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# Supporting R&D in the Aged Care Sector

Impact Economics and Policy | Sydney Policy Lab

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## Impact Economics and Policy

Impact Economics and Policy brings together a group of expert economists and policy specialists with experience working for government, not-for-profits and big four consulting. Established at the start of 2022, our mission is to partner with clients for impact through providing robust evidence, fresh analysis and strategic communication to tackle Australia's biggest public policy challenges.

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Angela holds a PhD on the Economics of Disability in Australia from Monash University, a Masters in International Health Policy (Health Economics) with Distinction from the London School of Economics and Political Science, a Bachelor of Commerce (Hons) from the University of Melbourne and a Bachelor of Economics from the University of Tasmania.

### Nathan Blane, Manager, Economics

Nathan is an economist and public policy expert that has worked for the Commonwealth Treasury, the Grattan Institute and most recently UnitingCare Australia as a Senior Adviser, Economic Policy. In this role he advised on community services and economic inclusion policies.

## Sydney Policy Lab

The Sydney Policy Lab is a non-partisan space created by the University of Sydney where communities and the academy come together to investigate and solve complex policy issues that face our world. As innovators of a new public policy R&D system, our work builds relationships between people from diverse backgrounds to encourage greater empathy and drive the creation and implementation of community-led policies.

### Dr Kate Harrison Brennan, Director

Kate has worked as Head of Policy & Design at the Paul Ramsay Foundation, CEO of an Anglican not-for-profit, adviser to an Australian Prime Minister and in the public service. Her publications focus on public policy and international organisations.

### Professor Brendan McCormack, Academic Chair, Australia Cares

An internationally-renowned nursing leader, Brendan has spent his career enabling person-centred practices in nursing and healthcare through participatory action research. He is now Head of School and Dean, Susan Wakil School of Nursing and Midwifery at the Faculty of Medicine and Health. Brendan has a deep commitment to cultures and practices of relational care.

We acknowledge Aboriginal and Torres Strait Islander peoples as the Traditional Owners of Australia and their continuing connection to both their lands and seas. We also pay our respects to Elders – past and present – and generations of Aboriginal and Torres Strait Islander peoples now and into the future.

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# Executive summary

Care has always been at the centre of our society, with the relationships it creates and deepens foundational to our collective wellbeing.

Likewise, the care sector plays a pivotal role in our everyday lives, in our communities and in our economy. And as the care sector becomes a larger part of our economy, innovation in the sector is becoming increasingly important.

The benefits of care services are wider than those that can be captured through market mechanisms and include:

- The existence and strength of relationships between carers and care recipients
- The wellbeing and quality of life of carers and care recipients
- The productivity of informal carers and care recipients
- Longer length of life for care recipients
- Reduced health system costs.

Research and development (R&D) is essential for innovation and driving improvements in care outcomes. However, investment in R&D is not occurring and in this research we take a deep dive into aged care to better understand the nature of the problem and the potential solutions.

## Aged care

As with the entire care sector, R&D in the aged care sector is essential to improve the quality and cost effectiveness of services and address the evolving needs of care recipients. The benefits of investing in aged care R&D are varied but they all have a potentially profound impact on outcomes and the overall performance of the aged care system.

R&D in the aged care sector leads to the development of innovative treatments, therapies and practices. By conducting research, the sector can find new ways to diagnose, treat, prevent and manage diseases. Similarly, innovations can be made to improve wellbeing by providing new understandings of the broader lifestyle services on offer through sector. Innovative breakthroughs can save lives and improve quality of life.

On average, Australian firms spend 0.4 percent of expenditure on R&D. In 2020–21 just \$464,953 of the \$3 billion in total expenditure on residential aged care was invested in R&D, or 0.016 percent. By way of comparison, if the aged care sector spent as much on R&D as bee keeping it would equate to an additional \$150 million per year on R&D.

There are international examples of R&D in the aged care sector that have realigned or reimagined services to maximise the outcomes including the autonomy of care recipients and efficiency of delivery. However, changes are needed in Australia in how we value care and support R&D so the potential of such innovations can be harnessed.

A number of reasons can explain the lacklustre performance of R&D in the care sector including the nature of aged care as a good, and difficulties in capturing the true benefits and value of innovation.

In this report we make recommendations to support R&D in the aged care sector going forward:

1. Establishing a coordination organisation for aged care R&D within government.
2. Developing a joint statement to provide a clear and transparent overview of the shared research and development objectives between the government, care recipients and the aged care sector.
3. Increasing government funding to reflect the relational nature of care services and support R&D across different organisational types and locations.

# Why does innovation in the care sector matter?

Innovation is one of the cornerstones of economic policy because it underpins higher productivity and increased prosperity.<sup>1</sup> The investment that firms make in R&D is a major contributor to innovation, and governments work hard to ensure the environment is conducive to such investment.<sup>2</sup>

The CSIRO has estimated every dollar of investment in R&D in Australia generates \$3.50 in direct economic benefits, excluding societal and environment gains.<sup>3</sup>

The services that make up the care sector play a pivotal role in our everyday lives, in our communities and in our economy. And as the care sector becomes a larger part of our economy, innovation in the sector is becoming increasingly important.

However, the care sector's value is greater than what is measured through GDP alone with traditional measures of economic progress not capturing many of the benefits of care work.

