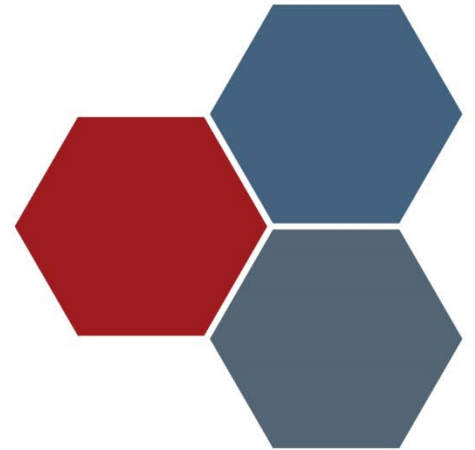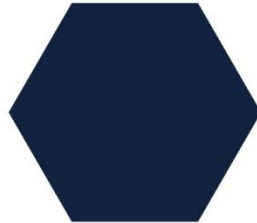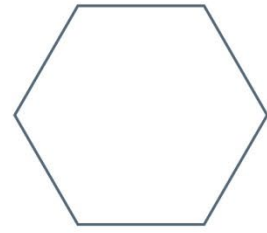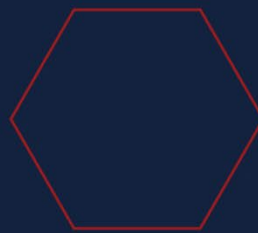Australian Government

Medical Research
**Future Fund**

**AUSTRALIAN MEDICAL RESEARCH
AND INNOVATION PRIORITIES
2024-2026**

# Australian Medical Research and Innovation Priorities aligning with the Australian Medical Research and Innovation Strategy 2021-2026

## Preamble

In accordance with the *Medical Research Future Fund Act 2015* (the MRFF Act), the independent Australian Medical Research Advisory Board (the Advisory Board) must determine the Australian Medical Research and Innovation Strategy every five years, and the Australian Medical Research and Innovation Priorities (Priorities) every two years. The Australian Medical Research and Innovation Strategy 2021-2026 (the 2021-2026 Strategy) was registered on the Federal Register of Legislation as the *Australian Medical Research and Innovation Strategy 2021-2026 Determination 2021* and effective 9 November 2021.

The MRFF Act requires the Advisory Board to take into account the following matters when determining the Priorities:
- the burden of disease on the Australian community;
- how to deliver practical benefits from medical research and medical innovation to as many Australians as possible;
- how to ensure that financial assistance provided under the MRFF Act complements and enhances other financial assistance provided for medical research and innovation; and
- any other relevant matters.

The Advisory Board has developed the 2024-2026 Priorities to align with and facilitate the achievement of the 2021-2026 Strategy's vision, aim and strategic objectives through a comprehensive national consultation process. The 2024-2026 Priorities will take effect on 6 November 2024, noting that the 2022-2024 Priorities registered on the Federal Register of Legislation as the *Australian Medical Research and Innovation Priorities 2022-2024 Determination 2022* will cease on 5 November 2024.

Each priority is outlined in the table below with its relevance (the 'why') and a recommended implementation approach (the 'how'). This provides the context on how each priority will contribute to the key elements across one or more of the strategic objectives to achieve health equity and deliver health and economic benefits through transformative and innovative research and a health system that is responsive to health challenges and underpinned by a skilled and sustainable workforce.

The Priorities align with the 2021-2026 Strategy and are designed to be broadly applicable and to intersect with each other, to provide overarching and cross-cutting strategic direction to Medical Research Future Fund (MRFF) activities. The Priorities are not intended to be considered in isolation and multiple Priorities may be relevant in directing research investment.

