



Australian Academy
of Health and
Medical Sciences

2023-24 Pre-budget submission

FROM THE AUSTRALIAN ACADEMY OF HEALTH AND
MEDICAL SCIENCES

JANUARY 2023

The Australian Academy of Health and Medical Sciences

PO Box 6114, Woolloongabba, QLD, 4102

www.aahms.org | Ph +61 7 3102 7220 | policy@aaahms.org

ABN: 55 167 124 067

Introduction

The Australian Academy of Health and Medical Sciences (AAHMS) is Australia's Learned Academy for health and medicine – the impartial, authoritative, cross-sector voice. We advance research and innovation in Australia to improve everyone's health.

We are an independent, interdisciplinary body of Fellows – elected by peers for outstanding achievements and exceptional contributions to health and medical science in Australia. Collectively, AAHMS Fellows are a representative and independent voice, through which we engage with the community, industry and governments.

AAHMS welcomes the opportunity to contribute to the Australian Government's considerations for the 2023-24 Federal Budget.

Maximising the value of health spending

As Australia recovers from the COVID-19 pandemic, and as a result of the current global economic climate, we know that the Australian Government is targeting efforts that maximise existing investments, aiming to be fiscally responsible while generating meaningful returns that benefit the Australian community. One of the key lessons of the pandemic is that long-term, sustainable investment in health and medical research and innovation pays dividends. Health and medical research and innovation has not only saved lives but has allowed Australia and the world to navigate an unprecedented global challenge, with health and medical research evidence informing important policy decisions and investments.

Supporting a continuously thriving health and medical research and innovation ecosystem will ensure as a nation, we have the capability to overcome future health challenges that threaten our economy and society.

The Academy published a report in October 2022 that outlines how Australia can benefit more from its spending on healthcare.¹ We identified several measures the Government can take that involve minimal investment but establish a health system equipped to deal with future health challenges and the rising costs of healthcare. Two priorities for the Budget are:

- 1. The Australian Government, through the Department of Health and Aged Care, should establish an inclusive, continuing mechanism that is empowered to develop and implement strategies for embedding research and innovation as core functions of the health system. An alliance for transforming health through research would bring together key partners to work collectively towards this aim.**
- 2. The Australian Government should develop a national strategy and implementation plan for building a world-class clinician researcher workforce. This should include a formal, harmonised clinician researcher training and career pathway that should be developed in partnership with state and territory health departments.**

Investing in research and innovation for the future

We welcome the Labor Party's commitment to raise Australia's gross expenditure on research and development (GERD) to 3% of GDP and urge the Government to begin moving towards this goal in the 2023-24 Budget.² Investing in research and innovation drives economic growth, boosts productivity and creates high value jobs.³

This kind of spending in health and medicine will ensure this ecosystem can flourish and will strengthen Australia's position as a global leader in this area. We would highlight the following priorities for this investment in the Budget:

- 3. The Australian Government should increase the National Health and Medical Research Council's (NHMRC) funding beyond indexation over the next five years to offset the real terms decrease that it has seen to its funding since 2010.**
- 4. The Australian Government should continue to grow its funding for initiatives that support and retain early- and mid- career researchers.**
- 5. The Australian Government should ensure the NHMRC-accredited Research Translation Centres receive meaningful, continuing funding to stimulate the formation of integrated, collaborative research teams that bring together health, academia and industry.**

We welcome the Government's commitment to establish a National Health Sustainability and Climate Unit and encourage further investment in this initiative through the Budget, as a priority for the nation's future health. It is also crucial that the Government is adequately funding policies and initiatives that aim to reduce health inequities for the whole community.

Maximising the value of health spending

Research and innovation as core functions of the health system

1. The Australian Government should, through the Department of Health and Aged Care, establish an inclusive, continuing mechanism that is empowered to develop and implement strategies for embedding research and innovation as core functions of the health system. An alliance for transforming health through research would bring together key partners to work collectively towards this aim.

