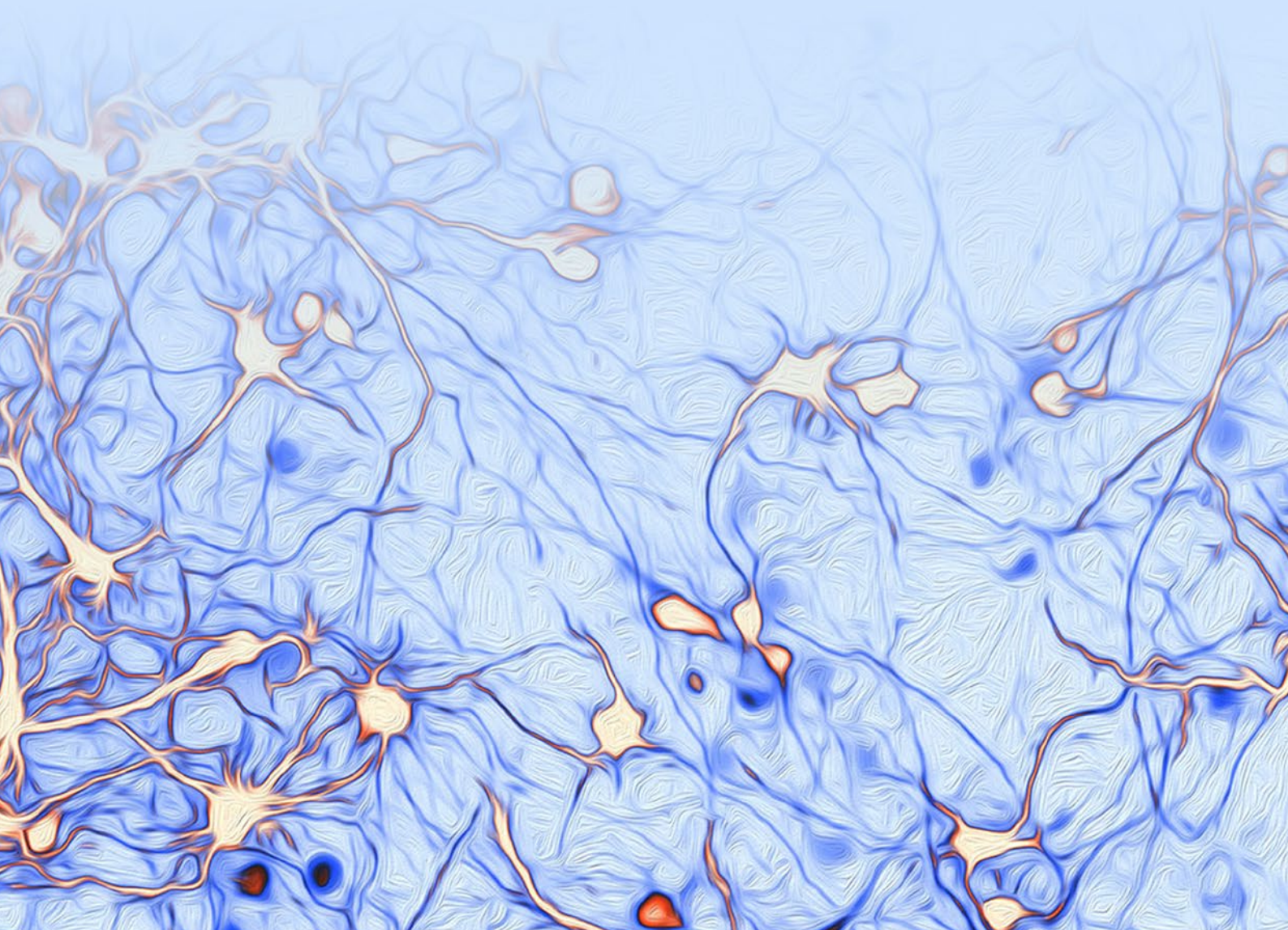


2026 - 2036

# National Health and Medical Research Strategy

Impactful research | Healthier Australians | Stronger nation

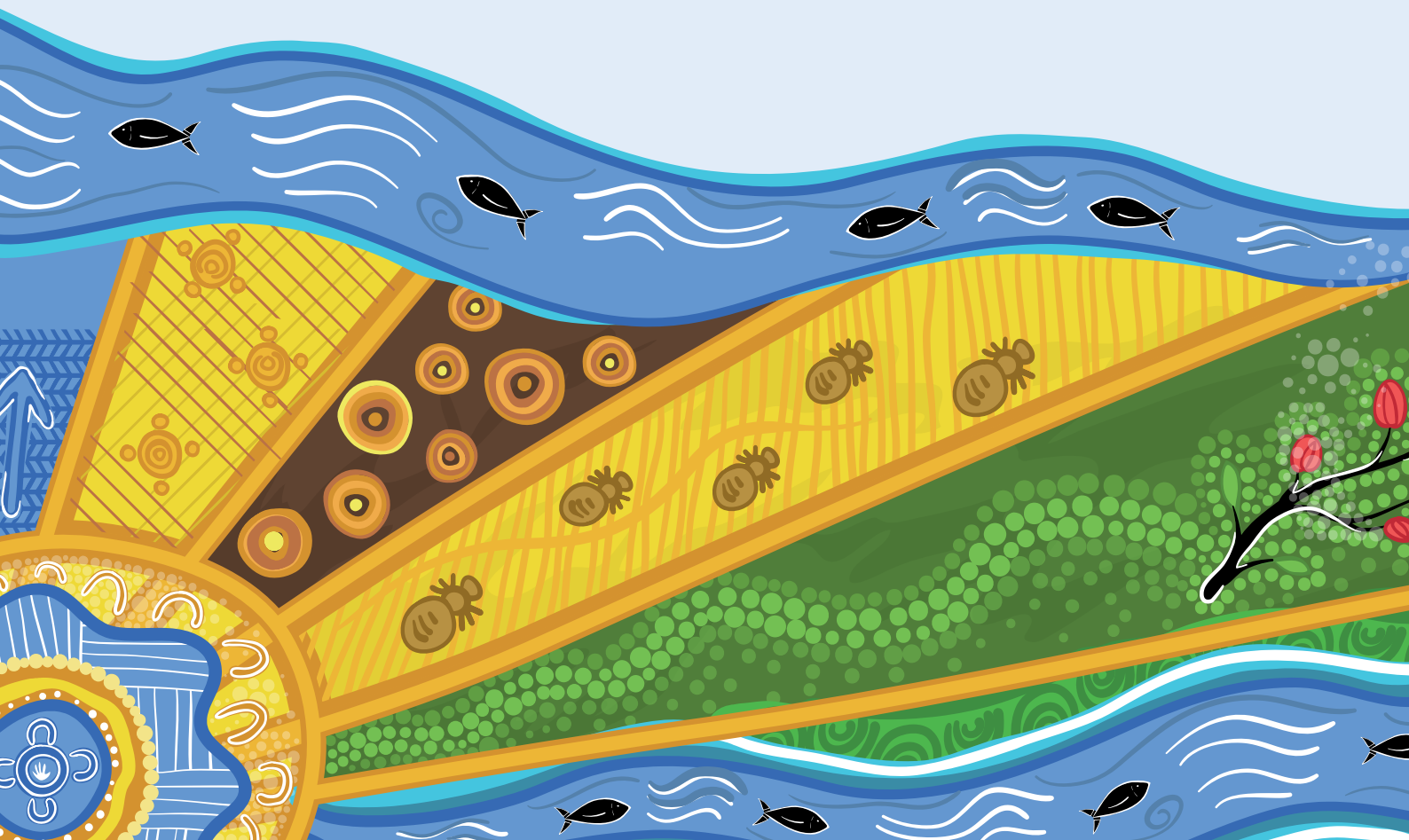


# Acknowledgement of Country

We acknowledge the Traditional Owners and Custodians of Country throughout Australia and pay respect to those who have preserved and continue to care for the lands and waters on which all Australians live and work, and from which we benefit each day. We recognise the strengths and knowledge Aboriginal and Torres Strait Islander peoples provide to the health and aged care system and thank them for their ongoing contributions to those systems and the wider community. We extend this gratitude to all health and aged care workers who contribute to improving health and wellbeing outcomes with, and for, First Nations peoples and communities.

## Artwork

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# Letter from the Chair

Dear Minister,

I am pleased to present for your consideration a proposed National Health and Medical Research Strategy (National Strategy), covering the 10-year period 2026-2036. Thank you for the opportunity to lead this important piece of work, the first of its kind in Australia.

The National Strategy has been developed in close consultation with the health and medical research sector through a year-long consultation process, including the release of a draft strategy in August 2025 and incorporating face-to-face meetings, webinars, workshops and written submissions.

I wish to acknowledge and thank the sector for their willingness to come together, present and engage with the evidence and contribute ideas with generosity throughout this process. My intent in developing this National Strategy has been to faithfully reflect these ideas and bring them into a document that has coherence and purpose and provides an action-oriented roadmap to strengthen health and medical research in Australia.

As noted in the National Strategy, its development comes at a pivotal time, where rapid technological progress and advances in knowledge present exciting new opportunities to supercharge research, transform our ability to improve health and wellbeing and foster a stronger economy through innovation. These will require new knowledge, new science, new ways of thinking, new approaches and new technologies that are appropriate and accessible to all Australians.

The National Strategy sets out a transformative 10-year vision to strengthen Australia's health and medical research system. As sought by you in its initial commissioning, its scope encompasses all elements of health and medical research across the Commonwealth, states and territories, industry, academia, health professionals, consumers, community and philanthropy – a truly national focus.

It presents a bold vision: **Australia: the healthiest nation – driven by research and innovation, delivering for all**, an architecture and series of actions to deliver that vision, and values to guide implementation. Areas to further progress over the course of the 10-year National Strategy are also identified.

The National Strategy is by design a multi-year effort. Additional funding, and targeted use of existing funding, will be required to deliver its ambition. While the extent of new funding, how it is allocated and over what time frame are a matter for government, I have sought to identify possible actions as a guide to how this could occur.

The strong and consistent view from the sector is that action is required now if Australia is to maintain its global position as a leader in health and medical research, and if, as a nation, we are to take advantage of research and innovation to deliver greater wellbeing, health equity, economic growth and a sustainable health system. Without action the sector has highlighted they face critical issues of sustainability, outdated infrastructure and workforce risks.

The National Strategy is grounded in the importance of discovery and basic science research to drive a culture of enquiry, built on a strong system of independent research institutions, and guided by national priority setting that maps current and emerging challenges and the opportunities and increased productivity that innovation and new technologies bring.

It highlights the importance of collaboration, consumer and community engagement and investment in pathways from discovery to translation, including through clinical trials and translation of research into health system policy and practice.

It shines a light on areas of entrenched inequity and the way that research investment, practices and translation strategies can improve health outcomes, with a focus area dedicated to Aboriginal and Torres Strait Islander health and a specific regional, rural and remote outcome area and implementation guide that identifies how actions across the National Strategy apply and should be rolled out.

It seeks to develop the maturing commercialisation sector to enable the benefits of Australian funded and developed research to be delivered at scale, to the benefit of the Australian community and with positive economic impact. It aims to put Australia at the forefront of technological change and embed our role as a high-performing global player in research and implementation science.

It addresses the enablers of the health and medical research system – a thriving workforce, funding that is sufficient and strategically coordinated, data and digital technology assets and planned infrastructure.

It presents systems of priority setting, governance, detailed actions and implementation plans to drive accountability in delivering the National Strategy's intent.

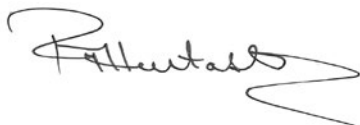
I would like to thank the secretariat that has supported this work in the Department of Health, Disability and Ageing and the National Health and Medical Research Council (NHMRC) together with the executive teams of the Health and Medical Research Office (HMRO) and the NHMRC. They have been tireless in their efforts throughout and approached what has been a complex task with energy and ideas.

I would also acknowledge the many leaders across the sector and from all jurisdictions who have given generously of their time to review drafts, provide detailed edits and contribute case studies. I would particularly thank the members of the Strategic Advisory Group and the Technical Reference Group for the National Strategy and the members of the NHMRC and the Australian Medical Research Advisory Board and its committees.

Finally, I acknowledge the Aboriginal and Torres Strait Islander people who have contributed to this work. While Australia's health and medical research has not done enough to serve Aboriginal and Torres Strait Islander people in the past, by working together and co-designing a National Strategy for the next 10 years, we can do better.

I trust that this National Strategy delivers against the challenge that you identified at the outset of this work, to ensure that Australia's world-leading research capability can change and improve the health and lives of all Australians, now and in the future.

Yours sincerely



**Rosemary Huxtable**  
**Chair of the National Health and Medical Research Strategy**

March 2026

# Recognition statement

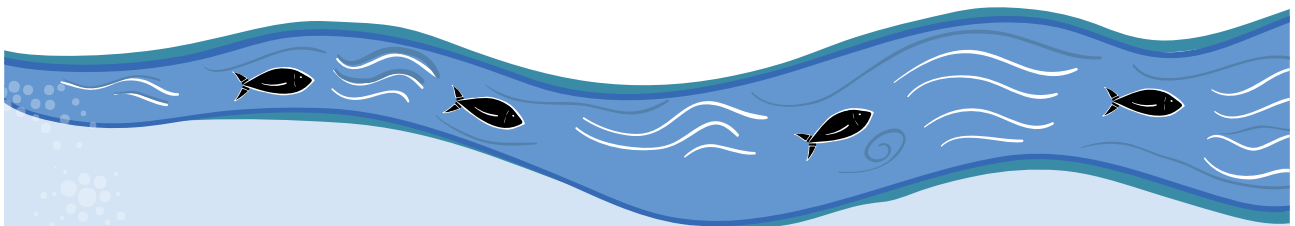
We acknowledge Aboriginal and Torres Strait Islander people as the First Nations peoples of Australia and Australia's first researchers. We acknowledge the need for Aboriginal and Torres Strait Islander leadership, genuine partnership and the critical role of communities in the future of Australia's health and medical research.

The National Strategy's success relies on all researchers embedding culturally safe practices and acknowledging the right of Aboriginal and Torres Strait Islander peoples to self-determination. The impacts of colonisation have led to great disparities in Aboriginal and Torres Strait Islander health and wellbeing, with ongoing experiences of systemic racism across the health and health and medical research sectors. The National Strategy complements the [National Agreement on Closing the Gap](#)<sup>1</sup> and [Aboriginal and Torres Strait Islander Health Plan \(2021-2031\)](#)<sup>2</sup> by seeking to embed culturally safe practices in all health and medical research to support overcoming inequalities experienced by Aboriginal and Torres Strait Islander peoples.

The terms used in the National Strategy may differ from those used across and between jurisdictions. The rights of Aboriginal and Torres Strait Islander peoples' self-determination are acknowledged, including in terminology used for cultural identification and preferred ways of collectively referring to Aboriginal and Torres Strait Islander peoples.

All members of Australia's health and medical research communities are encouraged to embed principles from the various guides outlining best practices for ensuring cultural competency in all research. In addition to those already mentioned, these include, but are not limited to:

- [AIATSIS Code of Ethics for Aboriginal and Torres Strait Islander Research](#)<sup>3</sup>
- [NHMRC Ethical Guidelines for Research with Aboriginal and Torres Strait Islander Peoples](#)<sup>4</sup>
- [National Aboriginal and Torres Strait Islander Health Workforce Strategic Framework and Implementation Plan 2021-2031](#)<sup>5</sup>
- [Framework for Governance of Indigenous Data](#)<sup>6</sup>
- [The Victorian Aboriginal Health, Medical and Wellbeing Research Accord](#)<sup>7</sup>
- [South Australian Aboriginal Health Research Accord](#)<sup>8</sup>
- [Treaty for Victoria](#).<sup>9</sup>



The National Strategy further acknowledges that culture is fundamental to Aboriginal and Torres Strait Islander peoples' health and wellbeing, even if definitions of health and wellbeing may differ across people, community and jurisdictions. The National Strategy recognises culture as a foundation of Aboriginal and Torres Strait Islander health and wellbeing and that approaches to a healthy life must include:<sup>2</sup>

- holistic health and wellbeing
- the cultural determinants of health
- the social determinants of health
- a life course approach.

# Introduction

## Why do we need a National Health and Medical Research Strategy?

Health and medical research underpins a modern, outcomes-focused health system. It is the foundation on which health treatment, technologies and models of care are discovered, trialled, translated and commercialised, improving health outcomes and contributing to a strong economy and fair society.

Developing and implementing a forward-looking, 10-year National Strategy aims to strengthen and leverage Australia's world-leading research capability, ensuring that rapid technological progress and advances in knowledge are harnessed and translated into healthcare policy and practice, commercial opportunities are realised and equity of access to proven treatments and care are enabled.

The process of developing the National Strategy has provided an opportunity for researchers, clinicians, healthcare professionals, policymakers, industry leaders, peak bodies and consumers to come together to think deeply and constructively about the optimal future for research in Australia and the collective action needed to get there.

This is not the first time that the future of Australian health and medical research has been considered, although it is the first at a truly national scale.

In 1998, the Wills Review<sup>10</sup> advised on how health and medical research could contribute to meeting Australia's future healthcare needs. The 2013 McKeon Review<sup>11</sup> looked closely at putting evidence into practice, laying the foundations for the Medical Research Future Fund.

In the years since, the Australian research sector has contributed significantly to global knowledge. While Australia makes up around 0.3% of the world's population, we contribute 3.4% of published research, a significant proportion of which is at, or above, world-class standard.<sup>12</sup> Australia ranks 7th globally in health sciences research,<sup>13</sup> 9th globally for healthcare

innovation<sup>14</sup> and 10th globally for the number of clinical trials conducted on a per-capita basis, ahead of the United Kingdom (UK), Canada and the United States of America (US).<sup>15</sup> We have been at the forefront of important discoveries and innovations that have had global, regional and local impacts: the Gardasil<sup>16</sup> and cervarix cancer vaccines; a chikungunya virus vaccine for the Asia-Pacific region;<sup>17</sup> the National Bowel Cancer Screening Program;<sup>18</sup> Indigenous birthing on country services;<sup>19</sup> and world-leading tobacco control measures.<sup>20</sup>

Australian medical research policymakers have demonstrated leadership in funding innovations, establishing specific commitments to supporting Aboriginal and Torres Strait Islander-led research<sup>21</sup> and introducing world-first measures to achieve gender equity in grant funding.<sup>22</sup>

But there are significant areas that remain to be addressed and new challenges and opportunities yet to be confronted. While we have made important progress in the management of many common health conditions, outcomes for people with rare disease remain stubbornly low. Mental ill health, diseases of ageing and many chronic conditions are an ongoing challenge to prevent and treat. Health inequality, as it is experienced by Aboriginal and Torres Strait Islander people, regional, rural and remote communities and other priority populations, is a stubborn problem.

These, and many others, will require new knowledge, new science, new ways of thinking, new approaches and new technologies that are appropriate and accessible to every member of the Australian community. The National Strategy lays out actions and initiatives that, working together, all sector stakeholders can drive, and to which they can contribute, in order to meet current and future challenges.

## Confronting systemic challenges

In 2026, Australia's health and medical research sector faces systemic challenges which require bold actions.

The strong foundations of our research system, particularly in discovery and basic science research, need to be shored up to continue to create the new knowledge that is the basis for future innovation and improvements in health outcomes.

Harmonising the funding landscape, more effectively meeting the growing costs of research, supporting high-risk, high-reward research and improving career pathways and job security for early- and mid-career researchers are critical to nurturing the discovery pipeline and ensuring the long-term sustainability of the sector.

At the same time, we need to focus on building capability for research and translation into our diverse health settings. We need to create the structures, incentives and culture to embed research as a routine part of prevention, clinical care and policy development. We need to ensure access to infrastructure and facilities in healthcare settings to deliver better health outcomes for all and invest in collaborative platforms and networks focused on building capacity for clinical research and implementation science.

We need to drive development of a maturing industry, commercialisation and manufacturing base that can meet sovereign needs and bring economic benefit. International indices of innovation show that, while Australia ranks highly on innovation inputs, we are less strong when it comes to innovation outputs.<sup>23</sup> Our economy remains low in complexity, with a heavy reliance on commodity exports as drivers of wealth – an imbalance that has the potential to slow future economic growth and prosperity.<sup>24</sup> Many research entrepreneurs report needing to go overseas to take a product through the development process and achieve scale. Creating a more joined-up research and development policy and funding environment, increasing opportunities for research-industry exchange and collaboration, and enhancing access to capital will drive the growth of a strong life sciences and health technology sector and enable Australia to capitalise on our success as a generator of new knowledge.

We must also position ourselves to be at the forefront of technological change and innovation and to contribute as a global partner in confronting the health challenges that impact an interconnected world. As the COVID-19 pandemic showed, being able to innovate rapidly, collaborate effectively and use the power of data and technology to drive solutions to critical problems is vital to our future wellbeing, prosperity and security.

Many of the challenges we face are not unique to Australia. A number of comparable countries have developed national strategies, plans and institutional structures focused on establishing a vibrant end-to-end research, translation and commercialisation sector. There are lessons, ideas and options that we can learn from and adapt, some of which have been incorporated into this National Strategy.

At the same time, Australia has fundamental strengths on which to capitalise. We have relatively high levels of educational achievement, and our overall research output is significant for a country of our size.<sup>12</sup> We have internationally well-regarded and high-functioning healthcare and regulatory systems,<sup>25</sup> public belief in the importance of government investment in health and medical research, and strong trust in health institutions.<sup>26,27</sup>

We also have specific challenges. Responsibility for and investment in health care, research and innovation is through a complex and at times poorly coordinated combination of the Commonwealth, states and territories, community and not-for-profit organisations and the private sector. We have a highly diverse and widely distributed population, around one-quarter of whom live in regional, rural and remote locations, making equity of access and service provision difficult and contributing to poorer health outcomes and shorter life expectancy for these communities.<sup>28</sup>

We must acknowledge and confront the racism and systemic bias that has characterised many Aboriginal and Torres Strait Islander peoples' experience of health and medical research and the health system and commit to do better. In line with the Priority Reform Areas of the National Agreement on Closing the Gap,<sup>1</sup> we must prioritise Aboriginal and Torres Strait Islander design, leadership and governance of research activities. We must embed cultural safety and a requirement for researchers to conduct research in culturally respectful and appropriate ways. We must commit to advancing Aboriginal and Torres Strait Islander ways of knowing, being and doing that have the capacity to contribute new and transformative ways of approaching research questions, addressing problems of concern to communities and translating and communicating outcomes. Building this capacity can only happen in Australia and will also help to continue the trajectory of Australia's leadership position in Indigenous health research. Achievements made to date in building Aboriginal and Torres Strait Islander research leadership, workforce capacity and engagement with community can serve as an exemplar and a model for how to achieve success for other underserved communities.

### Priority populations

A fundamental aim of the Australian health system is to prevent disease, intervene early and reduce ill health, enabling people to live in good health for as long as possible. Population groups that experience social inequalities and disadvantage resulting in health inequality are considered priority populations. These include Aboriginal and Torres Strait Islander peoples, culturally and linguistically diverse people, LGBTIQ+ people, people with disability, people with mental health conditions, people in low socio-economic groups and people living in regional, rural and remote areas.

A vibrant research system needs to account for these population groups at all stages of the research process, including priority setting and evaluation, horizon scanning and investments in platforms and networks.

## The future vision

The future state that this National Strategy aspires to reach by 2036 is ambitious.

It aims to break down the silos that have constrained progress across many parts of the research ecosystem and to maximise our comparative advantages.

It envisages a health and medical research sector that is underpinned by a foundation of strong, independent research institutions and universities that have access to the funding, workforce and infrastructure necessary to pursue high-value research and to create new knowledge that meets the priorities and needs of the Australian community, while also contributing globally.

It conceives of a health system that has the capacity and capabilities to conduct research in clinical and public health settings as matter of routine and to rapidly translate the outcomes of research to practice and policy that has real and enduring impact.

It outlines the ways in which all members of our rich and diverse community, but, in particular, Aboriginal and Torres Strait Islander peoples, people living in regional, rural and remote areas and other underserved communities, will be supported and encouraged to lead, contribute to and take part in health and medical research.

It puts forward mechanisms by which Australia's research, healthcare, community and industry sectors and governments can work together to better align, coordinate and share investment, outputs and outcomes of research across all parts of the research pipeline. These mechanisms will stimulate translation and commercialisation to grow Australia's life sciences and health technology industries, return economic and social benefits and strengthen Australia's position as a regional and global leader in health and medical research.

# At a glance: National Health and Medical Research Strategy 2026-2036

Impactful research | Healthier Australians | Stronger nation

## Vision

Australia: the healthiest nation – driven by research and innovation, delivering for all

### Values

Principles and ideals fundamental to the Australian health and medical research community



Impact and Sustainability



Equity



Quality and Integrity



Collaboration and Partnership

### Goals

Lead the world in health outcomes  
 Deliver equity – no one left behind  
 Drive national prosperity and security  
 Advance excellence in research and innovation  
 Secure a resilient and sustainable health system  
 Strengthen regional and global partnerships

### Enablers

The health and medical research assets we need: interconnected, available now and ready for the future

### Focus areas

- 1 Strengthen** a vibrant research system that delivers for the nation
- 2 Accelerate** Indigenous-led research and its translation to improve Aboriginal and Torres Strait Islander peoples' health and wellbeing
- 3 Deliver** high-value care through the timely translation and implementation of research findings into healthcare policy and practice
- 4 Drive** impact through strengthened research development and commercialisation
- 5 Maximise** the benefits of advanced technologies and be ready for future challenges



Workforce



Funding



Data and digital technology



Infrastructure

National Strategy Advisory Council

Evaluation

# Executive summary

The National Health and Medical Research Strategy 2026–2036 (National Strategy) sets out a transformative 10-year vision to strengthen Australia’s health and medical research system, generated through national consultation and evidence gathering. Its scope encompasses all elements of health and medical research across the Commonwealth, states and territories, industry, academia, health professionals, consumers, community and philanthropy – a truly national focus.

## National Strategy architecture

Aspirational and future focused, the **Vision** sets the tone of the National Strategy and guides all its elements. This Vision acknowledges the diversity of lived experience across Australians and seeks to foster equitable outcomes so that all members of the Australian community can benefit from and contribute to health and medical research.

**Vision** Australia: the healthiest nation – driven by research and innovation, delivering for all.

All elements of the National Strategy orient towards this decadal Vision.

Achieving this Vision over the next decade means striving towards key **Goals**, with progress monitored and measured over time. A successful National Strategy will achieve the following Goals.

## Goals

<b>Lead the world in health outcomes</b>	Make Australia the world’s healthiest country through research-informed policy and practice.
<b>Deliver equity - no one left behind</b>	Ensure every Australian, regardless of background or postcode, benefits from health and medical research.
<b>Drive national prosperity and security</b>	Boost Australia’s economy, sovereign capability and long-term security through investment in, and output of, medical research and innovation.
<b>Advance excellence in research and innovation</b>	Strengthen Australia’s international reputation for knowledge creation and innovation through a thriving research, development and commercialisation ecosystem.
<b>Secure a resilient and sustainable health system</b>	Support a cost-effective, future-ready health system that meets population needs and economic conditions.
<b>Strengthen regional and global partnerships</b>	Position Australia as a trusted and leading partner in global health, especially in the Indo-Pacific region.

The **Values** of the National Strategy embed principles and ideals that underpin its strategic intent and serve to orient and guide actions, behaviours and decisions throughout implementation.

## Values



### Impact and Sustainability

A sustainable research system that improves the health of the community, powers a high-performing health system and delivers productivity benefits.



### Equity

A research system that delivers equity by embracing diversity, being inclusive in priority setting, research processes and distribution of resources and promoting a distributed, diverse workforce.



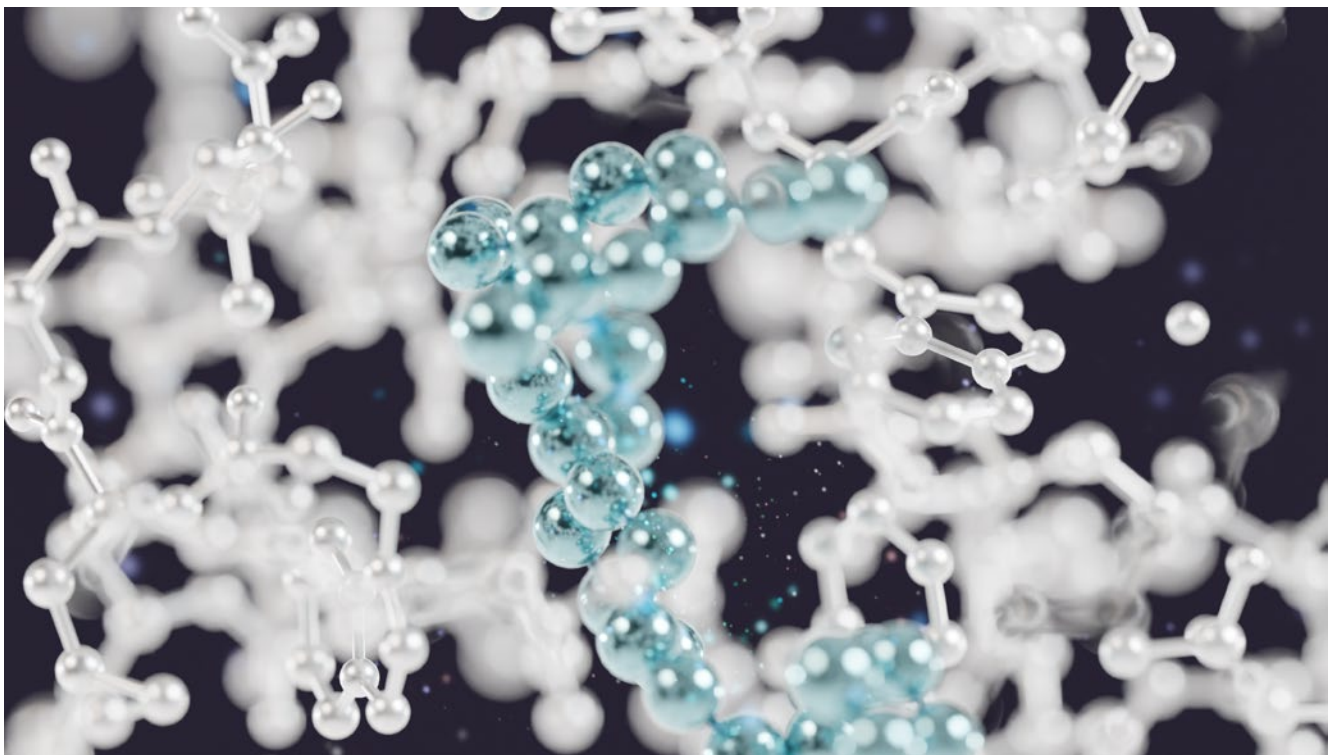
### Quality and Integrity

A research system that generates a high level of public trust through integrity, transparency, relevance, quality and the ethical conduct of research.



