



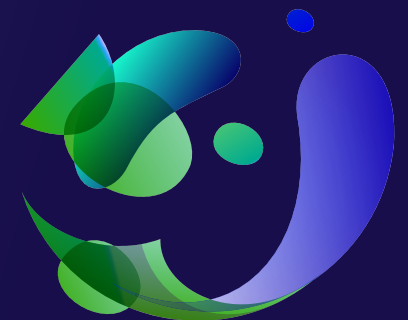
Australian Government

Department of Health, Disability and Ageing

Draft

National Health and Medical Research Strategy 2026 – 2036

Impactful research | Healthier Australians | Stronger nation



Copyright

© 2025 Commonwealth of Australia as represented by the Department of Health, Disability and Ageing

Creative Commons Licence



This publication is licensed under the Creative Commons Attribution 4.0 International Public License available from <https://creativecommons.org/licenses/by/4.0/legalcode> (“Licence”). You must read and understand the Licence before using any material from this publication.

Restrictions

The Licence may not give you all the permissions necessary for your intended use. For example, other rights (such as publicity, privacy and moral rights) may limit how you use the material found in this publication.

The Licence does not cover, and there is no permission given for, use of any of the following material found in this publication:

- the Commonwealth Coat of Arms. (by way of information, the terms under which the Coat of Arms may be used can be found on the Department of the Prime Minister and Cabinet website <https://www.pmc.gov.au/resources/commonwealth-coat-arms-information-and-guidelines>);
- any logos and trademarks;
- any photographs and images;
- any signatures; and
- any material belonging to third parties identified in this publication.

Attribution

Without limiting your obligations under the Licence, the Department of Health, Disability and Ageing requests that you attribute this publication in your work. Any reasonable form of words may be used provided that you:

- include a reference to this publication and where practicable, the relevant page numbers;
- make it clear that you have permission to use the material under the Creative Commons Attribution 4.0 International Public License;
- make it clear whether or not you have changed the material used from this publication;
- include a copyright notice in relation to the material used. In the case of no change to the material, the words “© Commonwealth of Australia (Department of Health, Disability and Ageing) 2025” may be used. In the case where the material has been changed or adapted, the words: “Based on Commonwealth of Australia (Department of Health, Disability and Ageing) material” may be used; and
- do not suggest that the Department of Health, Disability and Ageing endorses you or your use of the material.

Enquiries

Enquiries regarding any other use of this publication should be addressed to the Branch Manager, Corporate Communication Branch, Department of Health, Disability and Ageing, GPO Box 9848, Canberra ACT 2601, or via e-mail to copyright@health.gov.au

Acknowledgement of Country

We, the Department of Health, Disability and Ageing and the National Health and Medical Research Council, proudly 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 we 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.

Contents

Chair's Introduction	3
National Health and Medical Research Strategy	4
National Strategy development process	5
Phase 1 consultations: what the National Strategy should aspire to	6
National Health and Medical Research Strategy 2026-2036	8
National strategy 'architecture'	9
Values	10
Goals	11
Focus areas	12
Enablers	13
Focus areas	
Actions to drive transformational change	15
Focus area 1: Build a vibrant research system that delivers for the nation	16
Focus area 2: Embed research processes that are modern, efficient and consumer centred	20
Focus area 3: Accelerate research and its translation to improve Aboriginal and Torres Strait Islander Peoples' health and wellbeing	25
Focus area 4: Drive impact through research translation, innovation and commercial solutions	29
Focus area 5: Position to be ready for future needs and challenges	33
Enablers	
Workforce	38
Funding	40
Data and Advanced Technology	42
Infrastructure	44
National Strategy Advisory Council	46
Measuring success of the 10-year National Strategy	47
Definitions	48
References	51

Chair's Introduction

Ms Rosemary Huxtable AO PSM, Chair of the National Strategy

I am pleased to present, for consultation, the draft National Health and Medical Research Strategy. The draft Strategy sets out a transformative 10 year vision to strengthen Australia's health and medical research system. Supporting a thriving health and medical research ecosystem and skilled Australian researchers is essential for advancing knowledge and strengthening both the research and health sectors, ultimately leading to meaningful improvements in the wellbeing and prosperity of the Australian community.

The draft National Strategy is the result of a national consultation and evidence gathering process conducted throughout 2024 - 2025. It reflects the collective insights of researchers, clinicians, policymakers, industry leaders, Aboriginal and Torres Strait Islander researchers and community leaders and consumers.

The draft National Strategy will now enter phase 2 consultations, where stakeholders can provide formal feedback through submissions and by participating in webinars, workshops and roundtables. All feedback will be analysed and synthesised to identify common themes, gaps and opportunities, to inform the development of actionable solutions that address the sector's needs and ambitions and place Australia at the forefront of global health and medical innovation.

I have been encouraged by the level of engagement and positive approach to developing solutions that has been a hallmark of the work to date and look forward to continuing those partnerships in this next phase of development.

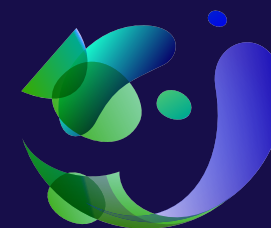
Transforming health and medical research in Australia

Investing in a once in a generation transformation of health and medical research in Australia.

*In May 2024, the Albanese Government announced the development of a National Health and Medical Research Strategy (National Strategy) to build on our national strengths and fill any gaps, while attracting researchers and investors.**

The need for a National Strategy has been one of the consistent messages the government has heard from the health and medical research sector.

The Department of Health, Disability and Ageing and the National Health and Medical Research Council (NHMRC) have led the development of the draft National Strategy for the Minister for Health, Disability and Ageing.



* Excerpt from Minister
Butler's [May press release](#)

National Health and Medical Research Strategy

National Health and Medical Research Strategy

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

Health and medical research underpins a modern, outcomes focused health system that can deliver equitably for the community. It is the foundation upon which health treatments, technologies and models of care are discovered, trialled, translated and commercialised, helping to improve health outcomes and, as a result, enabling a strong economy and fair society. The development of a National Strategy provides a unique opportunity to examine the evidence, consult broadly, engage on reform ideas and build on the ideas of previous reviews and consultations, to ensure our health and medical research sector is fit for purpose for the future.

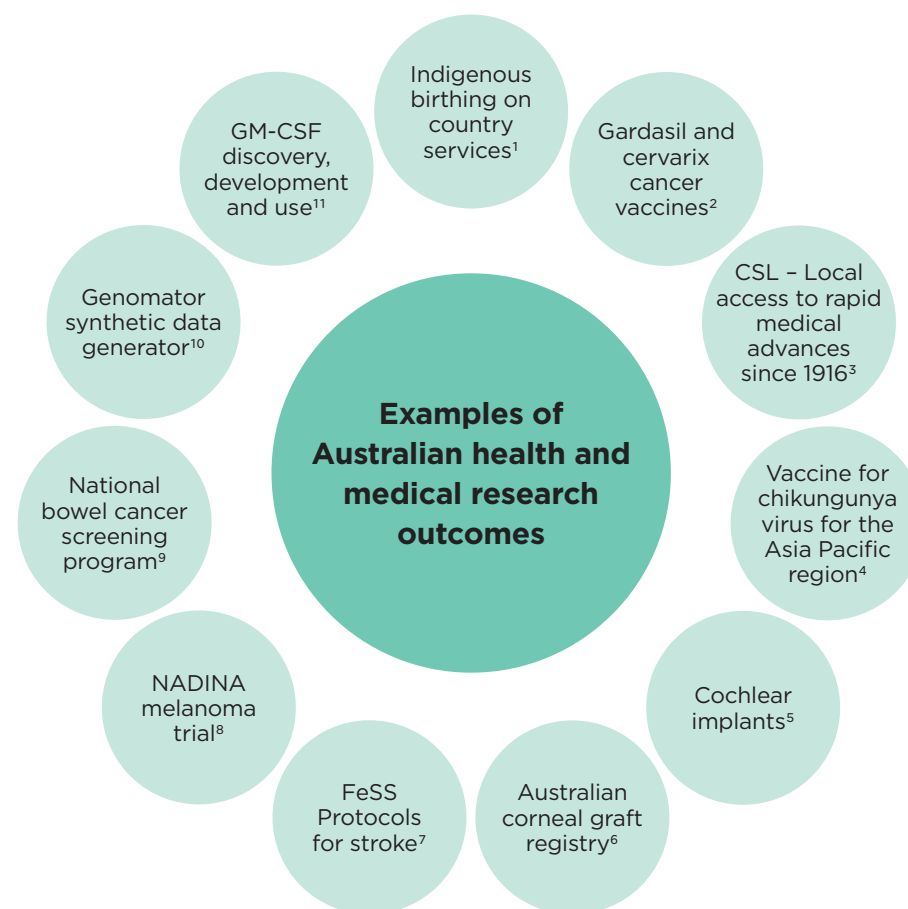
National Strategy purpose

The purpose of a National Strategy is to:

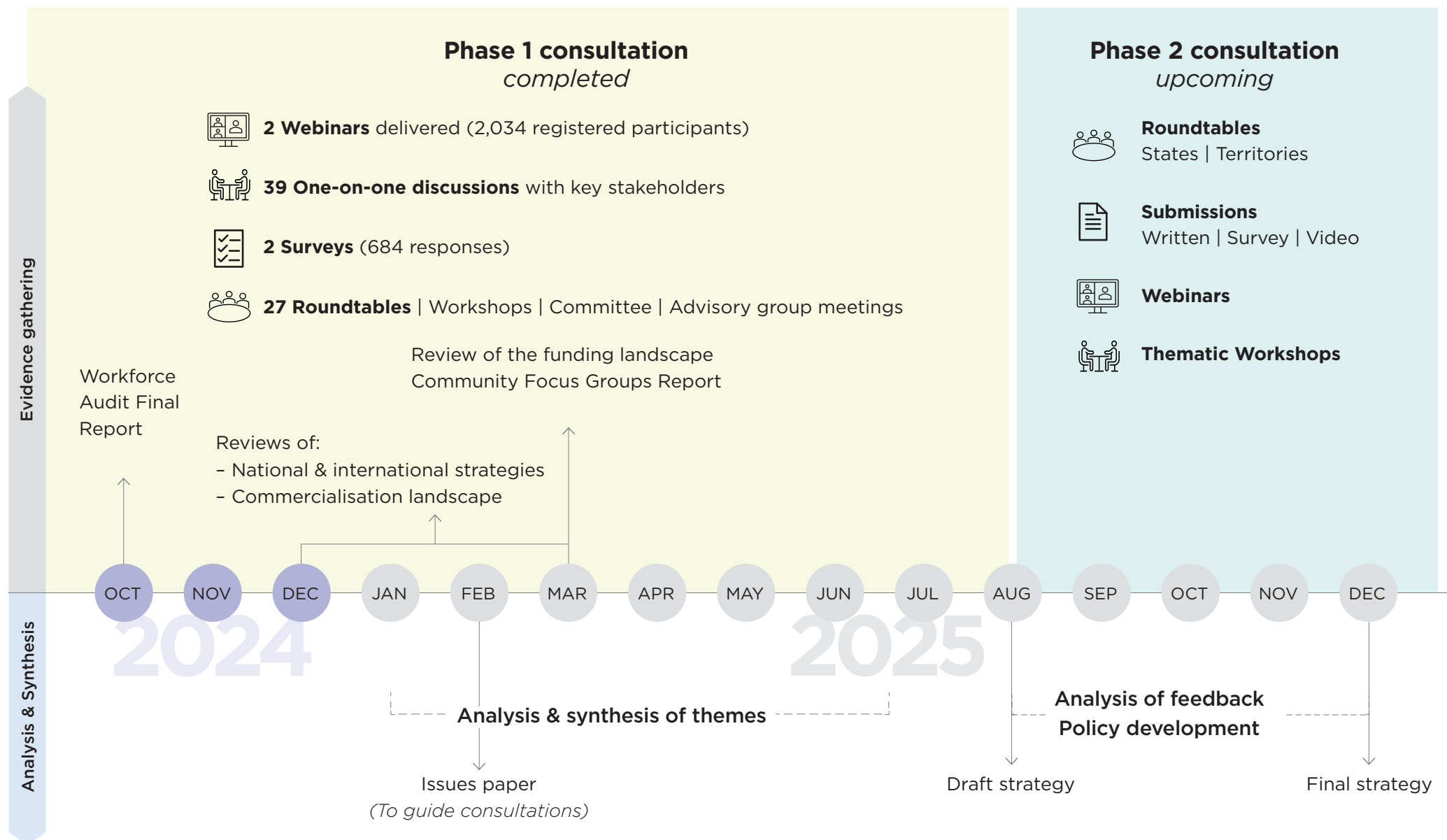
- Deliver a plan to strengthen and leverage Australia's world leading research capability, leading to better health outcomes from a productive and efficient research ecosystem.
- Provide strategic direction across the entire research continuum from initial discovery through to translation and scalable manufacturing of transformative research outcomes.
- Ensure equity, access, and workforce development through inclusive policies, broad participation and sustained investment in a diverse, skilled research community.
- Align and integrate with other strategic initiatives including the Strategic Examination of Research and Development (SERD), National One Stop Shop (NOSS) and the National Science and Research Priorities.

Australia has been at the forefront of many new discoveries and research innovations that have transformed health outcomes and led to global impacts. The strengths of Australian health and medical research, its skilled workforce and contribution to productivity and economic growth have benefited, and continue to benefit, the health of communities.

An outcomes-focused health and medical research ecosystem

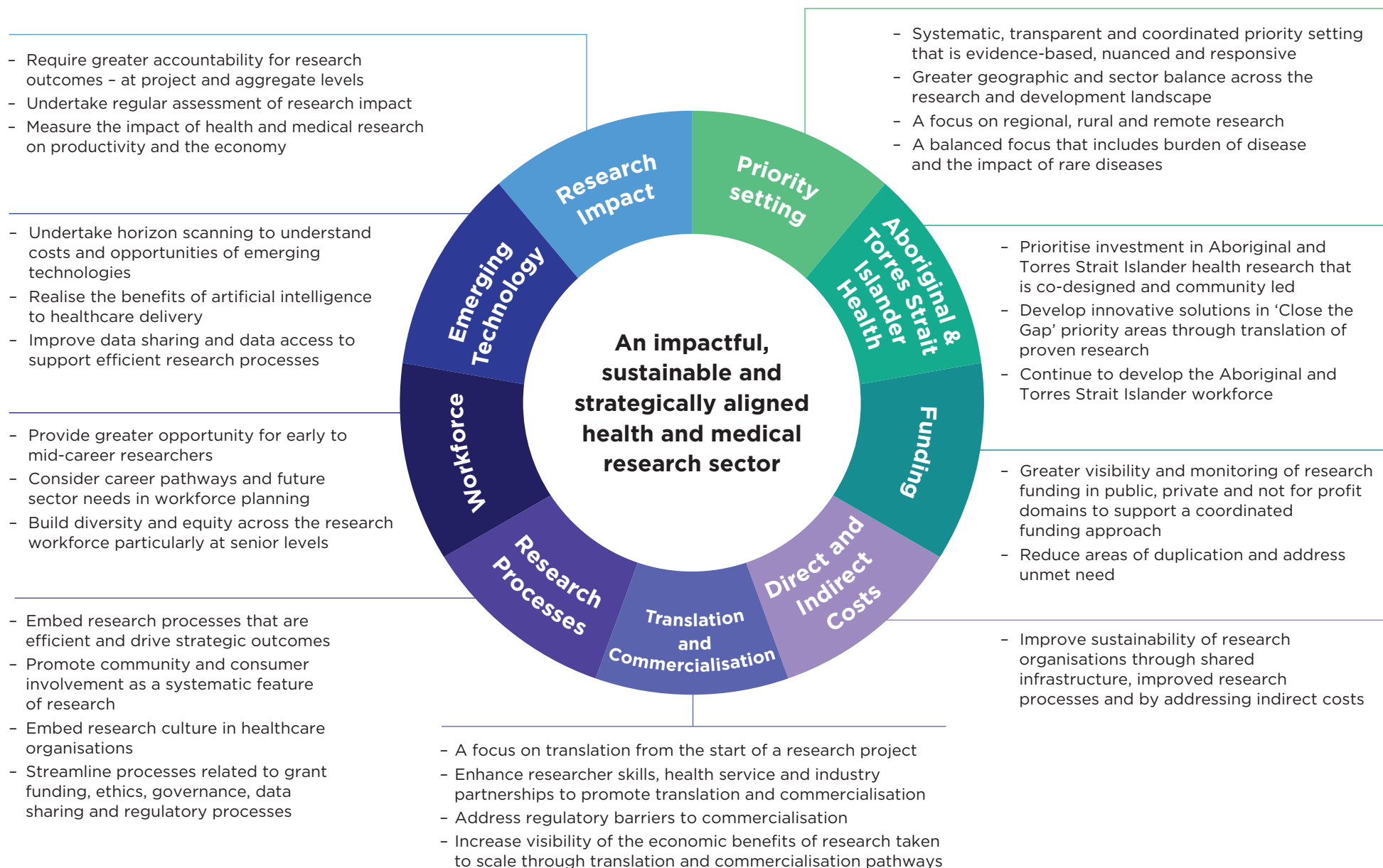


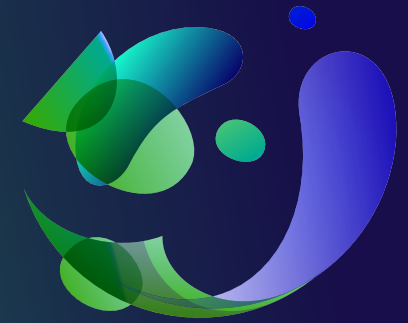
National Strategy development process



Phase 1 consultations: what the National Strategy should aspire to

Themes that have emerged through the consultation process





National **Health and Medical Research** Strategy

National Health and Medical Research Strategy

2026 – 2036

Impactful research | Healthier Australians | Stronger nation

National Health and Medical Research Strategy 2026-2036

Impactful Research | Healthier Australians | Stronger Nation

Our Vision

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

Values

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



Impact & Sustainability



Quality & Integrity



Equity



Collaboration & Partnership

Goals

- 1 Drive national prosperity and security.
- 2 Lead the world in health outcomes.
- 3 Deliver equity – no one left behind.
- 4 Secure a resilient and sustainable health system.
- 5 Strengthen regional and global partnerships.