Care work is relational and involves a degree of reciprocity, and the nature of the relationship between care recipients and care providers is a fundamental element of the quality of care provided. The very act of providing care generates value through the extension of social ties and forming new relationships, which are not captured or capable of being captured by the market.<sup>4</sup>

Improving the quality, effectiveness and efficiency of care services underpins human flourishing, improved wellbeing

1. Kennedy, S (2023). Opening statement to the Economics Legislation Committee.

2. Department of Industry, Science and Resources (2023). Encouraging Australian businesses to invest in R&D.

3. CSIRO (2021). Returns to Innovation Working Paper.

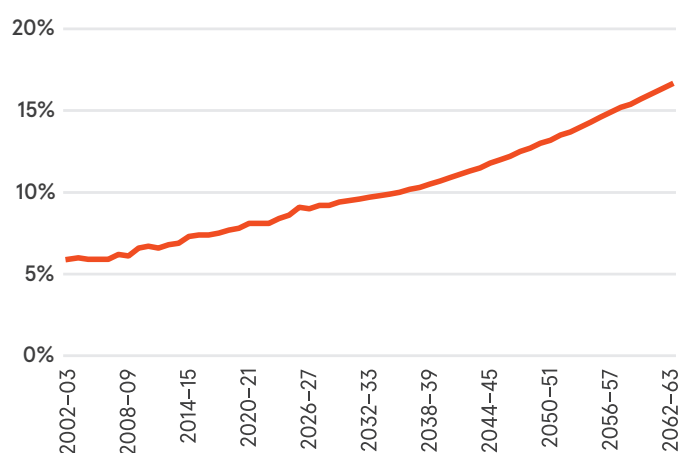
4. Pabst A. (2021). Postliberal Politics: The Coming Era of Renewal.

and better health outcomes in addition to higher economic growth:

- Child care workers influence long term health, educational and economic outcomes for children.
- Aged care workers improve life satisfaction, lower levels of loneliness and through improving health outcomes extend life and reduce health care use.
- Counsellors improve life satisfaction, economic participation and reduce health care use of their clients.
- Disability workers improve life satisfaction, increase economic participation and improve health outcomes of people with a disability.

While the quality, effectiveness and efficiency of care services is heavily influenced by the individuals directly providing care, innovations in models of service delivery and the use of technology can have large impacts.

**Figure 1: Care sector's share of GDP**



Source: Treasury (2023). 2023 Intergenerational Report.



## International innovations in care

There are international examples of how services can be realigned or reimagined to maximise the outcomes we want to promote, like the autonomy of care recipients and efficiency of delivery. However, changes are needed in the way that we value care so the potential of such innovations can be harnessed.

Across the care sector there is a lack of investment in the R&D needed to deliver the innovations in services that could deliver these better outcomes.

This is partly explained by the nature of care services. Providers are unable to fully capture the benefits of innovations. The benefits of care services are wider than those that can be captured through market mechanisms and include:

- The wellbeing and quality of life of carers and care recipients
- The productivity of informal carers and care recipients
- Longer length of life for care recipients
- Reduced health system costs.

In this research we seek to explore in detail what the benefits of such investment could be, why investment is lacking and how governments can ensure policy settings are conducive to investment. We focus on aged care services as an example to highlight the nature of economic and policy issues that will need to be addressed. We conclude there is a need for greater government stewardship of the R&D ecosystem in the care sector to realise the potential gains.

“**The Buurtzorg model** (Dutch for ‘neighbourhood care’) is a nurse-led model of holistic home care that supports independent living in a community setting and is driven by a belief in ‘humanity over bureaucracy’.”<sup>5</sup> Operated by a self-managed team with minimal bureaucracy, the Buurtzorg model privileges the evaluation of ‘person-centred outcomes’ balanced against efficiency and cost effectiveness.

A review of programs that implemented the Buurtzorg model highlights success in achieving a person-centred care approach, improved communication with patients and family caregivers and the potential for establishing new networks with other services. “The main challenges were related to the self-managed working culture, the organizational framework, or national healthcare policies, which hindered the implementation process.”<sup>6</sup>

**Apps** have improved the connection between care recipients and care providers. Evaluations of these apps show improvements in quality of life, care experiences and carer stress.

The use of **Virtual Reality** (VR) to enhance individual wellbeing, for example with patients receiving hospice care. A 2021 study found VR use “holds possibilities for relieving symptoms such as pain and anxiety frequently experienced by people in hospices,” as well as “creating the capacity to reconnect with a previous sense of self and to allow respite through the capacity to transcend current reality and connect with another meaningful reality.”<sup>7</sup>

**Social prescribing** describes methods of enabling health professionals, such as GPs or community nurses, to refer people to non-clinical services or sources of support in their local community. The prescribers, often known as “community connectors” or “community coordinators,” link patients to these services and supports rather than prescribing, for example, a pharmacological treatment. The Global Social Prescribing Alliance showcases best practice in this area and key learnings.<sup>8</sup>

5. The Institute for Research and Innovation in Social Services (2020). [The Buurtzorg Model](#).

6. Hegedüs, A; Schürch A; & Bischofberger, I (2022). [Implementing Buurtzorg-derived models in the home care setting: a Scoping Review](#).

7. Lloyd, A & Haraldsdottir, E (2021). [Virtual reality in hospice: improved patient well-being](#).

8. Global Social Prescribing Alliance (2021). [Global Social Prescribing Alliance Playbook](#).

# Drivers of R&D investment

Firms will undertake R&D when they perceive the expected benefits to outweigh the expected costs.<sup>9</sup> The most common benefits that drive commercial decisions around investment in R&D include:

- Greater market share through offering unique or superior products
- Charging a higher price for a product that is perceived as higher quality or offering more value to consumers
- Increased profit through improved productivity and reduced costs
- Fostering a culture of adaptation and innovation that can keep firms relevant.

The extent to which these benefits are realised will depend on the characteristics of the market a firm operates in and how well it can protect any intellectual property it generates from R&D activity.

Most R&D investment is funded by firms directly. However, governments also play a role in funding due to the wider economic benefits such investment can bring. Government intervention is warranted because firms may invest too little in R&D when they cannot capture all of the benefits or the benefits are highly uncertain.

