Online submission

21 August 2026

Australian Academy of Science submission on the
Draft Australian Medical Research and Innovation Strategy 2026-2031 and the associated Medical Research Future Fund Priorities 2026-28

The Academy supports the overall direction of the proposed Australian Medical Research and Innovation Strategy 2026-2031 and the associated Medical Research Future Fund (MRFF) Priorities 2026-28.

The Academy provided the following responses to the consultation survey questions.

14. Does the proposed Vision best position the MRFF to transform health and medical research and innovation in Australia over the next five years?

The Academy supports the proposed vision, particularly its focus on research excellence. The Strategy appropriately positions the MRFF as a catalyst for improving health outcomes through research translation, innovation and collaboration. The Academy welcomes the emphasis on building workforce capability, embedding research in practice, and sovereign capability, in the Statement of Intent and across the Strategic Objectives.

The draft Vision and Strategy currently lack a clear expression of the unique role of the MRFF in the health and medical research system, and its relationship to the 10-year National Health and Medical Research Strategy (NHMR Strategy). There is no mention of the NHMR Strategy in the MRFF Strategy – a critical omission, given that the NHMR Strategy provides a shared direction for the health and medical research system. The MRFF Strategy would be strengthened by articulating the role of the MRFF and its connection to the NHMR Strategy, providing needed coherence across the Strategies.

The MRFF Strategy should also recognise that transformational health innovation relies on complementary sustained investment across the research continuum.

Recommendation: The Strategy should clearly articulate the relationship between the MRFF Strategy and the National Health and Medical Research Strategy to provide coherent direction for the sector.

Recommendation: The vision should emphasise the MRFF's role in enabling excellent translational research and supporting health system innovation, while complementing other national research investments, such as the NHMRC's schemes.

15. Do the proposed Strategic Objectives set a clear and appropriate direction for delivering the MRFF Vision 2026-2031?

The Academy supports the proposed strategic objectives, providing a comprehensive framework encompassing prevention, translation, implementation, equity, workforce development and technological innovation. The inclusion of workforce as a strategic objective and a priority is a welcome measure, elevating the capability of the health and medical research workforce as both an objective and investment priority and strengthening the framework for the future needs of the sector.

The Academy welcomes the acknowledgement of global leadership in the Statement of Intent. The intent for global leadership could be strengthened by embedding Australia's role in building enduring, equitable international research partnerships, particularly with Pacific nations, strengthening regional capability and elevating Pacific expertise and priorities in international forums. This could be reflected in the cross-cutting principles, under Partnerships and co-investments.

The strategic objectives should also include stronger recognition of evaluation and continuous learning in guiding future MRFF investments. The objectives should guide MRFF investment decisions, complementing investigator-led research and being adaptable to emerging health challenges. The success of MRFF investments should be assessed against improvements in health outcomes, health-system performance, capability development and national benefit over time.

Recommendation: Strengthen the Strategy's commitment to global leadership by embedding the role of the MRFF in international collaboration, particularly equitable, Pacific-led research partnership.

Recommendation: Include stronger recognition of evaluation and continuous learning in funding future MRFF investments in the Strategic Objectives.

16. Will the proposed cross-cutting principles support successful delivery of the MRFF Strategy 2026-2031?

The proposed cross-cutting principles provide an appropriate foundation for the MRFF investment priorities.

The strategy would be improved by including a **seventh cross-cutting principle on enhancing quality of life and mental health.** The proposed draft strategy primarily focuses on physical health concerns and benefit, which only partially addresses the needs of Australians. For example, cancer and cardiovascular therapies should capture mental health and quality of life outcomes even when these are not the primary target of intervention. Including this cross-cutting dimension of mental health into the strategy will ensure the focus remains not purely on extending life, but on quality of life. This holistic approach would ensure that improvements in survival and clinical outcomes are accompanies by meaningful improvements in wellbeing and quality of life.

The principles should encourage multidisciplinary collaboration, recognising future health challenges increasingly require expertise spanning a range of fields including biomedical science, engineering, data science, artificial intelligence, behavioural science and health services research.

Recommendation: Include a cross-cutting principle focused on enhancing quality of life and mental health as fundamental outcomes of health and medical research.

17. Will the shared enablers support the successful delivery of the MRFF Strategy 2026-2031?

The Academy welcomes the proposed coordinated and complementary approach to the MRFF and the National Health and Medical Research Council (NHMRC) investment to support an integrated national research ecosystem.

Consistent with the broader data integration, and the sharing and access approach recommended in the NHMR Strategy, the MRFF enablers should focus on supporting interoperability, integration planning and secure research access, aligned with NCRIS and other national initiatives, to build the foundations for a connected national health data ecosystem. An integrated national research ecosystem as outlined in the shared enablers will provide alignment, reduce duplication, increase interoperability and enable a coordinated national approach.