### Collaboration and Partnership

A research system where collaboration and partnership achieve maximum impact for the community, from discovery science to translation, through investigator- and priority-driven research.



NHMRC Science to Art (2022): Sarah Piper, Monash University, 'Atomic jewellery'

The Strategy establishes 5 **Focus Areas**, each encompassing a series of desired outcome areas. It sets out 4 **Enablers** that seek to build the fundamental assets needed for a successful health and medical research ecosystem.

## Focus areas

### 1 Strengthen a vibrant research system that delivers for the nation

- 1.1 Discovery and basic science research:** A strengthened discovery and basic science research sector with new opportunities for high-risk, high-reward research and a consistent approach to supporting indirect research costs.
- 1.2 National priority setting and horizon scanning:** A national (whole-of-government) priority setting and horizon scanning process informing and guiding strategic investments, workforce and infrastructure planning.
- 1.3 Collaborative platforms and networks:** A series of national platforms and networks across the health and medical research ecosystem that support research, translation and capacity building in areas of identified priorities.
- 1.4 National coordination, governance and evaluation:** Structures that improve strategic investment decisions, reduce duplication and generate effective and efficient funding processes.

### 2 Accelerate Indigenous-led research and its translation to improve Aboriginal and Torres Strait Islander peoples' health and wellbeing

- 2.1 Aboriginal and Torres Strait Islander peoples' ways of knowing, being and doing:** Aboriginal and Torres Strait Islander knowledge systems that are embedded into Australia's broader research system and processes and supported by consolidated and coordinated funding opportunities.
- 2.2 Community partnership and implementation:** Aboriginal and Torres Strait Islander health and medical research built on strong community partnerships and connection to advance translation and implementation of research findings into community-based solutions.
- 2.3 Aboriginal and Torres Strait Islander leadership and workforce capacity and capability building:** An increased number of Aboriginal and Torres Strait Islander health and medical researchers in leadership positions and emerging researchers, particularly community-based researchers, equipped with innovative, cross-disciplinary skills.

### 3 Deliver high-value care through the timely translation and implementation of research findings into healthcare policy and practice

- 3.1 Translation into health systems policy and practice:** A learning health system where clinical practice and public and preventive health policies are informed by research and innovation.
- 3.2 Clinical trials, health services and public health research:** An equitable research system that supports access to clinical trials, workforce development and infrastructure for clinical, health services and public health research.
- 3.3 Consumers and communities as research collaborators:** A health and medical research system that is valued and trusted by the community, prioritises cultural safety and inclusivity and embraces diversity, particularly for priority populations.
- 3.4 Place-based regional, rural and remote research:** Research and infrastructure in regional, rural and remote areas, developed in collaboration with local communities, that are place-based and meet the unique needs, challenges and opportunities of regional, rural and remote communities.

### 4 Drive impact through strengthened research development and commercialisation

- 4.1 Research-industry partnerships and integration:** A health and medical research sector where researchers are integrated with industry specialists and equipped with cross-disciplinary skills and resources to successfully develop innovative research.
- 4.2 Sovereign capability and innovation:** A thriving life sciences and health technology industry where Australian innovations successfully scale to generate commercial solutions in the domestic and global market.
- 4.3 Access to capital and risk sharing:** A highly competitive and investor-friendly environment with access to capital to sufficiently fund and support the development of Australian research and innovation.

### 5 Maximise the benefits of advanced technologies and be ready for future challenges

- 5.1 Global partnerships:** Australia takes a leading role in addressing health priorities globally and in the Indo-Pacific region through meaningful strategic collaborations.
- 5.2 Advanced therapeutics and technologies:** Globally competitive, transformative approaches to research and clinical practice built through innovative and advanced therapeutics and technologies.
- 5.3 Environmental sustainability and resilience:** A health and medical research system and health system that adhere to and promote environmental sustainability and support a One Health approach.

## Enablers



### Workforce

A sufficient, skilled and future-ready workforce with enhanced job security, stability and productivity, engaged in research positive environments free from discrimination.



### Funding

Sufficient funding that is strategically coordinated across government, industry, not-for-profit and philanthropic sectors.



### Data and digital technology

Data and digital technologies that are accessible, interoperable and 'research-ready', with the capability to advance better health outcomes.



### Infrastructure

Sustainable, visible and accessible health and medical research infrastructure that supports a high-performing research sector and is fit for purpose for the future.

## Actions in each Focus Area and Enabler to transform the sector

A proposed set of **Actions** linked to each of the **Focus Areas** and **Enablers** are intended to deliver the National Strategy's Vision over its 10-year period. The body of the National Strategy provides more information on these Actions, together with 'Areas to further progress' to be advanced over the life of the National Strategy.

### Focus area actions

#### 1 Strengthen a vibrant research system that delivers for the nation

##### Discovery and basic science research

1. Invest in a high-risk, high-reward funding stream.
2. Implement a consistent approach to supporting indirect research costs across MREA\* and MRFF\* funding.

##### National priority setting and horizon scanning

3. Establish a national priority setting process involving the whole sector.
4. Establish a nationally coordinated approach to horizon scanning.
5. Establish a National Strategy Advisory Council to oversee implementation and monitor progress.

##### Collaborative platforms and networks

6. Invest in a series of nationally focused collaborative platforms and networks.

##### National coordination, governance and evaluation

7. Unified management of the Medical Research Endowment Account and Medical Research Future Fund for more effective and efficient funding across the research continuum.

#### 2 Accelerate Indigenous-led research and its translation to improve Aboriginal and Torres Strait Islander peoples' health and wellbeing

##### Aboriginal and Torres Strait Islander peoples' ways of knowing, being and doing

8. Strengthen grant processes to demonstrate cultural competency and benefits to communities.
9. Incorporate funding for genuine co-design of research methodologies.

##### Community partnership and implementation

10. Invest in a national network of Aboriginal and Torres Strait Islander research centres.
11. Build translation into funding mechanisms, including through focused Research Translation Centres.

##### Aboriginal and Torres Strait Islander leadership and workforce capacity and capability building

12. Increase workforce leadership and capacity to further strengthen cultural safety.
13. Recognise knowledge and experience of community researchers in grant assessments and research outputs.
14. Accelerate Aboriginal and Torres Strait Islander entrepreneurship and career development.

#### 3 Deliver high-value care through the timely translation and implementation of research findings into healthcare policy and practice

##### Translation into health systems policy and practice

15. Evaluate, support and expand on the Research Translation Centre model.
16. Identify and fund translation-ready research into clinical and/or policy settings through incubator funding.

##### Clinical trials, health services and public health research

17. Expand 'Clinical trial networks' with a focus on place.

##### Consumers and communities as research collaborators

18. Implement national guidelines on consumer remuneration, reimbursement and recognition in research.

##### Place-based regional, rural and remote research

19. Invest in a 'Rural Health Innovation Hub' co-designed by rural health researchers and communities.
20. Expand teletrials through partnerships with regional, rural and remote researchers.
21. Develop a targeted regional, rural and remote health implementation guide.

#### 4 Drive impact through strengthened research development and commercialisation

##### Research-Industry partnerships and integration

22. Develop new programs that equip researchers with commercialisation and investor engagement skills.
23. Establish a Life Sciences and Health Technology Council.

##### Sovereign capability and innovation

24. Fast-track Australian-funded innovations, including incentives to support development of products and expedited regulatory pathways.
25. Identify and fund research ready for commercial investment through incubator funding.

##### Access to capital and risk sharing

26. Establish a scheme to match Commonwealth funding with that of philanthropic and private sector funds.

#### 5 Maximise the benefits of advanced technologies and be ready for future challenges

##### Global partnerships

27. Advance bilateral and multilateral engagements for capacity strengthening and knowledge exchange

##### Advanced therapeutics and technologies

28. Establish a National Collaborative Platform for Non-animal Technologies.

##### Environmental sustainability and resilience

29. Progress environmental sustainability in research practices through revised funding policies.

### Enabler actions

#### Workforce

**30. A Health and Medical Research Workforce Plan** that describes the size and location of the current research workforce, identifies trends, gaps and opportunities, and sets a path to build an adaptable, diverse and future-ready workforce going forward.

#### Funding

**31. An annual National Health and Medical Research Investment Statement** that provides clear, accurate and accessible information on the availability and distribution of resources to the health and medical research sector to underpin how priorities are set and future investment decisions are made across the range of funders.

#### Data and digital technology

**32. A National Data Integration, Sharing and Access Plan** for health and medical research that enables secondary use of existing data for research, adheres to data sovereignty principles and is trusted by consumers and the community, complemented by a capable highly skilled workforce in data analytics.

#### Infrastructure

**33. A Health and Medical Research Infrastructure Roadmap** to guide investment by funders, institutions and industry, developed with sector-specific input and expertise and in close coordination with the NRI Roadmap and the proposed National Health and Medical Research Investment Statement.

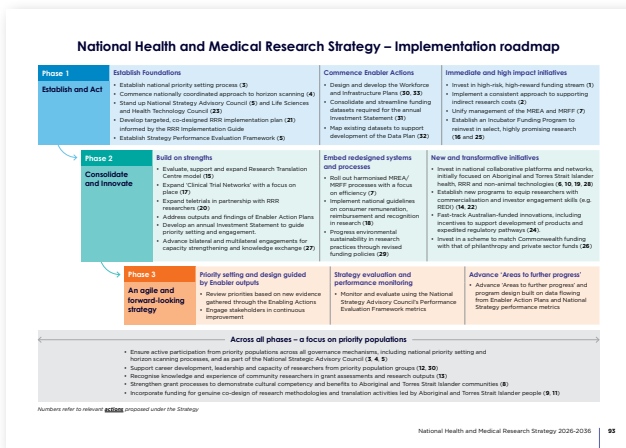
\* **MREA** Medical Research Endowment Account; **MRFF** Medical Research Future Fund

# Implementation, governance and evaluation

Implementation of the National Strategy will require leadership and involvement of all parts of the health and medical research sector – the Australian Government, state and territory governments, academia, researchers, industry, philanthropy, Aboriginal and Torres Strait Islander peoples, consumers and community representatives.

The National Strategy **Implementation Roadmap** (refer to [page 93](#)) provides an overview of how the Actions and ‘Areas to further progress’ could be advanced using a phased approach.

A key message of the National Strategy is the importance of implementation in partnership with priority populations. In particular, implementation must take into account the complex challenges facing clinicians, researchers, communities and Aboriginal and Torres Strait Islander people living in regional, rural and remote areas. A **Regional, Rural and Remote Implementation Guide** (refer to [page 94](#)) brings a dedicated focus to this task.



**Regional, Rural and Remote (RRR) – Implementation guide**

Proposed actions								
Focus area 1	Focus area 2	Focus area 3	Focus area 4	Focus area 5	Workforce	Funding	Skills and Digital Technology	Infrastructure
Active participation of RRR representation in national priority setting and horizon scanning (24)	Strengthen grant processes for RRR representation in national priority setting and horizon scanning (24)	Invest in a ‘Blue Health Innovation Hub’ co-designed RRR representation in national priority setting and horizon scanning (24)	Innovate for dynamic production of multiple forms of RRR innovation and products, supporting researchers and expand on the Research Translation Centres model with a focus on RRR (9)	Ensure equitable access to the proposed National Collaborative Platform for horizon scanning technologies for researchers in RRR and (24)	Ensure that the Workforce Plan addresses the needs of RRR researchers and supports the unique challenges of RRR communities, including non-traditional and remote-based researchers (24)	Work with funders to address the needs of RRR researchers and ensure appropriate funding mechanisms (24)	Address the needs of RRR researchers by developing and implementing the Data Plan and ensure appropriate data governance for RRR (24)	Ensure the infrastructure enablers supporting RRR researchers and health care and increase collaboration to improve accessibility (24)
Develop research priority setting processes that align with long-term, system-wide health goals addressing needs of RRR communities	Create new pathways for indigenous elders and researchers to identify community needs as part of national priority setting and grant program design	Expand research workforce capacity among clinicians in RRR communities through dedicated positions, such as identified technology industry networks to allow for protected time program design	Identify further areas of skill development required for the life sciences and health technology industry to build capacity and skills gaps in RRR communities	Continue to build regional and global partnerships with a view to strengthening connections for RRR researchers	Ensure future funding and policy considers options for building diversity of talent from RRR communities	Ensure funding models that balance funding for acute high-cost items with long-term, established research programs, are relevant and fit for purpose access to advanced technology in health care	Build trust in local health and research data to support RRR researchers to be the subject of all people and business, ensuring research integrity, privacy and security	Enhance research for RRR researchers to be the subject of all people and business, ensuring research integrity, privacy and security
Areas to further progress								
Develop research priority setting processes that align with long-term, system-wide health goals addressing needs of RRR communities	Create new pathways for indigenous elders and researchers to identify community needs as part of national priority setting and grant program design	Expand research workforce capacity among clinicians in RRR communities through dedicated positions, such as identified technology industry networks to allow for protected time program design	Identify further areas of skill development required for the life sciences and health technology industry to build capacity and skills gaps in RRR communities	Continue to build regional and global partnerships with a view to strengthening connections for RRR researchers	Ensure future funding and policy considers options for building diversity of talent from RRR communities	Ensure funding models that balance funding for acute high-cost items with long-term, established research programs, are relevant and fit for purpose access to advanced technology in health care	Build trust in local health and research data to support RRR researchers to be the subject of all people and business, ensuring research integrity, privacy and security	Enhance research for RRR researchers to be the subject of all people and business, ensuring research integrity, privacy and security

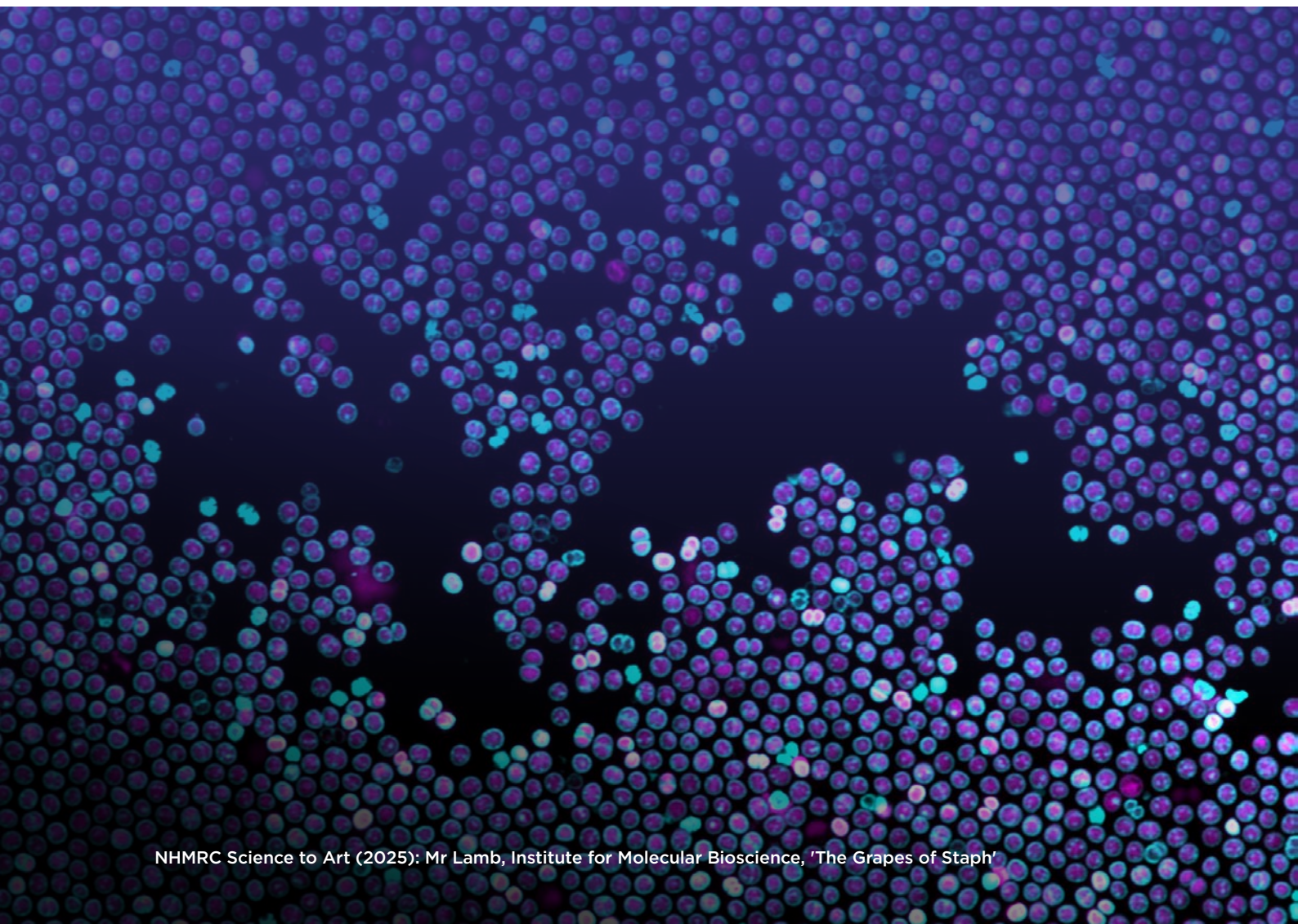
Numbers refer to relevant actions proposed under the Strategy. National Health and Medical Research Strategy 2026-2036 94

Implementation governance through a **National Strategy Advisory Council** seeks to ensure ongoing engagement and accountability for progress of the National Strategy.

Development of a **Strategy Performance Evaluation Framework** with performance metrics, co-designed in collaboration with researchers, institutions, communities and policymakers, will enable ongoing scrutiny of progress against the National Strategy and an assessment of the extent to which its Vision and Goals are being advanced.

# Focus areas and actions

*Focus areas are the thematic domains for the Actions that will deliver on the Goals of the National Strategy*



Strengthen a vibrant research system  
that delivers for the nation

**focus area**



# Strengthen a vibrant research system that delivers for the nation through:

- 1.1 discovery and basic science research
- 1.2 national priority setting and horizon scanning
- 1.3 collaborative platforms and networks
- 1.4 national coordination, governance and evaluation.

A strong, globally competitive health and medical research system relies on nationally coordinated processes, including priority setting, to provide a strategic balance in investment across discovery and priority-driven research, allowing opportunities for 'blue-sky' ideas to develop. A focus on sustaining the flow of new discoveries, building collaborations and shared infrastructure, and adopting a consistent approach to supporting the indirect costs of research would ensure Australia maintains its global reputation for innovation. Horizon scanning conducted at a national level would allow the sector to prepare for future challenges and capitalise on new opportunities for treatments and health technologies to improve health outcomes and contribute to national productivity and sustainability. A research culture that encourages collaboration over competition would promote the long-term sustainability of the sector.

Goal	How Focus Area 1 contributes
<b>Lead the world in health outcomes</b>	Maintaining Australia's global reputation for innovation through sustained funding and strengthened collaboration positions Australia as a global leader in health outcomes.
<b>Deliver equity - no one left behind</b>	Priority setting, which includes consumer and community members and priority populations, irrespective of socio-economic status or geographic location, enables equitable health outcomes to be achieved.
<b>Drive national prosperity and security</b>	Priority setting to guide investment decisions, and research that is guided by horizon scanning for emerging challenges and technologies, contributes to national prosperity and security.
<b>Advance excellence in research and innovation</b>	Sustained resourcing of new discoveries that value and prioritise collaboration and streamlined research and translation processes supports excellence in research and innovation now and into the future.
<b>Secure a resilient and sustainable health system</b>	A focus on collaborative research informed by horizon scanning that guides health policy and clinical practice enables a resilient and sustainable Australian health system.
<b>Strengthen regional and global partnerships</b>	A unified, coordinated approach to research and innovation can deliver international impact through regional and global partnerships.

## Outcome areas

### Discovery and basic science research

Discovery research is the foundation of a strong health and medical research system. Australian researchers have been at the forefront of new discoveries and research innovations that have transformed health outcomes and had global health impacts. However, the sustainability of the health and medical research system that supports the current and emerging workforce is at risk and requires sufficient and coordinated funding, including for indirect costs, national assets and infrastructure. Sustained investment in discovery research, as well as new investment in high-risk, high-reward pathways, would strengthen Australia's capacity for knowledge creation and innovation into the future.

### National priority setting and horizon scanning

National approaches to research priority setting and horizon scanning for emerging health challenges are lacking. Research funding decisions – whether by the Commonwealth, states and territories, industry, or philanthropic organisations – should reflect priorities that offer the greatest potential benefit to public health and community wellbeing. When these priorities are nationally aligned, there are opportunities to generate more efficient research outcomes. Horizon scanning is a critical tool in the decision-making process, especially in the face of rapidly emerging challenges and transformative technologies. By systematically exploring potential future developments with domestic and international agencies, horizon scanning can guide researchers, policymakers and institutions to create the settings to respond to scientific, technological and societal landscape changes over the next decade.

### Collaborative platforms and networks

The Australian health and medical research ecosystem and culture is highly competitive. Researchers generally work in siloes, which creates system inefficiencies. Platforms and networks provide the infrastructure and connectivity required to bring together scientists, researchers, clinicians, policymakers, consumers and communities across the health and medical

research ecosystem. By enabling resource pooling and coordinated research efforts on a larger scale and for longer time periods, platforms and networks accelerate innovation, reduce duplication and data siloes, enhance the translation of research outcomes and create a collaborative research culture.

### National coordination, governance and evaluation

The major Commonwealth health and medical research funds (the Medical Research Endowment Account (MREA) and the Medical Research Future Fund (MRFF)) operate across separate portfolio areas. Efficient and unified management of these funds would ensure investment aligns with national health priorities and responds to emerging challenges. Harmonising funding cycles, reporting processes and impact expectations across Commonwealth schemes would reduce duplication, avoid funding gaps and streamline application processes, ultimately lowering administrative burden and improving transparency. This would also provide opportunities for non-Commonwealth funders to align funding processes and procedures, leading to broader efficiency. It is important to regularly assess whether funded research is delivering results as expected and whether the systems in place are effectively supporting the translation of research into real-world outcomes.

### Open science, trust in science, effective regulation

Open science, trust in science and effective regulation are foundational to the integrity and impact of health and medical research.

These elements of the health and medical research ecosystem ensure that scientific findings are accepted, acted upon and translated into improved health outcomes. They foster a research environment that is transparent, accountable and responsive to societal needs, ultimately strengthening the credibility and utility of scientific advancements in health and medicine.

# 1.1 Discovery and basic science research

**Outcome:** A strengthened discovery and basic science research sector with new opportunities for high-risk, high-reward research and a consistent approach to supporting indirect research costs

## Proposed actions

- 1 Establish a Commonwealth funding stream that identifies and supports high-risk, high-reward, blue-sky research using a fail-fast approach, short time frames and appropriate budgets:
  - This funding stream could be modelled on international schemes such as the ones offered through UK's Advanced Research Innovation Agency (ARIA), US's Defense Advanced Research Projects Agency (DARPA) and the National Institute of Health's High-Risk High-Reward grant opportunities.
- 2 Implement a consistent approach to supporting indirect costs across the major Commonwealth health and medical research funds (the MREA and MRFF), with an initial uplift for MRFF funded grants, and seek to address funding adequacy over time.

## Areas to further progress

- A focus on the long-term sustainability of the discovery research workforce, particularly early- and mid-career researchers (EMCRs), informed by the proposed National Health and Medical Research Workforce Plan (refer to *Workforce Enabler*).

## Why this Outcome is important

- To enable research breakthroughs, dedicated investment in high-risk, high-reward research, as distinct from other types of health and medical research grant schemes, is needed. This will further Australia's global competitiveness in health innovation as technology advances.
- Through the consultation process, a number of independent medical research institutes (MRIs) have reported that they are becoming unsustainable due to the rising costs of undertaking research. Universities have also voiced concerns about the need for them to underwrite research costs.
- The health and medical research sector is highly competitive, with grant success rates declining, leading to job insecurity and workforce attrition.
- Sustaining a broad and diverse pool of EMCRs will maintain Australia's strengths in discovery science and potential for new innovations in future decades.

## What it could achieve

- Quarantined funding to support innovative, high-risk, high-reward research to grow the pipeline of health and medical research discoveries.
- A balanced and responsive funding system which values and supports discovery science and foundational research in a sustainable, efficient manner and a system that can adapt to the changing global health environment.
- Strengthened long-term sustainability of the sector and greater parity in funding across research institutions through better coordinated and consistent funding between the MREA and MRFF for indirect costs.



## Case studies

### Australian Research Council Discovery Program<sup>29</sup>

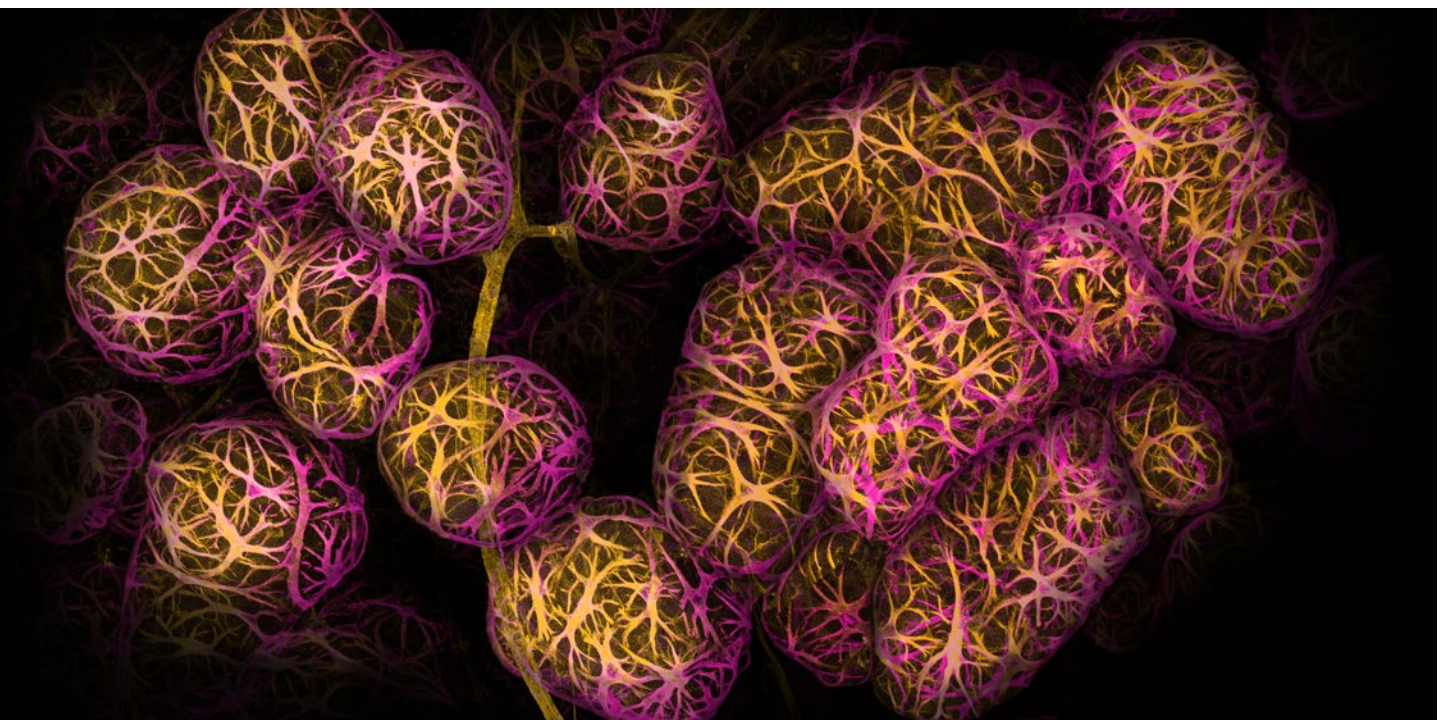
The [Australian Research Council \(ARC\) Discovery Program](#) funding recognises the importance of fundamental, ‘blue-sky’ research to Australia. It supports the national innovation system to build ‘new’ knowledge and a knowledge-based economy through developing new ideas/knowledge, creating jobs, economic growth and enhanced quality of life in Australia.

The ARC Discovery Program delivers benefit to Australia by building Australia’s research capacity through supporting research training and career opportunities for the best Australian and international researchers, international collaboration, and research in priority areas.

The ARC Discovery Program schemes support projects, and researchers at all levels, with a separate scheme dedicated to Aboriginal and Torres Strait Islander researchers.

### Defense Advanced Research Projects Agency<sup>30</sup>

The [Defense Advanced Research Projects Agency \(DARPA\)](#) is an independent research and development agency within the US Department of War. DARPA programs span the laboratory and applied sciences and advanced engineering disciplines and focus on the fundamental research required to establish proof of concept. The secret to DARPA’s success lies in the skill and tenacity of the program managers and unique funding approaches. In addition to multi-year programs that focus on developing technology from possibility to field-ready capability, prizes up to \$10 million are also awarded to non-traditional inventors, seedlings that move concepts from ‘disbelief’ to ‘mere doubt’, explorations that accelerate the timeline from concept to award, and Small Business Innovation Research and Small Business Technology Transfer initiatives that can lead to new programs.



NHMRC Science to Art (2023): Dr Caleb-Dawson, WEHI, ‘Breast alveoli in lactation’

# 1.2 National priority setting and horizon scanning

**Outcome:** A national (whole-of-government) priority setting and horizon scanning process that informs and guides strategic investments, workforce and infrastructure planning

## Proposed actions

- 3** Establish a systematic national priority setting process that:

  - aligns the research priorities of the National Health and Medical Research Council (NHMRC), MRFF and Australian Research Council (ARC) informed by other relevant Commonwealth agencies (e.g. the Australian Institute of Health and Welfare (AIHW) and Australian Bureau of Statistics (ABS))
  - formalises communication and collaboration across Commonwealth and state and territory governments to develop transparent, streamlined and scalable co-investment strategies supportive of shared outcomes and long-term impact
  - includes active participation and expert input from across the research sector and involving government agencies, industry, philanthropy and the broader community.
- 4** Establish a nationally coordinated approach to horizon scanning that involves the states and territories and all parts of the sector to identify emerging health challenges, technologies, research opportunities and areas of unmet need to assist in investment, workforce and infrastructure planning. This process could be modelled using international examples (e.g. the [NIHR Innovation Observatory](#)).<sup>31</sup>
- 5** Establish a 'National Strategy Advisory Council' (refer to *Governance*) with broad representation from the sector; state and territory governments; Aboriginal and Torres Strait Islander peoples; regional, rural and remote (RRR) communities; and consumer and community representatives to enable transparent oversight of the National Strategy by:

  - facilitating collaboration across the sectors and jurisdictions and harmonising across silos
  - monitoring and reporting progress and measuring the success of the National Strategy through a **Strategy Performance Evaluation Framework** (refer to *Evaluation*).

## Areas to further progress

- Over the life of the National Strategy, seek to develop research priority setting frameworks that align with long-term, system-wide health goals and are guided by ethical principles. These frameworks could highlight policies that are missing and how they can be addressed, including prevention, needs of priority populations and underserved communities in the current system. They would build on the outputs of the Enabler actions of this National Strategy.

