RESEARCH AUSTRALIA Championing Australian health & medical research & innovation

Submission to the Select Committee on Productivity in Australia

Thank you for the opportunity to provide a submission to the Select Committee on Productivity in Australia.

As the national peak body for the health and medical research and innovation sector, Research Australia continues to be highly engaged with the national productivity agenda. Over the past year, Research Australia has responded to multiple public consultations, including the Productivity Commission's Five Pillars of Productivity Inquiries, attended invitation-only Roundtables, and utilised our policy and advocacy platforms to consistently highlight the fundamental role health and medical research and innovation is, as an essential and cross-cutting enabler of productivity.

It is well established that every $1 invested in health and medical research yields close to $4 to the Australian economy[1], making public expenditure in the sector budget positive, economically generative and a multiplier of productivity. Investment in health and medical research and innovation is productivity reform – it grows the workforce, drives efficiencies in the health system and reduces costs, and builds high-value industries. According to the Economic Complexity Index (ECI), Australia ranks as the 74th most economically complex country out of 145 studied, despite ranking as the 9th richest economy per capita[2] (noting there are limitations to the methodology of this index)[3]. Furthermore, Australia has diversified exports in recent years, but into lower complexity products – worsening 8 positions in the ECI ranking as a result. The health and medical research and innovation sector is a prime solution to the nation's languishing economic complexity, offering real opportunities in emerging industries which simultaneously unlock productivity growth across the nation.

Recommendations

- Elevate investment in health and medical research and innovation as a critical enabler of high productivity growth in Australia.
- Align a multi-decade national settlement strategy to the recommendations in Research Australia's Regional, Rural, Remote and Very Remote Policy Discussion Paper.
- Fully implement the National Health and Medical Research Strategy and Strategic Examination of R&D to reduce systemic inefficiencies and duplications and expedite productivity growth in Australia.
- Prioritise the development of longitudinal and publicly available R&D datasets to better assess productivity growth emerging from R&D reforms.
- Fully fund the recommendations outlined in Research Australia's Pre-Budget Submission 2026-27.

Backing a high functioning health and medical research and innovation sector means backing the future health and wealth of the nation, and with the advent of the National Health and Medical Research Strategy and Strategic Examination of R&D (SERD), now is the time to reframe investment in the sector as a critical means for achieving future productivity dividends which benefit all Australians. This can be enabled by fully funding the recommendations outlined in Research Australia's Pre-Budget Submission 2026-27.

Objectives for a multi-decade national settlement strategy to achieve a more balanced distribution of population between cities and regional Australia

The development of a multi-decade national settlement strategy must focus on achieving equitable health outcomes and health system access between regional, rural, remote and very remote (RRRvR) communities and metropolitan areas. Multiple analyses across a broad spectrum of policy areas have highlighted a breadth of inequities between RRRvR and non-RRRvR regions[4]. In terms of health outcomes, this includes access to healthcare, maldistribution of the health workforce, as well as the social determinants of health (such as education, employment, housing) all impacting on the ongoing health and wellbeing of regional communities[5]. Equitable investment in research is a key precursor to equitable health; therefore the development of a multi-decade national settlement strategy must align with- and enable the implementation of- the recommendations of Research Australia's Regional, Rural, Remote and Very Remote Policy Discussion Paper.

The current position and opportunities to gain productivity growth

Investment in health and medical research and innovation is a critical and under prioritised lever for productivity growth, with a significant amount of Australian economic activity reliant on the strength of the sector. The opportunities for productivity growth are multifaceted and include, but are not limited:

Improved labour productivity through better health: Labour force participation, as well as reductions to absenteeism and presenteeism are foundational for productivity growth and fundamentally linked to the health of the nation. People with chronic disease, for example, are 60% more likely to not participate in the labour force, are less likely to be employed full-time, and more likely to be unemployed, than those without chronic disease[6]. A well supported health and medical research and innovation sector underpins improved diagnosis, treatment and prevention, ultimately leading to better health outcomes and by extension, improved labour productivity.

Lowering health system costs: In 2023–24, Australia spent an estimated $270.5 billion on health, an increase of $2.8 billion compared to 2022–23[7]. With health expenditure increasing in parallel with the rising rates of chronic disease and an ageing population, research must be seen as a critical cost containment tool. Prevention, early diagnosis and precision treatments reduce demand and ease budget pressures, while investment in health services research optimises care models and drives system efficiencies.