Enablers

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



Workforce



Funding



Data & advanced technology



Infrastructure

Focus areas

1. **Build** a vibrant research system that delivers for the nation
2. **Embed** research processes that are modern, efficient and consumer centred
3. **Accelerate** research and its translation to improve Aboriginal and Torres Strait Islander Peoples' health and wellbeing
4. **Drive** impact through research translation, innovation and commercial solutions
5. **Position** to be ready for future needs and challenges



Actions

Metrics

National Strategy Advisory Council

National strategy 'architecture'

The National Strategy uses a number of key concepts to construct a Strategy architecture that maps the path from vision to performance metrics.

All elements of the architecture work together to create a cohesive and purposeful design.



Values

The National Strategy seeks to embed principles and ideals that underpin the National Strategy and serve to orient and guide actions, behaviours and decisions throughout implementation.



Impact & Sustainability

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



Quality & Integrity

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



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.



Collaboration & 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.

Goals

The Goals of the National Strategy seek to achieve its Vision, with progress against these Goals monitored and measured over time. A successful National Strategy will support the health system to:

1

Drive national prosperity and security

Boost Australia's economy, sovereign capability and long term security through investment in medical research and innovation.

2

Lead the world in health outcomes

Make Australia the world's healthiest country through research informed policy and practice.

3

Deliver equity – no one left behind

Ensure every Australian, regardless of background or postcode, benefits from health and medical research.

4

Secure a resilient and a sustainable health system

Support a cost-effective, future ready system that meets population needs and economic conditions.

5

Strengthen regional and global partnerships

Position Australia as a trusted and leading partner in global health, especially in the Indo-Pacific region.

Focus areas

Focus Areas are the thematic domains for the Actions that will deliver on the Goals of the National Strategy.

1

Build a vibrant research system that delivers for the nation

Coordination of priorities and investment strategies across all health and medical research funders, with a focus on horizon scanning, partnerships and shared infrastructure will build a vibrant health and medical research system. This system will deliver impactful research that improves the health of Australians and contributes to national productivity and sustainability, now and in the future.

2

Embed research processes that are modern, efficient and consumer centred

Well-coordinated, modern, efficient research processes that reduce administrative burden on researchers and drive consumer engagement and co-design will enable a more effective and sustainable health and medical research sector.

3

Accelerate research and its translation to improve Aboriginal and Torres Strait Islander peoples' health and wellbeing

More community driven research led by Aboriginal and Torres Strait Islander health and medical researchers and removal of structural inequities to research translation will improve Aboriginal and Torres Strait Islander health outcomes.

4

Drive impact through research translation, innovation and commercial solutions

Mechanisms that incentivise and support research translation, commercialisation and industry growth will deliver economic gains, a robust biotech and medtech sector and health system capability, resilience and future preparedness.

5

Position to be ready for future needs and challenges

Knowledge exchange and harnessing artificial intelligence (AI) will ensure Australia has capacity, trust in science and sovereign capability to monitor and address global risks and opportunities. This capability will support Australia to face future health and environmental challenges and to be a strong contributor to global and regional partnerships.

Enablers

Enablers and an enabling environment are the building blocks of a successful health and medical research ecosystem. They are the fundamental assets needed to deliver across all the Action areas of the National Strategy.



Workforce

Improving funding stability and job security through innovative funding models and workforce planning, increasing productivity and creating a research positive culture.



Funding

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



Data and advanced technology

Building capability in emerging technologies, AI and data, that is accessible and linked.



Infrastructure

Using existing and planning new infrastructure, platforms and networks as shared resources in a sustainable research system.

Focus Areas and Actions

Focus Areas are the thematic domains for the Actions that will deliver on the Goals of the National Strategy.

Focus Areas – actions to drive transformational change

1

Build a vibrant research system that delivers for the nation

National priority setting and evaluation: Embed consistent processes to set, fund and evaluate research impact against national priorities, overseen and supported by a National Strategy Advisory Council.

Horizon scanning: Establish mechanisms for identifying new and emerging challenges for the health system that inform and guide priority setting, investment and workforce and infrastructure planning.

Collaborative platforms and networks: Prioritise collaborations and sharing of resources, through investment in platforms and networks across the health and medical research ecosystem, to support research, workforce development and translation in areas of national priority.

2

Embed research processes that are modern, efficient and consumer centred

Commonwealth research funding: Establish unified management of the Medical Research Endowment Account (MREA) and Medical Research Future Fund (MRFF) to ensure strategic, coordinated investment, aligned to national health priorities and challenges.

Clinical trials: Enable a vibrant clinical trials sector that improves patient outcomes and supports equitable access to clinical trials, regardless of demography or geography.

Consumer and community involvement: Reward inclusivity and embrace diversity – particularly for priority populations – and build community trust in health and medical research.

Regional, Rural, and Remote (RRR) research: Develop research processes that are adaptable and flexible to respond to the unique needs, challenges and opportunities of RRR communities.

3

Accelerate 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: Build community-led, place-based, co-designed research and translation activities, supported by consolidated and coordinated funding opportunities.

Translation and implementation: Prioritise community-based, innovative solutions to implement research outcomes that address the National Agreement on Closing the Gap.

Aboriginal and Torres Strait Islander leadership and workforce capacity and capability building: Enhance Aboriginal and Torres Strait Islander health and medical research leadership and support emerging researchers, particularly community-based researchers with non-traditional pathways into research.

4

Drive impact through research translation, innovation and commercial solutions

Research translation: Develop and expand on current structural solutions and initiatives, such as Research Translation Centres and hub and spoke models, to embed translation and research expertise in healthcare settings.

Industry integration and risk sharing: Establish mechanisms that optimise research-industry exchange and moderate and share risk for industry to stimulate investment attractiveness and drive commercial outcomes.

Manufacturing and marketing: Support commercialisation and sovereign capability by building local biotech and medtech manufacturing and industry marketing capabilities and research-industry partnerships for national and international markets.

5

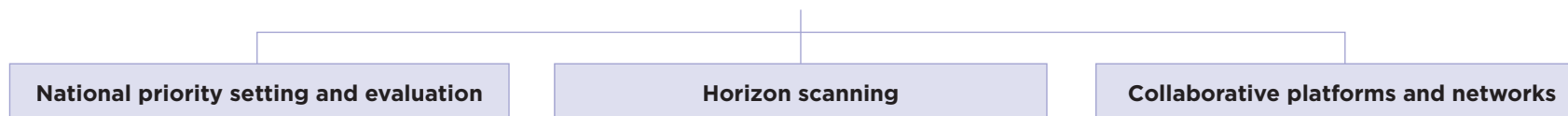
Position to be ready for future needs and challenges

Emerging technology: Build capability and capacity to take advantage of innovative emerging technologies including cutting edge approaches for responsible and impactful harnessing of AI.

Environmental sustainability: Consider the impact of health and medical research and health system outcomes on climate as a key factor in priority setting and embed research processes that promote environmental sustainability

Global partnerships: Promote strategic collaborations that address shared health priorities and strengthen Australia's leadership globally and in the Indo-Pacific region.

Build a vibrant research system that delivers for the nation



Coordination of priorities and investment strategies across all health and medical research funders, with a focus on horizon scanning, partnerships and shared infrastructure will build a vibrant health and medical research system. This system will deliver impactful research that improves the health of Australians and contributes to national productivity and sustainability, now and in the future.

Drive national prosperity and security	A vibrant research system that incorporates priority setting and evaluation activities, platforms and networks and horizon scanning will drive national prosperity and security.
Lead the world in health outcomes	A research ecosystem that delivers for the nation with a focus on coordination of priority setting, investment activities and partnerships will place Australia as a global leader in world health outcomes.
Deliver equity - no one left behind	Priority setting which is inclusive of all populations, irrespective of socioeconomic status or geographic location will ensure equitable health outcomes are achieved.
Secure a resilient and a sustainable health system	The resilience and sustainability of Australia's health system will be strengthened through a national approach to priority setting and a focus on translation
Strengthen regional and global partnerships	Regional and global partnerships are a key foundation of a research system that delivers for the nation, building access to new technologies and practices that improve outcomes.

National priority setting and evaluation

Research funding decisions – whether made by the Commonwealth, states and territories, industry, or philanthropic organisations – should be driven by priorities that offer the greatest potential benefit to public health and community wellbeing. When these priorities are nationally aligned, there are opportunities to generate efficient research outcomes. A coordinated process of priority setting and evaluation, guided by evidence and community needs, can ensure that limited resources are used efficiently and fairly. It is also 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.¹²

Horizon scanning

Horizon scanning is a critical tool in cultivating a vibrant research system, especially in the face of rapidly emerging challenges and transformative technologies. By systematically exploring potential future developments, horizon scanning can guide researchers, policymakers and institutions to anticipate shifts in scientific, technological, and societal landscapes over the next decade.¹³ Ultimately, horizon scanning supports decision making processes¹⁴, strengthens the foundation of a forward looking research ecosystem that is equipped to address complex problems and harness new technologies that will deliver benefits for all.

Collaborative platforms and networks

Platforms and networks provide the infrastructure and connectivity required to bring together scientists, researchers, clinicians, policymakers and communities across the health and medical research ecosystem. By facilitating data sharing, resource pooling and coordinated research efforts on a larger scale and for longer time periods, platforms and networks accelerate innovation, reduce duplication and enhance the translation of research outcomes.

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 (CALD) people, LGBTIQ+ people, people with a disability, people with mental health conditions, people in low socioeconomic groups and people living in regional, rural or remote areas.¹⁵ 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.

National priority setting and evaluation

Action

Embed consistent processes to set, fund and evaluate research impact against national priorities, overseen and supported by a National Strategy Advisory Council.

How we could do it

- Foster coordinated, formalised communication and collaboration across Commonwealth and state and territory governments to align priority setting in a way that will develop streamlined, scalable, co-investment strategies supportive of shared outcomes and long-term impact.
- Implement mechanisms to ensure industry, philanthropy, researchers, consumers and communities are engaged in the ethical priority setting of health and medical research.
- Ensure balanced investment into investigator-led and priority-driven research, across discovery, clinical, translational and commercialisation research and development, with fair funding practices that reinforce a positive culture of inquiry and learning.
- Embed research priority frameworks that are aligned with long-term, health system-wide goals. These frameworks will incorporate the needs of priority populations and those under-represented in the current system (for example, research into rare diseases) and be robustly guided by ethical principles¹⁶.
- Establish nationally aligned impact measurement tools
 - including adopting comprehensive models in addition to traditional academic metrics - to evaluate real world outcomes, health system improvements, economic returns, and societal benefits of research.
- Establish a National Strategy Advisory Council to uphold the values, oversee the implementation and measure the success of the National Strategy.

Why we should do it

- A nationally coordinated health and medical research system will be more streamlined and resource-efficient to maximise impact through collaboration across governments, industry, academic, health care, philanthropic and community sectors.

What it could achieve

- Priorities that are inclusive, equitable and aligned to community needs.
- Research funding that is strategically directed towards identified areas of need.
- Investment practices that achieve the right distribution of funds across discovery and priority-driven research.
- Unified and impact-driven funding landscape for Australian health and medical research through increased collaboration across funders.
- A responsive and needs based research funding system that can adapt to the changing global health environment.
- Increased impact and accountability of Australian health and medical research.

Case studies

NSW Setting Research

Priorities¹⁷: The NSW government has produced a guide to assist NSW Health staff to identify and update population health research priorities. The guide includes information regarding: the purpose of setting research priorities; principles of effective research priority setting; and a suggested process for setting, disseminating and reviewing research priorities. The guide provides users with a 4 stage process for setting and reviewing research priorities including:

1. Background investigation and preparation;
2. Generate and refine research priorities;
3. Finalise and disseminate research priorities;
4. Review and update research priorities.



James Lind Alliance (JLA)¹⁸:

JLA is a UK based nonprofit 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 (PSP) 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.

Horizon scanning

Action

Establish mechanisms to identify new and emerging challenges for the health system that inform and guide priority setting, investment and workforce and infrastructure planning.

How we could do it

- Establish a nationally coordinated horizon scanning mechanism across Commonwealth, state and territory jurisdictions to identify emerging health challenges, research opportunities and areas of unmet need, and to assist in priority setting, investment and workforce and infrastructure planning. This work would occur in collaboration with the Australian Centre for Disease Control in safeguarding Australia from health threats.
- Establish robust policy frameworks that integrate emerging risks and challenges identified through the coordinated horizon scanning mechanism, to inform policy and program development across the Enablers of *Workforce, Funding, Data And Infrastructure*.

Why we should do it

- Australia's health system faces a range of challenges including an ageing population and the associated increasing demand on health services, increasing rates of chronic disease and rising costs of medical research and innovations.
- 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.
- We must also take advantage of available data, emerging technologies and modernised practices.
- When performed consistently and effectively, horizon scanning, in partnership with other forecasting tools, can assist policy making and program design.

What it could achieve

- A unified and strategic approach to identifying and responding to emerging challenges, research opportunities and areas of unmet need.
- The ability for governments, industry, philanthropic and research organisations to make informed strategic decisions across the health and medical research ecosystem.

Case studies

Horizon scanning and landscape analysis by the World Health Organization (WHO)¹⁹:

The 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 R&D landscape analysis, which evaluates the pipeline of antibacterial candidates in development.

Australian Centre for Disease Control (ACDC)²⁰:

ACDC's horizon scanning for new and emerging human health threats takes a One Health approach, where policies and programs recognise the intrinsic link between the health of humans, animals and the environment. Horizon scanning activities are undertaken collaboratively with ACDC's key One Health partners including other Australian Government departments, state and territory governments, First Nations organisations, Wildlife Health Australia and the Commonwealth Scientific and Industrial Research Organisation (CSIRO).



Collaborative platforms and networks

Action

Prioritise collaborations and sharing of resources, through investment in platforms and networks across the health and medical research ecosystem, to support research, workforce development and translation in areas of national priority.

How we could do it

- Prioritise longer term health and medical research funding through a platform and network based approach. Creating incentives to develop collaborative infrastructure, multidisciplinary partnerships and efficient resource utilisation can deliver major impact across the health and medical research ecosystem.
- Establish processes to identify and fund new networks and platforms that align to national priority areas and community need. Embedding assessment criteria and governance mechanisms within national policy frameworks to evaluate the relevance, scalability and collaborative potential of specific research initiatives will assist in these processes.

Why we should do it

- Research networks bring together health and medical professionals, scientists, researchers, service providers and consumers and community members to drive impact through place-based and virtual collaborations.
- Networks can improve the opportunities for research participation and increase equity of outcomes.
- Centralised platforms often provide shared infrastructure, tools, or services that can be accessed by multiple projects or users, reducing the need to build systems from scratch and allowing for more broadly consistent standards and practices.
- Technology networks and platforms often support integration with other systems, allowing data and tools to work together seamlessly. Research supported through linked data within these networks can lead to improved health outcomes.

What it could achieve

- Strategic and targeted investment through platforms and networks to address areas of national priority, where collaborative models are most likely to deliver long term results.
- 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.

Case studies

The NSW-funded RNA Production and Research Network²¹:

This 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 Australia²² 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.²²

Embed research processes that are modern, efficient and consumer centred

Commonwealth research funding

Clinical Trials

Consumer and community involvement

Regional, rural and remote research

Well-coordinated, modern, efficient research processes that reduce administrative burden on researchers and drive consumer engagement and co-design will enable a more effective and sustainable health and medical research sector.