To strengthen efforts towards a coordinated national health research ecosystem, the Academy recommends linking data interoperability, secure data governance, research security and evaluation frameworks to ensure investments generate lasting national capability. Secure data environments, genomics platforms, advanced computing, clinical trial networks and manufacturing capability underpin Australia's capacity to translate research into improved health outcomes.

Recommendation: To enhance the capability of a national research ecosystem, the Academy recommends an integrated approach to data interoperability, secure governance, research security and evaluation across the medical research system.

18. Are there any additional issues or feedback on the proposed Strategy that have not been addressed above?

The strategy should clearly articulate the distinct role of the MRFF within Australia's research and innovation ecosystem. While the strategy's vision recognises the complementary value of the MRFF and the NHMRC, further clarification is required to improve coordination, reduce duplication and ensure investments are targeted to areas of greatest national benefit.

The strategy does not clearly articulate how the MRFF's Priorities and Research Missions intersect with and contribute to the broader national health and medical research framework, including the NHMR strategy. This lack of clarity risks fragmented investment, duplication of effort and unclear accountability for delivering national health outcomes. **The strategy should define the hierarchy, respective roles and intersections between frameworks to provide clear ownership of outcomes and ensure Commonwealth investment is coordinated towards a shared national direction.**

The Academy welcomes the Australian Government's commitment to lift the cap on the MRFF from $650 million to $1 billion by 2031, and the inclusion of $128 million from the MRFF to support indirect costs of research announced with the NHMR Strategy. However, system reform is required to alleviate the burden indirect costs of research have on universities and health and medical research organisations. The Academy urges the Australian Government to implement the recommendations of the *Ambitious Australia* review to grow competitive grant funding and support for the indirect costs of research. **The MRFF Strategy and next Investment Plan should consider settings that fairly support the indirect costs of MRFF grants.**

The strategy should acknowledge that many complex health challenges cannot be addressed in a single grant and require sustained investment over periods extending beyond individual funding cycles. Where appropriate, continuity of funding mechanisms should support proof of concept, validation, implementation and adoption. This will enable realised potential on investment returns and amplify potential health and public value from earlier investments.

A strategic and forward-looking approach to disease burden would strengthen Australia's capacity to identify emerging health challenges, and guide research investment toward areas of greatest need, maximising long term health. **The Strategy should embed the current, growing and evolving burden of disease facing Australia as a strategic objective, a core consideration in priority setting, investment and evaluation.**

The strategy and proposed priorities recognise some major health challenges, but the strategy would benefit from a stronger focus on future collective disease burden and ensuring the research system is equipped to respond. Demographic change, ageing population, increasing multimorbidity and interactions between chronic disease, mental health and neurological conditions will place increasing pressure on Australia's health system over the coming decades. Collectively, psychiatric and neurological disorders represent one of the largest and fastest growing contributors to this statistic with substantial impacts on health, productivity and economic participation.

Recommendation: The Strategy should clarify the MRFF's role and alignment across the research ecosystem and national health and medical research policy frameworks, particularly the relationship between the MRFF Strategy and Priorities, the MRFF Missions and the National Health and Medical Research Strategy.

Recommendation: The Australian Government must implement the recommendations of *Ambitious Australia* to grow competitive grant funding and support for the indirect costs of research. The MRFF Strategy and next Investment Plan should consider settings that fairly support the indirect costs of MRFF grants.

Recommendation: The Strategy should embed a forward-looking approach to disease burden to enable coordinated, sustained investment that responds to Australia's evolving burden of disease across physical, mental and neurological health.

19. Considering the proposed Priority 2026-2028 of AI in research and health systems, are there any important elements not captured in this Priority that should be included?

The Academy supports the inclusion of AI in research and health systems as a strategic priority. The Academy welcomes the prioritisation of trustworthy, ethical and clinically validated AI, representative, high-quality datasets and interoperability and secure data sharing.

The Academy recommends the addition of 'development of workforce capability for AI' under the proposed priority of 'AI in research and health systems'. Australia must develop its AI workforce through investment in AI education, upskilling and interdisciplinary training to build a workforce capable of developing, deploying and governing AI safely and effectively throughout healthcare at scale. Developing this capability would ensure

Australia holds capability and the talent needed to drive productivity, discovery, economic growth.

Underpinning these technologies as a critical enabler is the need for a skilled AI workforce across both research and healthcare. The Academy initiative *'Australian Science, Australia's Future'* found Australia is projected to face a capability gap in AI by 2035. The workforce demand in AI in Australia is outstripping the skills pipeline. This expertise must built and sustained in Australia to allow sovereign capability over the long term. Investment in AI should support translation into clinical practice while maintaining public trust through transparency, safety and appropriate governance.