Economically generative industries: Health and medical research and innovation powers high-growth industries such as pharmaceuticals, MedTech, biotechnology and advanced technologies. As a global leader in clinical trials and a beneficiary of a highly skilled workforce, Australia is well placed to grow sovereign capability and export its health innovations, leading to economic diversification and growth.

Translation of innovations: Previous analysis by the Productivity Commission highlighted the importance of widely diffusing health innovations, such as medical technologies and new drugs[8]. Delays to the translation of innovations is lost productivity growth, therefore Australia must focus investment on implementation science to support faster adoption of evidence-based care in the health system, embedding real-world trials in clinical settings and enabling the health system to adopt and scale innovations quickly via whole-of-systems reforms, including regulatory and commercialisation pathways.

Health security and economic resilience: Safeguarding the population from diverse health threats through a strong research sector to identify and respond accordingly is critical to the future of productivity growth in Australia, as exemplified by the impact of the COVID-19 pandemic. Furthermore, increasing geopolitical uncertainty is strengthening the case for sovereign capability development and the diversification of export markets to protect from productivity-reducing economic headwinds.

Supporting a high-functioning and coordinated ecosystem: The health and medical research and innovation sector is inherently fragmented and siloed across several government portfolios, jurisdictions and funding bodies. The advent of the National Health and Medical Research Strategy and SERD is a once-in-a-generation opportunity to implement whole-of-systems reforms which enable the efficient allocation of resources and minimisation of duplications and gaps. This is critical for powering productivity growth within the sector, as well as the resulting impacts stemming from a high-functioning system, as outlined above.

Conflicts of interest and structural barriers to sustainable growth

Achieving a strong and effective health and medical research sector which expedites productivity gains requires addressing the following structural barriers currently inhibiting growth:

Addressing declining investment: Research Australia's Pre-Budget Submission 2026-27 outlines the ongoing real-terms decline in investment in the health and medical research and innovation sector within the context of Australia's falling gross expenditure on R&D as a percentage of GDP, which has fallen from 1.88% to 1.69% over the past decade[9]. At a national level, investment in health and medical research and innovation must be reframed as a critical engine for achieving our national productivity ambitions, instead of an optional cost. Sustained productivity growth cannot be achieved if government continues to overlook the signs of chronic underinvestment and therefore must implement the recommendations outlined in Research Australia's Pre-Budget Submission 2026-27 to bolster investment through the MRFF, NHMRC, ARC as well as the private and philanthropic sectors.

National coordination: The Australian health and medical research and innovation sector is inherently broad and siloed, with decision-making, governance and accountability mechanisms spread across multiple portfolios, jurisdictions and organisations. Strategic alignment, coordination and outcomes measurement through the full implementation of the National Health and Medical Research Strategy is essential and urgent to reduce further systemic inefficiencies and duplications which are contradictory and harmful to productivity.

Data infrastructure: Researchers frequently do not have access to the full suite of data available across hospitals, health systems, research institutes and many other organisations which undertake research due to a lack of national leadership and fragmented infrastructure, governance and standards. This is a critical and ongoing structural barrier to the development of innovations which are unpinned by robust data access and have transformative potential for health-related productivity growth.

Supporting a future-ready workforce: The health and medical research and innovation workforce fundamentally underpins the productivity capacity of Australia's health and innovation system, yet faces systematic challenges, including but not limited to: job insecurity, high attrition rates, fragmented career pathways, inequitable access to opportunities and limited data capture by federal agencies to define, measure and forecast the workforce. Without a strong and well supported workforce, productivity growth stemming from health and medical research and innovation will ultimately falter. Government should work with Research Australia to realise the ambitions of the National Health and Medical Research Workforce Plan and implement the recommendations of the 2026 Research Australia workforce policy discussion paper.

Enabling translation, innovation and commercialisation: Australia suffers from an ongoing innovation bottleneck, whereby translation into the health system and commercial outputs often fail to evolve from research discoveries. This dynamic obstructs the development of high-growth industries and sovereign capabilities, as well as the swift adoption of health innovations which speed along productivity growth.

Opportunities for the states and territories to drive growth

As critical funders and managers of public hospitals and public health, states and territories are essential partners for productivity growth stemming from health and medical research and innovation. With the correct supports to embed research into health systems, the jurisdictions will be active sites of innovation and research translation, helping to drive the adoption of evidence-based models of care and treatments which are integral to improved labour productivity. The integration of health services researchers and health economists is also essential for the efficiency and optimisation of local health systems, driving productivity gains in the resource-intensive healthcare sector.