*Priorities aligning with the Australian Medical Research and Innovation Strategy 2021-2026*

| Priority | Why action is needed | How best addressed |
|---|---|---|
| **Consumer-Driven Research**<br><br>Research that is driven by meaningful consumer and community involvement and partnerships, to incorporate their diverse priorities, needs, values and experiences to deliver outcomes that are accessible, useful and used by consumers, carers, health care professionals and other end-users. | Consistent and effective consumer involvement will ensure that MRFF-funded research is fit for purpose, high quality, good value, trusted by the community and efficiently delivers the best possible research outcomes for improving the health and wellbeing of people in Australia. | Support meaningful and respectful consumer and community involvement and engagement in the prioritisation, design, conduct, translation, dissemination and evaluation of MRFF-funded research, and promote consumer and community leadership and partnership with researchers across all types of research. |
| **Research Infrastructure and Capability**<br><br>Address gaps in the generation of knowledge, in early biomedical and medical technology product development and translational research by supporting access to expertise, capability, and infrastructure, in partnership with industry to drive new research discoveries and accelerate innovation. This includes research facilities, equipment, systems, services, networks, digital infrastructure, integrated data, and biobanks. | Access to advanced biomedical and digital research and translation assets as well as relevant expertise, collaborations, and networks will ensure that discoveries are effectively and rapidly converted to new preventive interventions, diagnostics, therapeutic products, and medical devices, based on quality data. | Support access to expertise and infrastructure that facilitates innovation and the development of research discoveries for practical impact.<br><br>Emphasis should be placed on building capacity and capability, including through increased collaboration and partnerships across the research sector and with industry. This includes better integration with other government infrastructure programs such as the National Collaborative Research Infrastructure Strategy (NCRIS) program and the National One Stop Shop for clinical trials. |

| Priority | Why action is needed | How best addressed |
|---|---|---|
| **Translation and Commercialisation**<br><br>Provide a focus on research translation, implementation and commercialisation by accelerating and advancing innovation to improve health outcomes and impact, and by supporting the development of biomedical research industries in Australia. Leverage opportunities from novel or emerging tools and technologies that can transform health and medical research, health interventions and care. This includes building the evidence base for improved adoption into health care and policy, as well as increasing collaborations between the research sector, industry, health services, governments, and community. | Australia is recognised as a world leader in biomedical research outputs. Capitalising on these investments is critical to ensure that research discoveries have a pathway to translation and commercialisation to better realise health and economic benefits. | Support for translation of research into improved health care, new health care technologies and treatments including therapeutics, drugs, devices, and models of care.<br><br>Support the ecosystem for small and medium enterprises (SMEs) or not-for-profits to translate early-stage health and medical research with commercial potential into products or services.<br><br>Facilitate progress along the translation and commercialisation pipeline and de-risk projects to support commercial viability and implementation. |
| **Effective and High Value Care**<br><br>Demonstrate the comparative clinical and cost effectiveness of health interventions to identify and improve the delivery of high value care and to minimise unnecessary, ineffective, and harmful health interventions. This includes the generation of a range of evidence, including through innovative clinical trials, health economic evaluation, and analysis of real-world data, to enable ongoing assessment of interventions, care models and health technologies. | Knowledge of the benefits and harms of alternative means to prevent, diagnose, treat and monitor clinical conditions or improve the delivery of care is needed to transform health outcomes and reduce the amount of low value care. Evidence of health benefits and economic value will inform decisions about health care investment and disinvestment at the individual and population level. | Support innovative clinical trials and use of real-world data, particularly in areas of unmet need, to generate evidence of the clinical benefits and cost effectiveness of health interventions, to inform policy makers, clinicians and consumers.<br><br>Support research to address targeted evidence gaps of value to health technology assessment processes in Australia, to inform funding and delivery of the most effective care. |