Drive national prosperity and security	Unified, aligned and coordinated management of MRFF and MREA funding provides an avenue for public funds to be used efficiently to effectively deliver maximum impact.
Lead the world in health outcomes	A successful Australian environment for clinical trials will identify innovative treatments and technologies, contributing to improved care and better health outcomes.
Deliver equity – no one left behind	Meaningful consumer and community involvement will support research that meets the needs of the community and ensures that trust, diversity, geographic reach and equity are central.
Secure a resilient and sustainable health system	Aligning the MREA and MRFF, including processes to drive consumer and community involvement and strengthening clinical trials, will position Australia to respond swiftly to emerging challenges.
Strengthen regional and global partnerships	A well-coordinated Australian approach to health and medical research will set the foundation to build and strengthen regional and global partnerships.

Efficient management of Commonwealth research funding

Efficient and unified management of the two primary Commonwealth health and medical research funds (MREA and MRFF) will ensure investment aligns with national health priorities and emerging challenges. Harmonising funding cycles, reporting processes and impact expectations across Commonwealth schemes will reduce duplication, avoid funding gaps and streamline application processes, ultimately lowering administrative burden and improving transparency. This will provide opportunities for non-Commonwealth funders to align funding processes and procedures, leading to broader efficiency.

Enabling a vibrant clinical trials sector

A flourishing clinical trials sector and further embedding research into routine care will advance Australia's health and medical research outcomes and increase equitable access to innovative therapeutics and interventions. A strong clinical trials ecosystem that is underpinned by the NOSS, and growth of Clinical Trial Networks, can reduce costs through efficient trial design and accelerate the translation of evidence into practice. Developing sovereign capacity in clinical trial management can bring innovation into practice more quickly.

Driving consumer and community involvement in research

The National Health and Medical Research Community Qualitative Research report²³ found that many Australians believe the general public should have a say in research priority areas. A range of involvement options should be provided to overcome barriers such as time constraints and the expectation to understand overly complex information. Opportunities and communications must be tailored to the needs and interests of certain communities; for example, activities to involve Aboriginal and Torres Strait Islander peoples should implement culturally safe practices and take a localised approach in their design.

Responding to the needs of RRR research

Nearly 7 million Australians live in regional, rural and remote areas and, on average, experience poorer health outcomes and shorter life expectancy due to limited access to healthcare and the effects of the social determinants of health.²⁴ To improve equity, research in these communities must overcome barriers like distance, workforce shortages and infrastructure gaps, with adaptable approaches that build lasting, locally embedded research capacity.

Supporting indirect costs of research

An important area of feedback from the research sector during consultation on the National Strategy has been the need for greater support to meet the full costs of conducting research. These costs can include equipment, infrastructure and bridging salary gaps for researchers. We have heard that the increasingly sophisticated and complex nature of research is leading to indirect costs that are outstripping block funding and other support mechanisms. Reducing the impact of indirect costs will require a whole of sector approach, supported by the National Strategy. Opportunities include approaches that direct funding towards indirect costs that are currently not supported by existing mechanisms, infrastructure sharing or new cost effective platform and network approaches for highly specialised equipment. Better understanding the flow of funding and existing funding gaps, as well as encouraging collaborative research to minimise duplication, will also support sustainability and reduce the burden of indirect costs for the sector.

Commonwealth research funding

Action

Establish unified management of the MREA and MRFF to ensure strategic, coordinated investment, aligned to national health priorities and challenges.

How we could do it

- Bring together management of the MREA and the MRFF under a single executive agency.
- Ensure that the unique strengths of each fund are preserved, while delivering administrative efficiency, addressing duplication and gaps and driving research excellence from discovery science to translation.
- Stronger coordination and alignment with other organisations and processes, such as the Australian Research Council (ARC) and output of the SERD, where possible, including:
 - key policies, such as those related to consumer and community involvement and open access to funded research outputs
 - research processes, including funding cycles, application and assessment processes, reporting, evaluation and impact measurement.

Why we should do it

- Consultation on the National Strategy has supported findings from a recent review of the major Commonwealth health and medical research funding mechanisms which sought to improve alignment and coordination between the MREA and the MRFF²⁵, in particular:
 - A prevailing view that the 2 funds should be managed by a single executive agency.

- The need for a 'seamless but not homogenous' funding model – where the best of both funds is preserved and brought together in closer alignment and coordination.
- The desire for a transparent, strategic, cohesive and fit for purpose funding system, including balanced support across the entire research pipeline and new avenues for consumer and community engagement.

What it could achieve

- Coordinated, transparent, and fit for purpose investment through one unified Commonwealth health and medical research executive agency.
- A consistent set of research processes, reducing administrative burden on the sector.
- Synergies and efficiencies through streamlined administrative management, leading to better visibility of the funding landscape to enable the development of a resourcing statement (see *Funding Enabler*).
- Consistent policies and mechanisms to embed diversity and equity in research.
- An opportunity to improve understanding in the community through a 'front door' of Australian Government funded health and medical research.

Case studies

NHMRC/MRFF joint advisory committees²⁶

Following the consultation on MRFF-MREA alignment, 4 joint committees were established to advise on research strategies and policies for both funds, harmonising and improving coordination, 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 (HMR), including on strengthening consumer involvement in MREA and MRFF grant programs.
- **Industry, Philanthropy and Commercialisation Committee** – advises on industry and philanthropic involvement in HMR 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.

Unified administration of health and medical research²⁷

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.

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.

Clinical trials

Action

Enable a vibrant clinical trials sector that improves patient outcomes and supports equitable access to clinical trials regardless of demography or geography.

How we could do it

- System and regulatory reform, and growth in Clinical Trials Networks, to support equitable access to clinical trials, encourage innovation, develop sovereign capability and improve the quality of healthcare in Australia.
- Implementation of the National One Stop Shop for Clinical Trials and the National Clinical Trials Governance Framework across public and private health services.
- Roll out the Human Research Ethics Committee Quality Standard and Accreditation Scheme.
- Invest in regional, rural and remote clinical trial infrastructure, including long term funding for Clinical Trial Networks to manage logistics, data and recruitment.

Why we should do it

- 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. Australia is an attractive place to undertake trials and compares favourably to other OECD countries in terms of clinical trial activity, which has been increasing, with new studies registered per year rising from 725 in 2006 to 1,349 in 2020.²⁸

- To help reduce health disparities and better inform clinical and public health decision making, participation in clinical trials needs to be inclusive and representative.
 - Between 2006 and 2021, 0.8% of registered trials had an exclusive focus on the health of Aboriginal and Torres Strait Islander peoples and communities, but there is little available detail on the inclusion of Aboriginal and Torres Strait islander people in trials more generally.²⁸
 - Despite culturally and linguistically diverse Australians representing almost a third of the population, research has shown they are often excluded from clinical research due to potential lack of fluency in English being considered a risk to informed consent.²⁹
 - Until the 1990s, women were routinely excluded from clinical trials due to assumptions about reproductive risks and the impact of hormonal differences on trial findings. As a result, the underrepresentation of sex and gender differences in research data remains an issue.³⁰⁻³²
- There are opportunities to improve access to trials in Australia through regulatory system reforms and growth in clinical trial networks.
- The economic benefits of clinical trials are notable; an economic evaluation of 25 investigator-initiated clinical trials conducted across 3 clinical trial networks found that:³³
 - There was a return of \$5.80 for every \$1 invested in the networks.
 - If results from these trials were implemented in 65% of the eligible Australian patient populations for one year, this would deliver a net benefit of \$1.6 billion (2014 dollars).

What it could achieve

- Better inclusion and diversity in trials, including through incentives and broader representation, especially for rural, Aboriginal and Torres Strait Islander, and other underserved communities.
- Stronger integration between research and healthcare delivery, including through increased clinician engagement in clinical trial activities.
- Development and growth of regional health infrastructure, including trial sites, telehealth capabilities and mobile research units.
- Faster access to cutting edge therapies for patients across Australia.
- Central, coordinated expertise to equip researchers and clinicians with the capability and capacity to get trials up and running.



Case study

Breast Cancer Trials³⁴

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 involvement

Action

Reward inclusivity and embrace diversity – particularly for priority populations - and build community trust in health and medical research.

How we could do it

- Coordinate nationally to prioritise inclusion of diverse and priority populations, by co-designing research agendas, using inclusive recruitment strategies, increased support and capacity building for the sector and providing fair compensation.
- Build infrastructure/mechanisms for greater Consumer and Community Involvement (CCI), such as CCI networks and digital platforms.
- Monitor, evaluate and disseminate information about research impact to the broader community.
- Uphold and support implementation of the NHMRC Statement on CCI in health and medical research and the principles for consumer involvement, in all health and medical research.

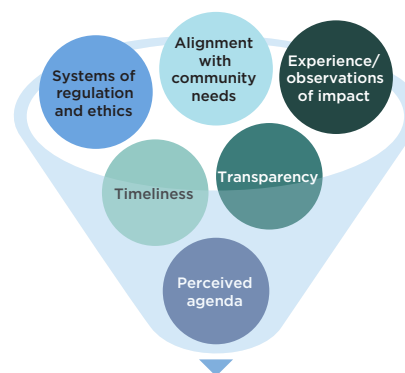
Why we should do it

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, particularly for priority populations. Partnering with consumers and communities provides an opportunity to build trust in science and social licence for research.

What it could achieve

- Research that is shaped by, and benefits, the communities it affects.
- Consistent frameworks and training across institutions for inclusive research practices.
- Increased involvement of priority and underserved populations.
- Improved public trust and social licence in health and medical research.
- Research that addresses the social determinants of health and systemic barriers to reduce health disparities.
- Institutional and cultural transformation, including through recognition and reward systems for researchers who demonstrate excellence in community engagement.

Factors impacting trust in, and perceived effectiveness of, the Health and Medical Research sector.²³



= Trust and perceived effectiveness

Case studies

WA Consumer and Community Involvement Program (CCIPProgram)³⁵



The CCIPProgram, based out of the WA Health Translation Network, supports consumers, community members and researchers to work in partnership to make decisions about health research, policy and practice. The CCIPProgram also provides tailored CCI support for research, unique involvement opportunities, and a diverse range of capacity building activities and engagement events. In 2023-24, there were over 6,000 members with lived experience interested in informing health and medical research. The CCIPProgram supported the development of WA'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 (NCIG)³⁶

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 their 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.

"The enthusiasm with which communities are participating in NCIG research, when other research initiatives struggle to achieve effective participation, is powerful evidence that the NCIG approach is working."

Regional, rural and remote (RRR) health and medical research

Action

Develop research processes that are adaptable and flexible to respond to the unique needs, challenges and opportunities of RRR communities.

How we could do it

- Establish methods to ensure RRR research is consistently included in priority setting initiatives and ensure that priority setting engages effectively and meaningfully with local communities.
- Coordinate Commonwealth, state and territory agencies to establish affirmative action for research conducted in, with and by RRR researchers and communities.
- Develop local infrastructure and services to support clinician researchers in RRR areas to increase the translation of research in ways that are appropriate and fit for purpose for the communities and settings they service.
- Ensure that grant assessment processes have balanced representation from RRR researchers.
- Promote and incentivise research collaborations with RRR researchers, particularly to extend access to clinical trials and translational research activities in the community.

Why we should do it

Approximately 7 million Australians (~27% of the population) live in RRR areas, and, on average, they experience worse health outcomes and shorter life expectancy than other Australians.²⁴ There are multiple factors that contribute to health inequities for RRR populations, including poorer social determinants of health and reduced access to primary healthcare services.³⁷

While engaging in research has demonstrated benefits for health outcomes, undertaking research in RRR areas faces significant barriers including distance, constrained clinical services, a limited research workforce and limited access to research infrastructure.³⁸⁻⁴²

Every RRR community in Australia is different and faces unique challenges in its degree of remoteness, health system capacity, demographics and healthcare needs. Therefore, research frameworks need to be adaptable and responsive to the specific needs of each community, with a focus on building and embedding enduring research capacity within the community and adopting smart approaches with new technological solutions to overcome vast distances.

What it could achieve

- Equitable research investment that helps to close long-standing gaps in health outcomes and research representation.
- Embedded local research capacity, ensuring that research expertise is grown and sustained within communities, rather than being externally driven or temporary.
- Community driven priorities for RRR research that reflect the real needs and values of local populations.
- Fit for purpose translation that works in real RRR settings.
- Fair representation in decision-making leading to more inclusive and context-aware funding decisions.
- Expanded access to innovation, including clinical trial access, will extend cutting edge research opportunities to RRR communities, improving health equity.



Case study

Townsville Institute of Health Research and Innovation (TIHRI)⁴³

The 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.

Accelerate 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

Translation and implementation

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

More community driven research led by Aboriginal and Torres Strait Islander health and medical researchers and removal of structural inequities to research translation will improve Aboriginal and Torres Strait Islander health outcomes.

Drive national prosperity and security	Investment in Aboriginal and Torres Strait Islander health research is crucial to ensuring Australia's national prosperity and security by overcoming systemic social and health disparities so everyone can contribute to the economy.
Lead the world in health outcomes	Australia will only lead the world in health outcomes when we achieve health equity between Australian Aboriginal and Torres Strait Islander Peoples and non-Aboriginal Australians.
Deliver equity – no one left behind	Continued investment in community-led research that alleviates structural inequities will generate effective community-based solutions for everyone.
Secure a resilient and sustainable health system	Aboriginal and Torres Strait Islander knowledge should play a transformative role in building a sustainable health system by offering holistic, community centred and environmentally attuned approaches to health and well being.
Strengthen regional and global partnerships	Prioritising Aboriginal and Torres Strait Islander leadership and knowledge in health and medical research means Australia can model how nations should engage Indigenous communities in global health governance.

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.⁴⁴ This is why it is vital to invest more into research and translation activities that are community led and designed. Commonwealth investment in Aboriginal health research has been increasing through dedicated funding from the NHMRC and MRFF.^{45, 46}

Translation and implementation

The most recent report from the Productivity Commission on progress towards Closing the Gap targets revealed that, while certain indicators were on track, such as proportion of babies born with a healthy birthweight, others, such as childhood development and improving social and emotional wellbeing, have worsened.⁴⁷ More needs to be done to improve these indicators through innovative research and translation activities designed and led by Aboriginal and Torres Strait Islander communities.

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

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.^{45, 48} More can be done to sustain the workforce by continued training and capability building of the next generation of experts. The achievements of the Lowitja Institute, Aboriginal community-controlled health organisations (ACCHOs) and networks (e.g Our Collaborations in Health Research – OCHRe) require further support.

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

Aboriginal and Torres Strait Islander health refers not just to the physical health of an individual but to the social, emotional and cultural wellbeing of the whole community, where everyone can achieve their full potential and contribute to the overall wellbeing of their community.⁴⁹

The Mayi Kuwayu study⁵⁰ is the largest national 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.⁵¹ Outcomes to date include positive health associations with participating 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.



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

Action

Build community led, place based, co-designed research and translation activities, supported by consolidated and coordinated funding opportunities.

How we could do it

- Undertake on-going reviews of the funding landscape for Aboriginal and Torres Strait Islander health research to ensure investments are meeting needs.
 - This will be done in conjunction with the wider review of the health and medical research funding landscape (*see Funding Enabling Initiative*).
 - Design consistent funding processes across funders that include data needed to monitor trends (e.g. Aboriginal and/or Torres Strait Islander status of investigators).
 - Create more pathways for community organisations to submit topics for grant opportunities such as NHMRC's Targeted Calls for Research Grant Scheme.⁵²
 - Better coordinate and align policies related to funding for Aboriginal and Torres Strait Islander health research across government and with non-government funders. Ensure there is alignment with existing frameworks such as the *NHMRC Road Map 3: A strategic framework for improving Aboriginal and Torres Strait Islander health through research*.⁵³
- Foster grant opportunities in Aboriginal and Torres Strait Islander health research that adhere to the following:
 - Co-designed with community and Aboriginal and Torres Strait Islander researchers.
 - Embed processes that enable research to be successfully undertaken in community settings such as the length of time and funding that is required to build relationships.
 - Adopt consistent approaches/criteria approaches/criteria for researchers that outlines community leadership through genuine partnerships with relevant Aboriginal community organisations.

Why we should do it

Positive results are seen when Aboriginal and Torres Strait Islander research is strengths-based and undertaken utilising the principles of self-determination and equity.⁵⁴⁻⁵⁶ Aboriginal and Torres Strait Islander researchers have continued to express that grant processes need to align with community needs, particularly taking into account the time and resources required to mobilise research in community settings.⁵⁷

What it could achieve

More targeted priority setting processes with greater visibility and transparency for research that is led by Aboriginal and Torres Strait Islander researchers.