There is a significant opportunity for the states and territories to also drive productivity growth through preventive health. Australia invests less in prevention compared to other OECD countries, with significant potential productivity returns emerging from investment in programs which inhibit later-stage, expensive health responses[10]. States and territories play a critical role

in prevention as the service delivery, regulatory and community implementation arm, with much of prevention policy responsibility and infrastructure sitting within jurisdictional remit. However, this is not only the responsibility of the jurisdictions – the Commonwealth must commit $1.5 billion over five years to fund the National Prevention and Early Intervention Fund to increase funding for prevention and advance government's commitment to spending 5% of the health budget on it by 2030. This will drive forward evidence-based preventive programs and models, leading to significant productivity gains and system efficiencies.

The impact and opportunity of technology

The health and medical research innovation sector is at the frontier of advanced technologies with the productivity potential to significantly increase output per dollar invested. Innovations such as quantum technologies, robotics and advanced life science technologies such as synthetic biology, as well as AI, are already having a significant impact on healthcare delivery, treatments and patient outcomes. As the sector continues to capture and harness these technologies, government must ensure that the funding, skills pipeline and systems are in place to accelerate growth and capitalise on existing and emerging technological developments.

Case Study: Harnessing AI to unlock clinical insights for childhood cancer research at the Children's Cancer Institute

The Computational Biology Team at the Children's Cancer Institute (CCI), supported by Luminesce Alliance, is using AI to semi-automate data extraction and verify clinician-curated information to improve research quality and accelerate progress in paediatric precision medicine.

For researchers, accessing and interpreting data held within clinical reports is a time-consuming process that requires meticulous manual effort. To overcome these barriers, the CCI is developing an AI workflow that leverages Large Language Models (LLMs) to extract structured, research-ready data from free-text clinical reports. Following a pilot study to demonstrate the feasibility of LLM-based automation in a secure and compliant environment, the team has laid the groundwork for a scalable solution with the potential to pave the way for faster, more effective and personalised treatments for children with cancer.

Figure 1 - Children's Cancer Institute article in Research Australia's INSPIRE Publication (Edition 37 - 2025)

Australian productivity growth is significantly constrained by limited data access and data infrastructure, which continues to inhibit health and medical researchers and innovators from utilising the vast pools of data – currently sitting idle – to make transformative productivity-enhancing discoveries. Hospitals produce on average 50 petabytes of data per year, yet 97% goes unused[11]. The productivity implications of this significant underutilisation are wide ranging, with the Productivity Commission estimating that better use of data in electronic medical record systems could save up to $5.4 billion per year by reducing the length of time patients spend in hospital, and up to $355 million through fewer duplicative tests[12]. Valuable research and innovation activity is being compromised by a significant untapped resource, despite data being a by-product of clinical activity. Government should work with Research Australia and partners, including the Digital Health CRC, to unlock this critical national asset and boost

research and innovation-powered productivity growth (please see communique for more information).

Priority opportunities in the market and non-market sectors for productivity growth

The health and medical research and innovation sector provides significant opportunities for productivity growth in both the market and non-market sectors. From a market sector perspective, the sector catalyses sovereign capability development, workforce participation and high-output commercial outcomes in areas such as pharmaceuticals, MedTech, biotechnology and clinical trials. Taking clinical trials as an example, Australia ranks 9th globally for life sciences research, and national involvement has already contributed over $1.4 billion to the economy and created more than 8,000 jobs – making Australia uniquely positioned to build a world-class ecosystem[13]. Health is both a large industry in its own right and a foundational input into the whole economy, therefore health and medical research and innovation has broad spillovers and implications for productivity growth across Australia.

Productivity growth in the non-market sector is also significantly enhanced by health and medical research and innovation, delivering health outcomes and system efficiencies which reduce strains on public services such as hospitals, aged care and education. With public service delivery costs compounded by increasing inflationary pressures – now is the time to harness health and medical research and innovation to drive productivity and budget sustainability across the non-market sector.

With adequate investment and prioritisation, the opportunities for productivity growth stemming from the health and medical research and innovation sector are significant and far-reaching. The advent of national priority setting emerging from the National Health and Medical Research Strategy and SERD provides a timely opportunity to identify and align priority opportunities for productivity growth with the national reform agenda.