Almost all OECD countries have policies or programs designed to incentivise business R&D. Most countries have a tax incentive included in this policy mix. Unlike other countries, Australia, alongside Canada and the Netherlands, relies almost entirely on a tax incentive to encourage R&D. Other countries offer more support to business R&D through direct measures like competitive grants.<sup>10</sup>

9. Romer, P (1990). [Endogenous technological change](#).

10. Ferris, B; Finkel, A; & Fraser, J (2016). [Review of the R&D Tax Incentive](#).

## Australian government support for R&D

### Research and Development Tax Incentive

The Research and Development Tax Incentive gives Australian businesses an incentive to invest in R&D by offsetting the costs associated with research and development against the tax a company owes. The objective of the program is to:

encourage industry to conduct research and development activities that might otherwise not be conducted because of an uncertain return from the activities, in cases where the knowledge gained is likely to benefit the wider Australian economy.<sup>11</sup>

### Direct government support

The Commonwealth, state and territory governments also provide direct support for R&D through funding universities, and awarding competitive and specific grants. These sources of support are important and ensure R&D is occurring in sectors where the potential benefits of R&D due to increased market share or reduced costs are unlikely to be realised.

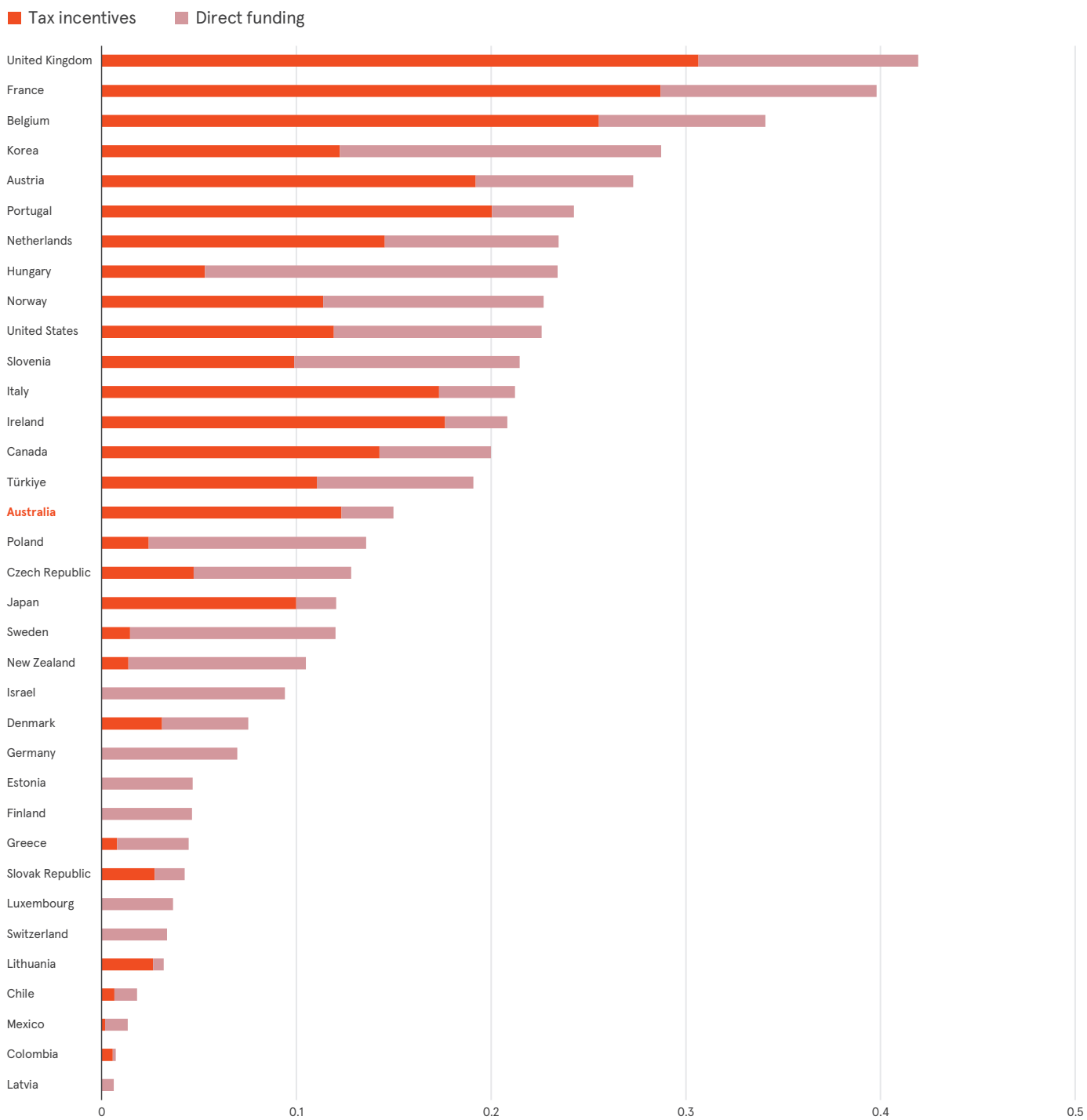
The National Health and Medical Research Council and the Australian Research Council are the two primary sources of research funding in Australia. More recently, more focused funding mechanisms have been introduced to target particular areas of research. For example, \$34 million has been provided to establish Aged Care Research Industry Innovation Australia.<sup>12</sup>

11. Australian Parliament. [Division 355 of the Income Tax Assessment Act 1997](#).

12. Flinders University (2022). [Aged Care Research & Industry Innovation Australia \(ARIIA\)](#).



Figure 2: Tax incentives and direct funding for business R&D, 2019, percent of GDP



Source: OECD (2023). [OECD R&D Tax Incentives database](#).

# Current levels of R&D in aged care

The Australian aged care sector is lagging in its R&D performance when compared to other areas of the economy.

While there have been important and noteworthy pockets of innovation, the sector is not undertaking the same level of R&D seen elsewhere.

