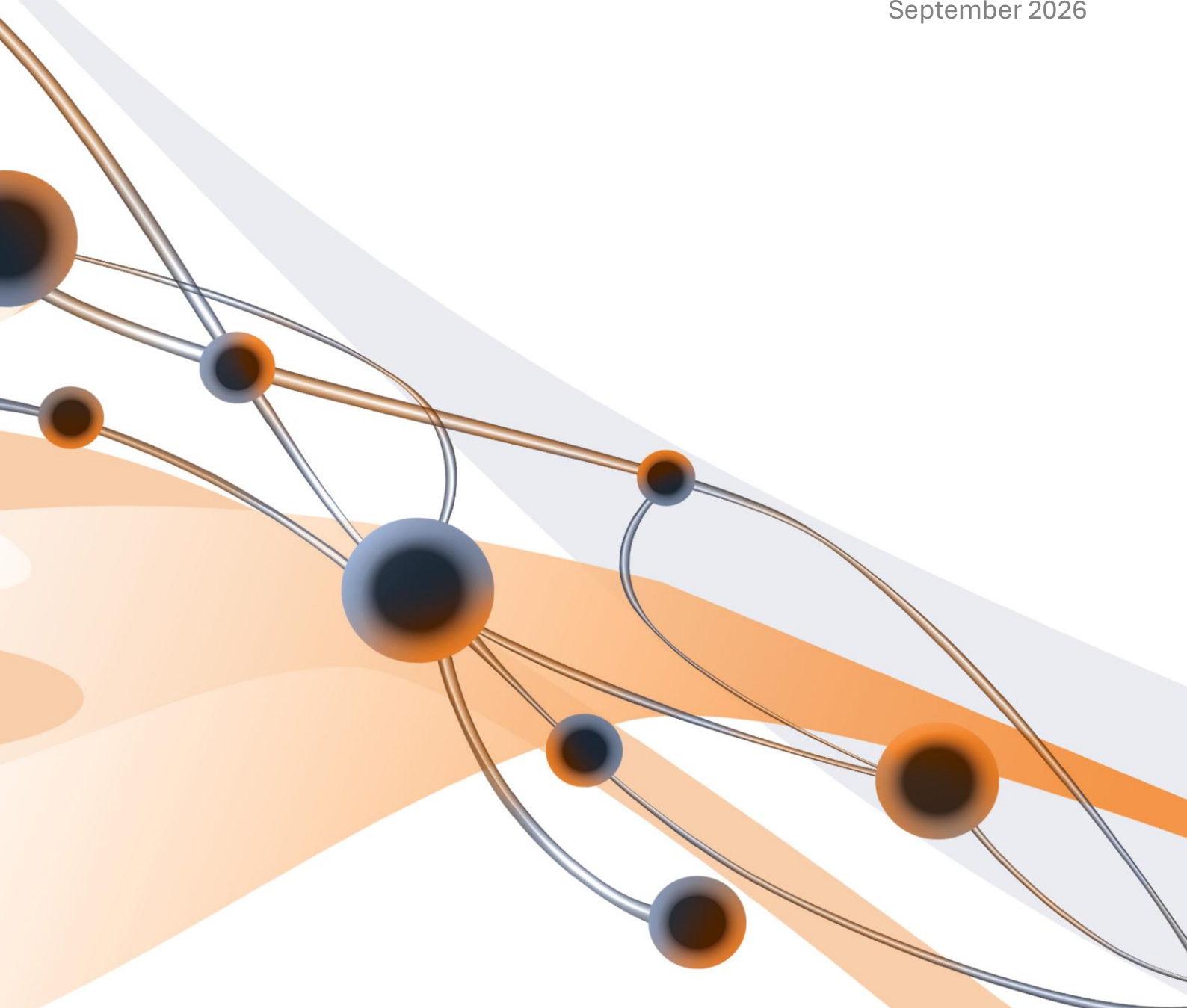


Response to the Joint Select Committee on Artificial Intelligence

Research Australia Submission

September 2026



**RESEARCH
AUSTRALIA**

*Championing
Australian health
& medical research
& innovation*

1. Executive Summary

Research Australia welcomes the opportunity to provide a submission to the Joint Select Committee on Artificial Intelligence. As the national peak body for health and medical research and innovation, we support artificial intelligence (AI) adoption that advances health, research excellence, productivity and sovereign capability while protecting safety, equity, privacy and public trust¹.