Understanding areas that are being appropriately funded and areas of unmet need that may require greater resourcing.

Identification of potential synergies across funders for consolidated funding opportunities that could achieve more impactful outcomes through collaborative projects and networks.

Processes that are more aligned to the needs of the community, leading to better research outcomes that are easier to translate into policy and practice.

More projects designed with community and genuine partnerships among researchers and community.

Case studies



Lowitja Institute's research grants program⁵⁸

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, which aims to produce high impact research, tools and resources that will have positive health outcomes for Australia's First Nations. 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 (NEIHR)⁵⁹

In 2018, the NEIHR program was launched by the Canadian Institutes of Health (CIHR). The NEIHR program is led by the Institute of Indigenous Peoples' Health (IIPH), co-led by the Institute of Circulatory and Respiratory Health (ICRH) and financially supported by all 13 CIHR institutes.

The NEIHR program has set the foundation towards 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.

Translation and implementation

Action

Prioritise community-based, innovative solutions to implement research outcomes that address the National Agreement on Closing the Gap.

How we could do it

- Better coordinate research and translation activities with 'Closing the Gap' targets by:
 - Working together with funders to ensure funding opportunities are clearly linked to 'Closing the Gap' priority areas, particularly areas that require further attention.
 - Encouraging processes among funders to better identify how all health and medical research improves the health and wellbeing of Aboriginal and Torres Strait Islander peoples – a process currently being piloted by the NHMRC.⁶⁰
 - Closer monitoring of research activity and its contribution to progress on 'Closing the Gap' by working together with agencies such as the Productivity Commission, the Lowitja Institute and other key Aboriginal and Torres Strait Islander health research organisations, including ACCHOs.
- Continue to grow investment in RTCs that focus on Aboriginal and Torres Strait Islander Health and work across Commonwealth, State and Territory funders to build translation incentives into funding mechanisms.
- Design grant opportunities that focus on the translation and implementation of research by including a requirement to clearly articulate a feasible translation pathway, evidence of genuine partnerships with community and alignment with existing frameworks. Implement processes so funding agencies can monitor translation of funded projects to inform future grant opportunities.
- Design better mechanisms of sharing research and translation outcomes through networks and data sharing portals that can be easily accessed by researchers, funders and policy makers (see *Focus area 1 Collaborative platforms and networks*).

Why we should do it

Investment in Aboriginal and Torres Strait Islander health research has increased. It is now time to set processes in place to monitor and evaluate the impact of this research on the health and wellbeing of Aboriginal and Torres Strait Islander Peoples, and progress towards the 'Closing the Gap' targets, to inform future funding decisions.

What it could achieve

- Improved health and wellbeing outcomes in the Aboriginal and Torres Strait Islander community through projects that are designed with feasible translation and implementation pathways.
- Leveraging effective elements of the Research Translation Centres model.
- Greater visibility of research achievements and translation outcomes, to reduce duplication and improve the design of new funding opportunities and research projects.
- Better alignment of health and medical research to 'Closing the Gap' targets.

Case studies



Kimberley Aboriginal Health Research Alliance (KAHRA)⁶¹

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 Australian Academic Health Science Network (CAAHSN)⁶²



Researcher Wappayalawangka – CAAHSN is an RTC accredited by the NHMRC. Researcher Wappayalawangka is an Arrernte rendering of a borrowed word describing a gathering of researchers. Wappayalawangka is made up of the first one or two letters of the 14 First Nation languages represented in Central Australia.

The network is dedicated to improving the health of people in Central Australia, with a focus on Aboriginal health. It is focused on community driven research and research translation in close collaboration with research, educational and service delivery organisations.

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

Action

Enhance Aboriginal and Torres Strait Islander health and medical research leadership and support emerging researchers in innovative cross-disciplinary fields, particularly community-based researchers with non-traditional pathways into research.

How we could do it

- Increase understanding of the profile of the Aboriginal and Torres Strait Islander health and medical research workforce as part of the wider Australian Health and Medical Research Workforce Plan (see *Workforce Enabling Initiative*).
- Ensure there is sustained and sufficient investment in existing networks (e.g. OCHRe) and for initiatives from the Lowitja Institute and ACCHOs that are having a positive impact in growing and developing the Aboriginal and Torres Strait Islander research workforce.
- Invest in innovative, cross-disciplinary health and medical research led by Aboriginal and Torres Strait Islander researchers and training programs to build skills in areas of translation, commercialisation and implementation science including as part of undergraduate and postgraduate degrees.
- Increase Aboriginal and Torres Strait Islander leadership and capacity building educational pathways to support the development of future Aboriginal and Torres Strait Islander health and medical researchers (e.g. micro-credentials and fellowships).
- Appropriately acknowledge the experiences and diverse backgrounds of community-based researchers in the review of grant applications.
- Ensure community-based researchers receive fair recognition on research outputs through appropriate guidelines.

Why we should do it

Building the Aboriginal and Torres Strait Islander researcher workforce provides opportunities to incorporate Aboriginal and Torres Strait Islander knowledges for innovative solutions to complex problems. Community-based researchers have an in-depth understanding of the issues that are important for the community. Growing the workforce will also relieve some burdens carried by the current workforce who face 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 so the National Strategy can elevate policies to reduce barriers to workforce entry and continue to build capacity and capability.
- Ongoing funding and resourcing of successful networks that ensures achievements to date will continue and grow.
- More innovative solutions and greater cross-disciplinary training for Aboriginal and Torres Strait Islander people that is needed to 'Close the Gap' and deliver better outcomes for the community.
- Alignment of organisations that share a common goal to advance the future Aboriginal and Torres Strait Islander workforce through education and employment opportunities.
- Acknowledgment of the diverse experiences of community-based researchers (so often different to other academic researchers) to ensure grant applications are reviewed and assessed equitably.
- Appropriate attribution of community-based researchers in research outputs as an important measure of research productivity, which will also aid the development of more diverse research careers.

Case studies

Our Collaborations in Health Research (OCHRe)⁶³



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 NHMRC 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
- Developing an Indigenous Knowledges and Cultural Safety Frameworks
- Genomics Our Way - online course 'An Introduction to Genomics Research with Indigenous Australians'

Drive impact through research translation, innovation and commercial solutions

Research translation

Mechanisms that incentivise and support research translation, commercialisation and industry growth will deliver economic gains, a robust biotech and medtech sector and health system capability, resilience and future preparedness.

Drive national prosperity and security	Advancing health and medical research innovation, translation and commercialisation will drive national prosperity and security by fostering investment and improving health outcomes.
Lead the world in health outcomes	More rapidly translating research findings into innovative policy, practice and products will enable Australia to deliver world leading health outcomes.
Deliver equity – no one left behind	Australia's diverse health system, together with research underpinned by Open Science principles, will help to ensure that all communities benefit from the rapid translation of research and innovations into high value care.
Secure a resilient and sustainable health system	Enhancing research translation will support improved access to novel treatments and care, while building sovereign innovation and commercialisation will support resilience in the face of future health challenges.
Strengthen regional and global partnerships	Australia's capacity to translate and scale up research quickly and effectively will provide a platform to develop and enhance partnerships that improve health outcomes, regionally and globally.

Industry integration and risk sharing

Research translation

Strengthening organisational structures, policies, funding models and performance indicators to promote research-positive cultures will foster meaningful collaboration between researchers, clinicians and the community. These collaborations will embed research and translation expertise - particularly for regional, rural, remote and other underserved communities – and improve patient outcomes. At the same time, developing clear pathways for the validation, scaling and widespread uptake of evidence-based prevention and population health innovations will enhance efficiency and equity of the health system overall.

Industry integration and risk sharing

Identifying and implementing programs to share risk and harmonise regulatory, approval and procurement pathways will help drive industry investment and growth. These programs will build sovereign capability in the production and manufacture of medical diagnostics, devices and pharmaceuticals. In addition, increasing opportunities for research-industry exchanges, training and alternative career pathways for researchers will help to bridge academia and business. This will ensure Australia has the workforce it needs to support a strong and broad-based biotech and medtech sector into the future.

Manufacturing and marketing

Building on existing strategies and models to enhance Australia's biotech and medtech manufacturing and marketing capacity will enable an increase in local production and export of Australian products to global markets. Focusing on building skills, expertise and collaboration from discovery research to market will strengthen Australia's health system and deliver benefits to the community and broader economy.

Learning Health Systems (LHS)

In a Learning Health System, research, data and practice are systematically and continuously integrated to improve patient outcomes and provide high value, cost efficient care.

Key characteristics of a 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.⁶⁴

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. A 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, policy makers, healthcare administrators, professional training and accreditation and peak bodies, and collaborative networks of practitioners, consumers and the community.

Research translation

Action

Develop and expand on current structural solutions and initiatives, such as RTCs and hub and spoke models, to embed translation and research expertise in healthcare settings.

How we could do it

- Continue to support and expand the operation of RTCs, especially those with a specific focus on Aboriginal and Torres Strait Islander, regional, rural and remote and underserved populations, harnessing the professional development support they can provide for clinician researchers.
- Leverage the work of other research translation initiatives underway in private practice, and across state, territory and local jurisdictions, acknowledging the importance of the specific needs of different communities and valuing differences of approach to the overall goal of improving health.
- Establish incentives and support mechanisms for public health, hospitals and health networks to embed LHS models that will grow research-positive cultures and systems, improve patient outcomes and provide high value, cost efficient care.
- Embed performance indicators for research within healthcare settings into existing funding arrangements to enhance implementation of research activity.

Why we should do it

- Accredited Australian RTCs have delivered benefits at both the community and 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. RTCs also facilitate the sharing of expertise and experience at the national level. As currently configured RTCs are primarily place based. New opportunities exist to build on and expand the model to support broader translation initiatives for even greater impact.
- While Australia has made substantial investments in supporting research translation, widespread implementation of research findings and evidence-based prevention, treatment and therapeutic innovations remains a significant challenge, particularly for RRR areas, Aboriginal and Torres Strait Islander health and underserved communities.
- There is evidence for the effectiveness of hub and spoke models that decentralise and extend translational activities and enable collaboration into a variety of settings for example teletrial designs that extend resources and upskill health care organisations into rural and remote areas.⁶⁵

What it could achieve

- More research projects implemented in health services.
- Increased delivery of high value, evidence-based care in healthcare settings.
- Greater impact of research, with more research moving into practice, improving patient outcomes and health system efficiency.
- Increased consumer and community engagement, aided by RTCs, embedding lived experience in all stages of the research endeavour.
- Increased research-intensive Australian healthcare services, regardless of where they are or the communities they serve.
- Development of training programs for the next generation of clinician-researchers, implementation scientists, and community partners.



Case study

The Australian Health Research Alliance (AHRA)⁶⁶

AHRA represents 12 NHMRC accredited and 2 emerging RTCs operating across all states and territories. Collectively AHRA comprises 169 partners including health services, universities, research institutes and community organisations.

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

Examples of National System Level Initiatives coordinated through the AHRA network include a program of work aimed at embedding consumers in health research policy and practice, a Women's Health Research Translation Network to boost national and international collaboration on women's health and research, negotiation of Data Sharing Accords between partners to facilitate access to health data for research use, and a National Indigenous Research(er) Capacity Building Network to support and grow the next generation of Indigenous researchers working in Aboriginal and Torres Strait Islander health.

Industry integration and risk sharing

Action

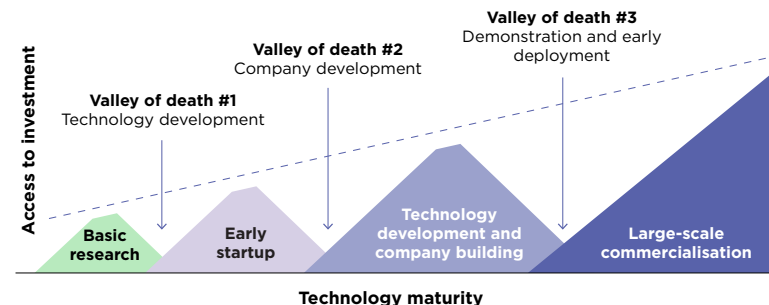
Establish mechanisms that optimise research-industry exchange and moderate and share risk for industry to stimulate investment attractiveness, build sovereign capability and drive commercial outcomes.

How we could do it

- Consolidate and leverage existing research and development (R&D) funding and support initiatives to provide targeted, fit for purpose support for different health and medical products, modalities or interventions, with a focus on supporting innovators and startups at the early stages of development and commercialisation.
- Identify gaps and solutions to streamline regulatory pathways and reduce time to market.
- Work across government and with industry to identify optimal ways to support high-risk, high-reward innovation in strategically important areas of R&D where market conditions or capital constraints preclude private investment.
- Encourage and reward researcher movement across discipline and sector boundaries, including through translational fellowships and industry PhDs, to strengthen the bridge between academia and business.
- Enhance opportunities for Aboriginal and Torres Strait Islander People's capability building in entrepreneurship and commercialisation to support the growth of community led industries.
- Support the SERD process in mapping where government and industry action can make the greatest impact on health and medical research commercialisation to increase Australia's market competitiveness.

Why we should do it

- More than 80% of Australian biotech and medtech companies are small and medium enterprises working in the early stages of translating research into commercial products.⁶⁷
- Companies face significant challenges moving through the 'valleys of death' from early stage research to large scale commercialisation (it can take 7-15 years and up to \$2.5 billion to bring one biomedical product from early research to market).⁶⁷



- Access to capital is cited by businesses as the number one barrier to commercialisation in Australia.⁶⁸
- Australian 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 cyber security.⁶⁹

What it could achieve

- Increased industrial capacity and capabilities.
- Increased investment in Australian startups and small to medium enterprises (SMEs).
- Increased local R&D presence of biotech and medtech multinationals in Australia.

Case studies



MTPConnect⁷⁰

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 MRFF initiatives, and state governments. MTPConnect also regularly collaborates with sector organisations and peak groups like Medicines Australia, MTAA and AusBiotech, and trade agencies including Austrade to deliver programs and advocate on behalf of the biotech and medtech sector.

European Innovation Council (EIC)⁷¹

The EIC has been established under the EU Horizon Europe program to support innovation throughout the lifecycle from early stage research to proof of concept, technology transfer, and the financing and scale up of startups and 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.

Manufacturing and marketing

Action

Support commercialisation and sovereign capability by building local biotech and medtech manufacturing and industry marketing capabilities and research-industry partnerships for national and international markets.

How we could do it

- Establish a central platform to provide consolidated, consistent and up to date information on intellectual property and commercialisation funding initiatives, training and support programs available for Australian innovators at all stages of the commercialisation pathway.
- Support and assist the actions outlined in the Medical Science Co-investment Plan⁷² for increasing industrial capacity and capabilities, supporting the commercialisation of high value products, and improving the international competitiveness of the Australian medical science and technology sector.
- Prioritise the development of sovereign capability and supply chain resilience by encouraging and incentivising local procurement of medical products where feasible.
- Continue to build on the innovation precinct model as a mechanism for embedding links between universities, hospitals, startups, and manufacturers that build expertise and capacity to manage and develop intellectual property across the entire value chain, from discovery research to manufacture and marketing.

Why we should do it

- Manufacturing 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 biotech and medtech future.
- Limited access to a small number of local research and manufacturing facilities presents challenges to Australian innovators.⁷³
- Over 90% of prescription medicines and 97% of all diagnostic raw materials and components are imported into Australia.⁷⁴
- The Australian biotech and medtech sector is maturing and developing the key prerequisites for successful biotech and medtech precincts: infrastructure, access to skills, capital and market know-how; enterprise culture; positive regulatory and governance conditions; and competitive advantage.⁷⁵

What it could achieve

- More Australian made biotech and medtech products used in Australian healthcare and exported internationally, generating financial benefits and economic growth.
- Faster access to innovative therapies for Australian patients and faster response to health emergencies, including pandemics and antimicrobial resistance.
- Reduced reliance on imports for critical medicines, vaccines, diagnostics and biologics.
- Improved health equity through locally produced, affordable technologies.
- Expansion of Australian biotech and medtech industries into local and international markets.

Case study



ADAPT[®] 76

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

Originally produced in small batches at Royal Perth Hospital, Admedus opened a manufacturing facility in 2014 in Malaga, WA to support broader surgical use, particularly in babies and children with heart defects. ADAPT[®] 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 a structural heart company. The novel acellular, biostable and non-calcifying ADAPT[®] tissue was molded into a single-piece 3D biomimetic heart valve (DurAVR[®] THV) with excellent early clinical results in the treatment of severe aortic stenosis, a life-threatening condition. A global study to commercialise the DurAVR[®] transcatheter heart valve will commence this year.

Position to be ready for future needs and challenges

Emerging technology

Knowledge exchange and harnessing AI will ensure Australia has capacity, trust in science and sovereign capability to monitor and address global risks and opportunities. This capability will support Australia to face future health and environmental challenges and to be a strong contributor to global and regional partnerships.