## Why this Outcome is important

- Australia does not have a national, systematic approach to health and medical research priority setting that involves all parts of the sector and makes use of broad intelligence-gathering pathways. Commonwealth funding agencies set priorities in a largely uncoordinated way, with limited engagement between the Commonwealth and states and territories.
- Key global health threats must be anticipated, including outbreaks of vaccine-preventable diseases, increasing reports of drug-resistant pathogens and the health impacts of environmental pollution and climate change.
- There is opportunity to take advantage of available data, emerging technologies and modernised practices to guide priority setting and investment decisions.

## What it could achieve

- Coordinated priority setting across Commonwealth funding agencies and between the Commonwealth and states and territories, resulting in a greater pool of funds available for common initiatives and coordinated initiatives.
- A nationally coordinated health and medical research system that is more streamlined and resource-efficient, supporting collaboration across governments, industry, academia, health care, philanthropy and consumer and community organisations.

- More impactful research through meaningful involvement of community and consumers in the priority setting process. Partnering with consumers and communities provides an opportunity to build trust in science and social licence for research.
- A unified and strategic approach, through horizon scanning, to identifying and responding to emerging health challenges, research opportunities and areas of unmet need to assist in policy making and program design.
- A strong, coordinated governance model to implement and evaluate the impacts of the National Strategy through the National Strategy Advisory Council.



## Case studies

### James Lind Alliance<sup>32</sup>

[James Lind Alliance](#) (JLA) is a UK-based non-profit initiative that was established in 2004. The JLA process is focused on bringing patients, carers and clinicians together, on an equal basis, in a priority setting partnership to define and prioritise uncertainties relating to a specific condition or health setting. It aims to raise awareness among research funding groups about what matters most to patients, carers and clinicians, to ensure that clinical research is both relevant and beneficial to end users.

### World Health Organization<sup>33</sup>

[The World Health Organization](#) (WHO) recommends horizon scanning or landscape analysis for a range of purposes, such as preparation for research prioritisation and driving research directions by indicating gaps and forming the basis for research agenda setting. A key WHO landscape analysis is the annual antimicrobial resistance research and development landscape analysis, which evaluates the pipeline of antibacterial candidates in development.

# 1.3 Collaborative platforms and networks

**Outcome:** A series of national platforms and networks across the health and medical research ecosystem that support research, translation and capacity building in areas of identified priorities

## Proposed action

6 Invest in a series of nationally focused collaborative platforms and networks with an initial focus on Aboriginal and Torres Strait Islander health research (refer to *Focus Area 2.2*) and capacity building and shared infrastructure support for research in RRR areas (refer to *Focus Area 3.2*).

## Areas to further progress

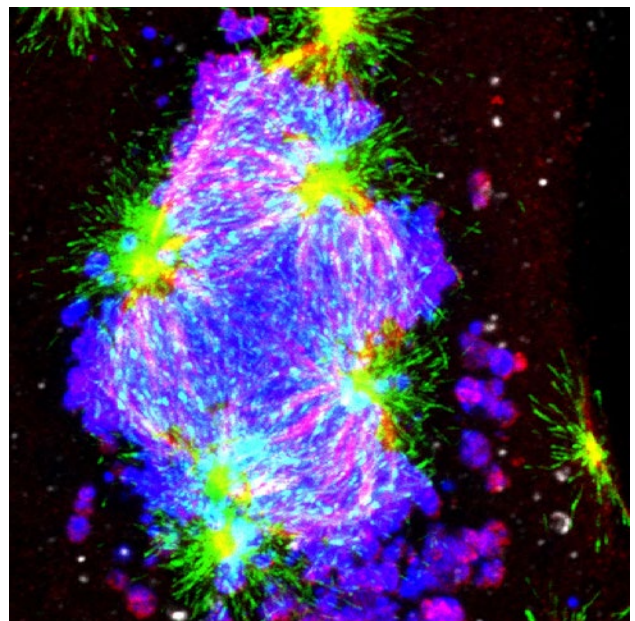
- Continue to build the concept of networks and platforms into the funding landscape, with a focus on those that are relevant to specific, nationally significant health challenges.

## Why this Outcome is important

- Current funding models are primarily based on competitive grant processes focused on individual projects operating over relatively short time frames. While focused on achieving excellence, this can drive a highly competitive research culture and lead to duplication of resources and infrastructure.
- There is a place in the system for research networks that bring together and support health and medical professionals, scientists, researchers, service providers and consumers and community members to drive impact through place-based and virtual collaborations.

## What it could achieve

- A strong Australian health and medical research ecosystem where collaborative, equitable, platform-based models aligned to need increase the effectiveness of research and create pathways to scaled implementation.
- Centralised platforms that provide shared infrastructure, tools, or services able to be accessed by multiple projects or users, reducing the need to build systems from scratch and allowing for more broadly consistent standards and practices.
- Strategic and targeted investment to address identified national priorities, where collaborative models are most likely to deliver long-term results.
- Development of a shared research culture that values collaboration over competition, with increased pathways for capability building across regions and specialisations, and longer term funding to support the workforce, particularly EMCRs.



NHMRC Science to Art (2017): Dr. Vishal Chaturvedi, The University of Melbourne, 'The nuclear fireworks'



## Case studies

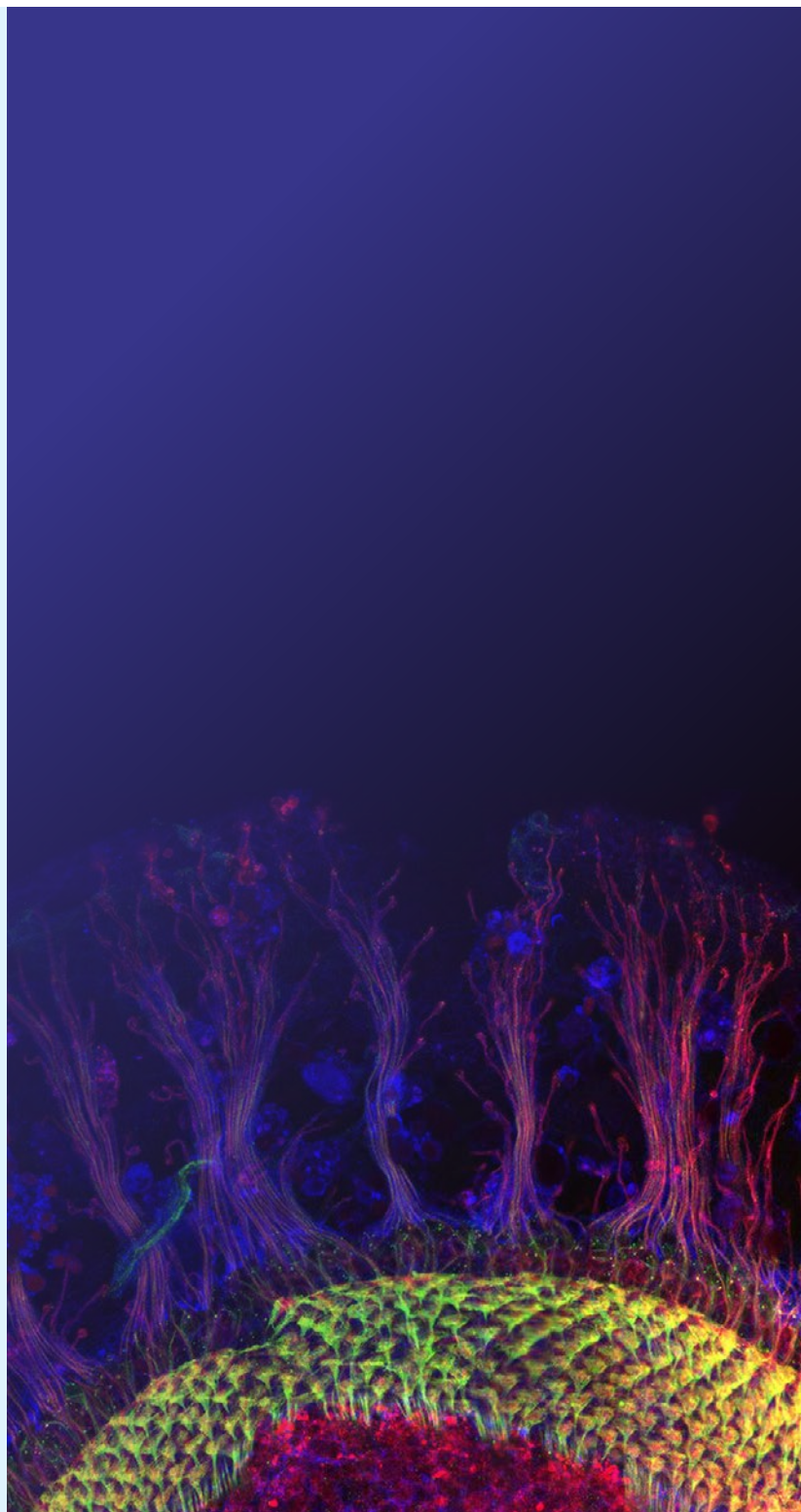
### The NSW Funded RNA Production and Research Network<sup>34</sup>

The [RNA Production and Research Network](#) enables access for scientists to materials required to translate newly developed RNA therapeutics from the bench to advanced pre-clinical studies. It supports production linked to therapeutic research and is building capacity and capability as a prerequisite to downstream Good Manufacturing Practice.

### Bioplatforms Australia<sup>35</sup>

[Bioplatforms Australia](#) supports biomedical and human health research in Australia by leveraging the cutting-edge integrated technologies operated across the national laboratory and bioinformatics network. These technologies enable the generation of large-scale (usually population-level) data resources and secure data sharing solutions required to advance the understanding and treatment of complex diseases and conditions spanning cancers, cardiovascular diseases, antimicrobial resistance as well as health related functions associated with gut metabolites and microbiomes.

Examples of national collaborative projects supported through Bioplatforms Australia include Australian Psychiatric Research Knowledge Bank; Ricin Genomics and Global Origins Initiative; Australian Function Fungi Initiative; Australian Gut Metabolome Initiative; Indigenous genomics; Cardiovascular Framework Initiative; Sepsis; Aspirin in Reducing Events in the Elderly (ASPREE) Framework Initiative; Exceptional responders; Melanoma; and Stem cells.



NHMRC Science to Art (2017): Mr Joshua SS Li, University of Queensland, 'Biological hardwiring'

# 1.4 National coordination, governance and evaluation

**Outcome:** Structures that improve strategic investment decisions, reduce duplication and generate effective and efficient funding processes

## Proposed action

**7** Bring together management of the MREA and MRFF with coordinated but separate governance to preserve the distinct strengths and purposes of both funding streams, while delivering administrative efficiency, addressing duplication and gaps and driving research excellence.

## Areas to further progress

- Extract maximum benefit from unified management of MREA and MRFF by better aligning grant application and reporting processes across the Commonwealth, such as funding cycles, application and assessments, reporting, evaluation and impact measurement. Ensure evaluation and milestone reporting are a key focus of all research grant management processes.
- Explore options for nationally aligned fit-for-purpose impact measurement tools, an accountability framework for researchers and open access to funded research outputs. These tools and frameworks should consider non-traditional academic metrics such as industry engagements, intellectual property (IP), patents and changes to health systems practice and policy to evaluate real world outcomes, economic returns and societal benefits.

## Why this Outcome is important

- There is limited strategic coordination and alignment of policies between the MRFF and the MREA, which generates inefficiencies, duplication and potential gaps in research funding. There is a prevailing view among stakeholders that these funds should be managed by a single executive agency, with the need for a 'seamless but not homogenous' funding model – where the unique features and intents of both funds are preserved but administration is brought together for closer alignment and coordination.
- The unified administration of the MREA and the MRFF would enable stronger policy alignment in a range of policy areas, including handling of direct and indirect costs.
- There is no consistent, national framework to report and assess project milestones to ensure accountability for research funding and to measure impact across funding agencies.
- Metrics used to assess researcher track records are heavily weighted towards academic outputs and require rebalancing towards outcomes, such as translation into policy or clinical practice as well as evidence of real-world impacts.

## What it could achieve

- Coordinated, transparent and fit-for-purpose investment decisions and funding policies, through a unified Commonwealth health and medical research executive agency.
- A consistent set of research processes, reducing administrative burden on the sector and enabling greater efficiency through streamlined administrative management.
- Better coordinated and consistent funding decisions across Commonwealth health and medical research funds, including by providing more support to the indirect costs of research, for the long-term sustainability of the sector.
- Increased impact and accountability of health and medical research, with a clear mechanism to show the impacts of the investment.



## Case studies

### UK Research and innovation<sup>37</sup>

[UK Research and Innovation](#) (UKRI) is an overarching public body that directs research and innovation (R&I) funding in the UK. It was created in 2018 with the aim of increasing integrative cross-disciplinary research. UKRI brings together 7 disciplinary research councils (including the Medical Research Council), Innovate UK and Research England into one unified body. This enables UKRI to work across the whole R&I system and to connect research communities, institutions, businesses and wider society in the UK and around the world. UKRI coordinates the UK government's medical and health related research with the National Institute for Health and Care Research, which has resulted in the creation of the independent Office for Strategic Coordination of Health Research.

This approach to unified administration has proven successful for various research efforts. An impact evaluation of the UKRI's COVID-19 response found that the nature of the UK R&I landscape played a substantial role in enabling a robust and timely response across multiple research areas and the realisation of wide-ranging social and economic impacts.

### NHMRC-MRFF joint advisory committees<sup>36</sup>

The [NHMRC Council](#), which guides the Medical Research Endowment Account (MREA), and [Australian Medical Research Advisory Board](#), which guides the Medical Research Future Fund (MRFF), jointly meet to provide expert advice to support the functions of both funds.

Four joint committees have been established across the MREA and the MRFF to advise on research strategies and policies for both funds, harmonising and improving coordination and integrating skills sets and experiences to optimise advice about different kinds of research:

- **Consumer Advisory Group** – advises on consumer and community involvement in health and medical research, including on strengthening consumer involvement in MREA and MRFF grant programs
- **Industry, Philanthropy and Commercialisation Committee** – advises on industry and philanthropic involvement in health and medical research and strategies to foster greater research commercialisation
- **Public Health and Health Systems Committee** – advises on strategies for strengthening preventive health, public health, primary care and health services, and for embedding research translation in the Australian health system
- **Indigenous Advisory Group** – advises on Aboriginal and Torres Strait Islander health research and capacity building for Indigenous health researchers.

Accelerate Indigenous-led research and its translation to prioritise Aboriginal and Torres Strait Islander knowledge systems and to improve Aboriginal and Torres Strait Islander peoples' health and wellbeing

**focus area**



# Accelerate Indigenous-led research and its translation to improve Aboriginal and Torres Strait Islander peoples' health and wellbeing through:

- 2.1 Aboriginal and Torres Strait Islander peoples' ways of knowing, being and doing
- 2.2 community partnership and implementation
- 2.3 Aboriginal and Torres Strait Islander leadership and workforce capacity and capability building.

Valuing and embedding Aboriginal and Torres Strait Islander knowledge systems and generating community-owned research and priority setting can strengthen outcomes and impact, build Indigenous research leadership and community engagement and expand workforce capacity. Investing in focused initiatives that provide a pathway to policy and practice through ideas, workforce, ethics and infrastructure, would begin to directly impact health and wellbeing outcomes for Aboriginal and Torres Strait Islander people. Ensuring all research and translation is culturally safe and free of discrimination and aligns with Aboriginal and Torres Strait Islander ethics processes is critical to improving health outcomes.

Goal	How Focus Area 2 contributes
<b>Lead the world in health outcomes</b>	Australia can lead the world in health outcomes in Indigenous health research when meaningful change occurs to ensure research infrastructure, funding and systems are Indigenous led to be a better fit for community priorities.
<b>Deliver equity – no one left behind</b>	Dismantling inequities and achieving transformational change means ensuring infrastructure and systems that deliver Aboriginal and Torres Strait Islander research are Indigenous led, with a focus on translating evidence into outcomes.
<b>Drive national prosperity and security</b>	Ongoing and increasing investment in Aboriginal and Torres Strait Islander knowledge systems, entrepreneurship and innovation will contribute to addressing systemic social and health disparities, giving everyone the opportunity to contribute to Australian society equally.
<b>Advance excellence in research and innovation</b>	Research excellence is strengthened by embedding Aboriginal and Torres Strait Islander lived experiences and cultural knowledge into all approaches to research across the system, ensuring priorities and outcomes are relevant and culturally safe. This excellence underpins robust, reproducible and internationally competitive discoveries that drive innovation and improve health equity.
<b>Secure a resilient and sustainable health system</b>	Aboriginal and Torres Strait Islander research and knowledge should play a transformative role in building a sustainable health system for Aboriginal and Torres Strait Islander people through developing evidence and its translation to deliver healthcare systems that are culturally safe and appropriate for Aboriginal and Torres Strait Islander people.
<b>Strengthen regional and global partnerships</b>	Prioritising Aboriginal and Torres Strait Islander leadership and knowledge means Aboriginal and Torres Strait Islander researchers can lead Australia's international engagement in global health governance, sharing knowledge and learnings with other First Nations peoples.

## Outcome areas

### Aboriginal and Torres Strait Islander peoples' ways of knowing, being and doing

Research shows that having Aboriginal and Torres Strait Islander health in Aboriginal and Torres Strait Islander hands is the best model for positive health outcomes.<sup>38</sup> This includes ensuring that health and medical research embraces Aboriginal and Torres Strait Islander research processes and ethics and acknowledges Indigenous Cultural and Intellectual Property (ICIP) and Indigenous Data Sovereignty principles.<sup>39</sup> How research outcomes will be embedded into health policy and practice to improve the lives of Aboriginal and Torres Strait Islander people should be a priority from the outset. Aligning funding with broader priorities and existing frameworks, including the National Agreement on Closing the Gap,<sup>1</sup> National Aboriginal and Torres Strait Islander Health Plan (2021-2031)<sup>2</sup> and Framework for Governance of Indigenous Data<sup>6</sup> will help work towards these national targets.

### Community partnership and implementation

Genuine partnerships and connection with community throughout the research process will ensure that research, translation and data sharing are led by Aboriginal and Torres Strait Islander peoples and communities and address their health needs and priorities. This is why it is vital to develop research and translation activities that are Indigenous led and designed and are conducted in ways that are meaningful for communities, driving Aboriginal and Torres Strait Islander self-determination. Doing so generates trust and transparency with communities, reduces research duplication and sees increased benefits from aligning research with community health needs and priorities.

### Aboriginal and Torres Strait Islander leadership and workforce capacity and capability building

The health and medical research sector must continue its efforts to grow the number of Indigenous researchers. The sector has seen an increase in the number of Aboriginal and Torres Strait Islander chief investigators on research grants funded by the NHMRC and MRFF.<sup>40</sup> However, the majority of NHMRC and MRFF research focused on Indigenous health is still led by non-Indigenous researchers. More can be done to sustain and grow the workforce by continued training and capability building of the next generation of experts, in a way that is culturally safe and free of discrimination. Further, the achievements of community-controlled research institutes, Aboriginal Community Controlled Health Organisations (ACCHOs) and individual research entities and networks (e.g. Our Collaborations in Health Research (OCHRe)) should be applauded and expanded.

### Culture is central to the health and wellbeing of Aboriginal and Torres Strait Islander people

The Mayi Kuwayu study<sup>41</sup> is the largest national longitudinal study of Aboriginal and Torres Strait Islander culture, health and wellbeing. Its development arose from Aboriginal and Torres Strait Islander peoples' and communities' need to have robust evidence on the links between culture, health and wellbeing. Aboriginal and Torres Strait Islander cultural practice and expression, together with physical, emotional and community connections, are recognised as a vital element to health and wellbeing. Over 13,000 Aboriginal and Torres Strait Islander peoples have responded by sharing their stories that recognise identity, spirituality and connection to Country, community and language as fundamental elements of culture. The study adheres to the Indigenous Data Sovereignty Principles.<sup>39</sup> Outcomes to date include positive health associations through participation in a Ranger program; development and validation of culturally specific measures of discrimination, psychological distress, family functioning and cultural wellbeing; population-level contribution of discrimination to psychological distress; development of community data projects; and development and delivery of data literacy training.

## 2.1 Aboriginal and Torres Strait Islander Peoples' ways of knowing, being and doing

**Outcome:** Aboriginal and Torres Strait Islander knowledge systems that are embedded into Australia's broader research system and processes and supported by consolidated and coordinated funding opportunities

### Proposed actions

- 8 Strengthen requirements for grant applications and reporting to demonstrate benefits to Indigenous communities and cultural competency among all researchers, including by:
  - requiring research grant applications to incorporate information on how research aligns with the National Aboriginal and Torres Strait Islander Health Plan (2021–2031)<sup>2</sup> and National Agreement on Closing the Gap Priority Reforms and outcome areas<sup>1</sup> and develop better mechanisms for identifying how research is improving Aboriginal and Torres Strait Islander health and wellbeing
  - building demonstration of cultural competency and incorporation of governance of Indigenous data and Indigenous Data Sovereignty Principles
  - closely monitoring research activity of funded Aboriginal and Torres Strait Islander research to ensure investments are meeting needs by undertaking ongoing reviews
  - using consistent criteria that verify how researchers are working in genuine partnership with Aboriginal and Torres Strait Islander organisations, aligning with existing frameworks such as the *NHMRC Road Map 3: A strategic framework for improving Aboriginal and Torres Strait Islander health through research*<sup>21</sup>
- working towards ensuring that the majority of research awarded with a focus on Aboriginal and Torres Strait Islander people and communities is led by Aboriginal and Torres Strait Islander peoples (including proportion of research team members and lead investigator).
- 9 Incorporate funding to allow genuine co-design of research methodologies with community (refer to *Focus Area 3.3*):
  - Build dedicated funding into Commonwealth-funded grant opportunities to include culturally safe approaches that support research in community settings - for example, allowing enough time and funding for meaningful co-design and to build strong relationships; and supporting non-traditional research roles within the grant. This could be in the form of 'seed' funding to allow relationship building activities.
  - Model funding allowances on grant opportunities from community-controlled organisations to ensure consistency across the sector and to embed Aboriginal and Torres Strait Islander research processes and priorities.

## Areas to further progress

- Led by Aboriginal and Torres Strait Islander elders and researchers, identify community needs as part of national priority setting and grant program design (refer to *Focus Area 1.2*). Ideas include:
  - creating pathways for community organisations to submit topics for grant opportunities, such as NHMRC's Targeted Calls for Research grant scheme, or participation in priority identification workshops at sector conferences/events
  - consistently capturing data to monitor trends (e.g. Aboriginal and/or Torres Strait Islander status of investigators) and support impact evaluation.
- Partner with Aboriginal and Torres Strait Islander researchers and communities to map practical ways to strengthen Aboriginal and Torres Strait Islander ethics approval processes and governance of Indigenous data (refer to *Data and Digital Technology Enabler*) to ensure they are built on Indigenous knowledge systems and support cultural safety. One option is to develop a national framework for Aboriginal and Torres Strait Islander human research ethics and a community of practice.
- Protect ICIP and build consent protocols to protect sensitive cultural knowledge while enabling appropriate collaboration.
- Use existing work underway, such as the National One Stop Shop (NOSS),<sup>42</sup> to streamline research processes into a single data system and aid Aboriginal and Torres Strait Islander participation in research, including clinical trials (refer to *Focus Area 3.2*).

## Why this Outcome is important

- Aboriginal and Torres Strait Islander cultures have continued to evolve and thrive, demonstrating resilience and strength despite the enduring effects on health outcomes of colonisation, systemic bias and intergenerational trauma.
- Positive results are seen when Aboriginal and Torres Strait Islander research is strengths-based and undertaken using the principles of self-determination and equity.<sup>43,44,45</sup> Aboriginal and Torres Strait Islander researchers have continued to call for grant processes to align with community needs, particularly taking into account the time and resources required to mobilise research in community settings.
- To improve Aboriginal and Torres Strait Islander health and wellbeing, space needs to be created for Indigenous-led research to become the authority and embrace Aboriginal and Torres Strait Islander concepts and non-traditional pathways towards research outcomes. This includes recognising the importance of Indigenous Data Sovereignty Principles<sup>39</sup> and aligning with Priority Reform 4 of the National Agreement on Closing the Gap.<sup>1</sup> This would ensure that:
  - measures and standards accurately reflect lived realities for Aboriginal and Torres Strait Islander peoples
  - Aboriginal and Torres Strait Islander researchers are able to prioritise First Nations concepts such as wellbeing and the social determinants of health and embrace methodologies that embed culture in Indigenous-led research
  - Aboriginal and Torres Strait Islander knowledge and data systems can meaningfully coexist and inform health policy and research settings.



### Defining Aboriginal and Torres Strait Islander 'wellbeing'<sup>12</sup>

'Aboriginal health means not just the physical wellbeing of an individual but refers to the social, emotional and cultural wellbeing of the whole Community in which each individual is able to achieve their full potential as a human being, thereby bringing about the total wellbeing of their Community. It is a whole-of-life view and includes the cyclical concept of life-death-life.'

- National Aboriginal Health Strategy (1989)

### What it could achieve

- Research processes that are aligned to the needs and priorities of the community and that are culturally safe and free of discrimination, which benefits all Australians.
- Research projects designed in genuine partnership between researchers and community and that have a strengths-based focus on improving Aboriginal and Torres Strait Islander health and wellbeing.
- Indigenous Data Sovereignty Principles embedded in health and medical research (see [Maiaam Nayri Wingara](#)<sup>39</sup> for best practice principles) and Aboriginal and Torres Strait Islander research ethics.
- Improved efficiency and quality of research ethics processes.
- Indigenous knowledge that is valued alongside Western science as valid and complementary.

### Case studies

#### Lowitja Institute's research grants program<sup>46</sup>

[Lowitja Institute](#) is Australia's only Aboriginal and Torres Strait Islander community-controlled health research institute. As a commissioning body, Lowitja Institute's research is built on key priorities, identified by Aboriginal and Torres Strait Islander peoples, that aim to produce high-impact research, tools and resources that will have positive health outcomes for Australia's Aboriginal and Torres Strait Islander peoples. Lowitja Institute facilitates engagement between Aboriginal and Torres Strait Islander communities, tertiary education, medical research institutions, government, and partner organisations to maximise the impact of research, knowledge and innovation. By funding only Aboriginal and Torres Strait Islander community-controlled organisations and researchers, the Lowitja Institute is actively strengthening the Aboriginal and Torres Strait Islander research workforce. Major research grants support innovative and responsive research, with additional funding provided for knowledge translation activities. Seeding grants support the scoping of community research priorities and engage translational research partners to co-create meaningful research projects.

#### Network Environments for Indigenous Health Research<sup>47</sup>

In 2018, the [Network Environments for Indigenous Health Research](#) (NEIHR) program was launched by the Canadian Institutes of Health (CIHR). The NEIHR program is led by the Institute of Indigenous Peoples' Health, co-led by the Institute of Circulatory and Respiratory Health and financially supported by all 13 CIHR institutes. The NEIHR program has set the foundation for establishing a national network of centres focused on strengthening Indigenous research capacity, training and mentoring; and supporting Indigenous community-based health research that reflects the priorities and values of Indigenous peoples.

## 2.2 Community partnership and implementation

**Outcome:** Aboriginal and Torres Strait Islander health and medical research built on strong community partnerships and connection to advance translation and implementation of research findings into community-based solutions

### Proposed actions

**10** Establish and support a national network of Aboriginal and Torres Strait Islander-led research centres to facilitate place-based, community-led research and knowledge translation activities and to lead implementation of research findings into effective community-based solutions, health services and policy settings. This concept would see centres that:

- are designed and led by Aboriginal and Torres Strait Islander community and researchers, with funding that enables a long-term investment in building expertise and a program of research
- have a central pillar of developing Aboriginal and Torres Strait Islander peoples' research capacity for all types of researchers
- focus on particular health areas for specialisation or on place-based and regional priorities
- support community-led initiatives and development of Aboriginal and Torres Strait Islander-led data systems
- form a collaborative network and come together as part of a connected national alliance.

**11** Grow investment in Research Translation Centres that focus on Aboriginal and Torres Strait Islander health and work across Commonwealth, state and territory funders, building translation pathways into funding mechanisms (refer to *Focus Area 3.1*).

### Areas to further progress

- Embed the concept of translation by design as a feature of research involving Aboriginal and Torres Strait Islander communities - for example, by:
  - requiring research findings to be disseminated back to Aboriginal and Torres Strait Islander communities and organisations in line with the National Agreement on Closing the Gap<sup>1</sup> and principles of Indigenous Data Sovereignty<sup>39</sup>
  - requiring clear articulation of a feasible translation pathway and processes so funding agencies can monitor translation of funded projects to inform future grant opportunities
  - requiring research grant awardees to report on achievements in building Aboriginal and Torres Strait Islander peoples' research capacity.
- Further empower communities to be leaders and equal partners in the research translation process focused on realising tangible benefits - for example, through:
  - meaningful community involvement and flexible funding opportunities to enable greater self-determination in research and to broaden the scope of funding to cover the indirect costs of community engagement
  - supporting ways to share research and translation outcomes through networks and data-sharing portals that can be accessed by researchers, community, funders and policymakers (refer to *Focus Area 1.3*); and supporting Indigenous-led ownership and governance of data assets
  - translation activities that incorporate research outputs into health policy and practice, working with Aboriginal and Torres Strait Islander communities, community-controlled health organisations and relevant policymakers throughout the research process.



## Why this Outcome is important

- Investment in Aboriginal and Torres Strait Islander health research has increased, with a greater focus on dedicated funding opportunities that aim to improve the level of self-determination in research priorities and practice.
- It is time to prioritise community partnership to ensure priority setting processes, research practices and translation are in Aboriginal and Torres Strait Islander hands; and to monitor, evaluate and learn from the impact of this research on the health and wellbeing of Aboriginal and Torres Strait Islander peoples.
- This includes translation of research into policy and practice in prevention, public health and primary care - the foundation systems where culturally informed practice is critical.
- Doing so can begin to address the effects of colonisation and institutional racism in the health and medical research system, aid progress towards the Closing the Gap targets and inform future priority setting and funding decisions.

## What it could achieve

- Clearer ownership of research priorities, practices and translation by Aboriginal and Torres Strait Islander communities.
- Increased and direct Aboriginal and Torres Strait Islander community benefit from research through culturally safe translation and implementation pathways, generating improved health and wellbeing outcomes.
- Collaborative Indigenous-led and governed networks and research infrastructure, essential to sustain and expand research into the future.
- Dedicated, stable and ongoing funding streams to elevate Aboriginal and Torres Strait Islander research leadership and strengthen community partnerships.
- Reduced duplication of research and improved design of new funding opportunities and research projects.
- Better alignment of health and medical research to the National Aboriginal and Torres Strait Islander Health Plan (2021-2031)<sup>2</sup> the National Agreement on Closing the Gap targets<sup>1</sup> and community needs and priorities.
- Greater visibility of research achievements and translation outcomes, with data and results more accessible to communities (refer to *Data and Digital Technology Enabler*).