We have prepared this submission building on existing work of Research Australia and outreach to our members, who serve as key stakeholders in this process. These members represent the health and medical research ecosystem and include universities, medical research institutes, private and public health systems and services, industry (medtech, biotech and pharma) and consumer advocacy organisations. Their insights and perspectives have been carefully considered to ensure a comprehensive response. We especially recognise the individual researchers and their teams who are leading and contributing to the evidence of the preparedness, processes and impact of AI on health and medical research, and more broadly on health. For example, Professor Enrico Coiera, whose contributions have consistently advocated for approaches to adopt AI in healthcare and work continues to emphasise the need for a unified national approach, improved data interoperability, workforce support, and responsible regulation to enhance patient outcomes and system efficiency.

AI can accelerate discovery, strengthen translation, reduce administrative burdens, support clinical decision-making and improve access to services. Realising these benefits requires coordinated national leadership, fit-for-purpose regulation, trusted Australian health data infrastructure, a capable workforce and stronger evidence of safety and efficacy. Research Australia recommends a comprehensive national healthcare AI plan, supported by a unified health data strategy, sustained investment in national research infrastructure, and exemplar implementations that translate responsible innovation into measurable health, social and economic outcomes². Additionally, it's critical to acknowledge the importance of social licensing and trust with the Australian public in relation to health AI. Australia's competitive advantage in health AI will ultimately depend on its ability to combine technological innovation with the trusted research and health systems needed to develop, validate and deploy it responsibly.

Alongside our submission Research Australia's publication Inspire: [Issue 38 Future of the Health and Medical Research Workforce](#) and [Issue 37 Data and Digital Health Edition](#) provide many case studies highlighting the current application and potential of AI in health and medical research and innovation.

¹ Research Australia, Ethical AI in Health & Research, 2025; Research Australia, Productivity Commission Five Pillars Submission, 2025

² Research Australia and Digital Health CRC, Long-term Strategic Guidance of Australia's Digital Health and Health Data Infrastructure, 2025; Research Australia, Draft National Health and Medical Research Strategy Submission, 2025; Research Australia, SERD Submission, 2025

Recommendations

1. Develop a comprehensive, whole-of-sector national healthcare AI plan that aligns research, regulation, health services, industry, jurisdictions and consumers, building on existing plans and roadmaps ³.
2. Establish a unified national AI and health data strategy, with clear stewardship, secure access, interoperability, Australian data sovereignty and a public-facing approach to data and investment coordination ⁴.
3. Create beacon implementations in priority areas to demonstrate safety, value, governance and pathways to scale, including but not limited to aged care, primary care, childhood cancer, chronic disease, clinical quality monitoring, rare disease, regional, rural, remote and very remote (RRRvR) health and public health ⁵.
4. Strengthen proportionate, adaptive regulation and clinical governance, including transparent evaluation of safety, efficacy, bias, privacy, cybersecurity, commercialisation pathways and real-world performance ⁶.
5. Invest in workforce capability, including practical AI, data science, health economics and regulatory-navigation training for researchers, clinicians, health services, data custodians, public servants and RRRvR workforces. This must include across the workforce, including executive management and leadership ⁷.
6. Build public trust and social licence through transparency, participatory governance, consumer partnership, consent reform, inclusive design and meaningful recognition of lived-experience expertise ⁸.
7. Use public investment, procurement, infrastructure funding and commercialisation policy to retain Australian intellectual property, data value, talent and sovereign capability ⁹.
8. Ensure AI adoption is equity by design, with explicit attention to First Nations' leadership, regional, rural, remote and very remote communities, women's health, people with disability, culturally diverse communities and other groups experiencing systemic barriers¹⁰.

2. AI as a National Health and Research Opportunity

Health and medical research is an area of Australian comparative advantage in which domain-specific AI can deliver broad public benefit. Opportunities include faster research and translation, more efficient health services, improved clinical decision support, and more person-centred access to care. These benefits should be assessed not only through research outputs, but

³ Research Australia, Ethical AI in Health & Research, 2025; Research Australia, Productivity Commission Five Pillars Submission, 2025

⁴ Research Australia and Digital Health CRC, Long-term Strategic Guidance of Australia's Digital Health and Health Data Infrastructure, 2025; Research Australia, INSPIRE 037, 2025