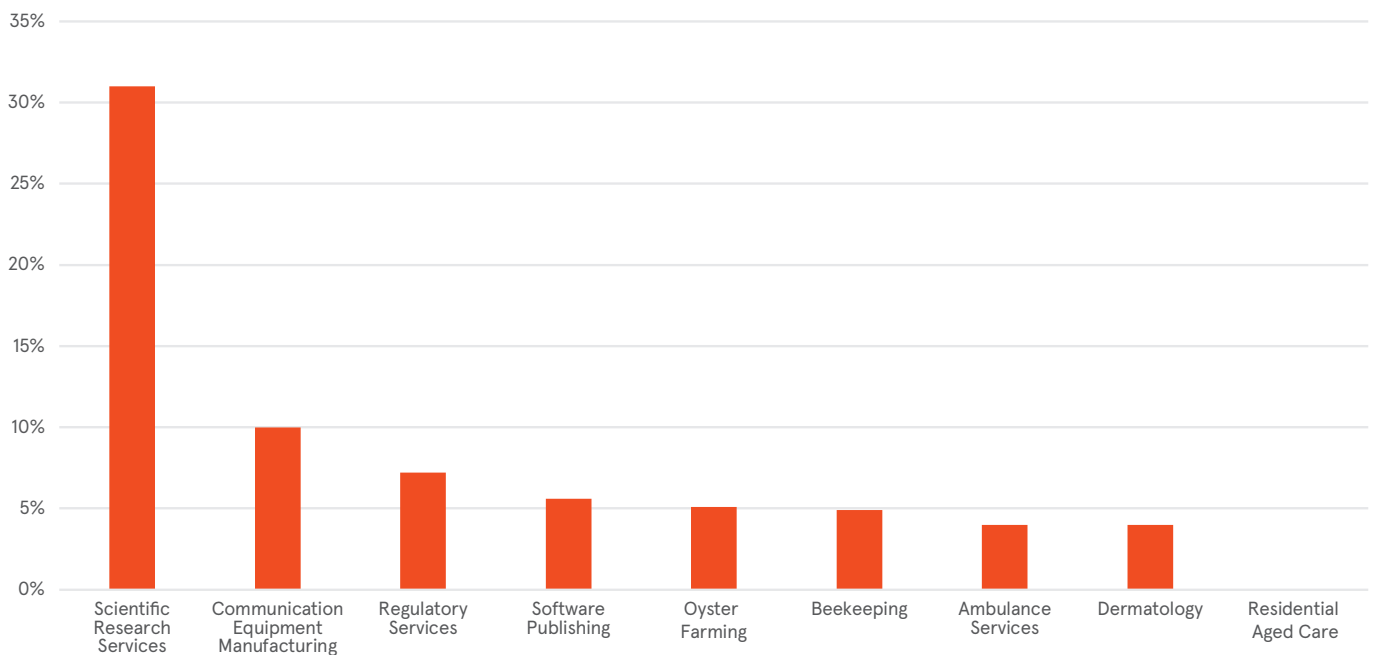
## Private investment

On average, Australian firms spend 0.4 percent of expenditure on R&D. In 2020-21 just \$464,953 of the \$3 billion in total expenditure on residential aged care was invested in R&D, or 0.016 percent.

This is much lower than other sectors such as regulatory services, beekeeping, software publishing and oyster farming, which spend about 5 percent of total expenditure on R&D. In percentage terms, these sectors spend over 300 times more on R&D than the aged care sector, highlighting the lack lustre performance of the aged care sector when it comes to privately funded R&D.<sup>13</sup>

By way of comparison, if the aged care sector spent as much on R&D as beekeeping it would equate to an additional \$150 million per year on R&D.

Figure 3: R&D share of total expenses for select business categories, 2020-21, percent



Source: ATO (2023). [Taxation Statistics 2020-21](#).

13. ATO (2023). [Taxation Statistics 2020-21](#).

## Public investment

Following the Royal Commission into Aged Care Quality and Safety, there has been a renewed focus on public funding of aged care R&D.<sup>14</sup> Two funds have been established to exclusively fund aged care R&D:

- \$34 million establishing Aged Care Research Industry Innovation Australia to 2024.<sup>15</sup>
- \$330 million for the Dementia and Aged Care Services Fund focused on existing and emerging dementia challenges in aged care.

In addition, funding for aged care R&D can be accessed from the Medical Research Fund, the National Health and Medical Research Council and the Australian Research Council Grants. However, very little funding has been awarded to aged care projects:

- \$40 million of the \$2.6 billion Medical Research Fund, less than 1.5 percent, has been directed to aged care since 2017.<sup>16</sup>
- \$19 million of the \$2.8 billion National Health and Medical Research Council, less than 0.7 per cent, has been directed to aged care since 2021.<sup>17</sup>
- \$31 million of \$15 billion from the Australian Research Council (ARC), 0.2 percent, has targeted aged care research since 2002.<sup>18</sup>

14. Royal Commission into Aged Care Quality and Safety (2021). [Final Report](#).

15. Flinders University (2022). [Aged Care Research & Industry Innovation Australia \(ARIIA\)](#).

16. Department of Health and Aged Care (2023). [Medical Research Future Fund grant recipients](#).

17. National Health and Medical Research Council (2023). [Outcomes of funding rounds](#).

18. Australian Research Council (2023). [ARC public datasets](#).

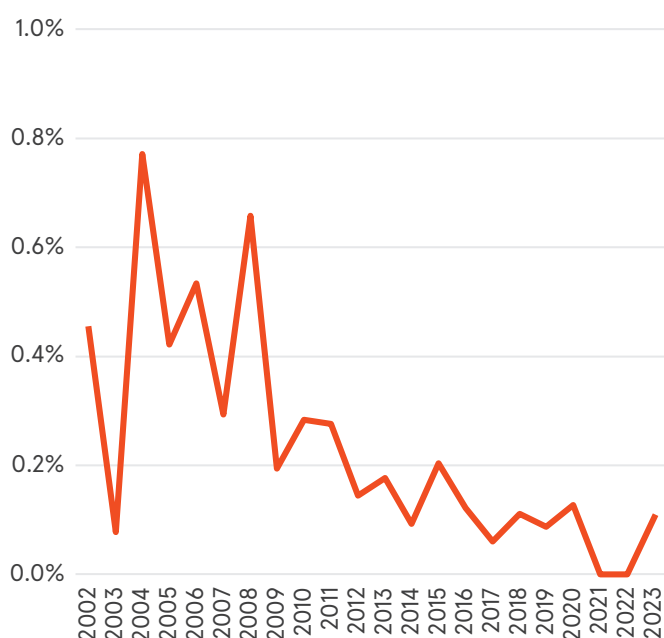
ARC funding for aged care-related research has fallen as a share of total funding over the past twenty years. Between 2002 and 2011, 0.4 percent of the total was directed to aged care, from 2012 to 2023 the proportion was 0.1 percent.<sup>19</sup>