Environmental sustainability

Global partnerships

Emerging technology

Building capability in emerging technologies is essential for a high performing health and medical research ecosystem. These technologies ensure that research remains fit for purpose, responsive to future challenges and well positioned to seize new opportunities.

Innovations such as gene and cell therapies and genomic medicine hold transformative potential for addressing some of Australia's most pressing health issues. In parallel, advances in therapeutic approaches, AI and digital health play an increasingly critical role in drug discovery, diagnostics, clinical decision-making and enhancing healthcare delivery and access.

AI and digital health tools can further improve healthcare outcomes by streamlining clinical workflows, supporting patient engagement, promoting equitable access and advancing health literacy across diverse populations.

Environmental sustainability

Integrating environmentally sustainable practices into research design, infrastructure and operations reduces the ecological footprint of research and aligns with broader public health goals.

By adopting sustainable procurement practices, minimising waste and investing in green technologies, the research community can lead by example – demonstrating that scientific advancement and environmental stewardship can go hand in hand. This approach supports long term health outcomes by protecting the ecosystems that underpin community wellbeing.

Global partnerships

Global partnerships are vital to advancing health and medical research, sharing knowledge and expertise across borders. In an increasingly interconnected world, health challenges such as pandemics, antimicrobial resistance, chronic and rare diseases require coordinated, collaborative responses that no single country can address alone. Collaboration accelerates scientific discovery, facilitates access to diverse populations and data sets and supports the development of globally relevant solutions. Strengthening these partnerships enhances resilience, innovation and preparedness for future needs and challenges.

Open science, trust in science, 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.

Drive national prosperity and security

Ensuring Australia is prepared for future needs and challenges, and has the capacity to respond, will advance national prosperity and resilience, contributing to national security.

Lead the world in health outcomes

Being prepared for future needs and challenges empowers Australia to continue to contribute as a global and regional leader in achieving outstanding health outcomes.

Deliver equity – no one left behind

Applying an equity lens to emerging technologies, environmental sustainability, and global partnerships will enable inclusive planning that leaves no one behind.

Secure a resilient and sustainable health system

Strengthening preparedness for future needs and challenges plays a vital role in building a resilient and sustainable health system, that is fit for purpose and able to adapt.

Strengthen regional and global partnerships

Australia's strengths in health and medical research underpin a leadership role in addressing global and regional health challenges.

Emerging technology

Action

Build capability and capacity to take advantage of innovative emerging technologies including cutting edge approaches for responsible and impactful harnessing of AI.

How we could do it

- Harness AI capabilities, advanced technology infrastructure and manufacturing capabilities for health and medical research through a nationally coordinated policy approach. This will be achieved by aligning efforts across jurisdictions and with industry to build an integrated ecosystem to support cutting edge research, accelerate technology adoption and strengthen domestic production capabilities.
- Define and implement policy frameworks that give appropriate protections for sensitive and valuable health and medical research data. These frameworks will address data governance, privacy, security and ethical use, to enable responsible data sharing and collaboration across jurisdictions.
- Engage with international horizon scanning initiatives to proactively identify and leverage emerging technologies and AI in health and medical research.

Why we should do it

- Advanced technologies and AI are rapidly evolving, presenting both opportunities and challenges for the health system and research environment. It is important that the Australian health system adapts to take advantage of the benefits of AI, while balancing necessary protections to ensure safety and privacy.
- It is estimated that globally, AI in the healthcare market is expected to reach USD67.4 billion by 2027, growing at a compound annual growth rate of 46%.⁷⁷
- The Commonwealth and many states and territories have or are implementing health identifiers and digital patient records. Digital technologies are easing pressure on health services and, through data sharing, informing evidence-based decision making.
- Australians, as early adopters, are already on track to embrace emerging technologies. The National Digital Health Survey (2021)⁷⁸ revealed consumers intend to increase their use of digital health in the future for self-servicing tasks such as booking healthcare appointments online or accessing electronic health records and prescriptions.
- Embedding digital technologies offers advantages for health services, such as:
 - real time access to patient health data and information across different healthcare settings and borders, to support immediate, evidence-based clinical decision making;
 - providing patients with access and control of their own health data;
 - distributing digitally enabled patient screening and medication alerts; and
 - generating data-driven insights for better practice planning, resourcing and continuous quality improvements.
- Despite the advantages, Australians are not yet equitably benefiting. Health providers and consumers have differing access to, and experience with, current and emerging digital technologies.

What it could achieve

- Positioning Australia as a global leader in AI and innovation, accelerating the translation of cutting edge research into practical applications.
- A secure and interoperable data environment supporting innovation while safeguarding public trust.

Case studies

The Centre for Health Record Linkage (CHeReL)⁷⁹

CHeReL links multiple sources of data and maintains a record linkage system that protects privacy. This allows for an accurate and more complete picture of the health of the population to be provided. CHeReL has contributed to the capacity of researchers to access linked data from across many different datasets through probabilistic linkage.

The Singapore Integrated Diabetic Retinopathy Programme (SiDRP)⁸⁰

SiDRP is a 12 year research and translation platform investment by government to link in real time digital retinal images from all the nation's 23 polyclinics to the Singapore National Eye Centre. AI has enhanced early detection of diabetic retinopathy, establishing the world's first nationwide AI-driven disease screening system. This approach is estimated to deliver cost savings of SGD144 per patient over the traditional family physician model.

Environmental sustainability

Action

Consider the impact of health and medical research and health system outcomes on climate as a key factor in priority setting to embed research processes that promote environmental sustainability.

How we could do it

- Embed targeted policy initiatives and cross-sector engagement to reduce the environmental impacts of health and medical research by communicating and promoting the benefits of modern, responsive and adaptable research practices that improve environmental impacts of research on people, organisations and society.
- Consider the impact of health and health system outcomes on climate change, as a focus of research priority setting processes.
- Incorporate Aboriginal and Torres Strait Islander knowledge systems, innovations and practices into sustainable health and medical research practices, through engagement and co-design.

Why we should do it

- 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.⁸¹

- In 2023, the Australian Government launched the first ever National Health and Climate Strategy,⁸² with 4 core objectives:

1. health system resilience;
2. health system decarbonisation;
3. international collaboration;
4. 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.

- 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 into health and health system impacts of climate change and how these challenges can be addressed going forward.
- Adopting sustainability adopted as a core research ethic, including by incorporating generations of Aboriginal and Torres Strait Islander knowledge and practices.

Case studies

Tasmanian Department of Health

Tasmania has a net zero target for greenhouse emissions by 30 June 2030.⁸³ 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.⁸⁴

The Australian Commission on Safety and Quality in Health Care (ACSQHC)

ACSQHC in partnership with the Australian Centre for Disease Control (ACDC) and the Australian Medical Colleges released a joint statement in 2024 signifying a shared commitment to address the health impacts of climate change.⁸⁵ The *Working together to achieve sustainable high quality health care in a changing climate* statement recognises the challenges of climate change, and the risks posed to physical and mental health.

UK National Institute for Health and Care Research (NIHR)

NIHR's commitments to climate, health and sustainability 2024-2026⁸⁶ include:

- publishing a baseline of their carbon footprint and developing an action plan to reduce it;
- increasing funding for climate, health and sustainability research, including research to protect human health, and research to help the healthcare system become more sustainable.

Wellcome Trust

The Wellcome Trust (UK) has played a key role in developing a *Concordat for the Environmental Sustainability of Research & Innovation Practice*,⁸⁷ which commits signatories to ensuring research and innovation they undertake or fund is practiced in an environmentally sustainable way. The Concordat currently has more than 75 signatories who agree to take institutional action to reform leadership and system change, sustainable infrastructure and procurement, emissions from business and academic travel, advocating through collaborations and partnerships and transparent reporting of environmental impact.

Global partnerships

Action

Promote strategic collaborations that address shared health priorities to strengthen Australia's leadership globally and in the Indo-Pacific region.

How we could do it

- Work to define global health and health security as issues of high priority to Australia and regional neighbours. Identifying and addressing trans-boundary health threats that are a risk to national and regional stability will allow health system strengthening, surveillance programs and preparedness policies to be developed in collaboration with global and regional partners.
- Support pathways of collaboration, capacity strengthening and knowledge exchange to draw on international expertise aligned with Australian priorities. This will be achieved through enduring bilateral and multilateral relationships and agreements.

Why we should do it

- Regional partnerships are critical to improve health security and to develop and implement solutions for disease prevention, treatment and emergency response to global health challenges.
- There is already a high level of international engagement of Australian health and medical researchers:
 - International mobility is particularly common among health and medical researchers, with 35% moving to Australia for a research job and 44% having worked overseas at some point in their careers.⁸⁸ This mobility and engagement enhances Australia's participation in global scientific networks and collaboration.
 - At the global level, the share of publications representing international collaboration has increased from 4.7% in 1980 to 25.7% in 2021.⁸⁹
- Strategic collaborations towards internationally shared health priorities aligns with the Commonwealth's Medical Science Co-investment Plan.⁷² 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.

What it could achieve

- Strengthening Australia's position as a global contributor to positive health outcomes.
- Increased leadership roles for Australia in regional health governance and strategic investment, coordinating action that addresses health threats and priorities across borders.
- Increased capacity of our regional and global partners to address complex health and medical research challenges arising from Australian engagement and partnerships.

Case studies

Partnerships for a Healthy Region⁹⁰

Part of Australia's continued investment in the health of our region, this initiative is an important contribution to the Pacific and Southeast Asia's recovery from COVID-19.

It aims to help build resilient and equitable health systems in the Pacific and Southeast Asia to reduce disease risks and burdens, and uplift effective responses to health emergencies. Investments under the Partnerships contribute to:

- Communicable disease prevention and control.
- Non-communicable disease prevention and control.
- Sexual and reproductive health and rights.
- Resilient health systems.
- Effective partnerships and delivery.

Elimination Partnership in the Indo-Pacific for Cervical Cancer (EPICC)^{91,92}

EPICC leverages expertise across Australia and globally to accelerate the WHO's strategy for the elimination of cervical cancer. Partnering with local and international organisations, EPICC promotes HPV vaccination, screening, and treatment and has made global impact on women's lives.

Enablers & Enabling Initiatives

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



Workforce

Improving funding stability and job security through innovative funding models and workforce planning, increasing productivity and creating a research-positive culture.

The research workforce is a cornerstone of a country's progress and resilience. Australia's talented health and medical researchers are crucial to achieving our strategic Goals.

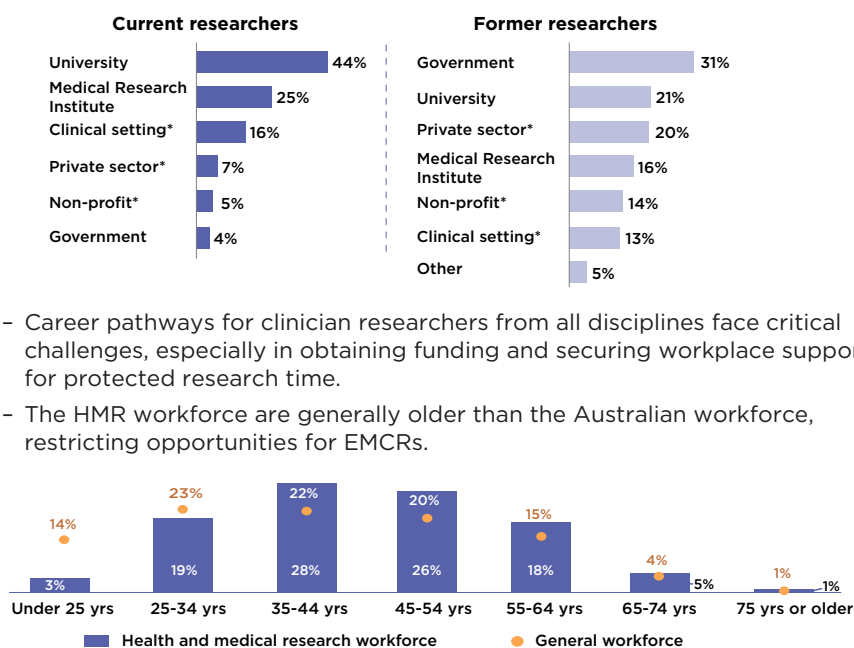
Drive national prosperity and security	Highly educated people are sources of innovation and efficiency, critical for industries like technology, finance, healthcare and engineering – all linked to economic growth and prosperity.
Lead the world in health outcomes	Australia's intellectual capital to invent and implement new technologies, therapeutic products, and healthcare services will fuel improved health outcomes.
Deliver equity – no one left behind	Diversity and lived experience enrich workforce capability, and initiatives to improve gender balance and integrate consumer perspectives into research teams deepen the impact and relevance of research.
Secure a resilient and sustainable health system	Our workforce generates the data and insights governments need to make informed decisions on health, education and environment to shape effective public policies and to inform sector decisions.
Strengthen regional and global partnerships	International mobility of our HMR workforce is notably high, with ~40% of researchers born abroad and ~44% working overseas during their careers ⁸⁸ , contributing diverse viewpoints and connections and bolstering Australia's place in global scientific networks.

The Australian Health and Medical Research Workforce Audit⁸⁸ outlines the profile of our 39,000 active health and medical researchers, and the almost 20,000 Australian with research training who currently work in non-research roles.

The Audit confirms well recognised challenges and opportunities.

What we know

- 69% of the HMR workforce are working in traditional research environments such as universities and medical research institutes (MRIs).
- Many health and medical researchers transition to other sectors, with government and healthcare being the most common.



- Career pathways for clinician researchers from all disciplines face critical challenges, especially in obtaining funding and securing workplace support for protected research time.
- The HMR workforce are generally older than the Australian workforce, restricting opportunities for EMCRs.
- Geographic spread is irregular, with the HMR workforce underrepresented in regional and remote areas and having limited reach beyond major cities.
- The interplay between the formulation of Research Training Program funding to universities, the number of PhD graduates being trained, and the pressure this places on funding programs as graduates seek to enter the workforce, is not well understood.
- Job insecurity is a major concern, with many on fixed-term or casual contracts. 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.

Strategic opportunities

- Define the optimal Australian HMR workforce, in both size and capability.
- Map emerging trends and demand, to cooperatively plan and support the HMR workforce of the future, that includes clinician and community-based researchers.
- Improve data capture to monitor workforce demographics over time to inform future interventions.
- Work with State and Territory governments and the private sector to understand research within health service settings and the perspectives of clinician researchers.
- Work with research-active institutions to understand how funding models and research processes influence organisational behaviours.



Workforce Enabling Initiative

An Australian Health and Medical Research Workforce Plan

Develop an Australian HMR Workforce Plan to provide a framework for attracting, retaining and developing a diverse health and medical research and translation workforce.

A Workforce Plan could address

1. **Future-proofing the Australian HMR workforce.** The ageing profile of the Australian HMR workforce highlights the importance of retaining EMCRs as active workforce members, and of fostering science literacy in schools to sustain a pipeline of fresh ideas. Initiatives across Commonwealth and state and territory governments, universities and MRIs provide funding, support and engagement for researchers at crucial stages of their careers. Continuing to build on these initiatives and evaluating and growing the types of support that are most impactful will ensure a consistent, harmonised approach to developing our most talented young researchers.
2. **Building an adaptable and responsive workforce.** Ensuring people can move successfully into and out of the research workforce, and between different parts of the sector, will build an adaptable and responsive workforce. Approaches will require partnership with stakeholders to broaden the curriculum of Australian higher degree by research programs to further enhance cross-disciplinary skills beyond traditional research prospects, into alternative careers outside academic research.
3. **Creating pathways for clinician researcher training and development.** The research workforce plan will seek to improve existing nation-wide pathways for clinician researcher trainees, which are currently disjointed and inconsistent. Further, methods to routinely evaluate the time commitment that clinically appointed professionals devote to research activities must be established.
4. **Clarifying definitions of the people and organisations that form the Australian health and medical research workforce.** A range of approaches can be leveraged for long term monitoring, better clarity and confidence when auditing the research workforce and evaluating the Workforce Plan, such as adjustments to the ABS standard for occupation classification to improve accurate workforce categorisation or working with health service providers to identify measures of embedded research activity.
5. **Improving alignment between the current and future workforce needs of the sector and the training of higher degree by research students.** Consideration of the workforce needs, future funding opportunities and career pathways of the sector will help to moderate the flow of PhD graduates to ensure that young researchers are equipped with the right skills and have access to opportunities to build secure research careers.
6. **Improving workforce diversity and security through grant funding.** Elements of grant funding initiatives can create more security or allow longer term planning (across fields of research and types of researchers). The design of future grant opportunities can offer equitable, gender balanced career development opportunities for researchers across the country, including Aboriginal and Torres Strait Islander researchers (*see also Focus Area 3 and Funding Enabling Initiative*).