⁵ Research Australia, INSPIRE 037, 2025

⁶ Research Australia, Ethical AI in Health & Research, 2025; Research Australia, Productivity Commission Five Pillars Submission, 2025

⁷ Research Australia, Pre-Budget Submission 2026–2027, 2026; Research Australia, RRRvR Policy Discussion Paper, 2025

⁸ Research Australia, Ethical AI in Health & Research, 2025; Research Australia, INSPIRE 037, 2025

⁹ Research Australia, SERD Submission, 2025; Research Australia, Pre-Budget Submission 2026–2027, 2026

¹⁰ Research Australia, RRRvR Policy Discussion Paper, 2025; Research Australia, MRFF Strategy and Priorities Submission, 2026

through health outcomes, system performance, productivity, economic growth and sovereign capability.

Practical opportunities include, but are not limited to, a single virtual AI “front door” for aged care that simplifies the consumer experience and integrates access to multiple services; leveraging investment in large language models to enhance and accelerate the capabilities of 1800 Medicare in primary care; and using AI to improve interoperability and link data where adoption of industry standards has been difficult. These applications should be co-designed with consumers and evaluated in real-world settings before broad deployment.

Research Australia’s recent data and digital health work shows that AI adoption should be framed as a people-centred reform agenda, not only a technology agenda. Member examples demonstrate AI and digital tools improving childhood cancer data extraction, lung disease detection, inherited retinal disease diagnosis, aged-care quality monitoring, diabetes self-management, vaccination outreach, clinical-quality dashboards, linked data for trials and rare disease visibility. These examples reinforce the need for national coordination so locally successful models can be validated, shared and scaled.

3. National Coordination and Adoption

Australia needs a comprehensive national healthcare AI plan to guide implementation across research and the health system. The plan should define priorities, responsibilities, governance, investment settings and measures of success, while aligning Commonwealth agencies, states and territories, health services, researchers, industry and communities. It should connect with the National Health and Medical Research Strategy, Ambitious Australia the Productivity Commission’s data and digital technology agenda and national research infrastructure planning rather than create another isolated initiative. The plan should include clear implementation milestones, lead agencies, shared accountability across jurisdictions and mechanisms for independent monitoring and evaluation¹¹.

Beacon implementations should demonstrate best practice, enable knowledge transfer and build confidence in adoption. Priority exemplars should have clear public value, mature governance, measurable outcomes and pathways to scale across metropolitan, regional, rural and remote settings. Australia should also draw on collaborative models such as the genomics sector’s alliance-based approach to integrating research and clinical practice.

There is growing consensus within Australia’s health and medical research sector that the principal challenge is no longer whether AI will be adopted, but whether Australia has the systems and capabilities required to adopt it safely, effectively and equitably. The Australian Alliance for Artificial Intelligence in Healthcare’s 2026 *Don’t Walk. Run. AI in Healthcare – The 3rd National Policy Roadmap*¹², led by Professor Enrico Coiera and informed by consultation across more than 96 organisations and 20 peak bodies and government agencies, calls for urgent and

¹¹ Research Australia, Draft National Health and Medical Research Strategy Submission, 2025; Research Australia, SERD Submission, 2025; Research Australia, Productivity Commission Five Pillars Submission, 2025

¹² Australian Alliance for Artificial Intelligence in Healthcare (AAAiH) (2026) *Don’t Walk. Run. AI in Healthcare: The 3rd National Policy Roadmap*. Australian Alliance for Artificial Intelligence in Healthcare, Australia.

nationally coordinated action across leadership, governance, sovereign capability, workforce development, consumer engagement, industry and research.

Research Australia supports this emphasis on national coordination. AI capability in healthcare cannot be understood simply as access to technology or computing capacity. It requires a strong health and medical research ecosystem capable of developing, testing, validating, monitoring and evaluating AI in Australian populations and real-world healthcare settings. It also requires an appropriately skilled research and clinical workforce, representative and accessible data, mechanisms for translation and implementation, and governance arrangements that maintain safety, public trust and social licence.

Australia should therefore approach AI in health and medical research as a national capability requiring coordinated investment across research, workforce, data, infrastructure, regulation, implementation and community engagement.

4. Health Data, Interoperability and Sovereignty

AI capability depends on access to high-quality, representative and appropriately governed data. Australia's health data remains fragmented across Commonwealth, state, territory and private systems, with barriers to discoverability, timely access and linkage. A unified national AI data strategy should establish person-centred governance, nationally agreed standards, secure access mechanisms and clear stewardship while recognising Indigenous Data Sovereignty, consumer control and the need to make under-counted populations visible in health systems.