| Priority | Why action is needed | How best addressed |
|---|---|---|
| **Preventive and Public Health Research**<br><br>Invest in preventive and public health research that can be translated into evidence-based health care, policies and systemic changes to maximise health and wellbeing, reduce the burden of disease, improve health equity and deliver social and economic benefits. | Promoting and improving health in Australia requires sustained research effort to define ways of reducing preventable illness, disability, and avoidable death. Effective health promotion and integration of individual, population-based and structural interventions within and alongside health care will improve wellbeing, address risk factors and co-morbidities, provide better support for self-care interventions, and reduce the burden of disease. This includes consideration of the social, cultural and commercial determinants of health. | Conduct collaborative, multidisciplinary research to develop and evaluate implementable approaches to primordial, primary and secondary prevention, and health promotion that are tailored to communities.<br><br>Support research that improves approaches to fostering health literacy, enables individuals to make self-care decisions, and addresses structural barriers to good health to improve individual and population health outcomes. |
| **Primary Care Research**<br><br>Support primary care research with an emphasis on multidisciplinary collaboration, adaptive research methodologies, innovative models of care, and clinician capability.<br><br>Develop the evidence base about the efficacy and value of different primary care models and health systems. This includes improving primary care intersection with secondary and tertiary care and promoting shared models of care between clinicians and consumers, including self-care interventions, for a more integrated and efficient health care sector. | The growing complexity of care environments and increase in chronic and complex diseases make practitioner and care team decisions increasingly challenging. Research on effective means to bridge the gap between primary care and specialist care is crucial to ensure that patients get access to the quality care that is available for complex and chronic problems following effective referral practice. While most health care occurs in primary care within the community, most research occurs in tertiary or specialist settings. Investment in primary care research will deliver a more concerted effort that is geographically relevant and, where possible, scalable nationally to maximise impact. | Conduct primary care research that is led by or conducted in collaboration with clinicians, including general practitioners, nurses and allied health care professionals, which can permeate daily practice and has potential for scalability. Support primary care research across Australia, including place-based research in regional, rural and remote communities and engagement with diverse populations. |

| Priority | Why action is needed | How best addressed |
|---|---|---|
| **Health and Medical Researcher Capacity and Capability**<br><br>Support development of Australian health and medical researcher capability, with a focus on improving the translation and integration of evidence-based research into primary and tertiary care settings, policy and commercial outcomes. Create a funding environment that fosters equity and increases opportunities for researchers with a diversity of backgrounds, career stages, skills and expertise to build research capacity and capability. | Building and growing researcher capacity and capability is critical for the long-term development and retention of the next generation of health and medical researchers. This will ensure the increased availability and sustainability of diverse skills within the research workforce and enhance career pathways for researchers in academia, industry, government, and clinical settings. | Support research led by early to mid-career researchers and clinician researchers to promote capacity and capability development and retention.<br><br>Support research that enables health and medical researchers to build innovation, translation, and commercialisation skills. |
| **Aboriginal and Torres Strait Islander Health and Wellbeing**<br><br>Improve the health and wellbeing of Aboriginal and Torres Strait Islander people to close the gap in health mortality and morbidity, improve experiences of health care and eliminate discrimination across the health system through Aboriginal and Torres Strait Islander-led priority setting, research leadership and self-determination. Recognise Aboriginal and Torres Strait Islander people's diverse experiences and health needs, including access and engagement across the health sector, including public, private and Aboriginal and Torres Strait Islander community-controlled health, to improve health outcomes. | There is a need to better support health related research that is led by and for Aboriginal and Torres Strait Islander people, recognising the harmful legacy of health and medical research conducted without Aboriginal and Torres Strait Islander people's leadership or involvement, that racism across the health system has ongoing impacts, and that self-determined solutions result in improved outcomes.<br><br>A culturally centred and rights-based approach to research that is anchored in Aboriginal and Torres Strait Islander ways of knowing, being and doing and that reflects the social and cultural determinants of health and wellbeing will help build an evidence-base to support health and wellbeing and health equity for Aboriginal and Torres Strait Islander people. | Support research that strengthens Aboriginal and Torres Strait Islander governance, leadership, agency and empowerment in research, applies Indigenous data sovereignty principles and strengthens research capabilities. Promote research that addresses priorities identified by Aboriginal and Torres Strait Islander people and communities, considers social and cultural determinants of health, centres diverse Aboriginal and Torres Strait Islander voices, and embeds Indigenous values, knowledges and worldviews.<br><br>Research prioritisation should be contextual and, where appropriate, should align with national and local initiatives to support Aboriginal and Torres Strait Islander health and wellbeing, including the National Agreement on Closing the Gap, the National Aboriginal and Torres Strait Islander Health Plan 2021–2031 and the National Aboriginal and Torres Strait Islander Health Workforce Strategic Framework 2016–2023. |