Recommendation: Adjust the 'AI in research and health systems' priority to include a development of a skilled AI workforce to ensure Australia can safely develop, evaluate and translate AI across the health and medical research sector.

20. Considering the proposed Priority 2026-2028 of Integrated digital health systems, are there any important elements not captured in this Priority that should be included?

The Academy welcomes the MRFF's focus on integrated digital health systems and considerations of linkages with existing national initiatives for a more cohesive national health and medical research framework. Investment in integration planning, interoperability, and secure system access, will help build the foundations for a more connected national health data and research ecosystem.

21. Considering the proposed Priority 2026-2028 of Aboriginal and Torres Strait Islander community governed and directed research, are there any important elements not captured in this Priority that should be included?

The Academy strongly supports the proposed priority and guidance of MRFF funding in Aboriginal and Torres Strait Islander community governed and directed research.

Recommendation: To strengthen the Priority, the Academy recommends a complementary approach across the NHMR Strategy, MRFF, NHMRC and other national research policies to ensure this capacity building extends beyond individual projects to a system approach to support Aboriginal and Torres Strait Islander research leaders.

22. Considering the proposed Priority 2026-2028 of Advanced therapeutics and emerging technology, are there any important elements not captured in this Priority that should be included?

The Academy supports this priority and suggests expansion to include quantum enabled diagnostics, advanced manufacturing, synthetic biology, robotics, digital therapeutics, regulatory science and Australian manufacturing capability for emerging therapies. Future investment should consider Australia's long-term sovereign capability alongside health outcomes.

23. Considering the proposed Priority 2026-2028 of Health impacts from environmental factors, including climate change, are there any important elements not captured in this Priority that should be included?

While the Academy welcomes this priority, additional considerations should include disaster preparedness and environmental monitoring technologies to strengthen prevention and health system resilience and align with One Health initiatives.

The priority must recognise Australia's contribution to global health research. Health threats such as antimicrobial resistance, emerging infectious diseases and pandemics extend beyond national borders and require coordinated international research and innovation. Biodiversity loss and ecosystem disruption can alter wildlife-human interactions and increase risk of zoonotic disease spread. Supporting research that strengthens resilient health systems, including the underlying functions of nutrition, improves disease risk and prevention and facilitates rapid translation of evidence into policy and practice. This will position Australia as a trusted global research partner while delivering direct benefits to the Australian community.

Recommendation: The 'Health impacts from environmental factors' priority should recognise the One

Health approach and include consideration of disaster preparedness and environmental monitoring to strengthen prevention and health system resilience.

Recommendation: Strengthen Australia's contribution to global health research by supporting international collaboration on the health impacts of climate change, environmental degradation and ecosystem change.

24. Considering the proposed Priority 2026-2028 of Multiomics-informed healthcare, are there any important elements not captured in this Priority that should be included?

This priority should include additional emphasis should on integration of genomics with clinical data, equitable access, workforce capability, bioinformatics, ethical governance, long-term data stewardship and implementation into routine healthcare, not solely technology development.

Realising the potential of genomics, proteomics, metabolomics, transcriptomics and epigenomics will require coordinated investment to uplift data and infrastructure that support this research. This investment should strengthen the integration of clinical and molecular data, improving secure and equitable access to interoperable datasets, and supporting the bioinformatics infrastructure required to analyse complex data sets at scale. The priority should include long-term data stewardship, including governance frameworks, sustainable data infrastructure and secure data management approaches to enable responsible sharing and linkage of data over time.

Recommendation: Coordinate a national approach to uplift data stewardship and omics informed healthcare data and infrastructure to strengthen the integration of utilisation of Australia's precision medicine capability. This will improve patient outcomes and deliver a well-positioned research system to readily adapt and respond to future advances in biomedical science.

25. Considering the proposed Priority 2026-2028 of Determinants of health, are there any important elements not captured in this Priority that should be included?

The proposed priority on the determinants of health would benefit from an expanded definition reflecting the full range of factors influencing health outcomes across the life course. This will aid in identifying where disadvantage arises, inform effective prevention and interventions and ensure advances have the ability to translate into improved outcomes. In addition to recognised social determinants, the priority should explicitly include health literacy, education, housing, digital inclusion and equitable access to digital health technologies, recognising the critical role in health outcomes and access.

The strategy should adopt a comprehensive understanding of food security and its six dimensions of availability, access, utilisation, stability, agency and sustainability to support a more effective and equitable healthcare system. The strategy should include guidance on integrated nutrition research, supported through AI for dietary surveillance, population monitoring and early identification of emerging health risks. Achieving this across Australia will require interoperable data systems that allow linkages of health, nutrition and other related datasets to provide a solid evidence base for prevention. This will inform more effective policy and support a more resilience, equitable and data-driven health system.