## Case studies

### Kimberley Aboriginal Health Research Alliance<sup>48</sup>

[The Kimberley Aboriginal Health Research Alliance](#) (KAHRA) brings together Kimberley health services, Aboriginal communities and research organisations to fundamentally change how research is designed, conducted and used in the Kimberley. This collaboration combines the wisdom and cultural strength of communities, the knowledge and commitment of regional health services and research expertise to drive evidence-based change. The activities of KAHRA are intended to 'flip' the state of investigator-driven research to instead have communities and health services directly driving the research agenda, for better health outcomes for Kimberley Aboriginal people.

### Central Australia Academic Health Science Network<sup>49</sup> – changing the landscape of health research

[The Central Australia Academic Health Science Network](#) (CAAHSN) is an NHMRC-accredited Research Translation Centre working to improve health, wellbeing and social outcomes for Aboriginal people in Central Australia and the Barkly. CAAHSN brings together and supports Aboriginal health and health-related services, researchers, universities and other partners to undertake strategic, collaborative research that responds to priorities identified by members and communities – to translate evidence into real-world impact.

## 2.3 Aboriginal and Torres Strait Islander leadership and workforce capacity and capability building

**Outcome:** An increased number of Aboriginal and Torres Strait Islander health and medical researchers in leadership positions and emerging researchers, particularly community-based researchers, equipped with innovative, cross-disciplinary skills

### Proposed actions

**12** Increase Aboriginal and Torres Strait Islander researcher leadership and capacity, and strengthen cultural safety in research, through various educational pathways (e.g. micro-credentials, Vocational Education and Training (VET) qualifications and fellowships). This action will be supported by the National Health and Medical Research Workforce Plan (refer to *Workforce Enabler*).

**13** Recognise the knowledge and expertise of community-based researchers and clinician researchers in the review of grant applications and research outputs, creating more opportunities to access funding.

**14** Accelerate Aboriginal and Torres Strait Islander health and medical entrepreneurship and career development across academia and industry, including through Aboriginal and Torres Strait Islander-specific Researcher Exchange and Development with Industry (REDI) fellowships (refer to *Focus Area 4.1* and *Workforce Enabler*).

### Areas to further progress

- Continue to build existing networks (e.g. OCHRe) and embrace initiatives from the Lowitja Institute, ACCHOs and related entities that are having a positive impact on growing and developing the Aboriginal and Torres Strait Islander research workforce.

- Strengthen transitions for Aboriginal and Torres Strait Islander students into the health and medical workforce to create options and enable strong representation across all disciplines within the health sector (see National Aboriginal and Torres Strait Islander Health Workforce Strategic Framework and Implementation Plan (2021 – 2031)<sup>5</sup>).
- Develop cross-disciplinary training programs to build skills among Aboriginal and Torres Strait Islander peoples in areas of identified and emerging unmet need, such as data, artificial intelligence (AI), translation, commercialisation and implementation science, including as part of undergraduate and postgraduate degrees.

### Why this Outcome is important

- A properly funded, resourced and skilled Aboriginal and Torres Strait Islander workforce, working across research institutions, healthcare settings, community and industry, is fundamental to delivering the type of health and medical research system that can improve the health and wellbeing of all communities.
- Community-based researchers have an in-depth understanding of the issues that are important to the community, and their expertise and knowledge needs to be built into the research system.
- While progress has been made, more needs to be done to place ownership of data, research and ethics processes into the hands of Aboriginal and Torres Strait Islander researchers and communities.
- Growing the workforce would relieve some of the burden carried by the current workforce, which faces multiple demands and unique challenges.



## What it could achieve

- A better understanding of the stories, settings, demographics and career paths of past and current Aboriginal and Torres Strait Islander researchers to reduce barriers to workforce entry and build capacity and capability that is culturally safe and free of discrimination across the whole sector.
- Greater acknowledgement of the contribution and diverse experiences of community-based researchers (often different to other academic researchers) and their outputs, in reviews of grant applications, to ensure they are assessed equitably.
- More Aboriginal and Torres Strait Islander people accessing pathways into the research workforce, working across the research sector, from discovery science to commercialisation, with opportunities for training and skills development.
- Appropriate attribution of community-based researchers in research outputs as a measure of research productivity, which would aid the growth of more diverse research careers and help to embed Aboriginal and Torres Strait Islander research ethics and principles of data sovereignty.
- Ongoing funding and resourcing of successful networks and organisations that ensure achievements to date will continue to grow and align with the strategic directions of the National Aboriginal and Torres Strait Islander Health Workforce Strategic Framework and Implementation Plan (2021–2031).<sup>5</sup>
- Capability building and development of diverse career pathways, including cross-disciplinary training, strengthening the Aboriginal and Torres Strait Islander research workforce and industry that is needed to meet the Closing the Gap targets and deliver better outcomes for the community.

## Case study

### Our Collaborations in Health Research<sup>50</sup>

#### [Our Collaborations in Health Research](#)

(OCHRe) is a national network of First Nations researchers that support a culturally secure and inclusive research network. OCHRe plays a key role in developing the next generation of First Nations research leaders by providing a supportive, connected environment. It represents the largest group of Indigenous researchers brought together under a single National Health and Medical Research Council application, ensuring First Nations perspectives are central to shaping Australia's health research. OCHRe builds on the unique skills at the interface of Indigenous knowledges, science and health research with the aim of improving the health and wellbeing of Aboriginal and Torres Strait Islander peoples.

OCHRe initiatives are many, and the following are a few examples:

- Research Experience Scholarships for non-research degree students
- travel scholarships to attend academic forums and conferences
- professional development research workshops for clinicians
- education and training of students in a Certificate IV in Aboriginal and Torres Strait Islander Research Theory and Practice
- development of Indigenous Knowledges and Cultural Safety Frameworks
- Genomics Our Way – an online course 'An introduction to genomics research with Indigenous Australians'.

Deliver high-value care through the timely translation and implementation of research findings into healthcare policy and practice

focus area



# Deliver high-value care through the timely translation and implementation of research findings into healthcare policy and practice through:

- 3.1** translation into health systems policy and practice
- 3.2** clinical trials, health services and public health research
- 3.4** consumers and communities as research collaborators
- 3.5** place-based regional, rural and remote research.

Investing in the effective and timely translation of research outcomes into clinical practice, health policy and health systems, in partnership with consumers and communities, policymakers and system leaders, enables consistent and rapid implementation of innovative research findings that are person-centred, equitable and drive high-value care.

Goal	How Focus Area 3 contributes
<b>Lead the world in health outcomes</b>	More research that is equitably implemented into clinical practice and drives health policy contributes to overall disease prevention and enables more Australians to receive high-quality health care.
<b>Deliver equity - no one left behind</b>	Meaningful consumer and community collaboration, equitable resourcing of priority populations and appropriate dissemination to communities promotes trust, diversity, geographic reach and equity.
<b>Drive national prosperity and security</b>	Clinical practice and health policies that are well informed by high-quality research ensures a healthier population, increasing Australia's prosperity.
<b>Advance excellence in research and innovation</b>	High-quality research and innovation drives continuous learning and impact on health systems, health care and policy.
<b>Secure a resilient and sustainable health system</b>	Strengthening clinical practice, health services and public health research positions Australia to respond swiftly to emerging challenges and ensures the health system is sustained.
<b>Strengthen regional and global partnerships</b>	A focus on translation and impact sets the foundation to build and strengthen regional and global partnerships and programs in global health.

## Outcome areas

### Translation into health systems policy and practice

Effective mechanisms are required to support the development of promising research with a high potential for translation into health systems policy and practice. Strengthening organisational structures, policies, funding models and performance indicators to promote research-positive cultures within healthcare settings is critical to drive meaningful collaboration between researchers, health professionals, policymakers and the community. These collaborations strive to improve patient outcomes through better access to cutting-edge and high-quality health care, particularly for RRR and other underserved communities.

### Clinical trials, health services and public health research

Embedding research into routine care would advance Australia's health outcomes and increase equitable access to innovative therapeutics and interventions. Clinical trials are a core part of a learning health system and evidence-based medicine. They are essential for the development of, and access to, new treatments and innovations. Public health and health services research also drives innovative healthcare policies and should be supported through investments and cross-disciplinary training pathways for researchers.

### Consumers and communities as research collaborators

Meaningful involvement of community and consumers across all stages of health and medical research, from priority setting to translation, enhances the relevance, quality and impact of research outcomes. A range of involvement options should be provided to overcome barriers such as time constraints and the need to understand overly complex information. Opportunities and communications should be tailored to the needs and interests of communities and the type of research to ensure the exercise is genuine and not tokenistic. For example, activities to involve Aboriginal and Torres Strait Islander peoples must implement culturally safe practices and take a localised approach in their design.

### Place-based regional, rural and remote research

Around 7 million Australians live in RRR areas and, on average, experience poorer health outcomes and shorter life expectancy due to limited access to health care and the effects of the social determinants of health.<sup>51</sup> To improve equity, research funding priorities must address workforce capacity building and infrastructure gaps, with adaptable and innovative approaches that build lasting, locally embedded research capacity. A dedicated Implementation Guide for RRR Australia is necessary for effective implementation of the National Strategy and to address health inequities, noting that many actions across the National Strategy would apply, either directly or in a tailored way, to those communities.

#### Learning health systems

In a learning health system (LHS), research, data and practice are systematically and continuously integrated to improve patient outcomes and provide high-value, cost-efficient care.

Key characteristics of an LHS include real-time access to knowledge and healthcare data; strong and meaningful patient-clinician partnerships; incentives to encourage value-based care; organisational leadership and systems that support research- and learning-positive cultures; and policies, governance and regulations that are aligned to facilitate research, collaboration and learning.

Developing, supporting and enhancing LHS models in all healthcare delivery settings is key to advancing research translation, improving evidence-based care delivery and supporting system efficiency. An LHS requires a range of supporting stakeholders to work together in ways that are context-specific, relevant and meaningful. For the Australian healthcare system these stakeholders include Commonwealth, state and territory government agencies, policymakers, healthcare administrators, professional training, accreditation and peak bodies, and collaborative networks of practitioners, consumers and the community.

## 3.1 Translation into health systems policy and practice

**Outcome:** A learning health system where clinical practice and public and preventive health policies are informed by research and innovation

### Proposed actions

**15** Evaluate, support and expand on the key strengths of the Research Translation Centre (RTC) model and related initiatives across state, territory and local jurisdictions, especially those with a specific focus on Aboriginal and Torres Strait Islander health, RRR health and underserved priority populations.

**16** Establish an Incubator Funding Program to reinvest in select highly promising research, with the potential for significant impact and benefit, or proven clinical interventions that require additional short-term support to be ready for translation into health policy, guidelines and clinical practice:

- A second element of the proposed incubator program would focus on select pre-commercial projects (refer to *Focus Area 4.2*).

### Areas to further progress

- Working with jurisdictions, expand learning health systems models that include funding and accountability arrangements for research within and across healthcare settings and accreditation requirements for research as an output of the healthcare system.
- Explore opportunities to invest in implementation research, preventive health and translation activities such as through national clinical practice guideline development, frameworks, clinical and public health decision-making and initiatives that bridge the gap between research and delivery.
- Consider the benefit of a national repository of research findings ready to be translated into clinical practice and explore opportunities for the Commonwealth and states and territories to bring proven ideas to scale through new or amended funding arrangements.

- Investigate ways to increase the capacity and capability for research within the health system, by encouraging research-active clinicians and support teams, such as through part-time fellowships, protected research time, domestic and international research exchange and advanced training programs co-designed with clinical colleges and professional boards.
- Enhance partnerships between researchers, government and policymakers through knowledge exchange forums, joint appointments and exchange programs across health system and policy settings.

### Why this Outcome is important

- Accredited Australian RTCs have delivered benefits at both the community and the national level by providing a base for local networks to drive implementation of research into practice and achieve better patient outcomes at the community level.
- There is an opportunity to accelerate translation and implementation of research findings, with the greatest potential to operate at scale, into policy and practice through transitional support using incubator funding.
- There is scope to improve how guidelines are developed and applied at the national level to ensure that promising research is able to reach its full potential and be implemented in a consistent way.
- There can be a disconnect between researchers and policymakers. Ensuring the research workforce has the skills to consider policy outcomes and has points of integration with policymakers provides pathways to research translation. As important is requiring policymakers to be research literate and supporting them to develop the requisite skills and practices to incorporate research findings into policy in a timely way.



## What it could achieve

- RTCs that are scaled up and enhanced to apply research findings to clinical settings.
- An increased number of research findings implemented into national guidelines, clinical practice, changes at a health systems level and evidence-based health policies, with a particular focus on those with the greatest potential for health system impact.
- More research conducted within healthcare settings, as measured through performance indicators and the outcome of accreditation requirements.
- More targeted investment in research in priority areas and preventive health, designed with health professionals and policymakers, to ensure effective and efficient translation of research findings.
- A higher number of completed fellowships, placements and training programs for clinician-researchers, implementation scientists and academics.
- Increased number of people in the health and medical research workforce, and among policymakers, with the complementary skills and qualifications required for appropriate translation into health systems and health policy settings.

## Case studies

### Collaboration for Enhanced Research Impact<sup>53</sup>

Established in June 2020, the [Collaboration for Enhanced Research Impact](#) (CERI) is a joint initiative between the Australian Prevention Partnership Centre and a growing number of National Health and Medical Research Council Centres of Research Excellence. As a unifying collaborative, CERI works to align the policy and practice implications of prevention research and to develop shared communications across projects and participating centres. CERI provides a mechanism for synthesising and translating different findings and perspectives into compelling and relevant advice for policy and practice. This is supported through CERI's capability building for early- and mid-career researchers to cultivate a dynamic prevention research workforce with skills and experience in policy and practice collaboration, knowledge mobilisation and systems thinking.

### The Australian Health Research Alliance<sup>52</sup>

[The Australian Health Research Alliance](#) (AHRA) represents 12 National Health and Medical Research Council accredited and 2 emerging Research Translation Centres (RTCs) operating across all states and territories. Collectively AHRA comprises 169 partners, including health services, universities, medical research institutes and community organisations.

Each RTC operates independently to pursue research priorities and work programs relevant to the communities in which they operate. The RTCs collaborate as AHRA to share their collective expertise in support of the overall mission to support health and medical research to be translated and embedded into health care to improve health outcomes, health equity and the health economy.

Examples of national-level initiatives coordinated through the [AHRA network](#) include embedding consumers in health research policy and practice; building a highly skilled clinical trials workforce via the [Australian Clinical Trials Education Centre](#); leading women's health research through the [Women's Health Research Translation Network](#); a focus on national Indigenous research(er) capacity building, a regional, rural and remote (RRR) network informing national policy and growing the researcher workforce in RRR communities; and building national capacity in data-driven healthcare improvements.

## 3.2 Clinical trials, health services and public health research

**Outcome:** An equitable research system that supports access to clinical trials, workforce development and infrastructure for clinical, health services and public health research

### Proposed action

**17** Expand the number of Clinical Trial Networks with a focus on place (e.g. RRR) and priority populations (e.g. multicultural and linguistically diverse), informed through consumer and community collaborations and partnerships with states and territories (refer to *Focus Area 3.4*).

- Work to promote balanced investment in the diverse types of research methodologies and workforce skills across clinical, public health and health services research, such as through:
  - longitudinal cohort studies and registries using the proposed national health data ecosystem (refer to *Data and Digital Technology and Infrastructure Enablers*)
  - data analytical skills using the proposed National Health and Medical Research Workforce Plan as a guide (refer to *Workforce Enabler*).

### Areas to further progress

- Continue to implement the NOSS for Clinical Trials, the National Clinical Trials Governance Framework across public and private health services and the Human Research Ethics Committee Quality Standard and Accreditation Scheme as integral elements of streamlining and improving access to clinical trials.
- Work towards streamlining national ethics approvals processes for all health and medical research, building on efforts underway from national reforms to establish the Human Research Ethics Committee Quality Standard and Accreditation Scheme.
- Consider options to formally recognise, including through classification systems, and appropriately resource the clinical research workforce, including clinical research coordinators, nurses and midwives, by contributing to the indirect costs of research (refer to *Focus Area 1.1*) and through infrastructure support (refer to *Infrastructure Enabler*).

### Why this Outcome is important

- There are opportunities to improve access to clinical trials in Australia through growth in clinical trial networks and regulatory reforms. To help reduce health disparities and better inform clinical and public health decision making, participation in clinical trials needs to be inclusive and representative. Consumers should be involved in the design and development of clinical trials.
- The [Inter-Governmental Policy Reform Group](#)<sup>54</sup> leads national reforms to strengthen and streamline the health and medical research regulatory and operating environment at a national level, including the NOSS and the Human Research Ethics Committee Quality Standard and Accreditation Scheme. Further supporting and strengthening this process would ensure the objectives are implemented rapidly and efficiently.
- Currently, there is no national, centralised research workflow or system for health and medical human research ethics, governance and regulatory approval processes.



- Nurses, midwives and clinical research coordinators are critical enablers of clinical research and clinical trials (particularly in RRR areas) and need to be supported to fulfil these roles.
- Many of the most pressing population health questions are best explored through mixed-methods, community-based, or longitudinal research designs. Greater resourcing of these methodologies through dedicated funding schemes, potentially through infrastructure funding, is required.

### What it could achieve

- Better inclusion and diversity in clinical trials, including through incentives and broader representation, especially for RRR residents, Aboriginal and Torres Strait Islander people and other priority population groups.
- Central, coordinated and resourced expertise to equip researchers and clinicians with the capability and capacity to get trials up and running and support other forms of non-trial clinical research.
- A central, cross-government approval platform that will replace existing national and jurisdictional systems to harmonise ethics approval processes for improved efficiency.
- Identification of the broader social, cultural, environmental and commercial determinants of health through greater use of population health study designs which can better inform health and social policies that impact on overall health and wellbeing.

## Case studies

### Breast Cancer Trials<sup>55</sup>

[Breast Cancer Trials](#) (BCT) is the largest independent oncology clinical trials research organisation in Australia and New Zealand, dedicated to the prevention, treatment and cure of breast cancer.

Founded in 1978, BCT conducts a multi-centre national and international clinical trials research program involving over 1,014 researchers across 118 institutions in Australia and New Zealand.

This unique collaboration between researchers, clinical trial participants and supporters has involved more than 17,910 participants in 95 clinical trials and led to improvements in the treatment and management of breast cancer and lives saved.

Consumer and community engagement has been a critical component in shaping BCT since its inception, empowering patients and improving the public perception of clinical trial involvement.

### Interdisciplinary Maternal Perinatal Australasian Collaborative Trials (IMPACT) Network<sup>56</sup>

The [Interdisciplinary Maternal Perinatal Australasian Collaborative Trials](#) (IMPACT) Network has provided a collaborative and supportive environment for researchers developing randomised controlled trials in maternal and perinatal health. Collectively IMPACT Network members have led over 500 trials in the area of maternal and perinatal health since 1994, and close to 100 of these have been multicentre studies. These trials have provided new knowledge on priority research questions guiding health care for mothers and babies. Many have led to important changes in clinical practice recommendations bi-nationally and globally.

## 3.3 Consumers and communities as research collaborators

**Outcome:** A health and medical research system that is valued and trusted by the community, prioritises cultural safety and inclusivity and embraces diversity, particularly for priority populations

### Proposed action

**18** Establish national guidelines for consumer remuneration, reimbursement and recognition on research output and ensure appropriate resourcing is available through funding structures (e.g. as an element of indirect costs).

- hold researchers accountable as part of funding agreements to ensure appropriate dissemination of information about research impact to consumers, health system leaders, policymakers and the broader community.
- Explore the development of professional pathways for consumer researchers, including funding for consumer engagement roles, training programs, and career development opportunities.
- Work with universities and research institutes, to mandate training in cultural safety, trauma-informed practice and relationship-building for researchers.

### Areas to further progress

- Continue to support the implementation of existing consumer and community involvement (CCI) guidelines and frameworks, including the revised Statement on Consumer and Community Involvement in Health and Medical Research.
- Identify, support and build on existing infrastructure (networks and digital platforms) and mechanisms for more effective consumer and community collaborations in research such as the [Australian Health Research Alliance health research hub](#) which provides access to practical, high-quality resources and tools for researchers, consumers, community members and healthcare professionals.
- Build partnerships between consumer representative groups, researchers and funding agencies to:
  - develop criteria that assess consumer involvement in developing grant funding proposals, including genuine co-design of research and involving consumers on assessment panels
  - more closely monitor, evaluate and report on the amount and quality of consumer and community collaborations in research through assessment of progress and final reports

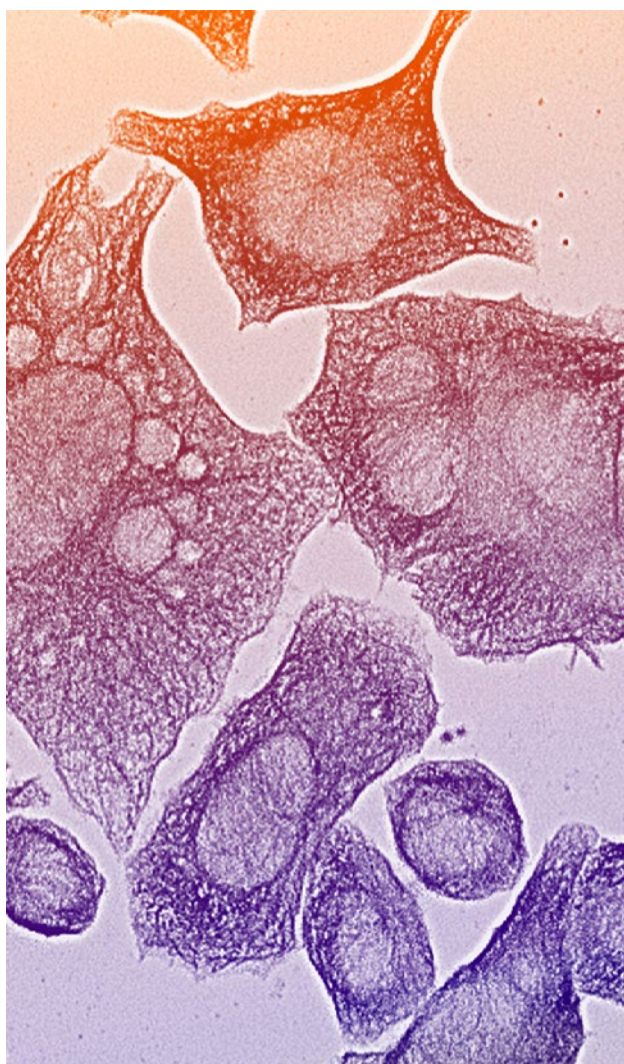
### Why this Outcome is important

- The National Health and Medical Research Community Qualitative Research report<sup>26</sup> found that many Australians believe the general public should have a say in setting research priority areas as well as in all stages of the research process.
- There is a lack of quantitative and qualitative data on consumer and community involvement in research processes and research projects.
- There are insufficient resources to fund genuine involvement of consumer and community members in research and inconsistent guidance across funding agencies as to how consumers and communities should be engaged in research processes.
- Increased number of researchers trained in cultural safety and evidence of improved relationships and engagement between researchers and communities would enhance research outcomes.
- Greater evidence of dissemination of research findings to communities through surveys and other reporting and feedback mechanisms will build trust and generate expectations for high-value care in policy and practice.



## What it could achieve

- More research that is shaped by, and benefits, the communities it affects.
- Consistent frameworks and training across institutions for inclusive research practices.
- Increased evidence of professional development for consumer researchers.
- Greater trust in science and social licence for research through inclusive planning, priority setting and translation processes.
- Increased research that addresses the social determinants of health and systemic barriers to reduce health disparities.
- Institutional and cultural transformation from closer monitoring of consumer involvement in research through progress reports and mandatory training for researchers.



NHMRC Science to Art (2017): Dr Nadia Cummins, University of Queensland, 'March of the Cells'

## Case studies

### WA Consumer and Community Involvement Program<sup>57</sup>

The [Western Australian Consumer and Community Involvement Program](#) (CCIProgram), based in the Western Australian Health Translation Network, supports consumers, community members, researchers, institutions and health services to work in partnership to make decisions about health research, policy and practice. The CCIProgram also provides tailored CCI support for research, unique involvement opportunities, and a diverse range of capacity-building activities and engagement events. There are currently over 6,000 members with lived experience interested in informing health and medical research. The CCIProgram supported the development of Western Australia's first Mental Health Research Framework, enabling people with lived experience of mental health challenges to play a pivotal role in establishing priorities for mental health research.

### National Centre for Indigenous Genomics<sup>58</sup>

The [National Centre for Indigenous Genomics](#) (NCIG) was formed at the recommendation of leading Indigenous Australian thinkers and advocates. The Australian National University put the future of a research collection in the hands of an Indigenous consultative committee, agreeing to abide by its recommendations. The consultative committee regarded the collection as having immense cultural, historical and scientific importance. The NCIG's genome research is conducted in line with customary laws and practices and community interests. Indigenous Australians play the central role in decisions about data collection, stewardship, access and use. They ensure that the conduct of research and dissemination of findings become part of cultural narratives that have meaning in the lives of Indigenous Australians.

## 3.4 Place-based regional, rural and remote health and medical research

**Outcome:** Research and infrastructure in RRR areas, developed in collaboration with local communities, that are place-based and meet the unique needs, challenges and opportunities of RRR communities

RRR health and medical research is a focus of the National Strategy, with the aim of addressing significant disadvantages and inequities in health access and outcomes. All elements of the National Strategy apply to RRR communities, in addition to this action area, and should be read as such (refer to *Regional, Rural and Remote (RRR) Implementation Guide*).

### Proposed actions

- 19 Stand up a 'Rural Health Innovation Hub' as part of the national collaborative platforms and networks action (refer to *Focus Area 1.3*), co-designed by rural health researchers and communities.
- 20 Strengthen capacity for and access to clinical trials, including preventive and non-pharmacological interventions for RRR researchers and residents through expansion of teletrials as a scalable and accessible model informed through partnerships with RRR researchers and communities.
- 21 Ensure tailored implementation of the National Strategy for RRR communities with a dedicated implementation guide (refer to *RRR Implementation Guide*), developed in consultation with key stakeholders, including the National Rural Health Commissioner, and delivered and monitored through rural-specific governance mechanisms.

### Areas to further progress

- Embed RRR representation in key governance forums, including to inform national priority setting and horizon scanning, to ensure equitable consideration of the needs of, and opportunities for, rural communities (refer to *Focus Area 1.2*).
- Develop collaborative approaches to shared use of research infrastructure to improve access for researchers working in RRR settings, building on the proposed Health and Medical Research Infrastructure Roadmap (refer to *Infrastructure Enabler*).
- Develop local infrastructure, capacity building and services to increase the translation of research in ways that are appropriate and fit for purpose for (refer to *Focus Area 1.3*, *Focus Area 3.1* and *Workforce Enabler*).
- Enable clinician engagement in research including part-time clinician-researcher fellowships by considering provision for protected time and identifying fellowships for RRR health professionals to initiate and participate in research (refer to *Focus Area 3.1*).
- Consider ways to strengthen support for research participation among RRR residents, including to address barriers to access such as cost and travel time.

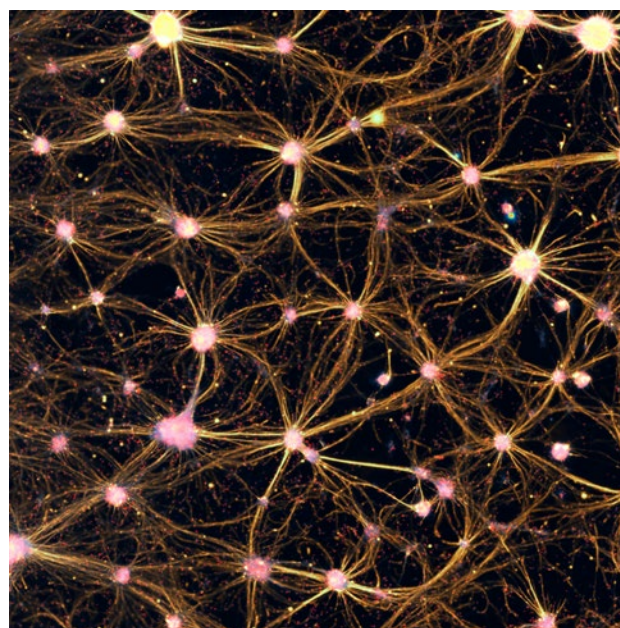
- Strengthen ongoing initiatives through the NHMRC and MRFF on RRR research, such as through the RTC initiatives and targeted grant opportunities, and develop new research collaborations with RRR researchers, communities and health services that are informed by and have balanced representation from different RRR communities. Funding schemes should be specifically designed to suit the needs of RRR researchers and communities through longer term and more flexible funding criteria.
- Address data gaps and increase analytical resources covering RRR populations through the proposed national health data ecosystem (refer to *Data and Digital Technology Enabler*).

### Why this Outcome is important

- Around 7 million Australians live in RRR communities. They have the right to inform priority setting, participate in health and medical research and access evidence-informed health care.
- The local RRR community and researchers are the knowledge holders of the multiple factors that contribute to health inequities for RRR populations and are best placed to work on, and identify, potential solutions.
- There are significant challenges in undertaking research in RRR areas, including distance, constrained clinical services, a limited research workforce and limited access to research infrastructure.
- Every RRR community in Australia is different and faces unique challenges in its degree of remoteness, health system capacity, demographics and healthcare needs.
- There is evidence of the effectiveness of hub and spoke models that decentralise and extend clinical trials and research translation activities, and enable collaboration into a variety of settings - for example, teletrial designs that extend resources and upskill healthcare organisations into RRR areas.

### What it could achieve

- Improved health outcomes for RRR communities through access to evidence-informed health care, clinical trials and research outcomes that are incorporated into policy and practice.
- Community-driven priorities for RRR research that reflect the real needs and values of local populations and fair representation in decision making, leading to equitable research investment to help close longstanding gaps in health outcomes and research representation.
- Increased volume and visibility of RRR research activity through funding and research outcomes.
- Development and growth of regional health infrastructure, including trial sites, telehealth capabilities and mobile research units, to enable greater access to new health technologies and treatments for RRR communities.
- Embedded local research capacity, ensuring that research expertise is grown and sustained within communities, rather than being externally driven or temporary.
- Balanced and tailored investment of types of resources based on needs of the specific RRR community.



NHMRC Science to Art 2025: S. Morrison, Australian Institute for Bioengineering and Nanotechnology, 'Cosmic Web'



## Case studies

### Townsville Institute of Health Research and Innovation<sup>59</sup>

The [Townsville Institute of Health Research and Innovation](#) (TIHRI) is a purpose-built facility that supports all phases of clinical trials and strengthens local research capacity in northern Queensland. It provides infrastructure and resources for clinician researchers, including specialised equipment and collaborative spaces. TIHRI's strategic plan emphasises digital health, First Nations inclusion and workforce development to address regional health challenges. As the only tertiary university hospital in the region, it exemplifies how locally embedded research can improve health outcomes in regional, rural and remote communities.

### The Australian teletrial program<sup>60</sup>

[The Australian Teletrial Program](#) is supported by funding from the Australian Government under the Medical Research Future Fund infrastructures grant. The program has been provided \$75.2 million over 5 years to create the infrastructure across the Northern Territory, Queensland, South Australia, Tasmania, Victoria and Western Australia.