| Priority | Why action is needed | How best addressed |
|---|---|---|
| **Priority Populations**<br><br>Ensure equitable health outcomes for all people living in Australia by funding research to understand specific health needs for diverse individuals and communities and enabling the development of inclusive and targeted approaches to support health and wellbeing for priority populations, including:<br>• Aboriginal and/or Torres Strait Islander people<br>• people in remote/rural communities<br>• people with a disability (including people with intellectual disability)<br>• people from culturally and linguistically diverse communities (including people who are immigrants or refugees)<br>• LGBTIQ+ people<br>• children and youth<br>• older people experiencing diseases of ageing (e.g. cognitive decline and dementia)<br>• people with rare or currently untreatable diseases/conditions. | Australia consists of a mix of socially, ethnically, culturally, linguistically, geographically, and other demographically diverse populations, who may have very different health and health care needs that are not always addressed within the health system, leading to health inequities.<br><br>Research that considers the specific health needs of priority populations will inform fit-for-purpose approaches to support health and wellbeing for the Australian population as demographics change over time. | Support research to understand the complex and intersectional biomedical, health system, social, cultural, and economic determinants of health for priority populations. Promote research that is led by, or conducted in collaboration with, priority populations to investigate appropriate solutions to health challenges. Encourage intersectional approaches to research to ensure the heterogeneity of priority populations is accounted for and that allow for better visibility of people from priority populations in all research projects.<br><br>Investment focus needs to be responsive and align with national initiatives to address health inequities. |
| **Global Health and Health Security**<br><br>Build capacity for both proactive and reactive action to address identified, emerging or potential global health threats, including pandemics, zoonotic diseases and antimicrobial resistance (AMR), in alignment with international efforts and capabilities and in consideration of evolving geopolitical environments. | The emergence and spread of new disease is accelerating in a changing and increasingly connected modern world, causing significant health, social and economic impacts that will disproportionately affect vulnerable populations. Research is needed to develop and implement approaches that will improve the resilience of the health system and minimise service disruption in the face of emerging threats to health security. This will ensure that Australia, as a recognised world leader in health and medical research, is well placed to provide strategic leadership and contribute expertise to address public health events that endanger health across geographical borders. | Support multidisciplinary and cross-sectoral research and partnerships to address global health and health security issues of relevance to Australia, including surveillance, preparedness, prevention, response, countermeasures, eradication and management for both identified and emerging health threats. Support collaborative multidisciplinary research to develop strategies to address the impacts of AMR on human health. |

| Priority | Why action is needed | How best addressed |
|---|---|---|
| **Health Impacts from Environmental Factors**<br><br>Understand and address the emerging and long-term impact of environmental factors, such as climate change and natural disasters, on physical and mental health and wellbeing. Address the changing burden of communicable and non-communicable disease linked to environmental causes. | Diverse environmental factors shape people's health and contribute to the burden of disease, including climate change, globalisation, urbanisation, pollution, housing, occupational exposures, physical activity and food environments. There is a need to understand how these factors intersect to impact health, equity and access to health care and determine how to foster healthier environments. | Support multidisciplinary and cross-sectoral research to address health challenges resulting from environmental factors relevant to Australia. Research into the health impacts of climate change should contribute to the policy objectives of the National Health and Climate Strategy. |
| **Artificial Intelligence and Digital Health**<br><br>Support for the improved, secure and ethical integration and governance of artificial intelligence and data science approaches, health informatics, and other data-driven digital or technological innovations. This includes data-driven innovations such as quantum technologies, precision medicine, diagnostics, digital health tools and devices. This is critical to realising the benefits of more digitally integrated and effective health care systems to improve health outcomes. | Integration of artificial intelligence and other digital and technological tools and approaches in health care, including the curation and use of health data, is needed to achieve effective digitalisation of health care. This will enhance health care delivery by supporting the workforce's capability to increase efficiency of clinical processes, enabling better patient engagement and involvement through equitable access, and promoting health literacy and self-care interventions. | Support research that will promote the equitable, secure, ethical and responsible acquisition, use and sharing of robust health data.<br><br>Promote research that improves the integration, performance and safety of artificial intelligence and other digital approaches leading to enhanced analysis, prediction, diagnosis, decision-making, treatment and management (including self-management) of health conditions. |