Australia's health system is world-class, but it is facing significant challenges. COVID-19, aged care, chronic diseases and mental health are just some examples of challenges that continue to put a strain on the system. A combination of these and other factors have led to an inevitable increase in the cost of delivering and maintaining a quality, safe and affordable health system for all. Australia currently spends 10.2% of GDP on health, and the OECD projects that this will rise to 13% by 2030.⁴

We must tackle these challenges with new and impactful solutions that maximise existing investments, enhance what we do well, and target where we can improve.

International evidence shows us that research-rich health environments are better for patients and staff.¹ By embedding research at the heart of our health system, we can get more out of it and improve outcomes for the Australian community. By doing so we can:

- Build a future-proof system that delivers cutting-edge care.
- Fast track Australia's efforts to rise to our health challenges.
- Help manage cost pressures on the health system.
- Maximise the efficient use of existing resources.

Our 2022 report, *'Research and innovation as core functions of the health system: A vision for the future of health in Australia'* was informed by more than 260 individuals and organisations.¹ It found that one of the biggest barriers preventing Australia from reaping the benefits of a research-rich health system is the fragmentation and disconnect between the many stakeholders working to improve the nation's health, healthcare, and research and innovation. Healthcare providers and professionals; federal, state and territory governments; researchers, industry, consumers and other stakeholders all told us they want to see research and innovation better embedded in the health system. However, there is currently no mechanism for key partners like these to come together and act collectively to achieve this goal.

An alliance for transforming health through research could provide a mechanism for these stakeholders, who are rarely in a room together, to meet regularly to discuss the barriers to, and opportunities for, advancing their mutual goals in this area. It will enable open and robust discussion and, importantly, empower key partners to develop and deliver solutions together.

The report highlighted that this sort of approach has been highly successful elsewhere. For instance, in the early 2000s the UK identified similar issues to those we are experiencing in Australia today. They set up the UK Clinical Research Collaboration (UKCRC), which has succeeded in positioning the NHS as a world leader in delivering effective and efficient translation of scientific advances into patient care.⁵

As per the example from the UK, an alliance in Australia would require minimal cost to establish and could:

- Be coordinated by the Department of Health and Aged Care.
- Need one staff member to provide operational support and coordination.
- Include key representatives from the federal, state and territory governments, health and medical research funders, research institutes, AAHMS, consumers and others.
- Be inclusive of all healthcare and research disciplines.

By investing to establish an alliance, the Australian Government could see substantial gains at a low cost that would directly benefit the Australian public.

The clinician researcher workforce

2. The Australian Government should develop a national strategy and implementation plan for building a world-class clinician researcher workforce. This should include a formal, harmonised clinician researcher training and career pathway that should be developed in partnership with state and territory health departments.

Clinician researchers are the cornerstone of a health system that embraces and champions research. They hold posts across both clinical services and research institutions. Clinician researchers can be doctors, nurses, midwives, or allied health professionals, working across the full spectrum of health settings, including primary care, hospitals, community care, public health and aged care. Clinician researchers, working within teams, deliver research that targets patient needs and they support implementation of research findings into practice.

Clinician researchers are fundamental to a system that delivers the best, most up to date care. International evidence tells us that when allowed to thrive, clinician researchers can drive a culture of research and innovation within health systems leading to better health outcomes.¹

At present, there is no clear picture of how many clinician researchers there are in Australia, the training pathways they have taken, the settings in which they work, or their employment arrangements. These data gaps impact Australia's ability to grow and nurture this workforce. Given the important role this group plays in embedding research and innovation in the health system, the consequence is that Australia cannot fully reap the associated benefits, including better health outcomes for patients.

Australia needs to foster an environment in which clinician researchers are supported to grow and flourish. To achieve this, we need to:

- Define the clinician researcher workforce.
- Understand what attracts individuals to enter and remain in this career path.
- Understand this cohort's experiences and how they can be better supported.
- Provide more targeted support, based on experiences in the local context.
- Facilitate more strategic decisions about where clinician researchers are needed.

The Department of Health and Aged Care, working with state and territory health departments, should therefore develop a national strategy and implementation plan to grow and nurture this workforce.

Investing in research and innovation for the future

The National Health and Medical Research Council

3. The Australian Government should increase the National Health and Medical Research Council's funding beyond indexation over the next five years to offset the real terms decrease that it has seen to its funding since 2010.