## Total investment

The result is that funding for R&D focused on aged care services is very limited. Across private and public sources around \$100 million per year or 3.6 percent of total expenditure in aged care is spent on R&D.

19. Australian Research Council (2023). [ARC public datasets](#).

**Figure 4: Australian Research Council funding directed to aged care, percent**



Source: Australian Research Council (2023). [ARC public datasets](#).

## Aged care R&D funding

Funding source	Coverage	Total funding	Aged care funding
Private R&D	Aged care only	Over \$13 billion in 2020-21	0.004% – \$0.5 million in 2020-21
Aged Care Research Industry Innovation Australia	Aged care only	\$34 million over two years to 2024	100.00% – \$34 million over two years to 2024
Dementia and Aged Care Services Fund	Existing and emerging dementia challenges in aged care	\$330 million over four years to 2023	100.00% – \$330 million over four years to 2023
Medical Research Future Fund	All health	\$2.6 billion since 2017	1.44% – \$40.2 million since 2017
Australian Research Council	All research	Over \$15 billion since 2002	0.21% – \$31.1 million since 2002
National Health and Medical Research Council	All research	\$2.8 billion since 2021	0.67% – \$18.6 million since 2021

# Why does innovation in aged care matter?

Under current arrangements there is a lack of investment in aged care R&D that is undermining the development of innovative technologies and practices needed to drive improved care outcomes across the sector. As observed in the Royal Commission Interim Report:

Australia prides itself on being a clever, innovative and caring country. Why, then, has the Royal Commission found these qualities so signally lacking in our aged care system? We have uncovered an aged care system that is characterised by an absence of innovation and by rigid conformity. The system lacks transparency in communication, reporting and accountability.<sup>20</sup>

R&D in the aged care sector is essential to improve the quality and cost-effectiveness of services and address the evolving needs of care recipients. The benefits of investing in R&D aged care are varied but they all have a potentially profound impact on outcomes and the overall performance of the aged care system.

Key benefits of stronger aged care research and development capacity include:

1. Services that better meet the individual needs of care recipients
2. Improved cost effectiveness
3. Improved capacity to do more R&D in the future
4. Improved capacity to adopt and diffuse new ideas and regulations
5. Positive spillover impacts.

R&D in the aged care sector leads to the development of innovative treatments, therapies and practices. By conducting research, the sector can find new ways to diagnose, treat, prevent and manage diseases. Similarly, innovations can be made to improve wellbeing by providing new understandings of the broader lifestyle services on offer through sector. Innovative breakthroughs can save lives and improve quality of life:

Investment in innovation, science and research provides the foundation for groundbreaking technologies as well as new and significantly improved

processes, products, marketing and organisational practices.<sup>21</sup>

Simultaneously, R&D in aged care can enhance the efficiency and cost-effectiveness of service delivery. Through R&D efforts, the government and providers can identify better practices and implement new processes to streamline operations. This can reduce administrative burdens, shorten wait times and lower costs.<sup>22</sup>

Strengthening research and development capacity over time builds the human capital required to grow and expand research programs in the sector. The discoveries made through research not only benefit current practices but also lay the groundwork for future innovation. Individuals and institutions develop skills and processes that drive and encourage R&D. As a result, R&D done well today leads to even better R&D tomorrow.

Innovation has been defined as invention plus adoption plus diffusion.<sup>23</sup> Performing research and development well fosters collaboration and knowledge sharing among individuals and institutions across the sector. A robust invention network strengthens adoption and diffusion capabilities across the sector. The practice of implementing locally developed R&D makes the sector more agile and responsive to international developments and mitigates the expense of implementing government policy changes.

Given the interconnected nature of the care sector, and other areas of the economy, there are also positive spillovers beyond aged care. For this reason, innovations intended to improve the aged care sector will also have broader benefits in other sectors.<sup>24</sup>

20. Royal Commission in Aged Care Quality and Safety (2019). [Interim Report](#).

21. Industry, Innovation and Science Australia (2021). [Driving effective Government investment in innovation, science and research](#).

22. Business Queensland (2023). [Research and Development](#).

23. Kelly C, Young A. (2013). [Promoting innovation in healthcare](#).

24. Bakhtiari, S (2016). [The Role of Spillovers in Research and Development Expenditure in Australian Industries](#).

# Why is there a lack of investment in aged care R&D?

As with all firms, aged care providers will undertake R&D when they perceive the expected benefits to outweigh the expected costs.<sup>25</sup> The most common benefits that drive decisions around providers' investment in R&D include:

- Greater market share through offering unique or superior products
- Higher price for a product that is perceived as higher quality or offering more value
- Increased profit through improvement in productivity and reduced costs
- Fostering a culture of adaptation and innovation that can keep firms relevant.

While providers should be able to capture the benefits of reduced costs from R&D, the nature of the market

25. Romer, P (1990). Endogenous technological change.

for aged care services means the benefits of providing a superior product or higher quality may not be fully captured by providers.<sup>26</sup>

In particular, the relational nature of aged care work is based on reciprocity. In order to provide aged care, social ties are extended and new relationships are formed. The value of these relationships cannot be captured within a market framework, creating a market failure and a lower level of quality and provision.