The program has successfully set up a Regional Clinical Trial Coordinating Centre in each participating state and territory. The staff at these centres are helping clinicians, researchers and sponsors to set up and run teletrials in their local region.

### Riverland Academy of Clinical Excellence<sup>61</sup>

The [Riverland Mallee Coorong Local Health Network](#) (LHN) serves a population of 70,000 people across 12 rural towns in South Australia. In 2021, the Riverland Mallee Coorong LHN created the Riverland Academy of Clinical Excellence (RACE) to deliver on a commitment to take responsibility for training their own clinical workforce; creating and improving relevant evidence bases for their clinical practice; and bringing the benefits of integrated teaching, research and clinical care to the communities in the region. In 2 years, RACE transformed the Riverland Mallee Coorong LHN by recruiting more than 30 new doctors to live and work in these rural communities and train for a Rural Generalist Fellowship. To support the education and training of clinicians, RACE has developed a research unit, thus creating employment opportunities for rural and remote researchers. Albeit in its infancy, the local chief investigators have been successful on 9 nationally competitive grants from the National Health and Medical Research Council and Medical Research Future Fund. There have been 17 publications and 20 international and national conference presentations with RACE clinicians and researchers as authors. By deliberately shifting the approach within RACE to focus on cultivating local talent, First Nations peoples' ancient wisdom was harnessed to empower and sustain local communities.

Drive impact through strengthened  
research development and  
commercialisation

**focus area**



# Drive impact through strengthened research development and commercialisation through:

- 4.1 research-industry partnerships and integration
- 4.2 sovereign capability and innovation
- 4.3 access to capital and risk sharing.

Mechanisms that incentivise and support commercialisation and industry growth would deliver a robust and impactful life sciences and health technology sector, giving Australians priority access to new treatments, medicines and healthcare innovations and generating economic gains.

Goal	How Focus Area 4 contributes
<b>Lead the world in health outcomes</b>	More rapidly developing research findings into innovative treatments, therapies, products, health technologies and models of care supports the delivery of world-leading health care.
<b>Deliver equity - no one left behind</b>	A robust life sciences and health technology sector that develops innovations into novel treatments, therapies and digital health technologies at scale helps to ensure the health of all communities.
<b>Drive national prosperity and security</b>	Advancing health and medical research innovation and commercialisation drives national prosperity and security by fostering investment, supporting economic growth and improving health outcomes through access to new treatments, medicines and health care.
<b>Advance excellence in research and innovation</b>	Addressing the critical gaps in the sector through bridging skills gaps, incentives for Australian innovations and increasing access to capital enables excellence in research and innovation.
<b>Secure a resilient and sustainable health system</b>	Enhancing research development and commercialisation with a focus on sovereign capability improves access to novel treatments and care, increasing resilience in the face of future health challenges.
<b>Strengthen regional and global partnerships</b>	Australia's capacity to innovate and scale up research quickly and effectively provides a platform to develop and enhance partnerships that improve health outcomes, regionally and globally.

## Outcome areas

### Research-industry partnerships and integration

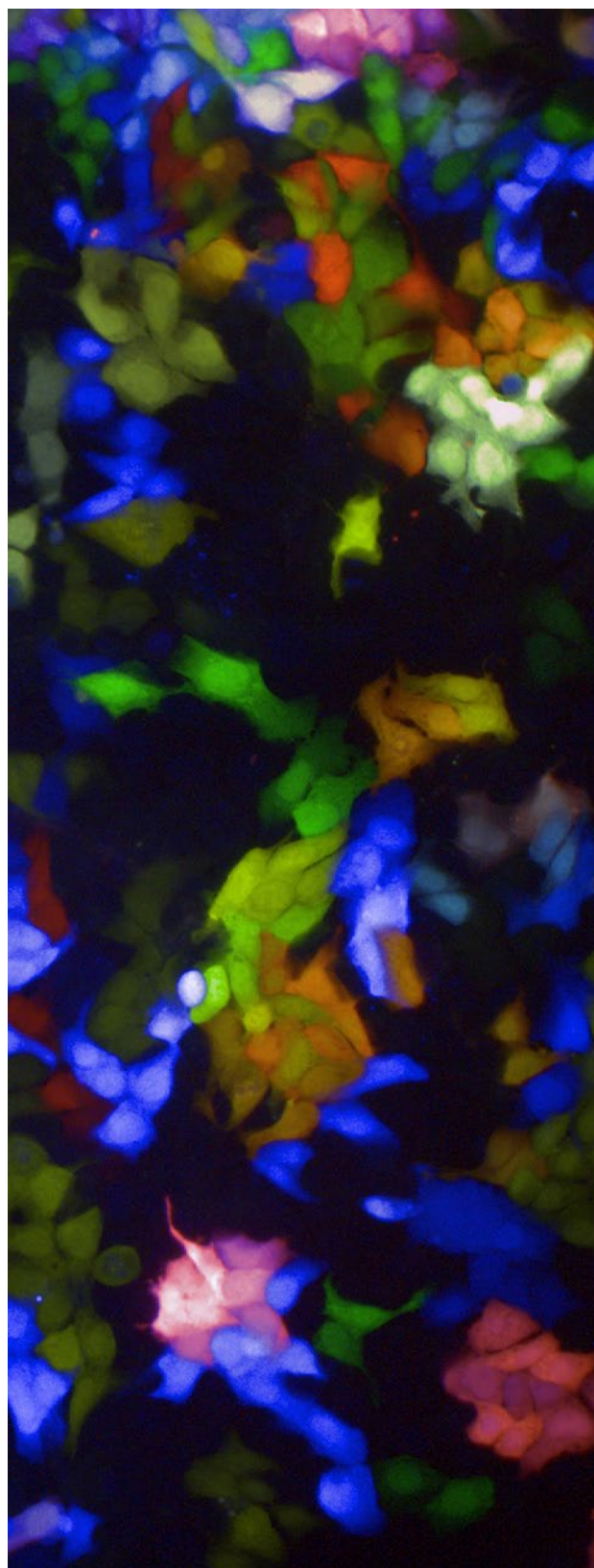
Increasing opportunities for research-industry exchanges, training and alternative career pathways for researchers would help to forge stronger links between academia and business and ensure Australia has the workforce it needs to support a strong and broad-based life sciences and health technology sector into the future. Focusing on building skills, expertise and collaboration from discovery research to market would strengthen Australia's health system and deliver benefits to the community and broader economy.

### Sovereign capability and innovation

Prioritising and recalibrating policy and regulatory settings to incentivise onshore development and build Australia's life sciences and health technology industry would enable faster domestic access to health innovations and an increase in local production and export of Australian products to global markets. A focus on building sovereign capability in the development of medical diagnostics, devices, pharmaceuticals and digital health technologies and software, where it is sensible to do so, should be an aim, incorporating the outcomes of the Health Technology Assessment (HTA) Review,<sup>62</sup> procurement reform and the findings of the Strategic Examination of Research and Development.<sup>63</sup>

### Access to capital and risk sharing

Initiatives that enhance access to capital for research and development (such as through better engagement with philanthropy and industry) and harmonise regulatory, approval and procurement pathways would help drive industry investment and growth. Further building the capacity of existing innovation precincts and hubs would enable Australia to be more attractive to foreign investments.



NHMRC Science to Art (2021): Professor Frederic Hollande, the University of Melbourne, 'Optically Barcoded'

## 4.1 Research-industry partnerships and integration

**Outcome:** A health and medical research sector where researchers are integrated with industry specialists and equipped with cross-disciplinary skills and resources to successfully develop innovative research

### Proposed actions

**22** Expand and/or complement existing programs and develop new programs which equip researchers with commercialisation and investor engagement skills. This could include recommencing the REDI program, with an initial focus on identified fellowships for Aboriginal and Torres Strait Islander researchers.

**23** Establish a whole-of-government, cross-portfolio 'Life Sciences and Health Technology' Council to bring together key Commonwealth research funding portfolios (Health, Education and Industry) with expert advisors from the sector to inform and guide Commonwealth investments in research, development and innovation:

- A key role of the council would be to establish a central platform to provide consolidated, up-to-date information on intellectual property (IP) (in partnership with IP Australia and the Department of Education), funding available at different stages of the commercialisation pathway, and training programs for researchers, particularly in identifying and protecting potential IP.

### Areas to further progress

- Identify and address areas of research and technical skill development (PhD and non-PhD qualifications) required for the life sciences and health technology industries, working with the Department of Education, Department of Industry and Department of Home Affairs (refer to *Workforce Enabler*) and informed by horizon scanning findings. The aim would be to inform national training pathways to address skills gaps and to acquire required skills internationally.

### Why this Outcome is important

- Australia's life sciences and health technology sector is fragmented, with policy responsibility spread across 9 Commonwealth government portfolios and with limited connection between initiatives and lack of clear priorities to guide investment decisions. While there is significant funding, tax incentives, programs and support available for commercialisation activities in Australia, at both national and state or territory level, there is insufficient coordination and often a lack of awareness across the sector of what is available.
- Researchers developing intellectual property with commercial potential find it difficult to take their inventions down a commercialisation pipeline. Commercialisation activities require a specific knowledge and skill set, which are not a focus in the training of researchers.
- Australian life sciences and health technology companies continue to struggle to secure skilled staff – in 2021, MTPConnect identified key skills gaps across critical areas such as business operations, health economics and regulatory affairs, health data and cybersecurity.<sup>64</sup>

## What it could achieve

- A coordinated sector with a centralised, accessible platform of consolidated and up-to-date resources and information for researchers and others in the sector.
- An integrated system where researchers are more able to connect with industry specialists and services that equip them with sufficient knowledge in commercialisation.
- A pool of highly skilled workers ready to enter the life sciences and health technology industry, enabling companies to successfully bring products to market.

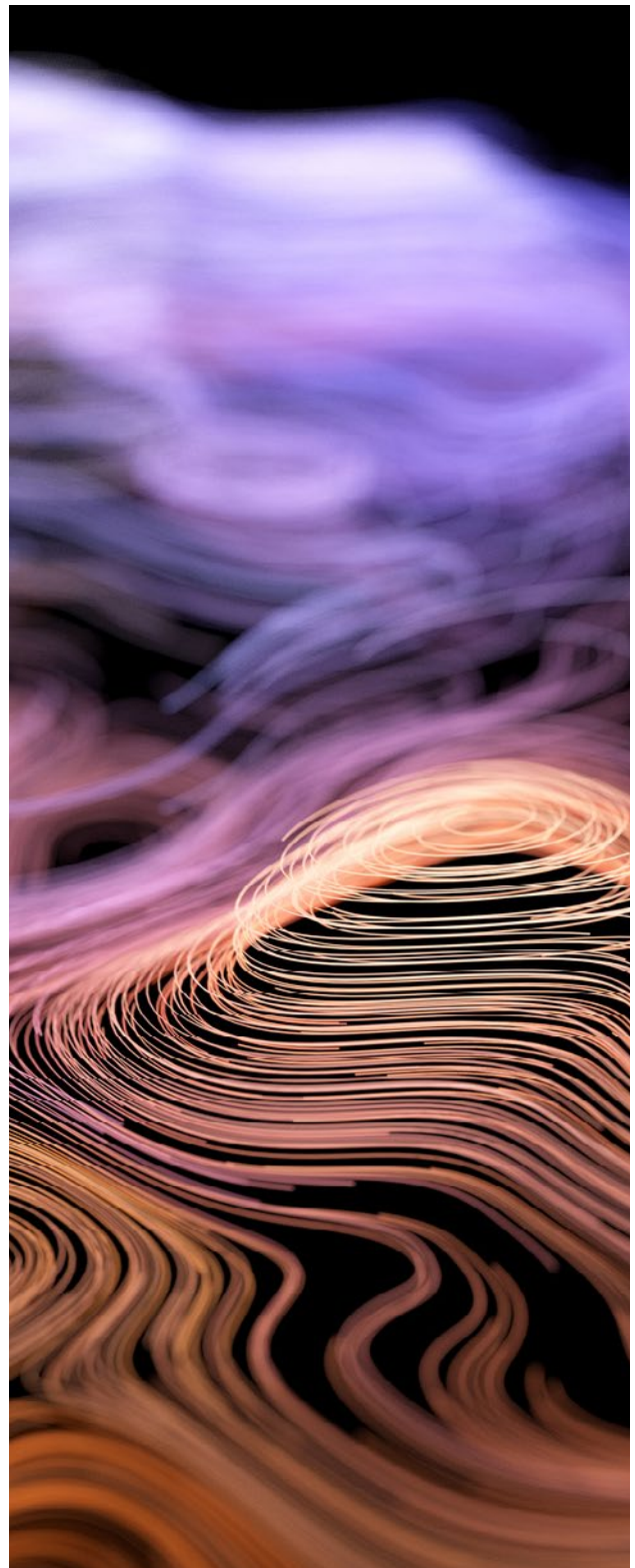


## Case study

### MTPConnect

[MTPConnect](#) was established by the Australian Government as an independent, not-for-profit organisation to support the growth of the Australian medical products sector.

MTPConnect improves collaboration and commercialisation, funding cutting-edge innovations, improving management and workforce skills, optimising the regulatory and policy environment and improving access to global supply chains and strategic international markets. A significant number of MTPConnect's programs and funding opportunities are offered in partnership with the federal government, particularly Medical Research Future Fund initiatives, and state governments. MTPConnect also regularly collaborates with sector organisations and peak groups like Medicines Australia, Medical Technology Association of Australia and AusBiotech; and trade agencies including Austrade to deliver programs and advocate on behalf of the biotech and medtech sector.



NHMRC Science to Art (2015): ' Victor Anggono, The University of Queensland, 'In search of memory'

## 4.2 Sovereign capability and innovation

**Outcome:** A thriving life sciences and health technology industry where Australian innovations successfully scale to generate commercial solutions in the domestic and global market

### Proposed actions

**24** Fast-track sovereign capability and domestic market access and avoid losing valuable IP to overseas production through:

- incentives to support the procurement and development of products established through Australian innovations
- expedited regulatory pathways to get Australian-funded innovations to market
- mechanisms to enable Australian patients to have access to Australian innovations, subject to expedited reimbursement processes.

**25** Establish an Incubator Funding Program to reinvest in select, highly promising research, with the potential for significant impact and benefit, that requires additional short-term support to be ready for commercial investment:

- A second element of the proposed Incubator Program would focus on select research ready for translation into health guidelines, policy or clinical practice (refer to *Focus Area 3.1*).

- Encourage cross-disciplinary research and collaboration to develop new digital capabilities and health technology to grow capacity in Australia's digital and connected care sector for transformative health technologies, such as developing advanced software and personalised and precision treatments, and prioritising research that overcomes technical and systemic barriers to the development and use of AI applications in clinical environments.

### Why this Outcome is important

- There is a need to incentivise and support development of sovereign capability and grow domestic market access for products and digital health technologies/software developed through Australian research funding.
- Over 90% of prescription medicines and 97% of all diagnostic raw materials and components are imported into Australia.<sup>66</sup> International indices of innovation show that, while Australia ranks relatively highly on innovation inputs, we are less strong when it comes to innovation outputs.<sup>23</sup>
- Enhanced development capacity, streamlined regulatory pathways and access to national and international markets are key to securing sovereign capability, economic resilience and the growth of Australia's life sciences industry.

### Areas to further progress

- Support on-going implementation of the HTA Review recommendations that address Australian market attractiveness and ensure that the recommendations remain fit for purpose.
- As outlined in the Medical Science Co-Investment plan,<sup>65</sup> consider use of Australia's areas of comparative advantage: *digital health, health and medical devices, complex therapeutics and sustainability* (includes additive manufacturing, preventive health care and sustainable production), as one of the mechanisms to guide investment decisions.

### What it could achieve

- More Australian-made innovations developed and made accessible to Australians and exported internationally, generating financial benefits and contributing to economic growth.
- Reduced reliance on imports for critical medicines, vaccines, diagnostics and biologics.
- Faster access to innovative therapies, medicines, digital health technologies/software for Australian patients and faster response to health emergencies, including pandemics and antimicrobial resistance.
- Expansion of Australian industries into local and international markets.



## Case studies

### ADAPT<sup>®67</sup>

Australian healthcare company Admedus Limited, in collaboration with Western Australian heart researcher and inventor Professor Leon Neethling, developed the ADAPT<sup>®</sup> tissue engineering process, which transforms animal tissue into durable bioscaffolds that can be used to mimic human tissue for surgical repair (Cardioce<sup>®</sup>).

Originally produced in small batches at Royal Perth Hospital, Admedus opened a manufacturing facility in 2014 in Malaga, Western Australia, to support broader surgical use, particularly in babies and children with heart defects. ADAPT<sup>®</sup> tissue has since been distributed for use in over 55,000 patients globally.

In 2022, Admedus changed its name to [Anteris Technologies](#) and pivoted to become a structural heart company. The novel acellular, biostable and non-calcifying ADAPT<sup>®</sup> tissue was molded into a single-piece 3D biomimetic heart valve (DurAVR<sup>®</sup> THV), with excellent early clinical results in the treatment of severe aortic stenosis – a life-threatening condition.

### Australian Epilepsy Project<sup>68</sup>

The [Australian Epilepsy Project](#) (AEP) is focused on democratising access to advanced epilepsy diagnostics at scale, including tests which are not widely available under the current standard of care. The AEP is a working example of how AI and technology can be used to develop a scalable expert system that enables a better standard of care for complex conditions; and is delivering real-world results, including a 10% improved epilepsy-causing lesion detection, 8% improved quality of life (over the 2 years of follow-up), 9% improved work productivity (for those with epilepsy-related reduced working hours) and an 8% average reduction of seizure rates across all cohorts.

The platform is a national solution that already connects over 1,900 patients with over 160 neurologists across all mainland states. The AEP translates and extends over 30 years of Florey research in imaging, genetics and neuropsychology into patient outcomes, positively impacting the lives of many Australians living with or recently diagnosed with epilepsy.

The AEP was awarded \$30 million from the Medical Research Future Fund Frontiers Program in 2021 – the largest single government investment into epilepsy research in Australia – and is currently seeking funding to move to the next stage of development to enable broader access by more than 151,000 patients and their families affected by epilepsy and to realise the full benefit of its research underpinnings.

## 4.3 Access to capital and risk sharing

**Outcome:** A highly competitive and investor-friendly environment with access to capital to sufficiently fund and support the development of Australian research and innovation

### Proposed action

**26** Establish a scheme to match Commonwealth funding with that of other non-government funders to diversify the research funding pool and increase and incentivise philanthropy and private sector investment in research:

- Working with researchers and funding agencies, the proposed scheme would seek to develop an accessible database of projects that have successfully shown proof of concept and require funding for their development stage.

### Areas to further progress

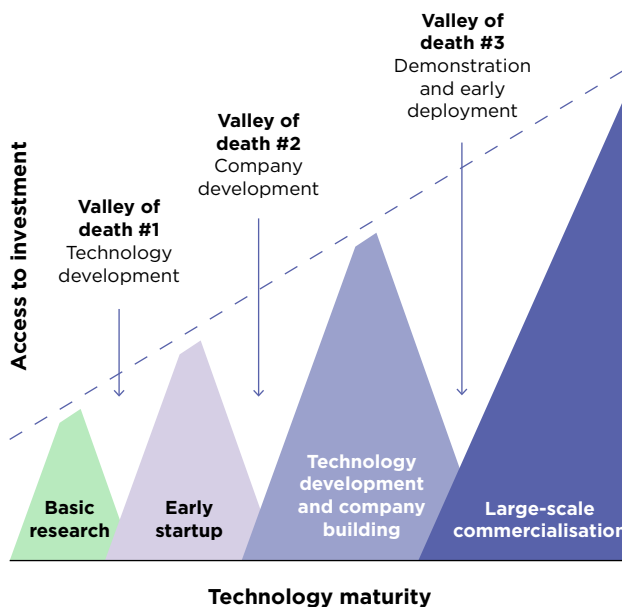
- Identify potential programs that can crowd-in a diversity of venture capital firms and investment companies supporting Australian research.
- Consider the right investment settings and an enabling policy and tax environment to reward risk in order to stimulate private sector investment.
- Work with state and territory governments to further build capacity of existing innovation precincts and hubs that link government, universities, MRIs, hospitals, startups and manufacturers, to build commercialisation expertise and increase capacity to attract investors.
- Consider the benefits of pooled investment vehicles to foster government-private industry partnerships. Global examples can be found in Canada and the UK.

### Why this Outcome is important

More than 80% of Australian life sciences companies are small and medium enterprises working in the early stages of translating research into commercial products.<sup>69</sup>

Companies face significant challenges moving through the ‘valleys of death’ from early-stage research to large-scale commercialisation (it can take 7 to 15 years and up to \$2.5 billion to bring one biomedical product from early research to market).<sup>66</sup>

**Figure 1: Challenge areas for product commercialisation**



- Access to capital is cited by the technology industry as the number one barrier to commercialisation in Australia.<sup>70</sup>



## What it could achieve

- Greater engagement and co-investment initiatives to increase the pool of funding available for the development of new innovations at scale.
- Diversifying the pool of investors to more effectively distribute risk while mobilising the substantial funding needed to scale innovation and accelerate growth.
- Targeted investment in established innovation precincts to amplify their capabilities and global standing, creating a system that attracts talent, capital and industry and brings together Commonwealth and state funding to drive research commercialisation and impact.



NHMRC Science to Art (2023): Sarah Piper, Monash University, 'Grapes'

## Case studies

### The Translation Science Hub<sup>71</sup>

In 2022, Sanofi entered a partnership with the Queensland Government, the University of Queensland and Griffith University to establish the [Translational Science Hub](#) (TSH) in Queensland with a strong focus on research and development and commercialisation pathways for mRNA vaccine development. The \$280 million unique initiative connects world-class researchers in Queensland with Sanofi scientists in France and the US, placing Queensland at the forefront of global vaccine development and biomedical research, and is bringing more expertise, supply-chain capabilities and clinical investigations to Queensland.

The TSH partnership enhances Queensland's research ecosystem through strategic collaboration. Funded projects benefit from regular reviews with Sanofi experts, fostering knowledge exchange and improving outcomes and industry insights. Researchers gain exposure at Sanofi's external innovation showcases, elevating Queensland's global research profile.

### European Innovation Council<sup>72</sup>

The [European Innovation Council](#) (EIC) has been established under the European Union Horizon Europe program to support innovation throughout the life cycle from early-stage research to proof of concept, technology transfer and the financing and scale-up of startups and small and medium enterprises (SMEs). EIC provides funding for individual companies (mainly startups and SMEs) through both grants and investments in the form of direct equity or quasi-equity investments managed by the EIC Fund.

Maximise the benefits of  
advanced technologies and  
be ready for future challenges

focus area



# Maximise the benefits of advanced technologies and be ready for future challenges through:

- 5.1 global partnerships
- 5.2 advanced therapeutics and technologies
- 5.3 environmental sustainability and resilience.

Australia's capacity to anticipate and respond to emerging and future health risks and opportunities requires ongoing engagement as a strong contributor to regional and international partnerships, investment in advanced technologies and promotion of environmental sustainability and resilience. Threats such as those posed by pandemics, climate change and shifting geopolitical dynamics can be addressed through coordinated international research responses, supported by the transformative problem-solving potential of advanced technology.

Goal	How Focus Area 5 contributes
<b>Lead the world in health outcomes</b>	Delivering new, technology-enabled approaches to prevent, treat and support people living with complex health problems, promoting environmental sustainability and collaborating with global partners positions Australia as a global leader in health outcomes.
<b>Deliver equity - no one left behind</b>	Ensuring that access to the transformative potential of advanced technologies is shared equitably across the community contributes to the goal that no one is left behind.
<b>Drive national prosperity and security</b>	Building sovereign capability and leadership in advanced therapeutics and technologies, expanding domestic production and economic diversity and ensuring research is environmentally sustainable supports Australia's national prosperity and security.
<b>Advance excellence in research and innovation</b>	Stimulating technological innovation, advancing novel therapeutic approaches and taking an environmentally responsible approach drives research excellence while contributing to global health knowledge and outcomes.
<b>Secure a resilient and sustainable health system</b>	Harnessing advanced therapeutics and technologies that enable novel approaches to research, prevention and treatment, along with a focus on environmental sustainability and a One Health approach, underpins health system resilience.
<b>Strengthen regional and global partnerships</b>	Strengthening regional and global partnerships grows Australia's own health and medical research capacity and ensures that Australia contributes positively and meaningfully to addressing global health challenges.

## Outcome areas

### Global partnerships

Global partnerships are vital to advancing health and medical research, sharing knowledge and expertise across borders. In an increasingly interconnected world, addressing health challenges such as pandemics, antimicrobial resistance, chronic and rare diseases and fragmented health systems requires coordinated, collaborative responses that no single country can address alone. Collaboration with like-minded countries in our region and across the globe accelerates scientific discovery, facilitates access to diverse populations and datasets and supports the development of globally relevant solutions. Strengthening these partnerships enhances resilience, innovation and preparedness for future needs and challenges.

### Advanced therapeutics and technologies

Building capability in advanced technologies and therapeutics is essential to ensuring Australia sustains a high-performing health and medical research ecosystem that is fit for purpose and positioned to seize new opportunities. Technologies including AI, cell and gene therapies, robotics, genomics and personalised medicine are increasingly demonstrating a capacity to supercharge research, address the world's most pressing health issues and offer hope for millions of people affected by previously untreatable and incurable diseases. Ensuring that Australia has the infrastructure, workforce, skills and regulatory settings to maximise the impact of new technologies as they arise is vital to cementing our place as an international leader in knowledge creation and healthcare delivery.

### Environmental sustainability

Integrating environmentally sustainable practices into research design, infrastructure and operations reduces the ecological footprint of research and aligns with broader public health and climate resilience goals critical to long-term prosperity and security. By adopting sustainable research practices, minimising waste and investing in green technologies, the research community can lead by example – demonstrating that scientific advancement and environmental stewardship go hand in hand. This approach supports long-term health outcomes by protecting the ecosystems that underpin community wellbeing.

#### One Health<sup>73</sup>

One Health is a concept that highlights the interconnectedness between the health of all humans, domestic and wild animals, plants and wider ecosystems. This interconnectedness means integrated, multidisciplinary and collaborative approaches across disciplines, sectors, communities and borders will be crucial to safeguarding the health of all humans into the future. Advancing technological capabilities to assist in the rapid prevention, diagnosis and treatment of disease; a focus on new methodologies and practices that will reduce the impact of research on animals and the environment as a whole; and working collaboratively with international and regional partners to openly share knowledge and expertise are all key components of an effective, meaningful and impactful One Health approach that will contribute to global health security and the health and wellbeing of all Australians.

## 5.1 Global partnerships

**Outcome:** Australia takes a leading role in addressing health priorities globally and in the Indo-Pacific region through meaningful strategic collaborations

### Proposed action

**27** Improve coordination and pathways for collaboration, capacity strengthening and knowledge exchange through bilateral and multilateral relationships and agreements with international health and medical research funders, regulators and academic institutions, including by:

- working with regional neighbours to address global health and health security as issues of shared high priority, and supporting research partnerships to address risks and build capabilities and capacity in global health
- enhancing Australia's relationship with international research funders and strengthening Indo-Pacific regional collaborations
- contributing to global cooperation and partnership on mutual health research priorities to improve the health of Indigenous peoples.

### Areas to further progress

- Strengthen international data partnerships that allow Australian participation in global health research for shared benefits, and prioritise and reward international data collaborations and trials, particularly in rare diseases, paediatric clinical trials and other cohort analyses.

### Why this Outcome is important

- Australia needs to look to a range of regional and global partners to ensure it remains well positioned to address shared health challenges, such as pandemics and antimicrobial resistance, to provide early access to new technologies and treatments domestically and to maintain necessary supply chains in the face of potential geopolitical shifts.

- International partnerships strengthen Australia's research capacity and opportunities and reflect current trends towards collaboration. Globally, the share of publications representing international collaboration has increased from 4.7% in 1980 to 25.7% in 2021.<sup>74</sup>
- The Australian Government negotiates and supports a number of strategic bilateral and multilateral agreements with international governments and research funding bodies that enable Australian researchers to join collaborative research projects and facilitate international networks and knowledge exchange.
- Initiatives like the [Human Frontier Science Program](#), [Global Alliance for Chronic Disease](#), and the [Global Research Collaboration for Infectious Disease Preparedness](#) underpin the development of global networks and resources, such as data repositories, to support the conduct of research and contribute to regional capacity building.<sup>75</sup>
- Strategic collaborations towards internationally shared health priorities aligns with the Australian Government's Medical Science Co-investment Plan.<sup>65</sup> The plan aims to capture more value from Australia's world-leading medical science sector by increasing industry capability and capacity, supporting commercialisation and improving our international competitiveness.
- Aboriginal and Torres Strait Islander research leaders and funding agencies have established longstanding and successful formal and informal links with international research and funding institutions to strengthen the capacity and capability of Indigenous health and medical researchers, encourage international collaboration on health and research issues of relevance to Indigenous populations, and to support actions that further understanding of Indigenous peoples' health and health research experiences and approaches to health and wellness.

## What it could achieve

- Increased opportunities for knowledge exchange between Australian researchers and international partners and collaborators, embedding global partnerships in research and innovation.
- Support for Aboriginal and Torres Strait Islander leadership in building international collaboration and knowledge sharing with Indigenous partners across the globe.
- Strengthening of Australia's position as a global contributor to shared challenges and to achieving positive health outcomes.
- Increased capacity for Australian innovations to establish partnerships and translate Australian research for regional and global markets.
- Increased leadership roles for Australia in regional health governance and strategic investment, coordinating action that addresses health threats and priorities across borders.



## Case studies

### Partnerships for a Healthy Region<sup>76</sup>

[Partnerships for a Healthy Region](#) is part of Australia's continued investment in the health of our region and is an important contribution to the Pacific and South-East Asia's recovery from COVID-19. It aims to help build resilient and equitable health systems in the Pacific and South-East Asia, supporting partner countries to reduce disease risks and burdens and respond effectively to health emergencies.

Investments under Partnerships for a Healthy Region contribute to communicable disease prevention and control; non-communicable disease prevention and control; sexual and reproductive health and rights; resilient health systems; and effective partnerships and delivery.

### Horizon Europe<sup>77</sup>

[Horizon Europe](#) is the European Union's flagship research and innovation funding program, structured around 3 main pillars: **Excellent Science**, supporting cutting-edge research and workforce development; **Global Challenges and European Industrial Competitiveness**, focused on areas including health, climate and digital technologies; and **Innovative Europe**, which fosters innovation and supports startups. Horizon Europe also funds mission-oriented initiatives targeting major issues such as climate adaptation and cancer.

The program is designed to facilitate collaboration, enhance knowledge creation and dissemination, strengthen impact and boost economic growth across Europe and internationally. The indicative funding pool for Horizon Europe for 2021-2027 is EUR95.5 billion, with a proposed budget of EUR175 billion for 2028-2034.