Recommendations: Expand on the proposed priority of 'Determinants of health' to incorporate the full range of factors influencing health over the life course. This should include social determinants and access to digital health technologies as well as integrated nutrition research to inform data driven health solutions.

26. Considering the proposed Priority 2026-2028 of Embedding research in the health system, are there any important elements not captured in this Priority that should be included?

The Academy supports the priority and recommends that the strategy establish learning health systems as the overarching model connecting research, evidence and clinical practice. Implementation science, clinician researchers, rapid evidence generation and national evaluation frameworks should be recognised as the enabling capabilities of this model. The strategy should support a continuous cycle in which health-system needs drive research, evidence is rapidly generated and translated into practice, and outcomes are evaluated and fed back into care and future research. This would reduce the gap between discovery and implementation, strengthen evidence-based care and enable effective interventions to be rapidly adapted and scaled across

Australia's health system.

Recommendation: Integrate learning health systems as an evolving and overarching model to provide live connection to evidence, research and clinical practice.

27. Considering the proposed Priority 2026-2028 of Skilled and sustainable health and medical research workforce, are there any important elements not captured in this Priority that should be included?

The priority should place greater emphasis on attracting, retaining and upskilling researchers, clinicians and technical professionals (e.g. research infrastructure experts) to ensure Australia maintains the capability required to respond to emerging health challenges. International collaboration should also be embedded as a strategic enabler of workforce capability. While participation in Horizon Europe presents valuable opportunities, the priority could support collaboration with leading research partners across the Indo-Pacific, North America, the United Kingdom and other regions of strategic importance.

Expanding international mobility, collaborative training and research partnerships will strengthen Australia's research capability, increase access to global expertise and infrastructure, and improve translation of research into health and economic outcomes. A resilient workforce, supported by stable career pathways and diverse international partnerships is fundamental to maintaining Australia's competitiveness and maximising the long-term impact of MRFF investment.

Recommendation: Embed international collaboration as a strategic enabler of workforce capability, whilst providing greater support and emphasis on the workforce continuum to upskill, attract and retain skilled workers.

28. Are the proposed Priority Populations appropriate for guiding equity considerations across the proposed MRFF Priority 2026-2028?

The Academy recommends the strategy recognise underrepresented areas of women's health research as a strategic investment priority. Despite improvements in health research, significant evidence gaps remain across a range of conditions that disproportionately affect women or present differently in women. These gaps limit the evidence available to inform clinical practice, health policy and service delivery. Including women's health in the Priority Populations would help accelerate research translation into improved models of care and health care policy to contribute more equitable health outcomes.

The strategy should also promote the routine consideration of sex and gender as factors in research design, analysis and translation, ensuring the MRFF investments generate evidence that is robust, representative and relevant to the health needs of Australia's population.

Consideration should also be given to cumulative disadvantage experienced by people belonging to multiple priority groups (intersectionality). This should include transparent reporting of equity outcomes across the MRFF portfolio.

Recommendation: Include women's health research in the Priority Populations.

29. Is there any additional feedback on the proposed Priorities you would like to provide that has not been addressed above? (Optional)

While the strategy provides emphasis on innovation and translation pathways that improve health outcomes, further specificity is required in the priorities. Alongside technological and pharmacological advances, psychosocial, education and implementation focused interventions should be recognised as equally important mechanisms for translating research into improved healthcare and population health. **This should be reflected within the existing priority 'Embedding research in the health system'**. Similarly, an operational definition of 'prevention' would provide greater clarity on the scope of eligible activities and promote consistent interpretation across MRFF funding opportunities.

Recommendation: Include psychosocial, education and implementation focused interventions in the priority 'Embedding research in the health system'.

Implementation of the MRFF priorities should incorporate robust evaluation mechanisms that measure long-term health, economic, and societal impacts, ensuring investments inform future funding decisions through continuous learning. Balance should remain to ensure there is flexibility to enable the MRFF to respond to emerging health challenges, scientific advances and challenging national priorities.

The Priorities cover a broad list of important areas for the MRFF to fund. Establishing a clear prioritisation framework and breakdown of investment for each priority in the next Investment Plan would provide greater strategic direction, improve accountability and ensure MRFF investments strengthen Australia's long-term research and innovation capability while delivering measurable improvements in health outcomes.

Recommendation: Establish a clear prioritisation framework and breakdown of investment for each priority in the next investment plan to provide greater strategic direction and improve transparency of MRFF investments.

To discuss or clarify any aspect of this submission, please contact Lauren Sullivan, Manager, Science Policy and Advice at science.policy@science.org.au.