Recent Research Australia positions also support a National Health and Medical Data Infrastructure Strategy that maps existing assets, harmonises governance, builds common data models, improves interoperability and enables secure, ethical linkage across clinical, administrative, genomic, phenomics, imaging and research datasets. This should include investment in trusted research environments, sovereign and secure compute, synthetic data governance, data linkage capability, RRRvR-relevant datasets, national registries, regional data access models and platforms such as Health Data Australia, while reducing the burden and uncertainty that currently prevents smaller research teams, health services, RRRvR communities and startups from using data for public benefit¹³.

System sovereignty is increasingly important amid geostrategic instability. Exporting Australian data while importing services can transfer economic and strategic value offshore, weaken domestic capability and create supply-chain dependencies. Government should support secure Australian infrastructure, narrow domain-specific models trained on Australian data, and commercialisation pathways that retain intellectual property, capability and value in Australia.

¹³ Research Australia and Digital Health CRC, Long-term Strategic Guidance of Australia's Digital Health and Health Data Infrastructure, 2025; Research Australia, RRRvR Policy Discussion Paper, 2025; Research Australia, INSPIRE 037, 2025

5. Safety, Evidence and Fit-For-Purpose Regulation

The healthcare AI landscape is evolving quickly. Industry self-organisation, including voluntary codes, is developing alongside increased regulatory capability within bodies such as the Therapeutic Goods Administration, the Australian Commission on Safety and Quality in Health Care and the Australian Health Practitioner Regulation Agency. However, evidence about the safety and efficacy of many emerging tools remains limited, and regulatory maturity is uneven across use cases.

The rapid, sometimes unregulated adoption of generative AI (including clinical scribes) risks outpacing provider governance and regulatory response. This “Uberisation” of healthcare can expose patients, clinicians and services to tools deployed before adequate assurance is available. Australia needs proportionate, adaptive and nationally coherent regulation supported by practical guidance for health providers, clear accountability across the AI supply chain, post-market monitoring and independent evaluation in real-world clinical settings.

Privacy, cybersecurity and consent must be treated as core AI infrastructure. AI models can create re-identification risks, infer sensitive attributes or support secondary uses that were not transparent to participants. Research Australia supports early consideration of consent, privacy law, ethics approval, commercialisation pathways, software-as-a-medical-device requirements, and the emerging AI safety standards framework. Simplified, participant-centred consent processes and clearer guidance for ethics committees should be part of a national approach to enabling responsible data sharing.

A national framework should also recognise that data sharing, consent and ethics are not merely compliance tasks: they determine whether AI-enabled research can proceed efficiently and legitimately. Research Australia supports simplified participant information and consent processes, clearer guidance for ethics committees, transparent management of commercial uses of data, and stronger support for trusted and secure analysis environments¹⁴.

Regulatory settings must also anticipate demand distortion from imported health beliefs and model outputs that do not reflect Australian evidence, policy or population needs. For example, AI systems influenced by overseas vaccine policies could amplify local hesitancy and contribute to avoidable infectious disease risk. Health AI deployed in Australia should therefore be demonstrably suitable for the Australian context, transparent about material limitations and subject to appropriate clinical oversight.

6. Workforce

Workforce capability is a precondition for safe adoption. Clinicians, researchers, managers, regulators and consumer partners need practical AI literacy as well as support to navigate ethical, legal, cultural, procurement and regulatory obligations. Government should consider an adoption-support model similar to AI Adoption Centres, tailored to the health and medical research ecosystem and accessible to organizations with limited internal capability.

Workforce capability must be recognised as core national infrastructure. Research Australia has consistently highlighted the need for a sustainable and translation-oriented workforce that can

¹⁴ Research Australia, INSPIRE 037, 2025; Research Australia, SERD Submission, 2025

move effectively between research, clinical care, industry and public policy. Realising the benefits of AI will require investment in clinician-researchers, data scientists, implementation specialists, health economists and regulatory experts, as well as AI literacy across the broader health workforce. Building these capabilities will strengthen Australia's ability to develop, evaluate, adopt and scale AI innovations while ensuring that the benefits of publicly funded research are translated into improved health outcomes and system performance. This aligns with the workforce enabler of the Draft National Health and Medical Research Strategy 2026-2036, which emphasises attracting, retaining and developing a diverse health and medical research and translation workforce ¹⁵.