Participation is open to institutions based in European Union member states and associated third countries. Australian participation is supported through the National Health and Medical Research Council - Horizon Europe Grant Scheme.<sup>78</sup>

In September 2025, Australia entered into non-binding exploratory talks on a future associate agreement with Horizon Europe, building on a 30-year history of research collaboration between Australia and the European Union that commenced in 1994, when Australia signed a bilateral Agreement on Science and Technology Cooperation with the European Commission. Associate status would further enhance existing cooperation by allowing Australian researchers to directly access funding and lead projects.<sup>79</sup>

## 5.2 Advanced therapeutics and technologies

**Outcome:** Globally competitive, transformative approaches to research and clinical practice built through innovative and advanced therapeutics and technologies

### Proposed action

**28** Establish a National Collaborative Platform for Non-animal Technologies, in partnership with state and territory governments, peak bodies and industry, to coordinate and promote non-animal model capabilities and platforms and provide training, information and advice to researchers, industry and government (refer to *Focus Area 1.3*).

### Areas to further progress

- Develop a nationally coordinated approach to harnessing AI capabilities across the research and innovation sector in safe and responsible ways, ensuring it is fit for purpose for the Australian context and validated for Aboriginal and Torres Strait Islander people and diverse populations.
- Work with State and Territory governments, industry, private healthcare providers and peak bodies to identify gaps in access to advanced technology applications focused on areas of critical need such as rare and chronic disease, RRR communities and historically underserved communities.
- Seek to develop an end-to-end, world class value chain for the discovery, development and distribution of cell and gene therapies to benefit patients in Australia and around the world. Areas of immediate focus could include enhancing investment in core technologies and skills development, improving strategic alliances and cross-industry collaboration, and increasing clinical trials activity through a nationally coordinated approach.<sup>80</sup>

- Explore options for regulatory pathways for advanced technologies that are fit for purpose and take into account the differing approaches to research, development and deployment that apply to new technologies including, for example, digital health products and cell and gene therapies.
- Continue to build Australia's capability in 'omics and quantum technologies, ensuring the recommendations under existing frameworks and strategies including the National Health Genomics Policy Framework and Implementation Plan<sup>81</sup> and the National Quantum Strategy,<sup>82</sup> are fully realised to enhance the benefits for health and medical research.
- Ensure that advanced technology applications are equitably, ethically and appropriately harnessed for the benefit of Aboriginal and Torres Strait Islander people, RRR communities and other priority populations, underpinned by standards and guidelines that are developed and implemented in partnership with Aboriginal and Torres Strait Islander people and priority populations.

### Why this Outcome is important

- The development of innovative technologies and applications is a global, forward-looking enterprise. Australia's ability to remain at the forefront of novel technological approaches is reliant on our ability to engage with international collaborators across the full technological spectrum and to pursue new ideas proactively as they arise.
- Non-animal technologies and methods replace or reduce the use of animals in research. The complexity and capabilities of these technologies now equal or surpass traditional animal-based methodologies and can be more easily domestically produced, reducing dependencies on access to overseas animal models for certain types of research.<sup>83</sup>



- Supporting the rapid uptake of new technologies for use in research and deployment to the health system has significant health, wellbeing and economic benefits. Harmonising Australia's regulatory and reimbursement systems can assist in ensuring all patients can benefit from new therapies as soon as they are proven safe, clinically effective and cost effective, regardless of which part of the health system they are accessing, where they live or what they can afford to pay.
- The potential of AI to impact the speed and scale of innovation and product development and drive sector disruption offers opportunities for new players to translate their ideas quickly and widely. As AI and advanced therapeutics and technologies rapidly evolve, there needs to be parallel investment in infrastructure, workforce and pathways to facilitate translation quickly and effectively. Balancing regulatory and policy settings that can anticipate change and proactively respond, while also ensuring the safety and security of the community, is critical.
- Regenerative medicine such as cell and gene therapy can transform curative treatments, addressing significant unmet clinical needs. Australia's regenerative medicine sector is robust and growing, with around 45 research institutes and 60 companies involved in regenerative medicine research, development and manufacturing.<sup>84</sup>
- 'Omics technologies and quantum computing offer the potential to develop novel treatments, exponentially expand our capacity to solve complex problems using large datasets and are recognised as critical technologies for Australia.<sup>85</sup>

## What it could achieve

- Position Australia as a global leader in advanced technologies development, scaling and implementation, accelerating the translation of cutting-edge research into practical applications.
- Long-term health and well-being benefits for the Australian community and savings to the health system through delivery of earlier, more accurate disease diagnoses and potentially curative treatments.
- Increased opportunities for workforce expansion and development in growth industries in health and medical research.

## Case studies

### Viral Vector Manufacturing Facility<sup>86</sup>

The [Viral Vector Manufacturing Facility](#) (VVMF) is Australia's first clinical and commercial-scale manufacturing facility dedicated to providing services in the research, design, development and manufacture of Good Manufacturing Practices (GMP) grade lentiviral and adeno-associated viral vectors for advanced therapeutic applications. Located in the Westmead Health and Innovation Precinct, the facility was officially opened in October 2025 with the support of a \$134.5 million investment from the New South Wales Government.

Viral vectors play a crucial role in delivering genetic material into cells and are central to innovative treatments in areas of medicine including cancers and rare diseases. Securing viral vector supply in Australia will leverage Australia's world-leading cell and gene therapy expertise, provide opportunities for high-value, high-skilled jobs and boost Australia's advanced manufacturing industry. It will also ensure Australian researchers, biopharma companies and patients have faster, secure access to advanced therapies for clinical trials and therapeutic and preventive health interventions.

### National Centre for the Replacement, Refinement and Reduction of Animals in Research<sup>87</sup>

The [National Centre for the Replacement, Refinement and Reduction of Animals in Research](#) (NC3Rs) is a UK-based scientific organisation that works nationally and internationally with the research community to accelerate advances in replacing, refining and reducing the use of animals in research and testing. The NC3Rs funds research into new 3Rs research models, tools and technologies; provides training to embed the 3Rs into research practices worldwide; and advises funders and research institutions on the implementation of 3Rs approaches in their organisations. The NC3Rs receives core funding from the Medical Research Council and the Biotechnology and Biological Sciences Research Council, as well as funding for specific programs and co-funded grants from a range of funders.

## 5.3 Environmental sustainability and resilience

**Outcome:** A health and medical research system and health system that adhere to and promote environmental sustainability and support a One Health approach

### Proposed action

**29** Require NHMRC Administering Institutions and MRFF Eligible Organisations to demonstrate a commitment to environmental sustainability through institutional policies and practices as a component of applications and through compliance reporting.

### Areas to further progress

- Support actions under the National Health and Climate Strategy<sup>88</sup> to build a climate-resilient health system and support research and innovation on climate-related health impacts.
- Incorporate Aboriginal and Torres Strait Islander knowledge systems, innovations and practices into sustainable health and medical research practices, through engagement and co-design (refer to *Focus Area 3.3*).
- Encourage partnerships between Commonwealth and state and territory government agencies, universities and other national and international organisations to implement One Health approaches across the entire research ecosystem.

### Why this Outcome is important

- People in Australia are experiencing the impacts of climate change on their health. The increasing frequency, intensity and duration of extreme weather events is leading to more deaths, disease and injury; and adversely impacting mental health and wellbeing.<sup>89</sup>
- The National Health and Climate Strategy outlines 4 core objectives: health system resilience; health system decarbonisation; international collaboration; and health in all policies. Consistent with these objectives, Australian health and medical research can support health, climate-resilient and sustainable communities through the work practices of the health and medical research ecosystem.
- Many of the practices, tools and equipment commonly used for health and medical research, including, for example, animal experimentation and AI, are coming under increasing scrutiny for their potential environmental impacts.
- International funders of health and medical research are implementing progressive policies and commitments to environmental responsibility.

### What it could achieve

- Recognising and mitigating environmental impact across all facets of health and medical research as an integral part of research culture.
- Prioritising research on health and health system impacts of climate change and how these challenges can be addressed going forward.
- Incentivising sustainability as a core research ethic, including by incorporating Aboriginal and Torres Strait Islander knowledge and practices.



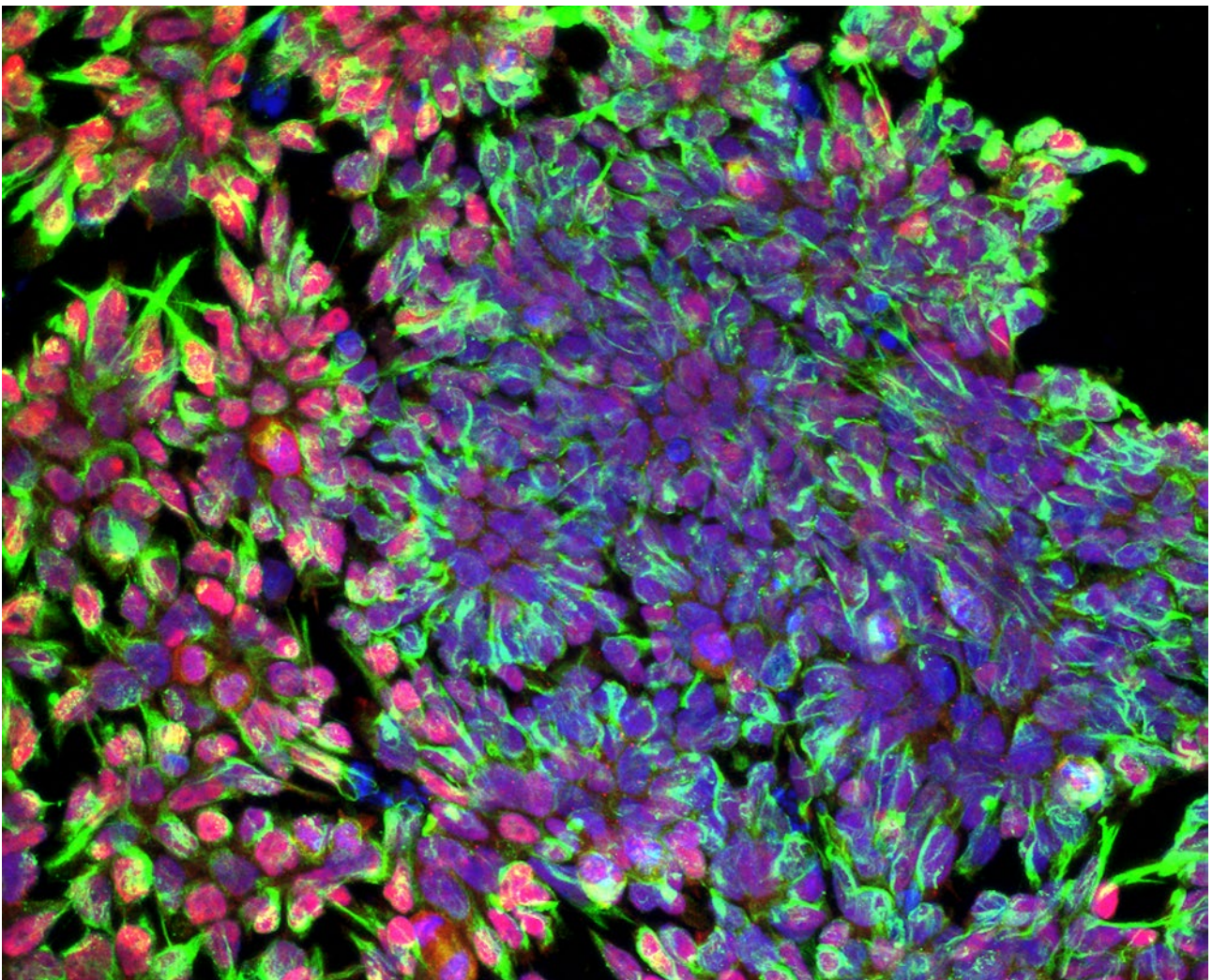
## Case studies

### Department of Health, Tasmania

Tasmania has a net zero target for greenhouse emissions by 30 June 2030.<sup>90</sup> In support, the Tasmanian Department of Health developed and released a 2019 framework for action focused on establishing a sustainable health unit, reducing emissions, sustainable food choices and new delivery models, including reducing unnecessary medical tests and treatments.<sup>91</sup>

### The Australian Commission on Safety and Quality in Health Care

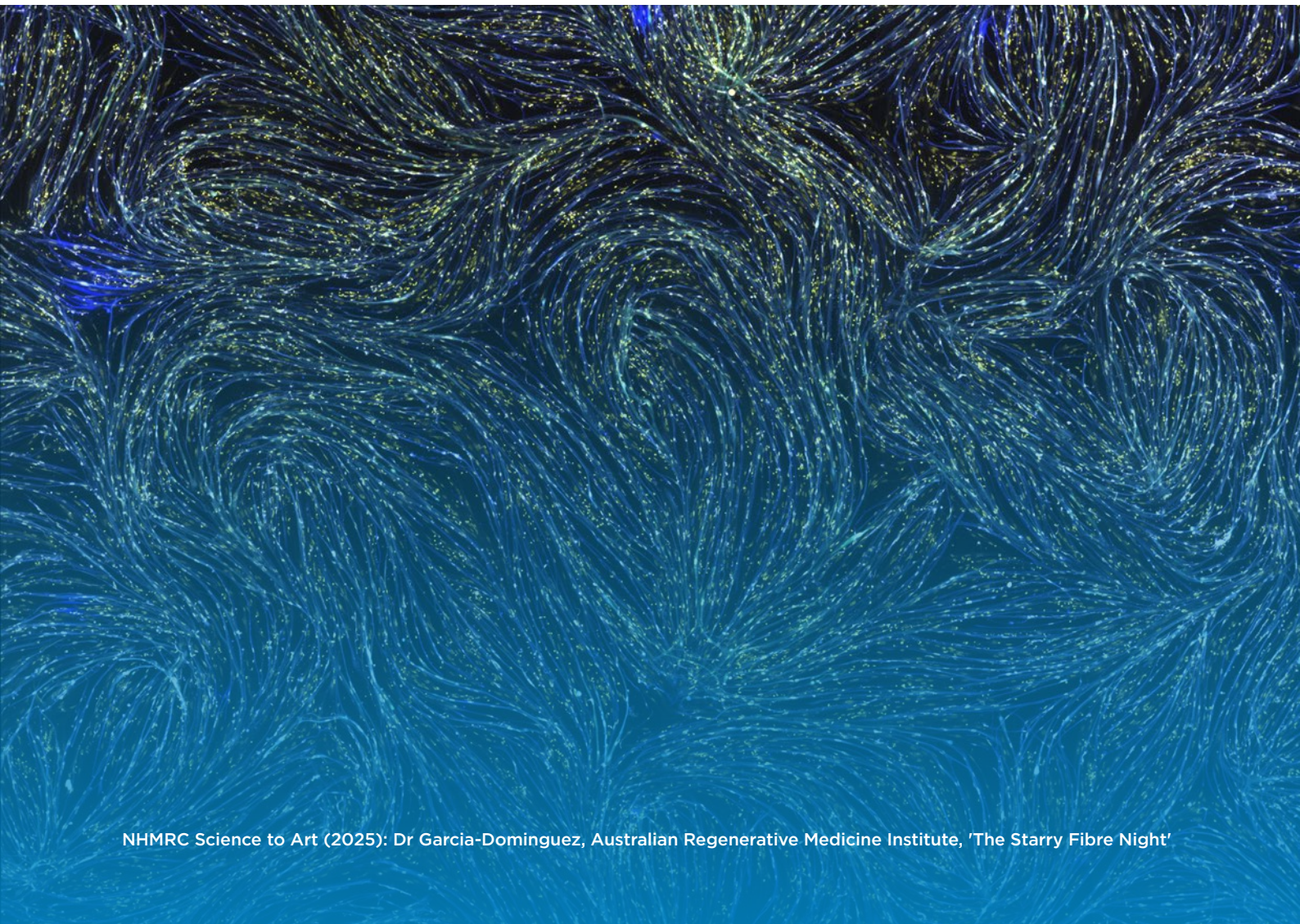
The Australian Commission on Safety and Quality in Health Care, in partnership with the Australian Centre for Disease Control, the Australian Indigenous Doctors' Association and the Australian Medical Colleges, released a joint statement in 2024 signifying a shared commitment to addressing the health impacts of climate change.<sup>92</sup> The Working Together to Achieve Sustainable High Quality Health Care in a Changing Climate Joint Statement recognises the challenges of climate change and the risks posed to physical and mental health.



NHMRC Science to Art (2021): Ms Mira Holliday, Centenary Institute, 'Bouquet of Rosettes'

# Enablers and enabling initiatives

*Enabling Initiatives are foundational efforts that  
create the conditions for success and will support  
outcomes across all 5 Focus Areas*



# Workforce



# Workforce

**Outcome:** A sufficient, skilled and future-ready workforce with enhanced job security, stability and productivity, engaged in research positive environments free from discrimination

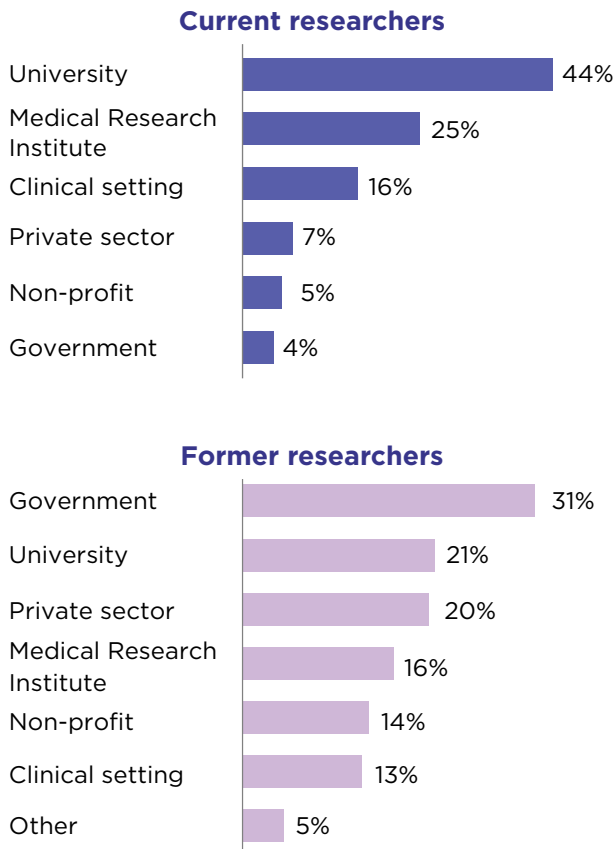
Australia's health and medical research workforce – researchers; professionals working across associated technical, support and advocacy roles; consumer and community members; and those with lived experience – is a fundamental building block of the health and medical research sector.

Goal	How the Workforce Enabler contributes
<b>Lead the world in health outcomes</b>	Australia's intellectual capital to invent and implement new technologies, therapeutic products and healthcare services can help fuel improved health outcomes.
<b>Deliver equity – no one left behind</b>	Diversity and lived experience enrich workforce capability. Initiatives to improve gender balance, geographic representation and integrate consumer and community perspectives into research teams deepen the impact and relevance of research.
<b>Drive national prosperity and security</b>	A well-trained and diverse workforce, equipped with broad-ranging skill sets, contributes to economic growth and prosperity.
<b>Advance excellence in research and innovation</b>	A well-supported, agile and diverse workforce is vital to delivering research to the highest standards of excellence and driving innovation.
<b>Secure a resilient and sustainable health system</b>	A skilled research workforce generates the data and insights that governments and industry need to make informed decisions on health, education and environment to shape effective public policy and to inform sector decisions.
<b>Strengthen regional and global partnerships</b>	Supporting international mobility and investing in a globally engaged health and medical research workforce contributes diverse viewpoints, builds networks and connections and bolsters Australia's capacity to contribute to global health.

## What we know

- The Australian Health and Medical Research Workforce Audit<sup>93</sup> (Workforce Audit) reported on the profile of our 39,000 active health and medical researchers and the almost 20,000 Australians with research training who currently work in non-research roles. The audit confirmed well-recognised challenges and opportunities.
- The full size, scope and make-up of the Australian health and medical research workforce is not well understood, in part because a large component of the workforce that contributes to health and medical research are primarily employed in other roles – for example, as clinicians or other healthcare providers; or work outside the traditional research institutions of universities or medical research institutes – in the life sciences industry or in related professions such as contract research management; intellectual property (IP); and legal, public health, health economics, policy and advocacy.
- The Workforce Audit identified that 69% of the health and medical research workforce are employed in traditional research environments such as universities and medical research institutes (MRIs), with the remaining 31% working across clinical settings, government and the private and non-profit sectors.
- Many health and medical researchers work across more than one sector or transition to other sectors over the course of their careers.

**Figure 2: Employer organisation category for current and former researchers (as at June 2024)**



- International mobility of the health and medical research workforce is high, with around 40% of researchers born overseas and around 44% working overseas during their careers.
- Career pathways for researchers in non-traditional settings and with non-traditional backgrounds are limited. This includes clinician researchers from all disciplines and researchers working in broader community or healthcare settings, who face challenges in obtaining funding, securing workplace support for protected research time and having their qualifications and track records recognised.
- The health and medical research workforce is generally older than the Australian workforce, with around 50% over the age of 45 compared to 39% for the general workforce, reducing opportunities for early- to mid-career researchers (EMCRs) to gain leadership experience and career progression opportunities.

- Job insecurity is a major concern, with many on fixed-term or casual contracts and competing for limited funding opportunities. This is a key factor, alongside work-life balance, leading researchers to contemplate leaving the sector and underscoring the need for more reliable funding sources to retain talent.
- Highly competitive grant funding, reduced leadership opportunities and insecure jobs disproportionately impact women, Aboriginal and Torres Strait Islander researchers, LGBTQIA+ and non-binary/gender diverse researchers, multicultural and linguistically diverse researchers and researchers who live with disability.
- The regional, rural and remote (RRR) research workforce faces particular challenges. The health and medical research workforce is generally under-represented in RRR areas, and opportunities to engage in research are limited by constrained clinical environments and the capacity to access infrastructure and support for research activities.
- Despite work by the National Health and Medical Research Council (NHMRC) and others to level the playing field through priority funding and other measures, there is more to be done to coordinate efforts across the whole health and medical research ecosystem to improve workforce diversity, equity and inclusion.
- The interplay between the formulation of Research Training Program funding to universities, the number of PhD graduates being educated, and the pressure this places on funding programs as graduates seek to enter the workforce is not well understood, nor is there a clear line of sight between graduate skills and postgraduate training and a workforce ready to address contemporary and emerging challenges.
- Consumers and community members and people with lived experience play a critical role in informing, co-designing and supporting research; however, barriers exist to community-based researchers being appropriately recognised, supported and remunerated for their contributions.

## Proposed enabling action

**30** A **Health and Medical Research Workforce Plan** (Workforce Plan) that describes the size and location of the current research workforce, identifies trends, gaps and opportunities, and sets a path to build an adaptable, diverse and future-ready workforce going forward.

The proposed **Workforce Plan** would provide a contemporary view of the health and medical research workforce; map trends and identify challenges; and set a framework for attracting, retaining and developing a diverse workforce going forward. The **Workforce Plan** would aim to:

- identify and define the people and organisations that form the Australian health and medical research workforce through improved data collection and periodic, detailed health and medical research surveys to identify trends and emerging challenges and develop tools to inform long-term planning, monitoring and evaluation
- improve alignment between the current and future workforce needs of the sector and the training options offered by universities and other higher education providers, clinical and professional development training programs in research support, translation and commercialisation
- incentivise approaches that drive an adaptable and responsive workforce and encourage successful movement into and out of the research workforce by broadening the curriculum of Australian higher degree by research programs to include cross-disciplinary skills beyond traditional research; and cross-subsidised opportunities for researchers such as fellowships, internships and secondments
- improve workforce diversity and job security through grant schemes and career development initiatives that enhance funding stability, allow for longer term career planning and promote equitable, gender and diversity balanced opportunities for researchers across the country
- optimise training and funding programs to support EMCRs to develop and sustain research careers by ensuring that funding schemes include mechanisms to consider career stage as a target for affirmative action to increase opportunities for EMCRs to progress their careers; and providing career development, leadership training and other incentives for them to remain as active members of the research workforce, particularly in areas of need identified through the Workforce Plan
- create pathways for non-traditional researcher training and career development to embed research as a key component of clinician training and practice and to acknowledge and support the critical role of community-based researchers in building the capacity, quality and impact of Aboriginal and Torres Strait Islander health research and those working in RRR areas
- future-proof the Australian health and medical research workforce, especially in areas of identified skills needs, through fostering science literacy in schools and ensuring that future funding and workforce policy development prioritise and encourage a diversity of talent across priority populations, including Aboriginal and Torres Strait Islander people, people with disability, gender diverse people and people living in RRR communities.



## What it could achieve

- An evidence-based and detailed understanding of the characteristics of the health and medical research workforce – its size, skills, composition and placement.
- Improved data capture and trend analysis to monitor workforce demographics and map workforce trends over time, including for clinician and community-based researchers.
- Improved training and diverse career development pathways and opportunities, developed in collaboration with state and territory governments, higher education providers, industry and the philanthropic sector, to support an adaptable, agile and diverse workforce equipped with skills and knowledge to meet current and future needs.
- Greater job security and long-term planning for researchers through evidence-informed adjustments to funding models and training pathways to better align higher education and training and career development support initiatives with workforce needs.
- Attraction and retention of new generations of researchers with the aptitudes and skills needed for a future health and medical research workforce that better represents and supports diversity across gender, population groups and geography.
- Enhanced opportunities for researchers to move between sectors and build broad-based, adaptable skills and knowledge exchange across the research ecosystem.
- Strengthened clinician researcher pathways to enhance the quality and safety of health care through high-quality, evidence-based practice and innovation.
- Exposure to the life sciences and health technology industry for academic, clinical and health services researchers to expand the capacity and capability of health and medical researchers and build meaningful, ongoing partnerships between industry, academia and government in the provision of joint training, placement and mentoring opportunities.

## Case studies

### Cancer Nurses Society of Australia Cancer Nursing Workforce Survey

The [Cancer Nurses Society of Australia](#) (CNSA) regularly reviews data collected through the Department of Health, Disability and Ageing National Health Workforce Data Tool to obtain a snapshot of the changing demographics of the nursing workforce who select 'cancer care' as their job area. Together with data collected through the workforce data tool, the Australian Health Practitioner Regulation Agency and national registration boards, CNSA runs an annual survey to help understand and predict trends in cancer nursing workforce employment, education and professional development needs; and to inform strategic planning of cancer services to better meet the needs of healthcare professionals and consumers to ensure equity of access to care.

### National workforce monitoring surveys

The UK-wide surveys of medical and dental clinical academics undertaken by the [UK Medical Schools Council](#) are examples of how universities, hospitals and research funders can be surveyed to understand the current pool of clinical academics. Data collections are coordinated and repeated annually to define specialty populations and career stage, as well as regions, funding sources, age and gender. This information is used to plan for the future of clinical academia, ensuring that it continues to benefit patient care. The National Health and Medical Research Council's 2021 report [Investigating clinician scientist career pathways](#) flagged the opportunity to better support Australian clinical academics by improving what is understood.

# Funding

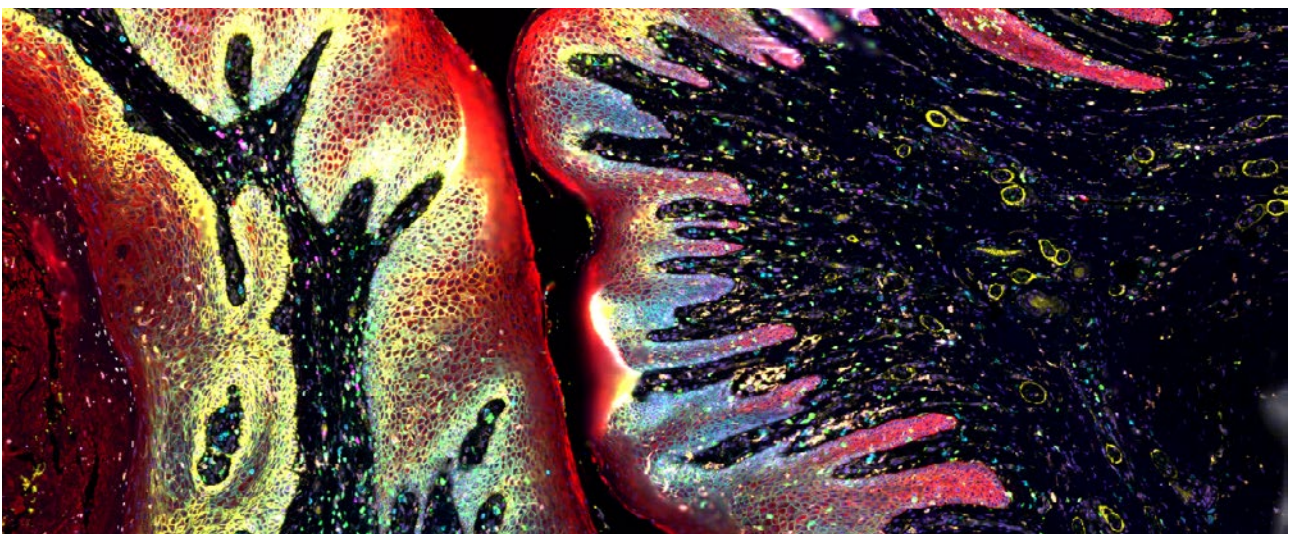


# Funding

**Outcome:** Sufficient funding that is strategically coordinated across government, industry, not-for-profit and philanthropic sectors

Having sufficient funding that is strategically coordinated across the research continuum to sustain research, development and innovation and deliver against national priorities is fundamental to achieving the Goals of the National Strategy.

Goal	How the Funding Enabler contributes
<b>Lead the world in health outcomes</b>	Funding needs to be directed into research areas that address areas of greatest need, both now and into the future, to improve health outcomes.
<b>Deliver equity - no one left behind</b>	Targeted investment in health research that addresses disparities and supports Australia’s diverse communities will advance equity and improve population health.
<b>Drive national prosperity and security</b>	Australia’s health and medical research sector is a vital driver of economic growth and biosecurity. Strategic investment in the capability and sustainability of the sector will safeguard the nation’s sovereign capabilities and future resilience.
<b>Advance excellence in research and innovation</b>	Coordinated and optimised investment across the health and medical research continuum is essential to generating new research breakthroughs, strengthening Australia’s competitive advantages and sustaining a thriving research workforce.
<b>Secure a resilient and sustainable health system</b>	Long-term improvements in health care flow from a sustainably funded research ecosystem.
<b>Strengthen regional and global partnerships</b>	Strategic joint funding mechanisms can catalyse global and regional health improvements, foster scientific innovation and build lasting partnerships.