## The market for aged care services

The Australian aged care sector functions as a quasi-market, where government funding to providers is determined by the number and care needs of residents,

26. Harris, R & Trainor, M (2009). Why do some firms undertake R&D whereas others do not?

### Market characteristics

The provision of aged care services requires a degree of reciprocity, and a key value of its provision is through its extension of social ties and new relationships the value of which cannot be captured in traditional markets.

Measuring outcomes and success of R&D is difficult because the impact of provider effort on care outcomes is hard to determine due to differences between residents that are unobservable and the long timeframes over which outcomes occur.

Quality of care has many dimensions and assessment of quality is subjective and heavily influenced by the relationship between carers and users.

Residents with high care needs often must rely on others to make decisions about care.

There is asymmetry of information with providers possessing more information about service quality and how it impacts on residents leading to adverse selection and moral hazard.

The absence of private insurance markets to cover the costs of social care means that governments dominate the financing of the sector. Similarly, many consumers are unable to afford top-up contributions beyond government funding.

Aged care is an experience good, meaning that before moving into aged care judging quality is difficult, so is comparing facilities. The reliance on services for day-to-day needs increases the consequences of making a poor decision. This is especially true given very high costs to switching providers.

### Impact on R&D investment

Because the value cannot be captured, there is lower level of R&D investment than would be socially and economically optimal.

Providers may not benefit from increased market share as a result of R&D if it is not possible to measure outcomes accurately.

Any improvement in quality may not be reflected in available quality data, increasing the risk that there will not be benefits from R&D.

There may be an improvement in the wellbeing and quality of life of residents, but decision makers may undervalue this improvement meaning providers do not benefit.

Providers may be able to overstate the quality improvement.

Providers may not be able to charge a higher price when they provide higher quality care or deliver better outcomes due to government pricing structures.

Decisions are made with limited information and will not track quality as well as other markets.

and residents have the freedom to select their aged care provider. The Government simultaneously regulates provider performance, staffing ratios and consumer charges.

Economists consider that markets represent the most effective mechanism for achieving optimal quantity and quality, with increased competition leading to more efficient resource allocation. However, for this ideal scenario to materialise, the aged care market must align with the characteristics of a perfect market.

The market for aged care has a range of characteristics which make it difficult for individual providers to benefit from R&D, and therefore reduces their incentive to invest in R&D.

These imperfections in the market for aged care services mean providers may not be rewarded for improving quality and better meeting the needs of residents in the same way as with other markets, reducing the benefits of investing in R&D. This strengthens the need for appropriate government regulation and funding of aged care services, as well as the need for government support for R&D in the sector.

The Government could also look towards reforms of the aged care market that would ensure providers are more likely to capture some of these benefits, including:

- Improved use of quality indicators to ensure providers are rewarded through higher market share for improving quality and better meeting the needs of residents
- Limiting price competition to ensure quality is the main source of differentiation between providers
- Use of average pricing so that where providers are more efficient than the market average they are rewarded, and where providers are less efficient than average they have strong commercial incentive to improve their efficiency.

### Nature of aged care as good

Even in a well-functioning market the nature of potential benefits from providing aged care services means they do not accrue to providers in aged care. These benefits can be thought of as positive externalities and, because they are not captured by providers, they do not factor into

Benefits	Beneficiaries				
	Informal carers	Care recipient	Provider	Government	Care workforce
Improved health outcomes	Increased ability to participate in work and improved wellbeing	Improved health	Reduced care costs in residential aged care setting	Reduced expenditure on health care	Improved employment conditions
Improved wellbeing	Increased ability to participate in work and improved wellbeing	Improved wellbeing	No	No	Improved employment conditions
Reduced care costs	Reduced cost of services	Reduced cost of services	Increased profits	Reduced government expenditure	No
Increased demand for services	Not fully realised	Increase in number of relationships	Increased demand for services	Increase in expenditure	Increase in number of relationships

their decision making about the optimal level of R&D.

- Both care recipients and care providers benefit from the provision of care services through the extension and deepening of social ties and relationships.
- While providers benefit from improved health care outcomes through reduced care costs, there are broader benefits including for governments through reduced health expenditure, workers through lower care needs of residents and informal carers through increasing ability to participate in paid work.
- Improved health outcomes and improved wellbeing of care recipients arising from R&D make care recipients a key ultimate beneficiary of R&D done well.
- Increased wellbeing of care recipients can benefit informal carers' and workers' wellbeing, as well as increase the ability of informal carers to engage in paid work.
- Reduced costs of delivering care benefit providers through higher profits but also workers through potentially underpinning higher wages across the sector.
- Increased demand for aged care services not only benefits providers through increased market share, but also can benefit aged care workers through improved employment conditions.

## Consequences of market imperfections and failings

Decisions on what and how much R&D to undertake in the aged care sector should reflect the range of potential benefits and beneficiaries. But there is strong evidence that community priorities are not being appropriately weighted in the current system. In particular, financial outcomes have been prioritised at the expense of care and wellbeing outcomes.

Reflecting the relational nature of care, investment is required across geographies, forms of infrastructure (physical, social and civic), organisational types,

capabilities, jobs and skills. Without a holistic approach to investment in a relational economy, the current basis of value creation – including through the limited R&D that does take place – risks a lack of focus on what we value most as a society.

Evidence heard at the Royal Commission indicated regular, if not common, deviation from community care expectations. Financial outcomes were prioritised above care outcomes when physical and chemical restraints were used with terrible results. Similarly, care priorities suffered when young people were placed in residential aged care because there was nowhere else for them to go.<sup>27</sup> In these and a range of other instances, we see evidence of a tendency to overapply financial consideration and underapply care consideration.<sup>28</sup>

Reversing the underapplication of wellbeing considerations is at the centre of the Government's recently released wellbeing budget, the Measuring What Matters Statement. That statement calls for a more deliberate appreciation of non-financial value and opens:

Traditional economic indicators have long been the focus of public debate and remain a vital part of measuring progress, but they are far from the whole story.<sup>29</sup>

Wellbeing outcomes are at the centre of why we have an aged care system. While measurement of outcomes can make assessing the benefits hard in aged care, care outcomes lend themselves well to R&D projects.