What it could achieve

- A more planned, adaptable and resilient research workforce, better prepared to navigate uncertain futures and career transitions.
- Retention of EMCRs and a balanced age profile in the HMR workforce that is more representative across geography, gender and population groups.
- Strengthened clinician researcher pathways and enhanced quality and safety of healthcare through evidence-based practice and innovation.
- Greater job security and long-term planning for researchers through evidence-informed adjustments to funding models to better align graduate output with workforce needs.

Case study

National workforce monitoring surveys⁹³⁻⁹⁵



Medical
Schools
Council

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.⁹³⁻⁹⁴ 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 NHMRC's 2021 report *Investigating Clinician Scientist Career Pathways*⁹⁵ flagged the opportunity to better support Australian clinical academics by improving what is understood.



Funding

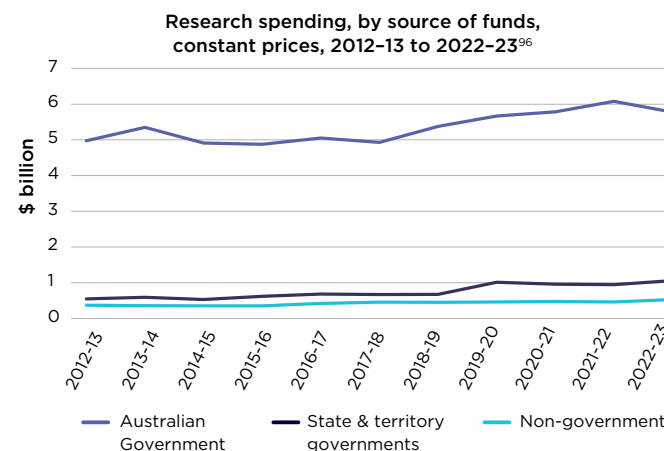
Ensuring sufficient funding that is strategically coordinated across government, industry, not for profit and philanthropic sectors.

Having a sufficiently funded system that is strategically coordinated is fundamental to achieving our strategic Goals.

Drive national prosperity and security	Australia's health and medical research sector is a vital driver of economic growth. Strategic investment in the sector will safeguard the nation's sovereign capabilities and future resilience.
Lead the world in health outcomes	Funding needs to be directed into areas of health and medical research that address health challenges of greatest need, both now and into the future to improve health outcomes.
Deliver equity – no one left behind	Targeted investment in health research that addresses disparities and supports Australia's diverse communities will advance equity and improve population health.
Secure a resilient and sustainable health system	Long term improvements in healthcare flow from a sustainably funded research ecosystem.
Strengthen regional and global partnerships	Strategic joint funding mechanisms can catalyse global and regional health improvements, foster scientific innovation and build lasting partnerships.

What we know

- 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.
- Health and medical research funding crosses areas from basic science and discovery 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.
- Australian Government funding is provided through the NHMRC and the Department of Health, Disability and Ageing's MRFF; the ARC; the Department of Education through research block grants and the National Critical Infrastructure Support program; the Department of Industry, Science and Resources through the CSIRO, the Biomedical Translation Fund and Cooperative Research Centres. States and territory governments play an important role in funding research and infrastructure support along with not for profit philanthropic agencies and private/industry sources.
- Based on data from the Australian Institute of Health and Welfare (AIHW),⁹⁶ in 2022-23, an estimated \$7.4 billion was spent on health and medical research:
 - the Australian Government contributed \$5.8 billion (78.4%)
 - state and territory governments an estimated \$1.1 billion (14.4%)
 - non-government sector an estimated \$0.5 billion (7.2%)
- The average annual real growth rate over the decade (2012-2022) was 2.3%.



Strategic opportunities

- Enable accurate measurement of Australia's expenditure on health and medical research and benchmark with other countries.
- Allocate funds more strategically, based on an optimally sized health and medical research sector, for projects, infrastructure and the workforce across funders and the research landscape.
- Enhance understanding and respond to areas of unmet need.
- Identify potential co-funding opportunities across multiple funding agencies that support system wide transformation, not just short-term projects.
- Recognise areas of duplication and potential gaps where funds may be reallocated.
- Consider approaches for disinvestment based on duplication or evidence of research impact.
- Build accountability for research impacts into the funding model.



Funding Enabling Initiative

Design innovative funding models

Leverage or re-design current funding mechanisms that channel funding for research across healthcare, educational and industry settings.

How we could do it

1. **Develop a national health and medical research resourcing statement** Modelled on the existing science, research and innovation (SRI) budget tables,⁹⁷ the statement can comprise an accessible data resource that includes government and non-government sources of health and medical research funding, information on where the funding is going and trends over time. Coordinated across funding agencies, the resourcing statement will generate more informed discussions on funding requirements and whether these are fit for purpose for current and future requirements.

Developing this resource will require the following key actions:

- Identifying all sources of health and medical research funding in Australia.
 - Working with funders to encourage and enable data sharing. Examples of effective data partnerships managed overseas can be adapted for use in Australia (e.g. Centre for Improving Data Collaboration, National Health Service, England).⁹⁸
 - Ensuring consistent data capture practices related to research processes within each funding agency to accurately monitor trends.
 - Designing the data resource to be accessible, user friendly and regularly updated.
2. **Re-design current funding models to accommodate an optimally sized health and medical research sector and to leverage and consolidate funds.**
- Invest in more co-funded grant opportunities to provide larger scale, crosscutting funding on priority issues. This action will require collaboration between funders, particularly government departments and the not for profit philanthropic and private/industry sector.

- Creation of dedicated, cross-disciplinary grant schemes, collaboratively supported by funding agency partnerships (such as the ARC and NHMRC) that will incentivise and provide resourcing for research activity that does not otherwise fit within traditional disciplinary boundaries.
- Smarter design of grant opportunities that are fit for purpose. Establish a funding model that has the right balance of funding for smaller, short-term investigations of high-risk, innovative ideas and larger, longer term grants for more established programs of research in priority areas (e.g. Centres of Research Excellence, platforms and networks). This action will require funders to work together with researchers to best understand the needs of the sector.
- Ensure balanced investment into discovery and priority-driven research that address areas of national need, consider risk and strategic opportunities.

What it could achieve

Development of a health and medical research funding resourcing statement will provide:

- Greater transparency of funding data including the source, amount and where investments are directed.
- Enhanced ability to monitor funding trends over time for policymakers, researchers and funders.
- Ability to design a more fit for purpose funding model to suit current and future needs.

Re-designing current funding models will lead to:

- A more collaborative and less competitive funding structure that encourages and rewards collaborative, cross-disciplinary research for greater social and economic impact.
- Researchers with better insight about where to apply for their respective fields of research and career stages.

Case studies

Science, research and innovation (SRI) budget tables⁹⁷

The SRI budget tables report the Commonwealth Government's investments in R&D, science and innovation. Updated annually, the dataset is an interactive dashboard which is easily accessible.

Impact of large-scale funding from multiple sources – National Bowel Cancer Screening Program⁹

Australia was the first country in the world to implement and sustain a national population-based colorectal cancer screening program using faecal immunochemical tests. NHMRC 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 government, philanthropic, industry and international) went on to provide funding for the research.





Data and Advanced Technology

Building capability in emerging technologies, AI and data, that is accessible and linked.

Technological solutions that leverage Australian health and medical research data assets are essential for research that stimulates economic growth, enhances national security and improves public services.

Drive national prosperity and security	Technological independence and innovation protect Australian digital health infrastructure and critical systems, while advancing AI capabilities to accelerate the pace of research.
Lead the world in health outcomes	Effective use of 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.
Deliver equity – no one left behind	Improved access to 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.
Secure a resilient and sustainable health system	Sophisticated use of data to proactively plan, rapidly respond to crises, and deliver efficient, equitable healthcare brings long term value to both people and the economy.
Strengthen regional and global partnerships	Collaborative research, shared disease surveillance and interoperable digital health systems, position Australia as a trusted partner in advancing global health security and innovation.

Throughout our consultations, stakeholders described opportunities and challenges related to health data assets and capabilities or skills to access enabling technologies.

The CSIRO *AI Trends for Healthcare*⁹⁹ report identifies the opportunities and challenges facing the continued and inevitable integration of AI in Australia's healthcare sector, from clinical decision support to administrative tasks.

What we know

- Key challenges for Australia include our national competitive advantage in international markets, current duplication of infrastructure and its associated costs, limited capacity to share data and technology and a mismatch in workforce skills.
- International counterparts and coalitions are strengthening biodata capabilities and prioritising AI enabled advances, overcoming barriers that persist across Australian jurisdictions.
- A range of national plans, strategies and initiatives related to health data and digital healthcare are currently underway, but these are not well connected into health and medical research.
- The Australian Digital Health Agency (ADHA) has produced the National Digital Health Strategy 2023–2028⁷⁸ that will implement a range of initiatives focused on achieving 4 key outcomes for a health system that is digitally enabled, person-centred, inclusive and data-driven. These are supported by recent implementation of Sharing by Default legislation¹⁰⁰, designed to ensure health information follows individuals through the system.
 - The Australian National Data Integration Infrastructure initiative¹⁰¹ provides a platform for data access, research and analysis, using best practices in data integration and governance.
 - The National Healthcare Interoperability Plan 2023-2028¹⁰² outlines a national vision to share consumer health information in a safe, secure and seamless manner and identifies 44 actions across 5 priority areas relating to identity, standards, information sharing, innovation and measuring benefits.
 - The Australian Research Data Commons (ARDC) Health Studies Australian National Data Asset (HeSANDA)¹⁰³ is an example of sector-driven approaches to synchronise, align and build national data sharing capability.

Strategic opportunities

- Capitalising existing national frameworks and networks to streamline and coordinate opportunities for research and innovation.
- A national approach to promote and deliver cooperative arrangements that leverage Commonwealth, state and territory strengths across e-medical records.
- Government partnerships, including with industry and private enterprise custodians of Australian health data.
- Incorporating priority tertiary skills development into the Australian HMR Workforce Plan, across computer science, statistics, data science, engineering and enhanced higher degree training pathways into domain specific areas (e.g., bioinformatics, machine learning).



Data and Advanced Technology Enabling Initiative

Build on current initiatives to develop and reform access to data, digital assets and advanced technology across the nation, freeing up secondary use of data for research purposes.

How we could do it

1. **Undertake nationwide mapping of data and digital assets and investigate how to overcome barriers currently restricting shared and open access, aligned with the objectives of key national frameworks.** Develop cross-Commonwealth protocols for secure data capture and sharing to better integrate insights across relevant agencies (for example: ABS, AIHW, ADHA). Work towards international and cross-jurisdictional agreements for health data sharing that address regulatory and system interoperability and linkage, with nationally consistent implementation of opt-out consent.
2. **Create dedicated cross-disciplinary funding schemes.** Ensure specific grant programs that require collaboration across disciplines are incentivised, by resourcing research activity that does not otherwise fit within traditional disciplinary boundaries, or which may currently be restricted by policy settings (see *Funding Enabler*).
3. **Cultivate workforce skillsets and capabilities that adapt to changing environments.** Expand training pathways and cross-disciplinary collaborations to enable health and medical research access to core technical skills including programming, statistics and mathematics, machine learning, data manipulation and analysis, data visualisation and big data tools.
4. **Outreach and support for data literacy and data citizenship, to improve community, researcher and care provider understanding of personal data and its use, access, sharing and ownership.** Build trust in how health and research data is shared, 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 healthcare to deliver benefits that people can see and on which they can rely.
5. **Prioritise research that overcomes technical and systemic barriers to the development and use of AI applications in clinical environments.** Coordinated investment into advanced technology R&D that aids development of mature, highly functional AI tools specifically suited to Australian care settings, as well as programs to accelerate organisational readiness and reduce cultural resistance.

What it could achieve

- Reliable and responsible access to de-identified health data for secondary use that accelerates research and innovation.
- Increased national, regional and global cross-disciplinary collaboration.
- Integration of future ready skills across the health and medical research workforce.
- Confidence and understanding across community, research and healthcare environments about responsible use of personal health data.
- Faster development of treatments, better understanding of disease patterns and more inclusive clinical trials.
- Cost savings and health system sustainability, where AI and data analytics streamline administrative tasks and data-driven decision making at individual, community, and national levels.



Case studies

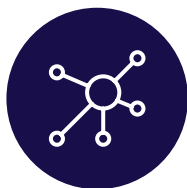
Global Biodata Coalition (GBC) and living evidence synthesis programs¹⁰⁴

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 GBC is an example of international cooperation for long term sustainability of biodata resources by coordinating strategies across global research funders, including the NIH and UKRI, to ensure that biodata resources remain freely available to all researchers everywhere around the globe.

The Evidence Synthesis Infrastructure Collaborative (ESIC)¹⁰⁵

is an example of what can be achieved through living evidence synthesis programs. Supported by the Wellcome Trust, ESIC enables the continuous and timely integration of new scientific findings into existing evidence bases, promotes open science practices, making evidence synthesis tools and data accessible to researchers worldwide (especially in the Global South and underfunded fields) and supports policymakers, clinicians, and other stakeholders by providing up to date, synthesised evidence that can inform real time decisions.



Infrastructure

Use existing and plan new infrastructure, platforms and networks as shared resources in a sustainable research system.

Ensuring Australia has the right mix of accessible health and medical research infrastructure, located in the right places, will be key to achieving our strategic Goals.

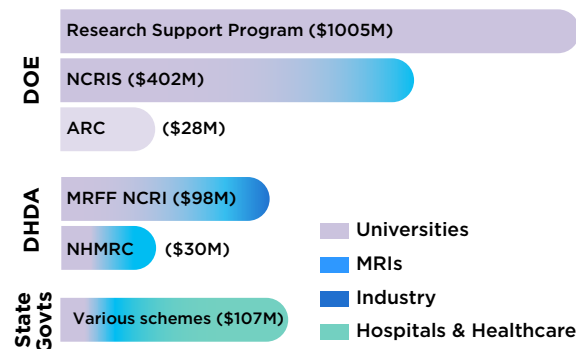
Drive national prosperity and security	Developing and maintaining accessible state of the art research infrastructure is a foundation for the operation of an efficient and innovative sector.
Lead the world in health outcomes	Infrastructure to support the development and translation of innovative therapeutic products, technologies, processes and interventions from the bench to the bedside and beyond enables impactful health outcomes.
Deliver equity – no one left behind	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.
Secure a resilient and sustainable health system	Infrastructure that is fit for purpose, adaptable and managed efficiently and effectively will contribute to the sustainability of the health system.
Strengthen regional and global partnerships	The strength and breadth of Australia's research infrastructure base is an important element of our ability to contribute to global health networks and knowledge generation.

What we know

Funding for research infrastructure is provided through a variety of Commonwealth, state and territory government sources, in a relatively uncoordinated way. Certain Commonwealth schemes, such as National Collaborative Research Infrastructure Strategy (NCRIS) are intended to promote broader economic and R&D policies of the Commonwealth Government, while others such as the 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. There are disparities and gaps in access to research infrastructure funding for some organisations.

- Procurement, management and maintenance of research infrastructure is increasing in cost and complexity.
- There is a lack of available data about what infrastructure funding is being used for, who is utilising funded equipment and facilities and to which outputs it contributes. While there are examples of precincts and collaborative groups and networks that share information and access to facilities and equipment at the national level, there are other examples where infrastructure is not accessible, risking duplication and waste.
- By consolidating infrastructure, organisations, skills and culture, research precincts are internationally recognised as drivers of research innovation and translation, able to deliver scale and competitive advantage. However, it is important to have the right number, type, location and mix of research precincts for a country of Australia's size and population to optimise success.
- Access to the infrastructure needed to support translational research and clinical trials within healthcare settings can be challenging in the context of constrained clinical environments where facilities are at maximum utilisation for clinical care.

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



Research Support Program (RSP) and National Collaborative Infrastructure Strategy (NCRIS), ARC Linkage Infrastructure, Equipment and Facilities (LIEF) Program, Education portfolio⁹⁷,¹⁰⁶, MRFF National Critical Research Initiative¹⁰⁷ and NHMRC IRIIS and Equipment Grants¹⁰⁸, Health portfolio; estimate based on publicly available data on NSW, VIC, WA and SA government infrastructure and operational funding.¹⁰⁹

Strategic opportunities

- Infrastructure funding disparities and gaps could be addressed better coordination and transparency across Commonwealth agencies and with state and territory governments.
- State-based infrastructure that delivers commercial and competitive advantage may benefit from focussed investment.
- Infrastructure holdings across research institutions could enable shared access, consolidation or decommissioning in a manner that addresses duplication, manages waste and assists in reducing the indirect costs of research.
- Existing networks that connect researchers, industry, philanthropy and community and consumer groups could be expanded and enhanced.
- There is scope to map emerging and declining infrastructure needs, trends and demand to support national, collaborative infrastructure planning and development.