NHMRC Science to Art (2025): Associate Professor Arutha Kulasinghe, Frazer Institute, University of Queensland, 'Battleground beneath the skin'

## What we know

- Sufficient funding is essential for the ongoing sustainability and continued high-quality output of Australia's research sector, to provide the right level of investment in the right areas at the right time. This includes addressing challenges to sustainability for health and medical research institutions, such as the impact of indirect costs of research (refer to *Focus Area 1.1*) and the disparities and constraints within existing funding structures.
- Health and medical research receives funding from Commonwealth, state and territory governments as well as from the private sector, not-for-profit organisations and charities. Currently, there is limited interaction and coordination between funding entities.
- Understanding current funding flows and potential gaps or opportunities across the research continuum is important as a precursor to managing the change needed to strengthen the system into the future and bring great ideas into mainstream use.
- Australian Government funding is provided through the NHMRC and the Department of Health, Disability and Ageing's Medical Research Future Fund (MRFF); the Australian Research Council (ARC); the Department of Education through research block grants and the National Critical Infrastructure Support program; and the Department of Industry, Science and Resources through CSIRO and the Biomedical Translation Fund and Cooperative Research Centres. State and territory governments also play an important role in funding research, translation and infrastructure support, along with not-for-profit philanthropic agencies and private/industry sources.
- Current funding models tend to be fragmented and can have a short-term focus from one grant cycle to the next; are not necessarily well balanced across the sector; and do not cover all the costs of undertaking research, such as those related to infrastructure, some elements of the workforce, and costs associated with consumer and community engagement and translation. This can discourage collaboration and access to research assets and act as a barrier to scaling up successful initiatives, with implications for Australia's global reputation for research excellence. Sufficient, better coordinated and innovative funding models are needed to address key issues of sustainability.
- Growth and sustained innovation across the health and medical research sector also relies on collaboration with industry, not-for-profit organisations and philanthropy to diversify the funding pool and to inject more focus into development and commercialisation pathways.

### Health expenditure

Based on data from the Australian Institute of Health and Welfare,<sup>94</sup> in 2023–24, an estimated \$7.6 billion was spent on health and medical research:

- the Australian Government contributed \$5.9 billion (77.2%)
- state and territory governments contributed an estimated \$1.2 billion (15.4%)
- the non-government sector contributed an estimated \$0.6 billion (7.4%).

The average annual real growth rate in funding over the decade was 1.4%.

- Health and medical research funding crosses areas from discovery and basic science research to priority-driven research, translation, commercialisation and implementation. There are dedicated funds for infrastructure and equipment and to support the workforce at various stages of their careers. Distributing funding in the most optimal way and ensuring that all parts of the system work together effectively to bring discovery to scale will drive success.

## Proposed enabling action

**31** An annual **National Health and Medical Research Investment Statement** (Investment Statement) that provides clear, accurate and accessible information on the availability and distribution of resources to the health and medical research sector to underpin how priorities are set and future investment decisions are made across the range of funders.

The proposed **Investment Statement**, modelled on the existing science, research and innovation (SRI) budget tables,<sup>95</sup> should:

- be an accessible, user-friendly data resource which is able to be interrogated and updated annually
- include government and non-government sources of funding; information on where funding is going and trends over time; and leverage existing and develop new data sources to ensure the full complement of funding, including that provided by the philanthropic sector and industry, can be identified and tracked
- encourage and enable data sharing among funders, developing a common dataset with consistent data capture practices to ensure transparency and to inform evaluation processes and investment decisions. This should include the ability to disaggregate funding for priority populations; RRR areas; and Aboriginal and Torres Strait Islander populations
- be used with insights from the proposed Health and Medical Research Workforce Plan and Infrastructure Plan to guide broad investment discussions on health and medical research.

## Areas to further progress

- Explore potential avenues to redesign current funding models to consolidate and leverage available funding for maximum impact through:
  - a broad approach to health and medical research funding that has the right balance of funding for smaller, short-term investigations of high-risk, innovative ideas (refer to *Focus Area 1.1*) and larger, longer term grants for more established programs of research in priority areas (e.g. nationally focused collaborative platforms and networks such as the Rural Health Innovation Hub and the Aboriginal and Torres Strait Islander-led research centres - refer to *Focus Areas 1.3* and *2.1*)
  - balanced investment into discovery and priority-driven research that addresses areas of national need and considers risk and strategic opportunities identified through national priority setting (refer to *Focus Area 1.2*)
  - cross-disciplinary grant schemes, collaboratively supported by funding agency partnerships (such as the ARC and NHMRC), that incentivise and provide resourcing for research activity that does not otherwise fit within traditional disciplinary boundaries
  - further engagement with philanthropy and industry representatives when designing grant schemes, potentially through existing joint NHMRC-MRFF Advisory Committees. This can build on the unique role each funding scheme has - for example, philanthropic funding can complement government investment (refer to *Focus Area 4.3*) by supporting innovative, higher risk initiatives that may fall outside the scope of traditional public funding.



## What it could achieve

- Accurate measurement of Australia's investment in health and medical research across government, private, philanthropic and not-for-profit funders, with capacity to benchmark to other countries.
- Funding allocated more strategically across funders and the research landscape, based on the size, skills, composition and placement of the workforce, projects and infrastructure to support optimal outcomes.
- Adapted funding models that suit different research environments, including those that rely on non-traditional or cross-disciplinary approaches, such as prevention, methodological research and primary care.
- Enhanced understanding and response to areas of unmet need and reduced duplication or gaps, enabling funding to be reallocated.
- Potential to co-invest across multiple funding agencies and sectors that support system-wide transformation, not just short-term projects.
- Ongoing involvement of philanthropy and industry in setting priorities for large-scale, cross-cutting funding grant opportunities.
- Researchers with better insight about where to apply for their respective fields of research and career stages.
- A more collaborative and less competitive funding structure that encourages and rewards collaborative and cross-disciplinary research for greater social and economic impact.

## Case studies

### Science, research and innovation budget tables<sup>96</sup>

[The science, research and innovation \(SRI\) budget tables report](#) the Australian Government's investments in research and development, science, and innovation. Updated annually, the dataset is an [interactive dashboard](#) which is easily accessible.

The government's research and development investment supports 160 programs and activities across 14 government portfolios. In 2025–26, the Industry, Science and Resources; Education; and Health and Aged Care portfolios have the highest allocated investment.

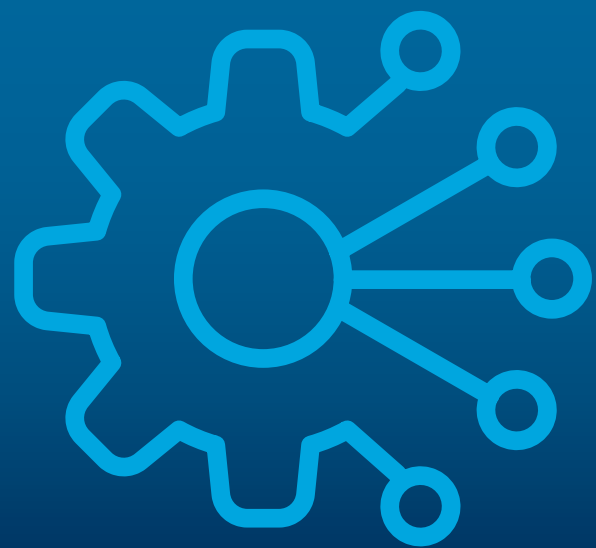
The SRI tables enable insight on some key trends in government research and development investments, which are a component of Australia's broader innovation system, and an understanding of how government investments in research and development relate to the new National Science and Research Priorities.

### Impact of large-scale funding from multiple sources – [National Bowel Cancer Screening Program](#)<sup>18</sup>

Australia was the first country in the world to implement and sustain a national population-based colorectal cancer screening program using faecal immunochemical tests. The National Health and Medical Research Council began ongoing funding for key colorectal cancer researchers in the 1970s to develop testing technology and later to demonstrate the health service implementation of screening practices. Many other organisations, including Cancer Australia, State Cancer Councils, Australia Cancer Research Fund, South Australian Strategic Health Research Program, Flinders Foundation, Australian Gastrointestinal Trials Group and the Hospital Research Foundation, went on to provide funding for the research.

Since the program commenced, over 10 million screening tests have been completed. The program has been contributing to reducing morbidity and mortality from bowel cancer in Australia.

# Data and digital technology



**Enabler**

# Data and digital technology

**Outcome:** Data and digital technologies that are accessible, interoperable and ‘research-ready’, with the capability to advance better health outcomes

A connected, person-centred, fit-for-purpose, national data and digital ecosystem that can harness technological advances, including Artificial Intelligence (AI), to accelerate the pace of research; support a highly capable workforce to respond to emerging health trends; and stimulate industry growth to capitalise on Australian innovation.

Goal	How the Data and Digital Technology Enabler contributes
<b>Lead the world in health outcomes</b>	Effective use of data and digital technology enables personalised medicine, early disease detection and data-driven public health strategies to support high-quality and innovative research and efficient healthcare delivery, tailored to the unique needs of Australia’s diverse population.
<b>Deliver equity - no one left behind</b>	Improved access to data and digital tools has the potential to identify and address health disparities across regions and populations, enabling targeted interventions for underserved communities and ensuring that health policies are informed by inclusive, representative data.
<b>Drive national prosperity and security</b>	Greater technological capability and capacity to anticipate challenges supports economic resilience to emerging health or system threats and brings increased capacity to protect Australian digital health infrastructure and critical systems.
<b>Advance excellence in research and innovation</b>	Integrated data and investment in national data and digital capabilities maintains Australia’s global position and provides new platforms to foster discovery research and innovation.
<b>Secure a resilient and sustainable health system</b>	Sophisticated use of data to proactively plan, rapidly respond to crises, and deliver sustainable, equitable health care brings long-term value to both people and the economy.
<b>Strengthen regional and global partnerships</b>	Collaborative research, shared public health surveillance and interoperable digital health systems position Australia as a trusted partner in advancing global health security and innovation.

## Maiam Nayari Wingara – Defining Indigenous Data Sovereignty and Indigenous Data Governance<sup>39</sup>

In Australia, ‘Indigenous Data’ refers to information or knowledge, in any format or medium, which is about and may affect Indigenous peoples both collectively and individually.

‘Indigenous Data Sovereignty’ refers to the right of Indigenous people to exercise ownership over Indigenous Data. Ownership of data can be expressed through the creation, collection, access, analysis, interpretation, management, dissemination and reuse of Indigenous Data.

## What we know

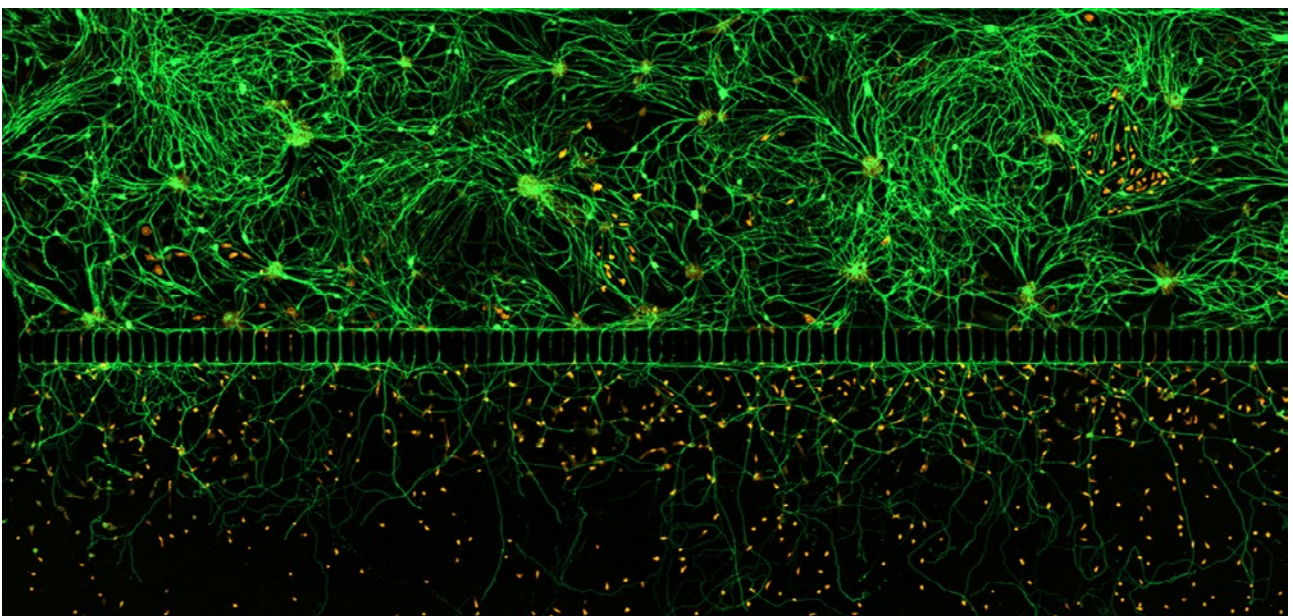
- Australia hosts world-class data facilities and capabilities across governments, research precincts and private enterprises. Large population-scale linked data assets, such as the Australian Bureau of Statistics [Person Level Integrated Data Asset](#) (PLIDA) and the Australian Institute of Health and Welfare [National Health Data Hub](#) (NHDH), biodata holdings like the [Australian Health Biobank](#) and increasingly powerful computational platforms and tools, like AI, can amplify the power of research.
- The CSIRO AI trends for healthcare report<sup>97</sup> identifies the opportunities and challenges facing the continued and inevitable integration of artificial intelligence (AI) in Australia's healthcare sector, from clinical decision support to administrative tasks.
- However, critical gaps in health data collections, inconsistent legislation and standards, restrictive data sharing environments and lack of interoperability across information systems mean existing data holdings are underutilised for research and difficult to bring together to achieve impact at scale.
- Key challenges for Australia include siloed development of data and digital resources, resulting in duplication of assets (data proliferation) and associated costs across sectors; limited capacity to share data and technology across borders and sectors; and a mismatch in workforce skills needed to harness AI and contemporary analytic tools. Among Organisation for Economic Co-operation and Development countries, Australia performs poorly on measures of data availability, data accessibility, and support for data reuse.<sup>98</sup>
- International counterparts and coalitions are strengthening data collaborations and biodata capabilities and prioritising AI enabled advances, overcoming barriers that persist across Australian jurisdictions.
- In Australia, a range of cross-jurisdictional plans, strategies and initiatives related to health data and digital health care are underway:
  - the Australian Digital Health Agency is driving cross-jurisdictional digital health reforms in national health information sharing, system interoperability and exchange so that health information follows individuals safely and seamlessly through the system, with work underway to develop the data-driven infrastructure outlined in the Digital Health Blueprint 2023-2033;<sup>99</sup>
  - recent implementation of Sharing by Default legislation, commencing with diagnostics and pathology results, seeks to ensure timely patient and clinician access to key medical information in My Health Record; supports greater health literacy among consumers; and empowers them to make decisions with providers about their own care.
  - in addition to PLIDA, NHDH and similar initiatives, the Australian National Data Integration Infrastructure initiative will provide a platform for data access, research and analysis, using best practices in data integration and governance.
  - the National Indigenous Australians Agency's Framework for Governance of Indigenous Data is being implemented across the Commonwealth and will progress Priority Reforms 3 and 4 under the National Agreement on Closing the Gap.<sup>1</sup>
  - development of the [National One Stop Shop platform](#) for clinical trials will be a major step towards streamlined discoverability of data and digital assets, supporting identification of duplicated assets and bringing opportunities for collaboration.
- Progress towards national increased accessibility and use of data must remain in step with community expectations and trust
  - a core priority in particular for Aboriginal and Torres Strait Islander communities seeking data sovereignty and for governance of Indigenous data to be embedded in all data and digital systems.
- Trust is also crucial to increased collaboration among data custodians and a factor in their willingness to partially cede control of data to be part of national benefits realisation. The Australian Research Data Commons [Health Studies Australian National Data Asset](#) (HeSANDA)<sup>100</sup> is an example of sector-driven approaches to synchronise, align and build national data sharing capability.

## Proposed enabling action

**32** A **National Data Integration, Sharing and Access Plan** (Data Plan) for health and medical research that enables secondary use of existing data for research, adheres to data sovereignty principles and is trusted by consumers and the community, complemented by a capable highly skilled workforce in data analytics.

The proposed **Data Plan** would leverage national reforms underway to provide a comprehensive overview of existing data and digital health assets, facilitate sharing and collaboration and build whole-of-sector skills and capability in the effective use of data and digital technologies. The **Data Plan** would aim to:

- map data and digital assets held across public, private and research sectors to promote reuse of existing assets and stimulate new research. This would include identifying datasets that hold information about priority populations and Aboriginal and Torres Strait Islander people and communities to allow communities and individuals to know what data is held relating to their interests, its use and how it can be accessed
- work towards international and cross-jurisdictional governance arrangements for health data sharing that addresses regulatory, system interoperability and linkage barriers
- identify new national critical data and digital infrastructure required for health and medical research as part of infrastructure planning (refer to *Infrastructure Enabler*), particularly focused on capabilities that would accelerate research such as biobanks and consolidation of clinical quality registries
- consolidate and ensure interoperability of datasets with overlapping functions, such as cross-jurisdictional clinical registries and biobanks, to provide more comprehensive and accurate population coverage and reduce duplication of effort
- establish shared infrastructure and enable available datasets to be interoperable and 'research ready' through international and cross-jurisdictional governance arrangements for health data sharing to address regulatory, system interoperability and linkage barriers
- ensure appropriate partnerships are in place to address data gaps for under-represented populations, including RRR people and communities.



NHMRC Science to Art (2025): Professor Tarylor, UNSW, 'Axonal Glial Crosstalk'

## Areas to further progress

- Continue to build trust in how health and research data is shared and used or made open by default for the benefit of all people and businesses, especially for communities that are often left out. This means keeping personal information safe, using AI responsibly, and making sure research leads to real improvements in health care to deliver benefits that people can see and on which they can rely.
- Establish Governance of Indigenous Data and [Indigenous Data Sovereignty Principles](#) across the data ecosystem, including developing appropriate models for data access, sharing and use in partnership with Aboriginal and Torres Strait Islander peoples and communities.
- Harness the data opportunities from interoperable digital health platforms and technology that are expanding under existing digital health strategies and intergovernmental priorities for connected care. Timely access to comprehensive health data would expedite the pace and scale of research in Australia, particularly with whole-of-population datasets.
- Expand training pathways and cross-disciplinary collaborations to enable health and medical research access to core technical skills, including programming, statistics and mathematics, AI and machine learning, data manipulation and analysis, data visualisation and big data tools.
- Accelerated pace and scale of research and innovation through faster and improved access to comprehensive, consolidated population health data, including biospecimens and cohort data, alongside contextual determinants of health. This includes faster development of treatments, better understanding of disease patterns and more inclusive clinical trials.
- Sustainable, interoperable data and digital infrastructure that can be deployed across the sector to build a truly national approach, leveraging existing government initiatives and unlocking the significant economic value of Australian data through more mature data access and use for research, policy and commercial purposes.
- Reliable and responsible access to de-identified health data for secondary use that accelerates research and innovation.
- Embedded principles of Aboriginal and Torres Strait Islander data sovereignty, equitable place-based access, and culturally safe research and data governance practices that prioritise community needs and equitable data access for priority populations.
- Increased national, Indo-Pacific regional and global cross-disciplinary collaboration to increase capability and onshore and regional access to new treatments and therapeutics.
- Integration of future-ready data and digital technology skills across the health and medical research workforce, including in the skills areas of computer science, statistics, data science, engineering and enhanced higher degree training pathways into domain specific areas (e.g. bioinformatics, machine learning).

## What it could achieve

- Increased discoverability of data and digital assets for greater return on investment in existing platforms, frameworks and networks and to support access for priority populations and communities.
- A national collaborative approach across government, industry and private enterprise data custodians to develop 'research-ready' data assets and responsible approaches to AI, and to consolidate and connect assets to maximise their utility.
- More streamlined and efficient health systems that leverage AI and data analytics for administrative tasks and data-driven decision making at individual, community and national levels.
- Confidence and understanding across community, research and healthcare environments about responsible use of personal health data.



## Case studies

### Population-linked data enabled world-leading insights on COVID-19 vaccine effectiveness<sup>101</sup>

In 2022-23, epidemiology researchers at the [National Centre for Immunisation Research and Surveillance](#) used whole-of-population linked data, including the Australian Immunisation Register (AIR) and the 2021 Census, to analyse the effectiveness of the COVID-19 vaccine among 3.8 million older Australians.

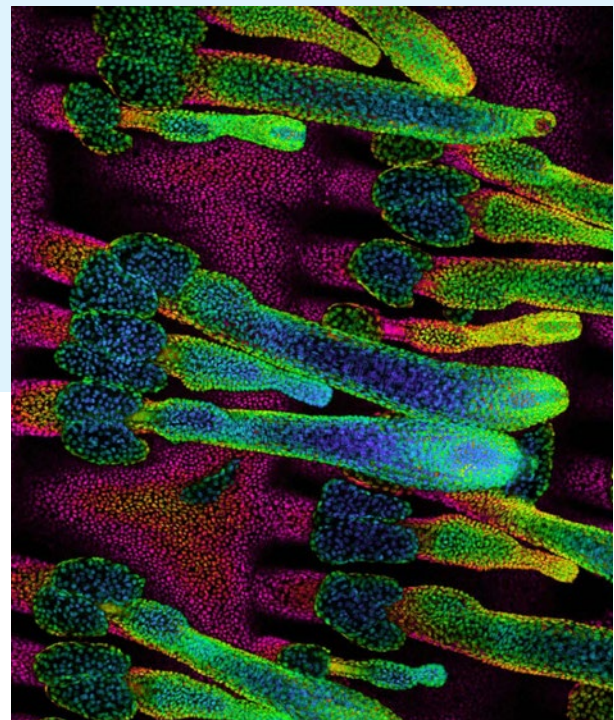
Vaccinations were found to be highly effective in preventing COVID-19 deaths, but the work also highlighted that recency of dose may be more important than total number of boosters received. These findings informed government's consideration of booster requirements for older Australians.

This was one of the few studies globally to analyse the effectiveness of the COVID-19 vaccine in preventing COVID-19 mortality over pandemic waves and the first for the Australia population. Analysis was undertaken in the [AIR-PLIDA project](#) managed by the Department of Health, Disability and Aged Care and was funded by the department, and results were published in The Lancet Regional Health - Western Pacific.

### Global Biodata Coalition<sup>102</sup> and living evidence synthesis programs

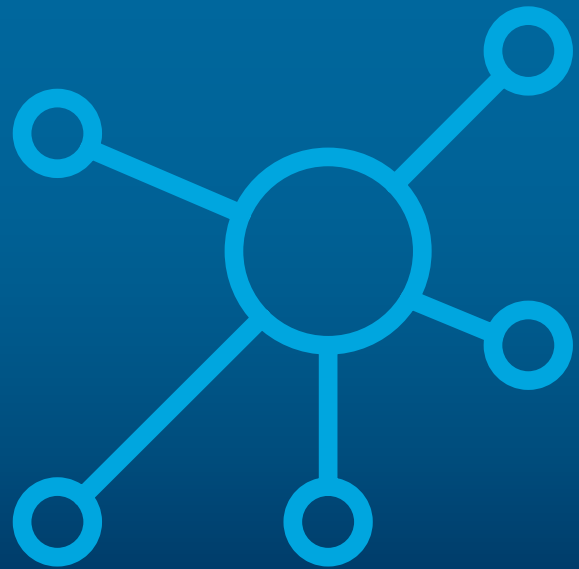
Coordinated efforts are needed to address the fragmented nature of biodata by promoting unified strategies to reduce duplication, avoid redundancy and revise outdated conclusions.

The [Global Biodata Coalition](#) is an example of international cooperation for long-term sustainability of biodata resources by coordinating strategies across global research funders, including the National Institutes of Health and UK Research and Innovation, to ensure that biodata resources remain freely available to all researchers everywhere around the globe.



NHMRC Science to Art (2013): Dr Ian Smyth, Monash University, 'A follicular rainbow'

# Infrastructure



# Infrastructure

**Outcome:** Sustainable, visible and accessible health and medical research infrastructure that supports a high-performing research sector and is fit for purpose for the future

Ensuring Australia has the right mix of health and medical research infrastructure, located in the right places, broadly accessible and informed by active planning for future need, will be key to achieving the Goals of this National Strategy.

**Infrastructure** is the facilities, equipment, data and services used to conduct research and foster innovation. Infrastructure can include major equipment or instruments; collections, archives, registers or databases; high-performance computing systems; software and platforms; networks; and communication systems.

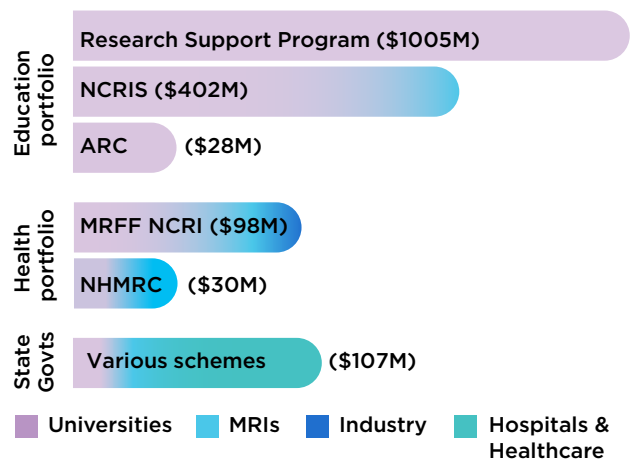
Goal	How the Infrastructure Enabler contributes
<b>Lead the world in health outcomes</b>	Infrastructure to support the development and translation of innovative therapeutic products, technologies, processes and interventions from the bench to the bedside and beyond enables impactful health outcomes.
<b>Deliver equity - no one left behind</b>	A coordinated, national approach to the location and availability of research infrastructure is one element of ensuring equitable access to innovation for researchers, clinicians and consumers.
<b>Drive national prosperity and security</b>	Developing and maintaining accessible state-of-the-art research infrastructure is a foundation for the operation of an efficient and innovative sector.
<b>Advance excellence in research and innovation</b>	Excellence and innovation require a foundation of accessible, advanced facilities, technologies and resources to enable and drive high quality, impactful research and translation.
<b>Secure a resilient and sustainable health system</b>	Infrastructure that is fit for purpose, adaptable and managed efficiently and effectively contributes to the sustainability of the health system.
<b>Strengthen regional and global partnerships</b>	The strength and breadth of Australia's research infrastructure base is an important contribution to global health networks and knowledge generation.

## What we know

- Infrastructure plays an essential role across the research life cycle, from equipment for experimental analyses to the secure storage of vast amounts of data for analyses. Nationally accessible collaborative research platforms and networks, and place-based research precincts, are internationally recognised as drivers of research innovation and translation that can operate at scale and deliver significant competitive advantage and economic benefit.
- Currently, access to and funding for infrastructure varies across Australia. Outside of research precincts, there is limited interactivity, collaboration or sharing between industry and academia and across public and private healthcare settings. Within healthcare settings, facilities are primarily used for the delivery of clinical care and access for research can be challenging. This is particularly the case in RRR areas.
- There is also a growing need to invest in infrastructure that supports Australia’s ability to be at the forefront of cutting-edge health and medical research and gain a competitive advantage. For example, a recent CSIRO report identified at least 200 biobanks across Australia that host and provide access to over 4 million biospecimens and associated information.<sup>103</sup> The direct financial benefits of a searchable, shared national biobanking platform were estimated at \$39 million annually from accelerated access for research, increased utilisation of existing infrastructure, and expanded research and development opportunities.
- Funding for research infrastructure is provided through a variety of Commonwealth, state and territory government sources as well as institutional, private sector and philanthropic investments that support the procurement, maintenance and management of facilities, equipment and support services.
- The Commonwealth’s National Research Infrastructure (NRI) Roadmap process, which is undertaken every 5 years, seeks to ensure Australian research is supported by world-class infrastructure, aligned to national priorities.<sup>104</sup> The NRI Roadmap in turn guides the National Collaborative Infrastructure Strategy (NCRIS), – a national infrastructure funding program, including, but not limited to, health and medical research, administered through the Department of Education.

- Health and medical research-focused initiatives such as the MRFF National Critical Research Initiative, NHMRC Independent Research Institutes Infrastructure Support Scheme (IRIIS), and state and territory government infrastructure support programs fund infrastructure that delivers specific project, institutional or jurisdictional objectives.

**Figure 3: Primary targets of recurrent Commonwealth and state research infrastructure funding 2023-24 by recipient organisation type**



Education portfolio: Research Support Program (RSP), NCRIS, and ARC Linkage Infrastructure, Equipment and Facilities Program;<sup>104, 105</sup> Health portfolio: MRFF National Critical Research Initiative<sup>106</sup> and NHMRC IRIIS and Equipment Grants;<sup>107</sup> State government estimates based on publicly available data for New South Wales, Victorian, Western Australian and South Australian government infrastructure and operational funding.

- Despite significant investment, there is a lack of available data about what infrastructure funding is used for, who is utilising funded equipment and facilities, and to which projects it contributes. The lack of a coordinated approach for health and medical research has resulted in disparities and gaps in funding and access to research infrastructure that impact the sector’s capability, capacity and efficiency.
- Procurement, management and maintenance of research infrastructure is increasing in cost and complexity. The cost of acquiring, maintaining, upgrading and supporting research infrastructure is a significant contributor to the indirect costs of research. Coordinated, collaborative and structured approaches to investing – and disinvesting – in research infrastructure across the entire sector would assist in reducing the overall cost burden on individual research groups and institutions.

## Proposed enabling action

**33** A **Health and Medical Research Infrastructure Roadmap** (Infrastructure Roadmap) to guide investment by funders, institutions and industry, developed with sector-specific input and expertise and in close coordination with the NRI Roadmap and the proposed National Health and Medical Research Investment Statement. (refer to *Funding Enabler*).

The proposed **Infrastructure Roadmap** would provide a national, sector-wide view of current health and medical research assets, facilities, equipment and expertise; map utilisation trends; and identify gaps and areas of under- or overinvestment to support coordinated, collaborative decision making. The **Infrastructure Roadmap** should:

- map existing infrastructure funded across Commonwealth, state and territory governments, enabling visibility of, and establishing a framework to, develop and maintain new and existing major equipment, facilities and platforms
- support collaboration with industry by encouraging and facilitating local and international industry investment in constructing, manufacturing and maintaining infrastructure to enable sovereign capability in critical areas. Consolidating local industry capacity would support Australia's Future Made in Australia<sup>108</sup> agenda and deliver wider economic and productivity gains
- incentivise cooperative, shared approaches to development of, and access to, collaborative research infrastructure across disciplines, institutions and jurisdictions. An aim would be to reduce the degree to which individual research groups, institutions, precincts and jurisdictions develop and maintain bespoke research equipment and facilities such as biobanks and registries, so as to achieve efficiencies and widen access
- enhance access to infrastructure and facilities within healthcare settings to support clinical, health services and public health research. This would involve collaboration between Commonwealth, state and territory health infrastructure planning and funding agencies and private healthcare providers to enable research access and shared services approaches to clinical facilities and infrastructure to support clinical trials, translational health services and public health research in healthcare settings
- ensure infrastructure developed to support Aboriginal and Torres Strait Islander-led research is culturally safe and reflects community priorities and facilitate Aboriginal and Torres Strait Islander community-led and community-controlled design and development of, and access to, research infrastructure that embeds Indigenous ways of knowing, being and doing
- enhance resourcing for RRR researchers and healthcare settings, including by incentivising collaborative approaches to research infrastructure to improve accessibility for researchers working in non-metropolitan centres and supporting clinical trials and translational research in healthcare settings - for example, through rural and remote hubs and communities of practice.