27. Royal Commission into Aged Care Quality and Safety (2021). [Final Report](#). And Royal Commission into Aged Care Quality and Safety (2019). [Interim Report](#).

28. Related research shows the more prevailing a profit motive within an aged care provider, the worse the care outcomes are. Cf. National Ageing Research Institute (2020). [Inside the system: aged care residents' perspectives, A report for the Royal Commission into Aged Care Quality and Safety, Research Paper 13](#).

29. Treasury (2022). [Measuring What Matters Statement](#).

# How to support R&D in the aged care sector

Robust and developed R&D approaches are ubiquitous in high-performing industries. Sectors like agriculture, pharmaceuticals and financial services all have sustained track records of improving productivity to drive better outcomes for consumers. Understanding the drivers in these industries offers the prospect of unleashing the potential for greater R&D in the care sector.

Different sectors draw on different strengths and opportunities to drive effective R&D practice, but there are five important drivers of R&D across all sectors:

- Clear R&D objectives
- Importance
- Sector capability
- Funding
- Risk tolerance.

## Clear R&D objectives

Clear metrics are an important part of R&D as they provide a way to measure and evaluate performance, impact and effectiveness. McKinsey and Co. identify the absence of accountability metrics as one of the four key causes of commercial R&D failure, noting that “R&D groups in most sectors lack effective mechanisms to measure and communicate progress.”<sup>30</sup>

Some of the most successful R&D processes have very simple input and outcome metrics. Often there is just one: make a profit while working within the organisation’s legal and moral obligations. The pharmaceutical industry is renowned for its standardised pipeline of clear progress metrics and valuation implications.<sup>31</sup>

30. McKinsey & Co. (2020). [Building an R&D strategy for modern times](#).

31. Light (2012). [Pharmaceutical Research and Development: What Do We Get for All that Money?](#) SSRN Electronic Journal

In aged care there are not these simple input-output relationships, with the enduring value of care services coming from the impact they have on the individual care recipient’s quality of life. These impacts are often difficult to measure and can be different across different cohorts, location and individuals. This all contributes to the outcomes from R&D in aged care being difficult to ascertain and capture.

Quality of life measures which can attest to the broad benefits of aged care services are by design subjective, multidimensional and individualised, making them challenging to quantify and assess. Other outcome measure such as clinical performance or safety records can be more objective. However, they do not capture the relational nature of aged care services.

The Royal Commission noted the limitation on quality of care research that results from issues with measurement:

... if you are researching for quality of care or quality of life outcomes, these matters are not capable of being flawlessly measured, as compared to blood pressure, for example, which is capable of objective measurement.<sup>32</sup>

However, there is scope for improvement. A comprehensive evidence review undertaken by Flinders University assessed 46 international measurement tools of quality of life, consumer satisfaction and consumer experience.

The quality of life tools reviewed were able to develop understanding of the subject’s physical health, alongside their mental health, emotional state, social connection, environment and personhood. Consumer satisfaction tools develop understanding of the care recipients’ views

32. Royal Commission into Aged Care Quality and Safety (2021). [Final Report](#).



of their own experience around issues such as respect, being supported to make their own decisions and staff skill.<sup>33</sup>

Using tools like these, practice and policy decisions can be made with a fuller understanding of care outcomes. Obtaining this outcome will require the active promotion of wellbeing as a research priority. It will also require more funding into the sector and a more balanced approach to which projects are funded.

### Perceived importance of R&D

In industries with a strong focus on R&D, firms and funders recognise the need to prioritise the research and development topics with the greatest potential benefit.<sup>34</sup> Organisations and individuals are motivated by the scale of the potential benefit of a task or project.

33. Ratcliffe, J. et al. (2021). Measurement tools for assessing quality of life, consumer satisfaction and consumer experience across residential and in-home aged care: Summary Report

34. Cf. Aged Care Research and Industry Innovation (2022). Grants.

Aged care providers have also experienced a consistent cycle of review and incubation paired with very limited success of rolling out new innovations at scale.<sup>35</sup> Pioneer gaps such as this have created fatigue and a sense that R&D isn't as worthwhile because, even if it is productive, it might not be implemented.

Changes in government policy can also produce uncertainty of strategic objectives. Where one government may prioritise quality, a later government may favour alternate R&D objectives such as cost control. This risk led the Australian Centre for Social Innovation to call for new R&D institutions with intergenerational stewardship responsibilities that would provide the sector with consistent objectives.<sup>36</sup>

Ultimately lifting the perceived importance of R&D requires support and guidance by the government and from within the sector. Additionally, the outcomes of R&D need to be promoted and visible.

35. Royal Commission into Aged Care Quality and Safety (2020). Research Paper 3 – Review of Innovative Models of Aged Care.

36. Australian Centre for Social Innovation (2021). Social R&D White Paper.

## Sector capability

Sector capability is essential as “the ability to exploit novel ideas to deliver economically viable innovation is dependent on the strength and availability of scientific cadres and talents.”<sup>37</sup>

Aged care R&D is inadequate in part because expert talent is insufficiently attracted to work in the space. Professor Briony Dow, Director of the National Ageing Research Institute, told the Royal Commission that research into the delivery of aged care is not viewed to be particularly important:

the problem is circular: societal attitudes filter down, aged care research is not seen as a particularly attractive area by educators and researchers, and this is reinforced by a lack of funding.<sup>38</sup>

As with all capability enhancement, R&D capability requires time to develop and strengthen over successive wins and improvements. Again, the aged care sector suffers for having seen too few innovations developed and implemented to full effect.