The National Health and Medical Research Council (NHMRC) supports a broad range of competitive investigator-driven funding initiatives for individuals, teams and projects across the research pipeline.⁶ The breadth of activities undertaken by the NHMRC make it a critical component of Australia's health and medical research and innovation landscape. The NHMRC is the main funder of discovery and public health research. It also pursues a range of strategies to promote research translation into clinical practice and supports the commercialisation of research discoveries.⁶

Australia needs long-term, stable research and innovation funding commitments if we are to maximise the efficiency and impact of these endeavours.

Despite its importance, the NHMRC's funding has declined in real terms over the decade from 2010 to 2020, going from an equivalent value of \$964 million to \$900 million annual funding. This represents a drop in funding per capita over the same period from \$43.50 to \$35.00. This is significantly impacting researchers and the research they conduct. For instance, grant success rates are notoriously low and continue to hover around 13-14%.⁷

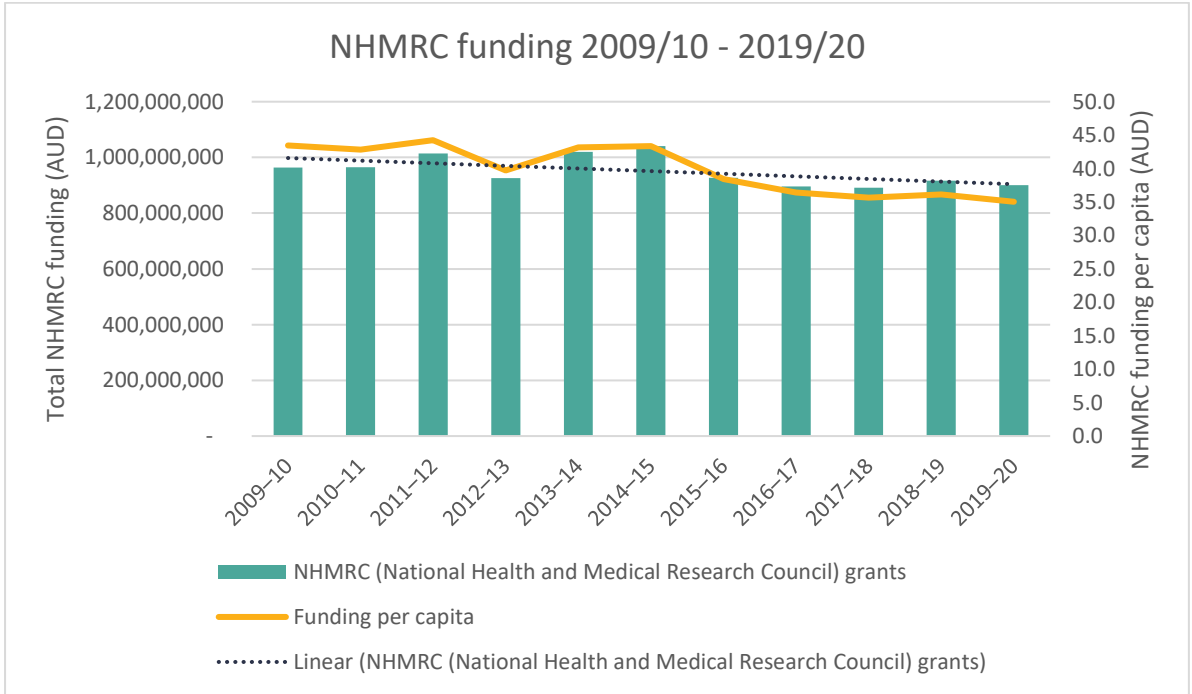


Figure 1: Total NHMRC funding (bars and dotted line) and NHMRC funding per capita (line), 2009/10 – 2019/20. Prices are constant, based on the professional health workers wage rates index deflator. Source: Australian Institute of Health and Welfare, Health Expenditure Australia 2020 – 21 report and Australian Bureau of Statistics.⁸

The NHMRC itself noted that “rapid growth in grant application numbers and rising costs of research have led to funding rates for NHMRC’s major grant schemes falling to historical lows... having a range of negative effects on Australian health and medical research”.⁹