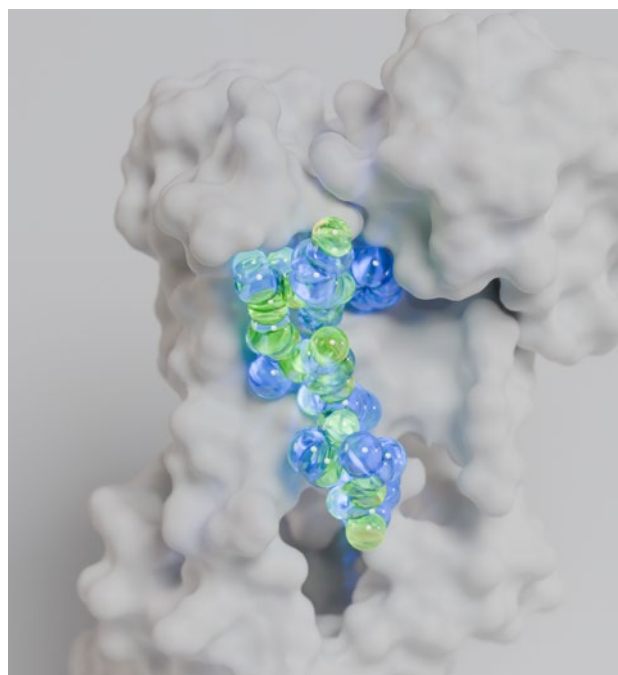
## What it could achieve

- Establishment of a baseline for the current state of infrastructure established, funded, accessed or utilised for health and medical research to guide ongoing investment in high-performing, fit-for-purpose infrastructure that supports and encourages whole of system collaboration.
- Increased national, regional and global collaboration and coordination across disciplines, sectors, jurisdictions and communities, balanced with sufficient resourcing at the institution, community and local level, to address infrastructure funding disparities and gaps and reduce duplication where that is shown to deliver the best outcome.
- Optimised, openly accessible infrastructure of national significance or broad-based research utility such as biobanks, data linkage, animal and non-animal models, drug discovery and research libraries.
- More efficient infrastructure utilisation and reduction in indirect research costs through a deliberate approach to shared access and consolidation or decommissioning of infrastructure holdings across research institutions.
- Long-term, sustainable and nationally coordinated investment in platforms, networks, precincts and other collaborative infrastructure modalities that connect researchers, industry, philanthropy and community and consumer groups and support research, translation and capacity building activities.
- Economic and productivity gains for government, industry, investors and the health and medical research workforce.
- Research and health system infrastructure that delivers commercial and competitive advantages and is adaptable for future needs.

## Case study

### NCRIS Health Group<sup>109</sup>

The National Collaborative Research Infrastructure Strategy (NCRIS) Health Group is a cross-capability collaboration bringing together 6 of Australia's leading research facilities and networks to provide leadership and coordination and enable access to national research infrastructure, both in expertise and equipment, which supports health and medical research innovation and translation. The principle behind the NCRIS Health Group is that the complex problems being investigated by Australia's health and medical researchers will often take a multidisciplinary, multi-platform effort to address. Working together, the NCRIS Health Group support cross-cutting projects such as a virtual brain cancer biobank, which provides researchers with easy access to tissue and associated data to accelerate paediatric and adult translational brain cancer research; and a platform to deliver a complete quality assessment of mRNA and RNA therapeutics to accelerate the local development and translation of cutting-edge therapeutics.



NHMRC Science to Art (2025): Dr Sarah Piper, Monash University, 'Marbles'

# Governance

## National Strategy Advisory Council: ensuring success of the 10-year National Strategy

### Why governance is important for the National Strategy

The National Strategy seeks to transform Australia's health and medical research landscape over the next decade. With a broad scope – spanning 5 Focus Areas and 4 Enablers – it aims to strengthen discovery and basic science research, align research efforts with national health priorities, foster innovation and ensure equitable translation of health outcomes for all Australians.

Health and medical research is inherently multifaceted. It has diverse stakeholders, including governments across jurisdictions, research institutions, the research workforce, healthcare providers, industry partners, philanthropic organisations, consumers and communities.

A governance structure to advance the National Strategy needs to ensure that its Actions, outputs and outcomes are sustained, connected and aligned with its Values and strategic Goals.

### Managing a 10-year framework

While the National Strategy is framed over a 10-year horizon, it is not intended to be static. It is designed to evolve through its proposed Actions, designated 'Areas to further progress' over the life of the National Strategy, and implementation milestones that mark progress and guide adjustments. These milestones can serve as checkpoints to ensure the National Strategy remains relevant and impactful in order to:

- evaluate the effectiveness of interventions
- reassess priorities based on new evidence or changing health needs
- incorporate technological advances and policy shifts
- engage stakeholders in continuous improvement.

The National Strategy proposes that a National Strategy Advisory Council (the Council) be established (refer to *Focus Area 1.2*), with broad representation across the health and medical research sector; state and territory governments; industry; philanthropy; Aboriginal and Torres Strait Islander peoples; RRR areas; and consumer and community representatives. The Council would act as both a guardian and a catalyst, ensuring the National Strategy stays on course and retains currency by monitoring implementation (see below for details on the Strategy Performance Evaluation Framework), providing advice to Commonwealth and state and territory governments, and informing key related parties (industry and philanthropy) on progress. The Council is intended to complement the work of state and territory governments and coordinate and align with existing frameworks (refer to *Related strategies and initiatives*).

The preferred model for the Council is to build on current governance mechanisms across government and leverage existing relationships and expertise, such as through the Australian Medical Research Advisory Board and NHMRC Council, which includes broad-sector representation including states and territories. The establishment of the Council and its terms of reference should be an early implementation step for the National Strategy, in consultation with the sector.

# Evaluation

## Strategy Performance Evaluation Framework: measuring success of the 10-year National Strategy

Measuring the performance of the National Strategy over the course of its 10-year lifespan will be critical to evaluating its overall success in meeting its Goals and providing continuous feedback to governments and the broader sector on where improvements or strategic adjustments may be needed.

A **Strategy Performance Evaluation Framework** (Framework), developed by the National Strategy Advisory Council (the Council) (refer to *Focus Area 1.2*) and co-designed with researchers, institutions, communities and policymakers, is proposed. Ideally a mixed-methods approach should support the Framework, combining quantitative and qualitative tools and data analytics and spanning a range of categories such as:

- input metrics to track resources such as funding and workforce diversity
- process metrics to assess collaboration, stakeholder engagement, research administration and consistency
- output metrics such as publications, patents, health system policy and practice change
- outcome metrics to evaluate health improvements, equity gains and economic benefits.

Building on and enhancing linkages between existing datasets and reporting mechanisms and developing new, fit-for-purpose evaluation tools will fill data gaps and support meaningful analysis and evaluation of the National Strategy. The proposed Workforce Plan, Investment Statement, Data Plan and Infrastructure Roadmap will provide insights on the current state of the sector and establish baselines for ongoing evaluation (refer to *Enablers and Enabling Initiatives*).

The Framework should also incorporate value-based metrics to ensure the Goals and Values that underpin the National Strategy continue to orient and guide actions, behaviours and decisions throughout its implementation.

The Framework should support a phased evaluation approach. In the early years, evaluation should focus on implementation fidelity and early outputs, while longer term actions will be measured for sustainability and lasting impact. Assessing progress against milestones will enable the National Strategy to operate in an agile way, as actions are implemented, development areas further investigated and new challenges emerge.

# National Health and Medical Research Strategy – Implementation roadmap

<p><b>Phase 1</b></p> <p><b>Establish and Act</b></p>	<p><b>Establish Foundations</b></p> <ul style="list-style-type: none"> <li>Establish national priority setting process (3)</li> <li>Commence nationally coordinated approach to horizon scanning (4)</li> <li>Stand up National Strategy Advisory Council (5) and Life Sciences and Health Technology Council (23)</li> <li>Develop targeted, co-designed RRR implementation plan (21) informed by the RRR Implementation Guide</li> <li>Establish Strategy Performance Evaluation Framework (5)</li> </ul>	<p><b>Commence Enabler Actions</b></p> <ul style="list-style-type: none"> <li>Design and develop the Workforce and Infrastructure Plans (30, 33)</li> <li>Consolidate and streamline funding datasets required for the annual Investment Statement (31)</li> <li>Map existing datasets to support development of the Data Plan (32)</li> </ul>	<p><b>Immediate and high impact initiatives</b></p> <ul style="list-style-type: none"> <li>Invest in high-risk, high-reward funding stream (1)</li> <li>Implement a consistent approach to supporting indirect research costs (2)</li> <li>Unify management of the MREA and MRFF (7)</li> <li>Establish an Incubator Funding Program to reinvest in select, highly promising research (16 and 25)</li> </ul>
<p><b>Phase 2</b></p> <p><b>Consolidate and Innovate</b></p>	<p><b>Build on strengths</b></p> <ul style="list-style-type: none"> <li>Evaluate, support and expand Research Translation Centre model (15)</li> <li>Expand 'Clinical Trial Networks' with a focus on place (17)</li> <li>Expand teletrials in partnership with RRR researchers (20)</li> <li>Address outputs and findings of Enabler Action Plans</li> <li>Develop an annual Investment Statement to guide priority setting and engagement.</li> <li>Advance bilateral and multilateral engagements for capacity strengthening and knowledge exchange (27)</li> </ul>	<p><b>Embed redesigned systems and processes</b></p> <ul style="list-style-type: none"> <li>Roll out harmonised MREA/MRFF processes with a focus on efficiency (7)</li> <li>Implement national guidelines on consumer remuneration, reimbursement and recognition in research (18)</li> <li>Progress environmental sustainability in research practices through revised funding policies (29)</li> </ul>	<p><b>New and transformative initiatives</b></p> <ul style="list-style-type: none"> <li>Invest in national collaborative platforms and networks, initially focused on Aboriginal and Torres Strait Islander health, RRR and non-animal technologies (6, 10, 19, 28)</li> <li>Establish new programs to equip researchers with commercialisation and investor engagement skills (e.g. REDI) (14, 22)</li> <li>Fast-track Australian-funded innovations, including incentives to support development of products and expedited regulatory pathways (24).</li> <li>Invest in a scheme to match Commonwealth funding with that of philanthropy and private sector funds (26)</li> </ul>
<p><b>Phase 3</b></p> <p><b>An agile and forward-looking strategy</b></p>	<p><b>Priority setting and design guided by Enabler outputs</b></p> <ul style="list-style-type: none"> <li>Review priorities based on new evidence gathered through the Enabling Actions</li> <li>Engage stakeholders in continuous improvement</li> </ul>	<p><b>Strategy evaluation and performance monitoring</b></p> <ul style="list-style-type: none"> <li>Monitor and evaluate using the National Strategy Advisory Council's Performance Evaluation Framework metrics</li> </ul>	<p><b>Advance 'Areas to further progress'</b></p> <ul style="list-style-type: none"> <li>Advance 'Areas to further progress' and program design built on data flowing from Enabler Action Plans and National Strategy performance metrics</li> </ul>

<p><b>Across all phases – a focus on priority populations</b></p>			
<ul style="list-style-type: none"> <li>Ensure active participation from priority populations across all governance mechanisms, including national priority setting and horizon scanning processes, and as part of the National Strategic Advisory Council (3, 4, 5)</li> <li>Support career development, leadership and capacity of researchers from priority population groups (12, 30)</li> <li>Recognise knowledge and experience of community researchers in grant assessments and research outputs (13)</li> <li>Strengthen grant processes to demonstrate cultural competency and benefits to Aboriginal and Torres Strait Islander communities (8)</li> <li>Incorporate funding for genuine co-design of research methodologies and translation activities led by Aboriginal and Torres Strait Islander people (9, 11)</li> </ul>			

Numbers refer to relevant **actions** proposed under the Strategy

# Regional, Rural and Remote (RRR) – Implementation guide

## Proposed actions

Focus area 1	Focus area 2	Focus area 3	Focus area 4	Focus area 5	Workforce	Funding	Data and Digital Technology	Infrastructure
<ul style="list-style-type: none"> <li>Active participation of RRR representation in national priority setting and horizon scanning <b>(3,4)</b></li> <li>National Strategy Advisory Council to include RRR representatives <b>(5)</b></li> <li>Invest in national collaborative platforms and networks focused on building capacity and infrastructure in RRR communities <b>(6,19)</b></li> </ul>	<ul style="list-style-type: none"> <li>Strengthen grant processes to demonstrate benefits to Indigenous communities, many of which are based in RRR localities <b>(8)</b></li> <li>Incorporate funding for genuine co-design of research methodologies in community settings <b>(9)</b></li> <li>Build translation into funding mechanisms, including through focused Research Translation Centres <b>(11)</b></li> </ul>	<ul style="list-style-type: none"> <li>Invest in a 'Rural Health Innovation Hub' co-designed by rural health researchers and communities <b>(19)</b></li> <li>Evaluate, support and expand on the Research Translation Centre model with a focus on RRR <b>(15)</b></li> <li>Expand 'Clinical trial networks' with a focus on RRR communities <b>(17)</b></li> <li>Expand teletrials through partnerships with RRR researchers <b>(20)</b></li> </ul>	<ul style="list-style-type: none"> <li>Incentives for domestic production of Australian funded HMR innovations and products, supporting manufacturing industries in Australia, including in RRR localities <b>(24)</b></li> <li>Programs to equip researchers with commercialisation skills, such as the Researcher Exchange and Development with Industry initiative, including prioritising opportunities for RRR researchers <b>(22)</b></li> </ul>	<ul style="list-style-type: none"> <li>Ensure equitable access to the proposed National Collaborative Platform for Non-animal Technologies for researchers in RRR areas <b>(28)</b></li> <li>Ensure the development of environmentally sustainable policies for the conduct of research involves input from RRR researchers <b>(29)</b></li> </ul>	<ul style="list-style-type: none"> <li>Ensure that the Workforce Plan acknowledges and supports the unique workforce challenges in RRR communities, including non-traditional and community-based researchers <b>(30)</b></li> </ul>	<ul style="list-style-type: none"> <li>Work with funders to enable sharing and disaggregation of RRR funding data to ensure the annual Investment Statement provides an accurate funding landscape <b>(31)</b></li> </ul>	<ul style="list-style-type: none"> <li>Address the needs of RRR researchers in developing and implementing the Data Plan and ensure appropriate partnerships are in place to address data gaps for RRR people and communities <b>(32)</b></li> </ul>	<ul style="list-style-type: none"> <li>Ensure the Infrastructure Roadmap enhances resourcing for RRR researchers and health care and incentivise collaboration to improve accessibility <b>(33)</b></li> </ul>

## Areas to further progress

<ul style="list-style-type: none"> <li>Develop research priority setting frameworks that align with long-term, system-wide health goals addressing needs of RRR communities</li> </ul>	<ul style="list-style-type: none"> <li>Create more pathways for Indigenous elders and researchers to identify community needs as part of national priority setting and grant program design</li> <li>Create opportunities for community organisations to submit topics for grant opportunities</li> </ul>	<ul style="list-style-type: none"> <li>Expand research workforce capacity among clinicians in RRR regions through dedicated incentives, such as identified fellowships to allow for protected time</li> <li>Fund sustainable research initiatives which prioritise RRR collaborations and RRR participation</li> </ul>	<ul style="list-style-type: none"> <li>Identify further areas of skill development required for the life sciences and health technology industry, to build capacity and skills gaps in RRR communities</li> </ul>	<ul style="list-style-type: none"> <li>Continue to build regional and global partnerships with a view to strengthening connections for RRR researchers</li> <li>Identify gaps and develop mechanisms to ensure equitable access to advanced technology in health care</li> <li>Incorporate Aboriginal and Torres Strait Islander knowledge systems, communities into sustainable health and medical research practices, particularly those relevant to RRR settings</li> </ul>	<ul style="list-style-type: none"> <li>Ensure future funding and policy considers options for fostering diversity of talent from RRR communities</li> </ul>	<ul style="list-style-type: none"> <li>Ensure funding models that balance funding for smaller, high-risk ideas with long-term, established research programs, are relevant and fit for purpose across RRR areas and communities</li> <li>Ensure further funding opportunities through engagement with philanthropy and industry prioritises initiatives that will improve outcomes for RRR communities</li> </ul>	<ul style="list-style-type: none"> <li>Build trust in how health and research data is shared for the benefit of all people and businesses, especially for RRR communities.</li> <li>Ensure equitable access for RRR communities to new digital capabilities and health technologies complemented by training opportunities for people in RRR communities</li> </ul>	<ul style="list-style-type: none"> <li>Enhance resourcing for RRR researchers and healthcare settings by incentivising shared research infrastructure, improving access for RRR researchers, and supporting clinical trials and translational research through rural and remote hubs and communities of practice</li> </ul>
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Numbers refer to relevant **actions** proposed under the Strategy

# Acronyms

<b>ABS</b>	Australian Bureau of Statistics
<b>ACCHOs</b>	Aboriginal community-controlled health organisations
<b>AHRA</b>	Australian Health Research Alliance
<b>AI</b>	Artificial intelligence
<b>AIHW</b>	Australian Institute of Health and Welfare
<b>AMRAB</b>	Australian Medical Research Advisory Board
<b>ARC</b>	Australian Research Council
<b>ARIA</b>	Advanced Research Innovation Agency (UK)
<b>CCI</b>	Consumer and community involvement
<b>CSIRO</b>	Commonwealth Scientific and Industrial Research Organisation
<b>DARPA</b>	Defense Advanced Research Projects Agency (US)
<b>EMCRs</b>	Early- to mid-career researchers
<b>ICIP</b>	Indigenous Cultural and Intellectual Property
<b>IGPRG</b>	Inter-governmental policy reform group
<b>IRIIS</b>	Independent Research Institute Infrastructure Support Scheme
<b>LGBTIQ+</b>	lesbian, gay, bisexual, transgender, intersex, queer, asexual
<b>MREA</b>	Medical Research Endowment Account
<b>MRFF</b>	Medical Research Future Fund
<b>NCIRS</b>	National Centre for Immunisation Research and Surveillance
<b>NCRIS</b>	National Collaborative Research Infrastructure Strategy
<b>NHDH</b>	National Health Data Hub
<b>NOSS</b>	National One Stop Shop
<b>MRIs</b>	Medical research institutes
<b>NCRIS</b>	National Collaborative Research Infrastructure Strategy.
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>PLIDA</b>	Person Level Integrated Data Asset
<b>R&amp;D</b>	Research and development
<b>R&amp;I</b>	Research and innovation
<b>REDI</b>	Researcher Exchange and Development with Industry
<b>RNA</b>	Ribonucleic acid
<b>RRR</b>	Regional, rural and remote
<b>RTCs</b>	Research Translation Centres
<b>SME</b>	Small to medium enterprises
<b>UK</b>	United Kingdom
<b>UKRI</b>	UK Research and Innovation
<b>US</b>	United States of America
<b>VET</b>	Vocational education and training
<b>WHO</b>	World Health Organization

# Definitions

## Aboriginal and Torres Strait Islander peoples

Aboriginal and Torres Strait Islander peoples, the First Nations peoples of Australia and traditional custodians of the lands, while recognising that Aboriginal and Torres Strait Islander people have distinct cultures and identities.

## Artificial Intelligence (AI)

Computer systems developed to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision making, and translation between languages.

## Antimicrobial resistance (AMR)

The ability of microorganisms like bacteria, viruses, fungi and parasites to resist the effects of medicines designed to kill or inhibit their growth.

## Basic science research

Seeks to understand the biological processes that underpin health and disease at the molecular, cellular, organ system and whole-body levels. It may be conducted in vitro, in vivo and/or in silico. It may use, but is not limited to, cells, tissues or other materials of human origin or from relevant animal models.

## Culturally and linguistically diverse

Individuals and groups who come from diverse backgrounds, encompassing differences in culture, language, ethnicity and sometimes religion.

## Clinical research

The broad research area of 'Clinical medicine and science research', which seeks to improve the diagnosis, treatment and prevention of human diseases and conditions. It may involve interaction with patients and/or the use of clinical diagnostic materials or patient data.

## Clinicians

Healthcare practitioners who are involved in the provision of health and medical services and care, including diagnosis and/or treatment of patients, public and preventive medicine, and clinical research. This includes doctors, nurses, midwives, allied health and oral health professionals.

## Commercialisation

The active process by which the outcomes of research are brought to market as new or improved technologies, processes, products or services that generate economic or social value.

*\* Where research involves Aboriginal and Torres Strait Islander peoples, knowledge, data or biological materials, commercialisation must occur with appropriate community governance, informed consent, and mutually agreed benefit-sharing, consistent with cultural protocols.*

## Consumer

People with lived experience of a health issue and/or accessing health care and health systems. These include patients, potential patients, their families, friends and carers. Consumers can also be people who represent the views and interests of a consumer organisation.

## Cultural safety

As defined in the Aboriginal and Torres Strait Islander Health Plan, cultural safety is determined by Aboriginal and Torres Strait Islander individuals, families and communities.

Culturally safe practice is the ongoing reflection of knowledge, skills, attitudes, practising behaviours and power differentials in delivering safe, accessible and responsive health care free of racism.

## Development

The advancement of health and medical research findings into robust, applicable and scalable outputs, including methods, knowledge, technologies, tools, interventions, systems and services, through refinement, testing, validation and maturation to support readiness for translation or commercialisation.

## Early- to mid-career researchers (EMCRs)

An academic or research-related career stage following the completion of postgraduate research training (such as a PhD). It focuses on career stage rather than age, meaning EMCRs can be of any age as long as they are in the early to middle phase of their research careers, and is broadly considered relative to career disruptions and relative to opportunities.

### Health services research

Seeks to understand and improve the effectiveness, quality, safety, social and environmental dimensions of health care, including access, distribution, timeliness and efficiency.

### Implementation science

The study of methods and strategies that facilitate the adoption of evidence-based practices, interventions and policies in regular use by practitioners and policymakers. It is concerned with identifying and addressing the barriers that, in different settings, may slow or prevent the uptake of evidence-based health system improvements.

### Industry

Industry, in the context of health and medical research translation and commercialisation, refers to the broad ecosystem of organisations - public, private, for-profit, not-for-profit and community-based - that contribute expertise, resources, infrastructure and pathways needed to move research into real-world products, processes, services and impact.

*\* This includes Aboriginal and Torres Strait Islander community-controlled organisations and enterprises as active partners in creating pathways to impact.*

### Indigenous Data

As defined by Maiam nayri Wingara, Indigenous Data refers to information or knowledge, in any format or medium, which is about and may affect Indigenous peoples both collectively and individually.

### Indigenous Data Governance

As defined by Maiam nayri Wingara, Indigenous Data Governance refers to the right of Indigenous peoples to autonomously decide what, how and why Indigenous Data are collected, accessed and used. It ensures that data on or about Indigenous peoples reflects our priorities, values, cultures, worldviews and diversity.

### Indigenous Data Sovereignty

As defined by Maiam nayri Wingara, Indigenous Data Sovereignty refers to the right of Indigenous people to exercise ownership over indigenous Data. Ownership of data can be expressed through the creation, collection, access, analysis, interpretation, management, dissemination and reuse of Indigenous Data.

### Infrastructure

Facilities, equipment, data, and services used by the research community to conduct research and foster innovation, which can include: major equipment or instruments; collections, archives, or databases; high-performance computing systems; software and platforms; and networks and communication systems.

### Interoperability

Information can move easily between people, organisations and systems. It enables a connected healthcare system that shares health information securely, safely and without any special effort from the people and organisations involved. There are 3 layers where interoperability should be considered: external to an organisation, internal to an organisation, and at the point of care.

### Learning health system

A health system that systematically and continuously uses data from routine care to generate new knowledge and rapidly apply that knowledge to improve health outcomes, patient experience and healthcare system performance. A learning health system provides a feedback loop in which clinical practice, healthcare data and research are integrated to drive improvement.

### Life sciences

A broad spectrum of disciplines that is concerned with the study of living organisms, including microorganisms, plants, animals and human beings. The life sciences industry develops therapeutics and pharmaceuticals, medical technology (including devices and diagnostics) and digital health.

### LGBTIQ+

Initialism for 'Lesbian, Gay, Bisexual, Transgender, Intersex, Queer, Plus.' Other identities, such as asexual, are covered by the + symbol.

### Medical Research Endowment Account (MREA)

The key mechanism for investment in medical research by the NHMRC. NHMRC's objectives when funding health and medical research are to ensure that Australia undertakes the research needed to meet current and future health challenges, improving population health, patient outcomes and the effectiveness and efficiency of the health system; ensure that Australia has the research capability and capacity needed to underpin a world-class national healthcare system; and support research of unique importance to Australia that is unlikely to be undertaken elsewhere.

### Medical Research Future Fund (MRFF)

An ongoing research fund set up by the Australian Government in 2015 and managed by the Department of Health, Disability and Ageing to support Australian health and medical research. The MRFF aims to transform health and medical research and innovation to improve lives, build the economy and contribute to health system sustainability.

### Networks

People-based collaborative groups that join to work collectively and collaboratively to achieve a shared aim. Networks are often multidisciplinary and bring together a range of different stakeholders that can include researchers, clinicians, community and consumer groups, peak bodies, industry, and philanthropic organisations. Depending on their aims and objectives, networks can be geographical Research Translation Centres, discipline-based (Cancer Research Networks), community-based or focused on a specific challenge or opportunity.

### Non-animal technologies

A range of scientific methodologies designed to accurately model human biology and disease, including biological models that use human-derived or humanised cells or tissues such as organoids; computational models; and biochemical assays. Non-animal technologies may also be referred to as non-animal methods or methods (NAMs) or new approach methodology (NAM).

### Not-for-profit

Organisations whose primary objective is something other than the generation of profit.

### One Health

An integrated, unifying approach that aims to sustainably balance and optimise the health of people, animals and ecosystems.

It recognises that the health of humans, domestic and wild animals, plants and the wider environment (including ecosystems) are closely linked and interdependent.

### Open Science

Open scientific knowledge is open access to research papers, research data, metadata, open educational resources, software, and source code and hardware that are available in the public domain or under copyright and licensed under an open licence that allows access, re-use, repurpose, adaptation and distribution under specific conditions, provided to all actors immediately or as quickly as possible regardless of location, nationality, race, age, gender, income, socio-economic circumstances, career stage, discipline, language, religion, disability, ethnicity or migratory status or any other grounds, and free of charge. It also refers to the possibility of opening research methodologies and evaluation processes (UNESCO recommendation on Open Science).

### Philanthropy

The giving of money, time, information, goods and services, influence and voice to improve the wellbeing of humanity and the community.

### Platforms

Broad-based, long term, collaborative and sustained structural mechanisms that bring together expertise, systems, technologies and equipment to conduct, manage and accelerate medical research and translation, often through the sharing of data and resources. These mechanisms allow access to technologies that are beyond the capability of one organisation to support. They are underpinned by substantive, long-term investment commitments and collaborations across all parts of the sector. Platforms support larger, scalable approaches to innovation and translation and deliver faster, more impactful health outcomes.

**Public health research**

Seeks to improve the health of a population through the prevention of disease, prolongation of life and promotion of health and wellbeing. It includes research to understand the social, behavioural, environmental and other determinants of health and disease.

**Regenerative medicine**

Products intended to regenerate or replace injured, diseased or defective cells, tissues or organs to restore or establish function and structure. It includes gene therapies, cell therapies and tissue-engineered products.

**Research translation**

The process of moving research findings into practical application in real-world settings and making research findings accessible and usable to practitioners, policymakers and the public to inform decision making and improved health outcomes. Research translation can encompass dissemination of new clinical interventions and health guidelines, development and commercialisation of novel health and medical technologies, products, processes and services and changes to policies and programs.

*\* In Indigenous contexts, research translation should be guided by community priorities and culturally appropriate ways of sharing, applying and sustaining knowledge.*

**Ribonucleic acid (RNA)**

A nucleic acid found in all living cells, similar to DNA, but typically singlestranded. RNA plays a crucial role in various biological processes, including protein synthesis.

**Regional, rural and remote (RRR)**

Defined according to the Modified Monash Model (MMM). The model measures remoteness and population size on a scale of Modified Monash (MM) categories MM 1 to MM 7. MM 1 is a major city. Areas classified MM 2 to MM 7 are considered regional, rural or remote. People living in these areas can find it harder to get medical help and accessing doctors can take longer and cost more.

**Research Translation Centres (RTCs)**

NHMRC has recognised leading centres of collaboration in Australia that excel in the provision of research-based health care and training through the accreditation of RTCs since 2014. RTCs are cooperatively funded, and work both independently and together to drive improvements in health services and clinical trials in Australia.

**Small to medium enterprises (SMEs)**

Businesses employing 0-19 people are classified as small businesses; those employing 20-199 people are classified as medium sized.

**Social determinants of health**

The conditions in which people are born, grow, work, live and age and the wider set of forces and systems shaping the conditions of daily life. These forces and systems include economic policies and systems, development agendas, social norms, social policies and political systems.

AHW data to monitor key social determinants of health in Australia include: income, education, occupation; employment and work; housing and homelessness; early childhood; family relationships; and social inclusion.

**Translational research**

Research done to better understand how to implement research findings into clinical practice and care within health systems. It is concerned with the practicality, acceptability, effectiveness and scalability of innovations in the context of real-world settings.

# Related strategies and initiatives

The National Health and Medical Research Strategy sits alongside other important pieces of strategic planning and reform work across all levels of government. These include but are not limited to:

## Whole-of-government strategies and reform

[National Health Reform Agreement](#)<sup>110</sup>

[National Agreement on Closing the Gap](#)<sup>1</sup>

[Australia's Disability Strategy 2021-2031](#)<sup>111</sup>

[National Digital Health Strategy 2023-2028](#)<sup>112</sup>

[National Aboriginal and Torres Strait Islander Health Plan 2021-2031](#)<sup>2</sup>

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## Australian government strategies and reform

[Strategic Examination of Research and Development](#)<sup>63</sup>

[Inter-Governmental Policy Reform Group \(IGPRG\)](#)<sup>54</sup> (includes National Clinical Trials Governance Framework and National One Stop Shop (NOSS))

[Health Connect Australia Strategy, Architecture and Roadmap](#)<sup>122</sup>

[Australia's AI Ethics Principles](#)<sup>113</sup>

[Medical Science Co-investment Plan](#)<sup>65</sup>

[National Preventive Health Strategy 2021-2030](#)<sup>114</sup>

[Framework for Governance of Indigenous Data](#)<sup>6</sup>

[National Health and Medical Research Council Research Priorities](#)<sup>115</sup>

[Australian Medical Research and Innovation Priorities \(MRFF\)](#)<sup>116</sup>

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## State and territory research strategies

[Better together: A strategic plan for research in the ACT health system 2022-2030](#)<sup>117</sup>

[NSW Health Research and Innovation Strategy 2025-2035](#)<sup>118</sup>

[Queensland Health Research Strategy 2032](#)<sup>119</sup>

[Victorian Government Health and Medical Research Strategy 2022-2032](#)<sup>120</sup>

[WA Health and Medical Research Strategy 2023-2033](#)<sup>121</sup>

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