Australia's competitiveness and benchmarking against similar nations

Benchmarking against similar nations provides a useful insight into the competitiveness and performance of the health and medical research sector, and the Australian R&D ecosystem more broadly. Australia consistently outperforms in areas such as discovery research, ranking sixth among OECD countries for publications per capita/per million people[14]. However, benchmarking against similar nations reveals signs of chronic underinvestment in R&D – with Australian government R&D investment at an historic low, flagging behind the OECD average by $1.8 billion per annum[15]. With Australian gross expenditure on R&D (GERD) in a state of decline over the past decade[16], the nation is falling behind while other developed economies are scaling investment in R&D as a critical enabler of productivity growth.

While comparative benchmarking is useful, investment and outcomes data continues to be piecemeal. To enable whole-of-systems reforms and assess their impact against national productivity growth, government must prioritise the development and alignment of longitudinal and publicly available R&D datasets.

Conclusion

Thank you for the opportunity to provide a submission to the Select Committee on Productivity in Australia. We look forward to continuing partnering with government, our members and all relevant stakeholders to elevate and harness the health and medical research and innovation sector as a foundational and critical enabler of productivity growth across Australia.

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

Kind regards,

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About Research Australia

Setup by government following a landmark review in 2000, Research Australia is the national peak body for the health and medical research and innovation sector. Our membership is drawn from the whole pipeline of health and medical research and innovation, from universities and medical research institutes to charities and patient groups, and health care providers and companies commercialising new health technologies. Our priorities include a whole of systems approach to health and medical research and innovation, smarter investment, workforce and advancing prevention. Underpinning these priorities are equitable health outcomes; collaboration; AI and digital health, data and data linkage.

References

[1] KPMG. (2018). 'Economic Impact of Medical Research in Australia'. KPMG.

[2] Harvard University. 'The Atlas of Economic Complexity - Australia'. See https://atlas.hks.harvard.edu/countries/36

[3] Innovation Australia. (2026). 'Australia languishes in updated economic complexity rankings'. See https://www.innovationaus.com/australia-languishes-in-updated-economic-complexity-rankings

[4] Research Australia. (2025). 'Policy Discussion Paper: Advancing health and medical research and innovation across regional, rural, remote and very remote communities in Australia'.

[5] Monash University. (2023). The Driving Force Behind Improving Rural Based Healthcare Research. Monash Lens https://lens.monash.edu/@ medicine-health/2023/09/18/1386086/ the-drivers-force-behind-improvingrural-based-healthcare-research Accessed 25 June 2025.

[6] Australian Institute of Health and Welfare (AIHW). (2009). 'Chronic disease and participation in work' Australian Government.

[7] Australian Institute of Health and Welfare. (2025). 'Health Expenditure'. Australian Government. See https://www.aihw.gov.au/reports/health-welfare-expenditure/health-expenditure

[8] Productivity Commission. (2021). 'Implementing innovation across the health system – Information Paper'. Australian Government. Pg.17.

[9] Australian Bureau of Statistics. (2025). 'Research and Experimental Development, Businesses, Australia'. Australian Government. See https://www.abs.gov.au/statistics/industry/technology-and-innovation/research-and-experimental-development-businesses-australia/2023-24

[10] Productivity Commission. (2025). 'Delivering quality care more efficiently – Interim Report'. Australian Government. Pg 57.

[11] World Economic Forum. (2019). '4 ways data is improving healthcare'. See https://www.weforum.org/stories/2019/12/four-ways-data-is-improving-healthcare/

[12] Productivity Commission. (2024). 'Leveraging digital technology in healthcare'. Australian Government. Pg 2.

[13] Australian Trade and Investment Commission. (2025). 'Australia presents first class clinical trials capability to the world'. Australian Government. See https://www.austrade.gov.au/en/news-and-analysis/media-centre/media-releases/australia-presents-first-class-clinical-trials-capability-to-the-world

[14] Keneally B, Arculus R and Lim W. (2023). 'Realising Australia's Biomedical Potential with Targeted Capability Attraction'. BCG.

[15] Australian Academy of Science. (2025). 'Issues Paper: Incentivising Business Investment in R&D'. See https://www.science.org.au/files/userfiles/support/reports-and-plans/2025/aas-issues-paperfactsheet-rnd.pdf

[16] Australian Bureau of Statistics. (2025). 'Research and Experimental Development, Businesses, Australia'. Australian Government. See https://www.abs.gov.au/statistics/industry/technology-and-innovation/research-and-experimental-development-businesses-australia/2023-24