In recent contributions to Research Australia's online publication¹⁶, National Chief Executive Officer at Calvary Health Care, Mr Damian Bruce identifies four key approaches to building workforce capability and governance for responsible AI integration in healthcare:

1. Establish a dedicated national AI-in-health regulatory framework based on existing government and state frameworks to ensure consistent governance, transparency, data standards, and accountability.
2. Develop a long-term, sustainable funding strategy for AI health research that encourages interdisciplinary collaboration and maintains global competitiveness, aligning technological advancements with societal values.
3. Promote structured priority-setting through large-scale events involving clinicians, communities, and AI developers to identify critical health problems and co-design solutions, ensuring affected stakeholders shape AI development.
4. Invest in workforce education and AI literacy programs for healthcare professionals and regulators, including accreditation of AI developers, to enhance human oversight, confidence, and accountability in AI-enabled care.

Additionally, Digital Health Collaborative Research Centre (DHCRC) CEO, Professor Annette Schmiede¹⁷ emphasises that traditional training alone cannot meet the demands of the evolving digital health and medical research workforce. The DHCRC has adopted a system-wide approach, involving universities, industry, government, and health services, to develop a digitally capable, research-informed, adaptable, and connected workforce. Their initiatives focus on enhancing digital skills, data and research expertise, and fostering collaboration and innovation, recognising that successful digital transformation depends on people, not just technology.

The DHCRC's Emerging Leader Program exemplifies a novel approach, prioritising skills like systems thinking, communication, and collaboration over disciplinary expertise. Participants work on real industry projects, gaining practical experience, building networks, and developing leadership qualities at the intersection of healthcare, technology, policy, and research. Importantly, the program supports individuals at various career stages, reflecting the nonlinear nature of modern careers.

The key insight from this program is that digital health leadership is defined by capability and mindset, not titles. Emerging leaders are champions of evidence-based innovation aimed at improving patient outcomes and clinician experiences. Australia's health workforce faces significant challenges due to an aging population and rising chronic diseases, making such adaptable, digitally skilled leaders essential for future success.

¹⁵ Research Australia (2026) *Workforce – Looking Ahead: Shaping the Research Workforce for Tomorrow*. Research Australia, Sydney

¹⁶ Research Australia, INSPIRE 038, 2026

¹⁷ Research Australia, INSPIRE 038, 2026

7. Trust and Social Licence are Essential Infrastructure for AI Adoption

Trust and social licence are essential to realising the benefits of AI in health and medical research. Research Australia supports the responsible adoption of AI to improve research, healthcare and productivity. However, technological capability alone will not determine whether these benefits are realised. Public trust will be critical, particularly where AI relies on sensitive health information, influences clinical decision-making or uses data collected through publicly funded health and research systems.

Internationally, the OECD is moving beyond high-level principles for trustworthy AI towards the practical conditions required for responsible implementation at scale. These include appropriate governance and guardrails, trustworthy data and infrastructure, workforce capability, evaluation, transparency and meaningful engagement with patients, healthcare professionals and communities.

Australia is broadly aligned with these principles. The next challenge is to operationalise them consistently across the health and medical research ecosystem. This requires moving beyond seeking public acceptance after technologies have been developed and instead building social licence throughout the AI lifecycle.

Consumers, patients, clinicians, researchers and diverse communities should be meaningfully involved in the development, evaluation, implementation and governance of AI through co-design, participatory mechanisms and transparent communication. Particular attention is required to privacy and secondary uses of health data, representative datasets, algorithmic bias, explainability, accountability, cybersecurity and accessibility. AI should complement, rather than undermine, trusted relationships between researchers, health professionals, patients and communities.

Research Australia therefore considers social licence to be enabling infrastructure for AI, alongside data, research infrastructure and workforce capability. Investment in public engagement, evaluation and trustworthy governance should form part of Australia's national AI capability rather than being treated primarily as regulatory compliance.

8. Equity and Indigenous Data Sovereignty

In line with the Closing the Gap National Agreement, Priority Reform 4, Indigenous Data Sovereignty and Indigenous Data Governance should be embedded in the development and use of AI. Recent Australian research by Prehn et al.¹⁸ warn that AI systems built on existing data ecosystems can reproduce and amplify historical patterns of exclusion, misrepresentation and deficit framing.