Infrastructure Enabling Initiative

An Australian Health and Medical Research Infrastructure Roadmap.

Develop an Australian HMR Infrastructure Roadmap to drive the nationally coordinated development of high performing, fit for purpose and sustainable research infrastructure that supports and encourages whole of ecosystem collaboration.

An Infrastructure Roadmap could:

1. **Enhance coordination and development of infrastructure across Commonwealth, state and territory governments.** Enable Commonwealth and state and territory governments to have visibility of the status of health and medical research infrastructure across Australia and establish a framework through which stakeholders can collaborate and evaluate need to optimise the development and maintenance of new and existing major equipment, facilities and platforms.
2. **Support collaboration with industry.** Encourage and facilitate local and international industry investment in constructing, manufacturing and maintaining Australia's health and medical research infrastructure to ensure Australia maintains sovereign capability in critical areas. Consolidating local industry capacity will support Australia's Future Made in Australia agenda¹⁰ and deliver wider economic and productivity gains.
3. **Incentivise cooperative, shared approaches to infrastructure development and access across disciplines, institutions and jurisdictions.** Reduce the degree to which individual research groups, institutions, precincts, states and territories develop and maintain bespoke research equipment and facilities to deliver cost benefits, reduce waste and create opportunities for wider access to research infrastructure. Enhancing access and support for researchers based in regional, rural and remote areas will be a particular focus.
4. **Enhance access to infrastructure and facilities in healthcare settings to support clinical research.** Work with Commonwealth, state and territory health infrastructure planning and funding agencies to develop frameworks for guaranteed research access to facilities and infrastructure required to support clinical trials and translational research in healthcare settings, particularly in regional, rural and remote areas, for example through rural and remote hubs.

5. **Ensure a fit for purpose workforce.** Link to the proposed Australian Health and Medical Research Workforce Plan (see *Workforce Enabler*) to ensure an appropriately skilled technical workforce to produce, maintain and operate high performing and complex facilities and equipment. This will require identification of current capability gaps and developing training pathways and career development opportunities as future needs and opportunities arise.
6. **Future-proof Australia's health and medical research infrastructure.** Collaboration across the sector and with regional partners regarding existing infrastructure, along with cooperative approaches to planning and horizon scanning will deliver a more sustainable, cost effective and fit for purpose health and medical research infrastructure system that is responsive and adaptable to future needs and challenges as they arise.

What it could achieve

- Increased national, regional and global collaboration across disciplines, sectors, jurisdictions and communities.
- Reduced infrastructure and indirect research costs
- Long term, sustainable investment in precincts and other collaborative infrastructure modalities that 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 is adaptable for future needs.

Case study

NCRIS Health Group¹¹

The 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 multi-disciplinary, 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.

National Strategy Advisory Council

Establishing a National Strategy Advisory Council: Ensuring success of the 10-year National Strategy

Why governance is essential for the National Strategy

The National Strategy has a bold, long-term vision to transform Australia's health and medical research landscape over the next decade. With a broad scope – spanning multiple Focus Areas and Enablers – it seeks to 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, involving diverse stakeholders including governments across jurisdictions, research institutions, healthcare providers, industry partners, philanthropy and communities. A governance structure is necessary to ensure that activity arising from the National Strategy is sustained, and does not become fragmented, duplicative, or misaligned 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 static. It is designed to evolve through implementation milestones that will mark progress and guide adjustments. These milestones will serve as checkpoints that ensure the National Strategy remains relevant and impactful, 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 Advisory Council will act as both a guardian and a catalyst, ensuring the National Strategy stays on course while facilitating innovation and responsiveness.

Inter-governmental coordination

The National Strategy Advisory Council will seek to complement the outcomes of the SERD and may potentially be supported through existing arrangements such as the Health Ministers Meeting.

Action

Establishing a National Strategy Advisory Council could enable transparent oversight of the National Strategy, bringing together the range of interests across the health and medical research sector (government and non-government) to provide:

- **Strategic oversight:** Ensuring that all Actions across Focus Areas and Enablers are coherent and contribute to the overarching vision.
- **Coordination:** Facilitating collaboration across sectors and jurisdictions, and harmonising efforts to avoid silos.
- **Accountability:** Monitoring progress, evaluating outcomes, ensuring responsible use of resources, and upholding values.
- **Responsiveness:** Identifying emerging challenges and opportunities and adapting the strategy accordingly.



Measuring success of the 10-year National Strategy

Once the National Strategy is finalised, the hard work begins to achieve its Vision – Australia: the healthiest nation – driven by research, delivering for all.

How will we know that the National Strategy is successfully achieving our Goals?

Five key Goals have been defined and carefully considered throughout the development of the National Strategy:

1. Drive national prosperity and security.
2. Lead the world in health outcomes.
3. Deliver equity – no one left behind.
4. Secure a resilient and sustainable health system.
5. Strengthen regional and global partnerships.

To measure success, a framework of metrics that are co-designed in collaboration with researchers, institutions, communities, and policymakers, is needed.

These metrics must span various categories: input metrics to track resources such as funding and workforce diversity; process metrics to assess collaboration, stakeholder engagement, and consistency; output metrics that may include publications, patents, and policy influence; and outcome metrics to evaluate health improvements, equity gains and economic benefits.

How will we know that the National Strategy is upholding our values?

Four core values define the fundamental principles of behaviour, decision making, and priorities for the National Strategy:

- Impact & Sustainability
- Quality & Integrity
- Equity
- Collaboration & Partnership

Value based indicators must also be incorporated to ensure the principles and ideals that have underpinned the development of the National Strategy are serving to orient and guide actions, behaviours and decisions throughout implementation.



Design a phased approach to monitoring and evaluation across the Strategy's 10-year lifespan.

Progress towards the strategic Goals will vary across the different **Focus Areas** and **Enabling Initiatives**, which each present unique challenges and complexities. It is important that a phased evaluation process be appropriately designed and reflect these different challenges whilst also seizing opportunities to deliver meaningful results.

A mixed-methods approach that combines quantitative tools and data analytics that are integrated and aligned with other activities such as the outcomes from SERD, together with qualitative methods such as case studies and community feedback, can ensure objectivity and credibility. Periodically undertaken, independent reviews may also generate findings that can inform ongoing improvements and strategic adjustments.

The National Strategy is expected to deliver short-, mid- and long-term outcomes.

In the short term (years 1-3), the focus will broadly be on implementation fidelity and early outputs. The mid-term phase (years 4-7) will assess progress toward the strategic Goals and allow for course corrections, while the long-term phase (years 8-10) will evaluate overall outcomes, sustainability and lasting impact.

Definitions

Aboriginal and Torres Strait Islander Peoples

Refers to all Aboriginal and Torres Strait Islander Peoples of Australia while recognising that Aboriginal and Torres Strait Islander People have distinct cultures and identities.

ACCHOs

Aboriginal community controlled health organisations.

AI

Artificial intelligence refers to computer systems developed to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision making, and translation between languages. (definition from CSIRO, 2024 AI trends for healthcare).

AMR

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

ARC

Australian Research Council.

CALD

Culturally and Linguistically Diverse refers to individuals and groups who come from diverse backgrounds, encompassing differences in culture, language, ethnicity, and sometimes religion.

CCI

Consumer and community involvement.

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

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

CSIRO

Commonwealth Scientific and Industrial Research Organisation.

EMCRs

Early- to Mid-Career Researchers. A term that describes academic or research related career stage following the completion of postgraduate research training (such as a PhD). It focusses 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.

HMR

Health and medical research.

Implementation science

Refers to 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.

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
- Networks and communication systems.

Definitions

LGBTIQ+

Refers to individuals who identify as lesbian, gay, bisexual, transgender, intersex, queer, asexual, and other diverse sexual orientations, gender identities, and sex characteristics.

MREA

Medical Research Endowment Account is 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 health care system and support research of unique importance to Australia that is unlikely to be undertaken elsewhere.

MRFF

Medical Research Future Fund is 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.

MRIs

Medical Research Institutes

NCRIS

National Collaborative Research Infrastructure Strategy.

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 (RTCs), discipline-based (Cancer Research Networks), community-based or focused on a specific challenge or opportunity.

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).

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.

R&D

Research and development.

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 drugs and devices; and changes to policies and programs.

Definitions

RNA

Ribonucleic acid is a nucleic acid found in all living cells, similar to DNA, but typically single-stranded. RNA plays a crucial role in various biological processes, including protein synthesis.

RRR

Regional, rural, and remote, 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.

RTCs

Research Translation Centres. 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.

SERD

Strategic Examination of Research and Development.

SME

Small to medium enterprises. Businesses employing 0-19 people are classified as small businesses, those employing 20-199 people are classified as medium sized.

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.

WHO

World Health Organization.

References

- 1 NHMRC Impact Case Studies. Safer birthing for First Nations families: Case Study. www.nhmrc.gov.au/about-us/resources/impact-case-studies/safer-birthing-first-nations-families-case-study#block-views-block-file-attachments-content-block-1 (accessed 16 July 25)
- 2 NHMRC Impact Case Studies. GARDASIL® - the HPV vaccine: Case Study. www.nhmrc.gov.au/about-us/resources/impact-case-studies/gardasilr-hpv-vaccine (accessed 16 July 25)
- 3 CSL - Local access to rapid medical advances since 1916. www.cslbehrling.com.au/our-company (accessed 17 July 2025)
- 4 NHMRC Impact Case Studies. A vaccine for chikungunya virus. www.nhmrc.gov.au/about-us/resources/impact-case-studies/vaccine-chikungunya-virus (accessed 16 July 2025)
- 5 NHMRC Impact Case Studies. The cochlear implant restores hearing: Case Study. www.nhmrc.gov.au/about-us/resources/impact-case-studies/cochlear-implant-restores-hearing (accessed 16 July 2025)
- 6 NHMRC Impact Case Studies. Improving vision with corneal transplants. www.nhmrc.gov.au/about-us/resources/impact-case-studies/improving-vision-corneal-transplants (accessed 16 July 2025)
- 7 NHMRC Impact Case Studies. Improving Stroke Outcomes. www.nhmrc.gov.au/about-us/resources/impact-case-studies/improving-stroke-outcomes (accessed 16 July 2025)
- 8 Blank CU, Lucas MW, Scolyer RA et al (2024) Breakthrough melanoma treatment approved to be listed on PBS, The New England Journal of Medicine, vol 391, no. 18. melanoma.org.au/news/breakthrough-melanoma-treatment-approved-to-be-listed-on-pbs/ (accessed 16 July 2025)
- 9 NHMRC Impact Case Studies. Screening to prevent bowel cancer. www.nhmrc.gov.au/about-us/resources/impact-case-studies/screening-prevent-bowel-cancer (accessed 16 July 2025)
- 10 CSIRO. Australia e-Health Research Centre. Genomator: creating synthetic data based on logic-solving. aehrc.csiro.au/research/cloud-native-genomics/genomator-creating-synthetic-data-based-on-logic-solving/ (accessed 16 July 2025).
- 11 Ward C (2011). Granulocyte-macrophage colony stimulating factor discovery. CSIROpedia. CSIRO. csiropedia.csiro.au/granulocyte-macrophage-colony-stimulating-factor-discovery/ (accessed 16 July 2025).
- 12 Waltman L, Rafols I, van Eck NJ and Yegros A (2019). Supporting priority setting in science using research funding landscapes. RoRI Working Paper No.1, Research on Research Institute. London: Research on Research Institute. doi.org/10.6084/m9.figshare.9917825
- 13 Australian Council of Learned Academies (ACOLA). Horizon Scanning Series: An overview (acola.org/our-work/horizon-scanning-series/) (accessed 16 July 2025).
- 14 Lapham K, Fox N, Goddard S. (2024). Horizon Scanning in the New Zealand Health System. Commissioned by Medicines New Zealand Biointelect. www.biointelect.com/horizon-scanning-in-the-new-zealand-health-system/ (accessed 16 July 2025).
- 15 Australian Institute of Health and Welfare (2024). Health promotion and health protection. Retrieved from www.aihw.gov.au/reports/australias-health/health-promotion (accessed 22 August 2025).
- 16 WHO guidance on the ethics of health research priority setting. Geneva: World Health Organization; 2025. Licence: CC BY-NC-SA 3.0 IGO. iris.who.int/bitstream/handle/10665/381711/9789240110953-eng.pdf (accessed 16 July 2025).
- 17 Centre for Epidemiology and Evidence (2023). Setting Research Priorities: A Guide. Evidence and Evaluation Guidance Series, Population and Public Health Division. NSW Ministry of Health.
- 18 The James Lind Alliance Guidebook, Version 10 (2021). National Institute for Health and Care Research (www.jla.nihr.ac.uk/jla-guidebook) (accessed 16 July 2025).
- 19 Horizon scanning and landscape assessment. World Health Organisation. www.who.int/our-work/science-division/research-for-health/optimizing-research-processes/landscape-assessment (accessed 16 July 2025).
- 20 The interim Australian Centre for Disease Control (CDC). www.cdc.gov.au/ (accessed 21 August 2025)
- 21 RNA Production and Research Network. New South Wales Health and Medical Research. www.medicalresearch.nsw.gov.au/nsw-rna-production-and-research-network/ (accessed 16 July 2025).
- 22 Bioplatforms Australia: Advancing life science through biomolecular infrastructure and national collaboration. bioplatforms.com/ (accessed 16 July 2025).
- 23 Department of Health, Disability and Aged Care (2025). Report on findings from the National Health and Medical Research Community Qualitative Research. www.health.gov.au/resources/publications/report-on-findings-from-the-national-health-and-medical-research-community-qualitative-research?language=en (accessed 16 July 2025).
- 24 Australian Institute of Health and Welfare (2025). Rural and Remote Health. www.aihw.gov.au/reports/australias-health/rural-and-remote-health (accessed 2 June 2025).

References

- 25 Consultation summary report: Improving alignment and coordination between the Medical Research Future Fund and NHMRC's Medical Research Endowment Account (2024). www.health.gov.au/sites/default/files/2024-05/consultation_summary_report_-_improving_alignment_and_coordination_between_the_mrff_and_nhmrc_mrea.pdf (accessed 16 July 2025).
- 26 NHMRC Leadership and Governance. Committees. www.nhmrc.gov.au/about-us/leadership-and-governance/committees (accessed 16 July 2025)
- 27 UK Research and Innovation (UKRI). www.ukri.org/who-we-are/ (accessed 9 July 2025)
- 28 Willson ML, Seidler AL, Aberoumand M, Williams JG, Hunter KE, Barba A, Webster AC, Askie LM, Simes RJ. (2022). Latest update of the clinical trials landscape in Australia 2006 – 2020. Sydney: Australian New Zealand Clinical Trials Registry. doi.org/10.25910/t9n1-bm45
- 29 Australian Clinical Trials Alliance (2020). Clinical trial awareness and access amongst culturally and linguistically divers (CALD) populations: environmental scan. clinicaltrialsalliance.org.au/wp-content/uploads/2020/06/ACTA-Clinical-trials-and-CALD-population_Environmental-Scan-V3_final.pdf (accessed 16 July 2025)
- 30 The Sex and Gender Sensitive Research Call to Action Group (2020). Sex and gender in health research: updating policy to reflect evidence. Med J Aust 2020, Vol 212, No. 2, pp 57-62. doi: 10.5694/mja2.50426
- 31 Waltz M, Lyerly AD and Fisher JA (2023). Exclusion of Women from Phase I Trials: Perspectives from Investigators and Research Oversight Officials. Ethics & Human Research, Vol 45, No. 6, pp 19-30. doi: 10.1002/eahr.500170
- 32 Department of Health and Aged Care and NHMRC (2024). Statement on Sex, Gender, Variations of Sex Characteristics and Sexual Orientation in Health and Medical Research www.nhmrc.gov.au/research-policy/gender-equity/statement-sex-and-gender-health-and-medical-research (accessed 16 July 2025)
- 33 Australian Clinical Trials Alliance. Economic evaluation of investigator-initiated clinical trials conducted by networks. Sydney: ACSQHC; 2017. www.safetyandquality.gov.au/publications-and-resources/resource-library/economic-evaluation-investigator-initiated-clinical-trials-conducted-networks-final-report (accessed 17 July 2025)
- 34 Breast Cancer Trials. www.breastcancertrials.org.au/ (accessed 16 July 2025).
- 35 WA Consumer and Community Involvement Program. cciprogram.org/ (accessed 9 July 2025)
- 36 National Centre for Indigenous Genomics (NCIG). ncig.anu.edu.au/ (accessed 9 July 2025)
- 37 National Rural Health Alliance 2024–25 Pre-Budget Submission (2024). www.ruralhealth.org.au/wp-content/uploads/2024/11/national-rural-health-alliance-pre-budget-submission-2024-25.pdf. (accessed 17 July 2025)
- 38 Alston L and Versace VL (2023). Place-based research in small rural hospitals: an overlooked opportunity for action to reduce health inequities in Australia? The Lancet Regional Health – Western Pacific, Vol 30, No. 100682. [www.thelancet.com/journals/lanwpc/article/PIIS2666-6065\(22\)00297-8/fulltext](http://www.thelancet.com/journals/lanwpc/article/PIIS2666-6065(22)00297-8/fulltext)
- 39 Barclay L, Phillips A and Lyle D (2018). Rural and remote health research: Does the investment match the need? Aust. J. Rural Health, Vol 26, pp 74–79. onlinelibrary.wiley.com/doi/full/10.1111/ajr.12429 (accessed 16 July 2025)
- 40 Moran A, Haines H, Raschke N, Schmidt D, Koschel A, Stephens A, Opie C, Nancarrow S (2019). Mind the gap: is it time to invest in embedded researchers in regional, rural and remote health services to address health outcome discrepancies for those living in rural, remote and regional areas? Australian Journal of Primary Health 25, 104-107. www.publish.csiro.au/py/PY18201
- 41 O'Sullivan B, Cairns A and Gurney T (2020). Exploring how to sustain 'place-based' rural health academic research for informing rural health systems: a qualitative investigation. Health Res Policy Sys, Vol 18, No. 90. doi.org/10.1186/s12961-020-00608-7
- 42 Wong A, Quilliam C, Corboy D et al (2022). What shapes research and research capacity building in rural health services? Context matters. Aust J Rural Health, Vol 30, pp 410-421. <http://doi:10.1111/ajr.12852>
- 43 Townsville Institute of Health Research and Innovation. www.townsville.health.qld.gov.au/research-for-researchers/townsville-institute-of-health-research-and-innovation/ (accessed 16 July 2025)
- 44 Aboriginal Health & Medical Research Council of NSW. Policy Priorities 2021. www.ahmrc.org.au/wp-content/uploads/2023/10/AHM_Policy-Priorities-document-2021_Online.pdf (accessed 16 July 2025)
- 45 NHMRC. Annual Report 2023–24. Canberra: National Health and Medical Research Council, 2024. www.nhmrc.gov.au/about-us/corporate-plans-and-annual-reports (accessed 8 July 2025)
- 46 Medical Research Future Fund. Indigenous Health Research Fund Roadmap. www.health.gov.au/sites/default/files/2023-11/mrff-indigenous-health-research-fund-strategic-documents.pdf (accessed 8 July 2025)
- 47 Productivity Commission (2024). Closing the Gap Annual Data Compilation Report July 2024, Canberra. pc.gov.au/closing-the-gap-data/annual-data-report/closing-the-gap-annual-data-compilation-july2024.pdf (accessed 16 July 2025)