Once engaged in aged care-related work, skilled researchers will only be motivated to stay if they can see the real world impact of their work being implemented and where the impact of that implementation is transparent.

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37. Sarpong, D (2023). [The three pointers of research and development \(R&D\) for growth-boosting sustainable innovation system.](#)

38. Royal Commission into Aged Care Quality and Safety (2021). [Final Report.](#)

## Funding

There is a case for government intervention through public finance for R&D to support provision of aged care as a good and as an important part of the foundational economy essential for wellbeing and human flourishing.

Making new discoveries requires exploration. This needs expertise, equipment and facilities, regulatory compliance, and market research. Even through these investments, the uncertainty of discovery means failure is common. Each of these R&D components introduces new and often significant costs.

As previously outlined, funding for R&D is lacking in the aged care sector:

Such R&D is typically undertaken by market participants to obtain competitive advantages, but providers in the aged care sector lack the resources to invest in risky R&D.<sup>39</sup>

While government funding can deliver R&D outcomes, direct funding into aged care R&D has been limited with an average of \$1 million a year from the Australian Research Council, \$6 million a year from the National Health and Medical Research Council and \$7 million a year from the Medical Research Future Fund. Ultimately lifting R&D performance in the sector will require additional funding from government.

39. Royal Commission into Aged Care Quality and Safety (2021). [Final Report](#).

## Risk tolerance

Innovators need to be willing to fail. Research shows that in corporate innovation failure tolerance is critical.<sup>40</sup> In the absence of a willingness to fail, the necessary exploration and testing can't be undertaken.

The social license to operate has become an increasingly pressing issue in aged care over the past 20 years with considerable negative media attention relating to the profit focus of providers and common substandard care being offered to recipients.<sup>41</sup> Within this low trust context, provider willingness to undertake trial or experimentation involving care recipients can be muted.

Additional protocols are required for ethical experimentation with people and communities so that social R&D can thrive. This was highlighted when the Royal Commission into Aged Care and Safety and the Royal Commission into Victoria's Mental Health System both recommend participatory research and design activities into deliberative processes.<sup>42</sup>

A coordinator that advises on and supports appropriate risk in aged care R&D will better facilitate the right level of engagement and a greater research output. Transparency of research practice and research outcomes, where appropriate, will also spread the mindset necessary to undertake productive research.

40. Tian, X (2014). [Tolerance for Failure and Corporate Innovation](#). The Review of Financial Studies.

41. Cf. Sammut, J (2008). [The aged care industry is desperate for more of accommodation bonds](#) and Royal Commission into Aged Care Quality and Safety (2021). [Final Report](#).

42. Royal Commission into Victoria's Mental Health System (2021). [Final Report](#) and Royal Commission into Aged Care Quality and Safety (2021). [Final Report](#).

# Jumping aged care R&D barriers

The barriers to greater aged care R&D are considerable. Overcoming them will require comparable and sustained effort.

The following recommendations are necessary to get aged care R&D back on track, including through government funding.

## Recommendation 1

### *A coordinator*

A coordinating organisation should be established for aged care R&D within government. This coordinating organisation should have the following objectives:

- Support a joint statement on aged care R&D: The organisation should provide secretariat support to develop the joint statement on aged care R&D, see recommendation two.
- Balance funding distribution: Ensuring government funding support for R&D in aged care is distributed in a manner that appropriately balances clinical, financial and quality of care objectives, across the economy. This will deliver research efforts that are well rounded and consider all aspects of aged care, leading to comprehensive improvements.
- Promote quality of care: Promote the significance of quality of care objectives within the aged care sector. By emphasising the importance of delivering high-quality care to older individuals, the coordinating organisation can drive a culture of excellence and improvement.
- Ensure integration with care workforce reforms: Ensure investment in aged care R&D keeps the care workforce central, valuing the everyday economy and workers' jobs, supporting vocational education and training, building social relations and trust, and creating meaningful jobs with opportunities for career progression.
- Support and guidance for researchers: Provide support and guidance to researchers in designing and conducting R&D projects in aged care settings. This support should include information on acceptable types of failure, empowering researchers to take calculated risks without fear of detrimental consequences. If necessary, regulations for the provision of aged care should be amended to accommodate support for safe and appropriate R&D.
- Strategic implementation: Improve the implementation process for successful R&D projects. Streamlining the process will ensure that, when effective research is conducted, the resulting improvements can be efficiently integrated into aged care practices.
- Drive transparency: Provide advice to government and the sector on policy settings necessary to strengthen the relationship between quality and market share. Publicly report on the priorities, progress and outcomes of R&D in the aged care sector.

## Recommendation 2

### *A joint statement on aged care R&D*

A joint statement should be pursued to provide a clear and transparent overview of the shared research and development objectives between the government, care recipients and the aged care sector. This clarity ensures everyone involved understands the goals and can work collectively towards achieving them.

Highlighting the importance of quality care as a central research objective should be a focus of the statement. This focus will ensure research efforts are not solely driven by clinical and financial considerations but also by a genuine concern for the wellbeing of aged care recipients.

A statement will also convey that aged care offers promising opportunities for research careers. This can attract talented individuals to this sector, ultimately leading to innovation and improvement in aged care practices.

A clear and well-communicated joint statement will provide confidence within the aged care sector that their efforts in development and improvement will be implemented. This, in turn, can stimulate further innovation and investment in research.

By acknowledging the acceptable types of failure in research, the joint statement will encourage a culture of learning and growth. This fosters an environment where researchers and care providers can experiment, make improvements and collectively advance the quality of care in aged care settings.

## Recommendation 3

### *More funding*

An immediate increase in direct government funding is essential.

Aged care R&D needs more funding. The amount of funding to be delivered into the sector for R&D should be a consideration of the joint statement on R&D, and should ensure that approaches reflect the relational nature of care services including the importance of place.

Short term allowances should be made for the financial crisis currently unfolding in aged care with a long-term view to return to a more even balance between provider and government contributions.

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