First Nations peoples should therefore be more than data subjects or end-users. They should have meaningful authority over how data concerning their peoples, communities and knowledges are created, governed, interpreted and used, and how AI systems using those data are designed

¹⁸ Prehn (Worimi), J., Carlson (Aboriginal), B., Walter (Palawa), M., Lovett (Wongaibon/Ngiyampaa), R., & Maher (Yamatji, Noongar, Kija), B. (2026). Indigenous Data Sovereignty and the Governance of Artificial Intelligence: Toward Equitable Benefit for Indigenous Peoples. *Journal of Sociology*, 0(0).

and held accountable. This requires recognition of collective as well as individual interests and community-defined understandings of benefit. Such leadership could also inform Australia's broader approach to responsible and reciprocal engagement with all communities.

More broadly, Australia should pursue equity by design. Digital and AI tools can widen existing disparities if developed without culturally safe governance, consumer partnership, digital inclusion, appropriate reimbursement pathways and local relevance. Bias cannot be addressed solely as a technical problem of improving datasets; governance must also consider who determines what is measured, how communities are represented, what outcomes are valued and who ultimately benefits.

Conversely, appropriately governed and co-designed AI can improve access for regional, rural, remote and very remote communities, support First Nations-led services, address gender and condition-specific data gaps, and improve the visibility of people with rare diseases, chronic conditions and complex care needs in health systems and research datasets.

AI approaches for RRRvR communities should therefore be place-based and locally led wherever possible, supported by appropriate infrastructure and workforce investment, and evaluated against community-defined outcomes alongside conventional clinical and economic measures.

9. Investment, infrastructure and translation

AI adoption will not be sustained through isolated pilots. It requires long-term investment in the enablers of health and medical research and innovation: workforce, data, infrastructure, discovery science, implementation science, health services research, health economics, regional research capacity and commercialisation capability. This approach aligns with the draft National Health and Medical Research Strategy 2026-2036, which identifies four foundational enablers for national success: Workforce, Funding, Data and Advanced Technology, and Infrastructure. These enablers are intended to build the capability, coordination and capacity needed to achieve Australia's health, research and economic objectives.¹⁹ Research Australia supports a measurable pathway to lift national R&D investment, stronger funding for NHMRC and MRFF programs, release of available MRFF funding, funding for the full cost of research, and funding models that bridge the "valley of death" between discovery, clinical development, implementation and market readiness

Government procurement and public investment should be used to support Australian-developed health technologies, sovereign manufacturing, secure data infrastructure and local commercialisation pathways. For AI specifically, this includes investment in trusted data environments, interoperable health data systems, sovereign compute capability, Australian-trained models, evaluation and regulatory pathways, and mechanisms that support the translation of AI innovations from research into routine clinical practice. These priorities align directly with the Strategy's Data and Advanced Technology enabler, which emphasises building capability in AI, advanced technologies and linked health data to support research, healthcare delivery and national competitiveness. This includes considering models such as an Australian equivalent to Biomedical Advanced Research and Development Authority (BARDA) which could be aligned to

¹⁹ Draft National Health and Medical Research Strategy 2026–2036, *Enablers and Enabling Initiatives* (Workforce; Funding; Data and Advanced Technology; Infrastructure).

the role of the Australian Centre for Disease Control, stronger IP support, industry PhDs and placements, co-investment models with industry and philanthropy, and end-to-end support for reimbursement, health technology assessment and adoption in health services.

10. Conclusion

AI presents a significant opportunity to strengthen Australian health and medical research, improve health services and build national productivity and resilience. Capturing that opportunity requires coordinated implementation rather than fragmented adoption. This should include a national healthcare AI plan, trusted and interoperable data infrastructure, sovereign capability, fit-for-purpose regulation, workforce support, public participation, sustained investment and evaluation. Research Australia stands ready to work with governments, health services, researchers, industry and communities to translate these principles into safe, equitable and measurable benefits for all Australians.

Thank you for the opportunity to provide a submission in response to the Joint Select Committee on Artificial Intelligence. Research Australia is committed to collaborating with governments, healthcare providers, researchers, industry partners, and communities to translate our recommendations into equitable outcomes that can be clearly measured and beneficial to all Australians.

For further information regarding this submission please contact Dr Talia Avrahamzon, Head of Policy, Projects and Advocacy at talía.avrahamzon@researchaustralia.org or policy@researchaustralia.org

Warm regards,



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