References

- 48 Department of Health, Disability and Ageing (2024). Medical Research Future Fund Report on Chief Investigator data. www.health.gov.au/resources/publications/medical-research-future-fund-report-on-chief-investigator-data?language=en (accessed 8 July 2025)
- 49 National Aboriginal Community Controlled Health Organisation (NACCHO) (2011). Constitution for the National Aboriginal Community Controlled Health Organisation. f.hubspotusercontent10.net/hubfs/5328468/NACCHO_April_2020/PDFs/NACCHO-CONSTITUTION-Ratified-Ver-151111-for-ASIC-.pdf (accessed 16 July 2025).
- 50 Jones R, Thurber KA, Chapman J, et al (2018). Study protocol: Our Cultures Count, the Mayi Kuwayu Study, a national longitudinal study of Aboriginal and Torres Strait Islander wellbeing. *BMJ Open*, Vol 8, e023861. <http://doi.org/10.1136/bmjopen-2018-023861>.
- 51 Maiam nayri Wingara (2018). Indigenous Data Sovereignty Communique Indigenous Data Sovereignty Summit 20th June 2018. Canberra, Australia. Available from: www.maiamnayriwingara.org/mnw-principles (accessed 22 July 2025)
- 52 NHMRC Targeted Calls for Research. www.nhmrc.gov.au/research-policy/research-priorities/guide-proposing-targeted-calls-research (accessed 9 July 2025)
- 53 NHMRC. National Health and Medical Research Council Road Map 3: A strategic framework for improving Aboriginal and Torres Strait Islander health through research. Report of Community Consultations. www.nhmrc.gov.au/health-advice/aboriginal-and-torres-strait-islander-health/road-map-3 (accessed 16 July 2025)
- 54 McKenzie C, Bandler LG (2023). Aboriginal and Torres Strait Islander health research leadership. *Med J Aust*. Vol 218, No. 2, pp 75-6.
- 55 Laird P, Chang AB, Jacky J et al (2021). Conducting decolonizing research and practice with Australian First Nations to close the health gap. *Health Res Policy Sys*, Vol 19, No 127.
- 56 Thurber KA, Thandrayen J, Banks E, Doery K, Sedgwick M, Lovett R (2020). Strengths-based approaches for quantitative data analysis: A case study using the Australian Longitudinal Study of Indigenous Children. *SSM Popul Health* Vol 6, No. 12:100637. doi: 10.1016/j.ssmph.2020.100637.
- 57 McGuffog R, Bryant J, Booth K, Collis F, Brown A, Hughes JT, Chamberlain C, McGhie A, Hobden B, Kennedy M (2023). Exploring the Reported Strengths and Limitations of Aboriginal and Torres Strait Islander Health Research: A Narrative Review of Intervention Studies. *Int J Environ Res Public Health*, Vol 20, No. 5, pp 3993.
- 58 Lowitja Institute – Research Grants. www.lowitja.org.au/research/research-grants/ (accessed 8 July 2025)
- 59 Network Environments for Indigenous Health Research (NEIHR). cihr-irsc.gc.ca/e/51161.html (accessed 21 August 2025)
- 60 NHMRC. Fact sheet: Benefit for Aboriginal and/or Torres Strait Islander health question – Centres of Research Excellence 2025 pilot. www.nhmrc.gov.au/about-us/resources/fact-sheet-benefit-aboriginal-torres-strait-islander-health-question-cre-pilot#:~:text=NHMRC%20is%20piloting%20the%20introduction,to%20Closing%20the%20Gap%20targets%3F (accessed 9 July 2025)
- 61 Kimberley Aboriginal Health Research Alliance. www.kahra.org.au/principles (accessed 8 July 2025)
- 62 Central Australian Academic Health Science Network. caahsn.org.au/our-story-so-far/ (accessed 8 July 2025)
- 63 Our Collaborations in health research (OCHRe). public-health.uq.edu.au/project/ochre-our-collaborations-health-research (accessed 9 July 2025)
- 64 Zurynski Y, Smith CL, Vedovi A, Ellis LA, Knaggs G, Meulenbroeks I, Warwick M, Gul H, Pomare C, Braithwaite J (2020). Mapping the Learning Health System: A Scoping Review of Current Evidence. Australian Institute of Health Innovation, and the NHRMC Partnership Centre for Health System Sustainability. Sydney, Australia. www.mq.edu.au/_data/assets/pdf_file/0011/1083809/Mapping-the-Learning-Health-System-A-white-paper-web.pdf (accessed 16 July 2025)
- 65 Symons T, Woollett A, Zalberg J, Eckstein L (2024). Implementing Decentralized Clinical Trials in Australia through Teletrials: Where to From Here? Therapeutic Innovation & Regulatory Science australianteletrialprogram.gov.au/wp-content/uploads/2024/08/DIA-Teletrials-Paper-Apr-24.pdf (accessed 17 July 2025).
- 66 The Australian Health Research Alliance. ahra.org.au/ (accessed 9 July 2025)
- 67 AusBiotech submission in response to the Industry Growth Program: Consultation Paper. www.ausbiotech.org/documents/item/772 (accessed 16 July 2025)
- 68 Australian Government Department of Industry, Science and Resources. Domestic business environment. www.industry.gov.au/publications/australian-innovation-statistics/domestic-business-environment (accessed 16 July 2025)
- 69 MTPConnect (2021). MTPConnect REDI Initiative Skills Gap Analysis Second Report. www.mtpconnect.org.au/images/MTPC%20REDI%20Skills%20Gap%20Second%20Report.pdf (accessed 17 July 2025)
- 70 MTPConnect – Australia's Life Sciences Innovation Accelerator. www.mtpconnect.org.au/ (accessed 16 July 2025)
- 71 The European Innovation Council. eic.ec.europa.eu/index_en (accessed 16 July 2025)
- 72 Australian Government Department of Industry, Science and Resources (2024). Medical Science Co-investment Plan. www.industry.gov.au/sites/default/files/2024-04/medical_science_co-investment_plan.pdf (accessed 16 July 2025)

References

- 73 Ausbiotech. Biotechnology Blueprint - A Decadal Strategy for the Australian Biotechnology Industry. www.ausbiotech.org/documents/item/703 (accessed 16 July 2025)
- 74 AusBiotech and MTPConnect (2024). National Biotech and Medtech Development and Commercialisation Summit 2024 Discussion Paper. www.mtpconnect.org.au/images/AusBiotech_MTPConnect_DiscussionPaper2024.pdf (accessed 16 July 2025)
- 75 NSW Innovation and Productivity Council (2018). NSW Innovation Precincts Lessons from international experience. www.investment.nsw.gov.au/assets/Uploads/files/IPC/Full-Report-IPC-NSW-Innovation-Precincts-2018.pdf (accessed 16 July 2025)
- 76 Anteris Technologies. anteristech.com/about-us.html (accessed 16 July 2025)
- 77 Markets and Markets (2025). Artificial Intelligence in Healthcare Market. www.marketsandmarkets.com/Market-Reports/artificial-intelligence-healthcare-market-54679303.html
- 78 Australian Digital Health Agency (2023). National Digital Health Strategy 2023-2028. www.digitalhealth.gov.au/sites/default/files/documents/national-digital-health-strategy-2023-2028.pdf (accessed 16 July 2025)
- 79 The Centre for Health Record Linkage (CHeReL). www.cherel.org.au/about-us (accessed 16 July 2025).
- 80 Singapore Integrated Diabetic Retinopathy Programme (SiDRP). www.shec.com.sg/our-specialties/clinic-locations/sidrp (accessed 16 July 2025)
- 81 World Health Organisation (2023). Climate Change. WHO Factsheet. www.who.int/news-room/fact-sheets/detail/climate-change-and-health (accessed 21 August 2025)
- 82 Australian Department of Health, Disability and Ageing. National Health and Climate Strategy (2023). www.health.gov.au/sites/default/files/2023-12/national-health-and-climate-strategy.pdf (accessed 16 July 2025)
- 83 Tasmanian Government. Climate Change (State Action) Act 2008. (Tas) s5., 2022. www.legislation.tas.gov.au/view/pdf/authorised/2022-11-30%202022-12-13/act-2008-036 (accessed 16 July 2025)
- 84 Tasmanian Health Department (2019). Tasmanian climate change and health roundtable – Final Report. Tasmanian Government. www.health.tas.gov.au/publications/tasmanian-climate-change-and-health-roundtable-report (accessed 21 August 2025)
- 85 Australian Commission on Safety and Quality in Health Care (2024). Joint Statement: Working together to achieve sustainable high-quality health care in a changing climate. www.safetyandquality.gov.au/publications-and-resources/resource-library/joint-statement-working-together-achieve-sustainable-high-quality-health-care-changing-climate (accessed 16 July 2025).
- 86 National Institute for Health and Care Research (NIHR) Our commitments to climate, health and sustainability 2024-2026. www.nihr.ac.uk/our-commitments-climate-health-and-sustainability-2024-2026 (accessed 16 July 2025).
- 87 Wellcome Trust. Concordat for the Environmental Sustainability of Research and Innovation Practice. wellcome.org/about-us/positions-and-statements/environmental-sustainability-concordat (accessed 16 July 2025).
- 88 Australian Government Department of Health, Disability and Ageing (2024) The Australian Health and Medical Research Workforce Audit – October 2024. www.health.gov.au/resources/publications/mrff-the-australian-health-and-medical-research-workforce-audit?language=en (accessed 16 July 2025).
- 89 Aksnes DW, Sivertsen G (2023) Global trends in international research collaboration, 1980-2021 [J]. Journal of Data and Information Science, Vol 8, No. 2, pp 26-42 doi.org/10.2478/jdis-2023-0015.
- 90 Australian Government Indo-Pacific Centre for Health Security. Investments. indopacifichealthsecurity.dfat.gov.au/investments (accessed 16 July 2025).
- 91 World Health Organization (2023) Investing in cervical cancer elimination across Australia and the Indo-Pacific, 17 November 2023. www.who.int/news/item/17-11-2023-investing-in-cervical-cancer-elimination-across-australia-and-the-indo-pacific (accessed 16 July 2025).
- 92 The Daffodil Centre (2023) Australia takes ‘EPICC’ step towards fairer cervical cancer outcomes in region. daffodilcentre.org/australia-takes-epicc-step-towards-fairer-cervical-cancer-outcomes-in-region/ (accessed 16 July 2025).
- 93 Medical Schools Council. Staffing levels of medical clinical academics. www.medschools.ac.uk/what-we-do/championing-clinical-academia-and-research/clinical-academic-survey/ (accessed 16 July 2025).
- 94 Dental Schools Council. Clinical academic staff survey. www.dentalschoolscouncil.ac.uk/clinical-academia/clinical-academic-staff-survey/ (accessed 16 July 2025).
- 95 NHMRC (2021). Investigating clinician researcher career pathways project: Summary Report to the NHMRC Chief Executive Officer, December 2021. www.nhmrc.gov.au/sites/default/files/documents/reports/21650_nhmrc_-_project_summary_report_ff_1.pdf (accessed 16 July 2025).

References

- 96 Australian Institute of Health and Welfare. Health expenditure Australia 2022–23. www.aihw.gov.au/reports-data/health-welfare-overview/health-welfare-expenditure/overview (accessed 9 July 2025).
- 97 Australian Government Department of Industry, Science and Resources (2024). Science, research and innovation (SRI) budget tables 18 October 2024. www.industry.gov.au/publications/science-research-and-innovation-sri-budget-tables (accessed 9 July 2025).
- 98 NHS England. The Centre for Improving Data Collaboration. transform.england.nhs.uk/key-tools-and-info/centre-improving-data-collaboration/ (accessed 9 July 2025).
- 99 CSIRO (2024) AI Trends for Healthcare. aehrc.csiro.au/wp-content/uploads/2024/03/AI-Trends-for-Healthcare.pdf (accessed 16 July 2025).
- 100 Parliament of Australia (2024) Health Legislation Amendment (Modernising My Health Record—Sharing by Default) Bill 2024. www.aph.gov.au/Parliamentary_Business/Bills_Legislation/Bills_Search_Results/Result?bld=r7290 (accessed 16 July 2025).
- 101 Australian Institute of Health and Welfare. Australian National Data Integration Infrastructure. www.aihw.gov.au/reports-data/ndda/infrastructure (accessed 16 July 2025).
- 102 The Australian Digital Health Agency. Connecting Australian Health Care: National Healthcare Interoperability Plan 2023–2028. www.digitalhealth.gov.au/sites/default/files/documents/national-healthcare-interoperability-plan-2023-2028.pdf (accessed 16 July 2025).
- 103 Australian Research Data Commons (ARDC). Health Studies Australian National Data Asset (HeSANDA). ardc.edu.au/program/health-studies-australian-national-data-asset/ (accessed 16 July 2025).
- 104 Global Biodata Coalition. globalbiodata.org/ (accessed 16 July 2025).
- 105 Evidence Synthesis Infrastructure Collaborative (ESIC). evidencesynthesis.atlassian.net/wiki/spaces/ESE/overview?mode=global (accessed 16 July 2025).
- 106 Australian Research Council. Linkage Infrastructure, Equipment and Facilities Selection Report for Funding Commencing in 2025. www.arc.gov.au/funding-research/funding-outcome/selection-outcome-reports/linkage-infrastructure-equipment-and-facilities-selection-report-funding-commencing-2025 (accessed 16 July 2025).
- 107 Australian Government Department of Health, Disability and Ageing. Medical Research Future Fund (MRFF) grant recipients. www.health.gov.au/resources/publications/medical-research-future-fund-mrff-grant-recipients?language=und (accessed 16 July 2025).
- 108 National Health and Medical Research Council. Outcomes of funding rounds. www.nhmrc.gov.au/funding/data-research/outcomes (accessed 16 July 2025).
- 109 Australian Government Department of Health, Disability and Ageing. Funding Landscape Review 2024 (unpublished).
- 110 Future Made in Australia 2024–2025. treasury.gov.au/policy-topics/future-made-australia (accessed 18 July 2025).
- 111 National Critical Research Infrastructure initiative. www.health.gov.au/our-work/mrff-national-critical-research-infrastructure-initiative (accessed 21 August 2025).