Should these rates continue, Australia will not be able to sustain a world-leading research ecosystem, reducing our competitiveness on a global stage in the short and long-term. Underinvestment impacts the nation’s capacity to generate an evidence base for improving health, to develop a workforce able to develop and translate such evidence, and to advance consumer and community involvement in research. The COVID-19 pandemic has shown us that this is not a risk worth taking because if done right, a well-funded NHMRC:

- Produces world-leading health and medical research that can inform policy and guide investment for the benefit of the economy and society.
- Addresses many of the existing disparities experienced by early-and mid-career researchers and women, leading to greater opportunities to grow the sector.
- Safeguards and enhances research quality and integrity.

Early- and mid-career researchers

4. The Australian Government should continue to grow its funding for initiatives that support and retain early- and mid-career researchers.

Early- and mid-career researchers (EMCRs) play a crucial role in the health and medical research and innovation workforce. Not only do they make significant contributions as part of their research teams, but they also represent the future of Australian health and medical research and innovation.

EMCRs across all disciplines face considerable challenges at a scale that has the potential to affect sustainability of the research workforce in Australia. These challenges have existed for many years however, they have been exacerbated and brought to the fore by the COVID-19 pandemic. Many EMCRs reported that the pandemic, and its associated restrictions and implications, had significant negative effects on their mental health and productivity that would have a lasting impact on their careers and wellbeing.¹⁰

Among other challenges, EMCRs report a lack of secure employment (with many employed on a string of short-term contracts), and increasingly limited options to access sufficient funding due to historically low grant success rates from funders such as NHMRC. Female EMCRs with caring responsibilities are also disproportionately impacted by these challenges.

AAHMS acknowledges the Australian Government’s EMCR initiative that will invest \$384.2 million over 10 years between 2022-23 and 2031-32 through the Medical Research Future Fund (MRFF). We welcome this initiative and support any efforts to build and grow research capacity and capability in Australia by supporting EMCRs to continue their health and medical research careers.

AAHMS would urge the Australian Government to continue investing to support and retain the EMCR workforce. In doing so, the Australian Government should collaborate with EMCRs and research funders who have done work in this area, such as the NHMRC, to develop holistic and sustainable funding solutions that are fit for purpose.

Research Translation Centres

5. The Australian Government should ensure the NHMRC-accredited Research Translation Centres receive meaningful, continuing funding to stimulate the formation of integrated, collaborative research teams that bring together health, academia and industry.

Better embedding research and innovation in the health system is a smart way to maximise existing investments for widespread benefit that can lead to improved health outcomes, as described above. Research Translation Centres (RTCs) are one of the major vehicles in Australia for achieving this goal. They play a crucial role in helping to deliver greater efficiency from existing resources because they seek to speed up translation by bridging the gap between research, innovation, health and consumers. They are accredited by the NHMRC as part of the Research Translation Centre Initiative – which commenced in 2014 – and were introduced as a key tool to help reduce fragmentation across health and medical research and innovation.¹¹

Our October 2022 report, *Research and innovation as core functions in transforming the health system: A vision for the future of health in Australia*, found that the RTCs are a crucial driver for a more active health-academia-industry interface.¹ It is at this interface that ideas and people can come together to ensure the advancement of a research-rich culture. RTCs work with local partners to address local issues in metro, rural and regional areas, where they:

- Act as a broker between research and healthcare delivery.
- Advocate at a national level for health and medical research and its translation.
- Strengthen consumer involvement.
- Build capacity and capability of researchers and clinicians.
- Support implementation science, which improves the translation of research into practice.

Despite their benefits, contributors to our report acknowledged that RTCs are not being used to their full potential. They do not currently have the capacity to effectively play their important role. Core annual funding for each centre to support operations, including for a CEO and a small operational team, would yield a significant improvement in their capacity to foster connections between health, academia and industry. It would also improve their capacity to leverage further funding into the system and to deliver other targeted schemes to meet the needs of the community as they arise.

AAHMS suggests that the Australian Government deliver meaningful, continuing funding to the RTCs so they are empowered to perform their role. We estimate an annual investment of \$10 million for the ten centres currently established would be required.

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