

STRATEGIC EXAMINATION OF RESEARCH AND DEVELOPMENT SUBMISSION

April 2025

Summary

Research Australia, as the national alliance and peak of health and medical research, development and innovation, is pleased to have the opportunity to make this submission as part of the Strategic Examination Research & Development (SERD). This coming year offers a real opportunity to address the challenges identified in the Discussion Paper, through both the SERD and the Australian Government's development of the National Health and Medical Research Strategy, which Research Australia has advocated for since 2021. We have the unique opportunity to reform and reimagine a whole of R&D system that sets up a future Australia. One that is responsive, affordable, and sustainable. Given more than a quarter (26%) of Australia R&D is spent on health and medical research, there needs to be a dedicated focus in the Strategic Examination of R&D on health and medical research, development and innovation. We don't believe that these two initiatives should be seen or conducted as delinked.

A strong health and medical research, development and innovation sector enables greater outcomes and productivity through better health, drives efficiencies across Australia's health system and delivers new revenue opportunities through creating an Australian industry and the export of health innovations. We define health innovation as the development and implementation of new or improved health policies, practices, systems, products, technologies, services, and delivery methods that aim to improve healthcare efficiency, effectiveness, quality, sustainability, safety, and/or affordability. It includes both translation and / or commercialisation, including digital health, precision medicine, new models of care, improved infrastructure and service planning.

The investments we make during the next 18 months will be the difference between short term ad hoc investments or establishing a policy framework and infrastructure that will future proof the health and medical research, development and innovation sector, and Australia into the future. A cohesive, future-focused approach is essential for national health and economic prosperity. We have the potential to serve as a regional hub for world-class medical services and clinical trials, enhancing our global reputation as a leading health system and contributing to better health outcomes worldwide.

To summarise, the key to long term, sustainable prosperity is a more complex economy; greater complexity requires greater diversification of exports; existing knowhow provides a moderate number of opportunities to diversify our production; and the key to diversifying our exports and our economy is new knowledge creation and innovation, that includes smart manufacturing as an example.

Research Australia's SERD Submission has been developed drawing on previous Research Australia submissions, the contribution of members and broader input. Research Australia undertakes a range of processes to develop evidence-informed positions. We thank our members for their contributions.

This document provides a summary of the key recommendations as outlined in Research Australia's Submission. You can read our full submission [here](#).

For further information, please contact Research Australia's Head of Policy and Advocacy taliam.avrahamzon@researchaustralia.org

Summary of recommendations

SERD Consultation Questions	Key Recommendation
<i>What should an integrated, sustainable, dynamic and impactful Australian R&D system look like?</i>	Given more than a quarter (26%) of Australia R&D is spent on health and medical research, there must be a dedicated focus in the Strategic Examination of R&D on health and medical research, development and innovation.
	Align the Strategic Examination of R&D and the development of the National Health and Medical Research Strategy, especially during the development of recommendations and implementation. Jointly, they must have actions that: <ul style="list-style-type: none"> • are developed by the sector for the sector • be led by a long-term vision and a theory of change • facilitate coordinated, sustainable investment in research • strengthen the connection between research, development and innovation and healthcare • enable emerging innovative health industries, and • ensure accountability through embedding monitoring and evaluation of measures of success
	An integrated, sustainable, dynamic and impactful Australian R&D system looks like: <ul style="list-style-type: none"> • A seamless pipeline from discovery science to health innovation, including translation and commercialisation • Longer and coordinated investment to enable sustainability • Health innovation prioritised as a critical sovereign capability • A whole of systems approach to ensure coordination and investment across all jurisdictions and portfolios towards a shared vision • Innovation embedded in the health system, and • Workforce investments that ensure it meets the needs of a globally competitive future Australia
<i>What do we need to build a national culture of innovation excellence, and engage the public focus on success in health and medical R&D and innovation as a key national priority</i>	Australia needs to build a national culture of innovation excellence, especially focused on health and medical research, development and innovation, is the vision we need to achieve. It involves systemic changes across education, policy, media, investment, and both industry and public engagement. This includes: <ul style="list-style-type: none"> • Building health innovation into the national identity • Rewiring the education system to enable and empower innovators and critical thinkers

	<ul style="list-style-type: none"> • Invest in a thriving health innovation ecosystem, through de-risking innovation in partnership, and where appropriate, with industry, to accelerate bench to bedside and business • Establishment of a governing body that is strategically appointed, and separate from existing funding organisations, and tasked with monitoring and evaluation. • Industry partnerships • Engage the public (community and consumers) as stakeholders • Monitoring and Evaluation feedback loops
<p><i>What types of funding sources, models and/or infrastructure are currently missing or should be expanded for Australian R&D?</i></p>	<p>The funding sources, models and/or infrastructure that are needed for Australian R&D include:</p> <ul style="list-style-type: none"> • Establishing a measurable path to R&D investment of 3% GDP • Better coordination of funding • Defining a pathway to fund the full cost of research, in a rational and sustainable way, including infrastructure • Bridging translational funding gaps • Expanding long-term funding models • Activating government procurement powers • Boosting investment in research infrastructure, including the Centre for Disease Control, clinical trials one stop shop, and data and digital health infrastructure • Growing venture capital and commercialisation pipeline • Increasing philanthropically based health and medical research, development and innovation • Diversifying International funding streams, such as Horizons Europe
<p><i>What changes are needed to enhance the role of research institutions and businesses (including startups, small businesses, medium businesses and large organisations) in Australia's R&D system?</i></p>	<p>Australia needs to undertake both systemic and cultural reforms to enhance the role of research institutions and businesses in Australia's health and medical research, development and innovation system by incorporating the previous recommendations, as well as:</p> <ul style="list-style-type: none"> • Enabling collaboration across the pipeline and workforce through systems and cultural change; and • Developing specific plans for health and medical research, development and innovation, such as a National Medical Products Industry Plan
<p><i>How should Australia support basic or 'discovery' research?</i></p>	<p>To support basic or 'discovery' research, Australia should increase:</p> <ul style="list-style-type: none"> • funding for discovery science through the NHMRC and ARC • funding and ongoing commitment to National Collaborative Infrastructure Scheme (NCRIS), and

	<ul style="list-style-type: none"> investments and approaches that will enable Early- and Mid-Career Researchers to thrive
<p><i>What should we do to attract, develop and retain an R&D workforce suitable for Australia’s future needs?</i></p>	<p>In order to attract, develop and retain an R&D workforce suitable for Australia’s future needs, Australia needs to develop a National Health and Medical Research, Development and Innovation Workforce Plan.</p> <p>The Plan should have a long-term vision with immediate incentives for boosting the current workforce. The actions need to be strategic, embed and leverage other workforce and employment strategies, such as gender responsive budgeting to address the gender disparity within the sector, especially in research leadership positions. Overall, the plan should:</p> <ul style="list-style-type: none"> address the whole pipeline of skills required from initial discovery through to innovation, including translation, entrepreneurship, product development, commercialisation and manufacturing support a highly skilled and sustainable research workforce with circular mobility between academia, industry and other sectors across the pipeline align with changes required in our K-12 education curriculum and national plans to increase the development of skills needed for our future needs be aligned with key measures across other workforce strategies ensure universities (and other institutions across the ecosystem) are equipped to train the next generation of researchers retain Australian researchers and attracts the world’s best talent prioritise marginalised workforces
	<p>Australia should respond to a gap in current workforce strategies and data about Early- and Mid-Career Researchers by investing in a national Early-Mid Career Research Longitudinal Survey that</p> <ul style="list-style-type: none"> builds on previous national EMCR surveys provides the sector a regular environmental scan of key issues and monitor trends engages directly with policy frameworks and institutions in identifying opportunities and systems changes, and identifies and recommends positive systems change across the health and medical research, development and innovation sectors to contribute to a sustainable future workforce
<p><i>How can First Nations knowledge and leadership be elevated throughout Australia’s R&D system?</i></p>	<p>First Nations knowledge and leadership be elevated throughout Australia’s R&D system through identifying key actions in line with the Closing the Gap Priority Reforms.</p>

<p><i>What incentives do business leaders need to recognise the value of R&D investment, and to build R&D activities in Australia?</i></p>	<p>Incentives needed for business leaders to recognise the value of R&D investment and to build R&D activities in Australia should reduce risk, highlight potential returns, and align with broader national and business objectives. In addition to the existing recommendations they include:</p> <ul style="list-style-type: none"> • Financial incentives within funding programs to de-risk private investment in health innovation. • Streamlined regulatory pathways, to accelerated approvals and support for clinical trials and innovative health technologies.; as well as align with international regulatory frameworks to support global market access. • Intellectual Property support to assist in navigating and protecting IP rights • Infrastructure and Ecosystem Support, for example subsidised access to biotech labs, clinical trial networks, AI health data platforms, and the investment of national networks for biobanking and genomics. • Talent and workforce development, support for industry PhDs, postdocs, and internships in private companies. • Innovation clusters and hubs such as investment in health innovation precincts, especially around universities and hospitals; and the co-location incentives for startups and corporates near research institutions. • Market access and global opportunities, such as biobridges and strategic partnerships. • Investment promotion, for example, elevating Australia as a preferred destination for global pharmaceutical and medical technology R&D and marketing Australia's strong clinical trials ecosystem and world-class research.
<p><i>What should be measured to assess the value and impact of R&D investments?</i></p>	<p>Given the contribution health and medical research, development and innovation contribute to our nation, it is essential that we can specifically measure health and medical research, development and innovation investments at a programmatic and systemic level, as well as including on impact on burden of disease, productivity, economic and industry impact.</p> <p>Australia should act on the Innovation Metrics Review; and restore funding to the Australian Bureau of Statistics to improve the capture and analysis of data relating to R&D in Australia as first steps to developing a proper framework for measuring the impact of Australian research and innovation.</p>