



DELIVERING DECENT RESIDENTIAL AGED CARE:

FUNDING THE CARE ELDERLY
AUSTRALIANS DESERVE



EQUITY ECONOMICS



Delivering Decent Residential Aged Care: Funding the Care Elderly Australians Deserve

A global pandemic has once again revealed the precarious position of many elderly Australians living in residential aged care. With infections spreading through many aged care facilities, aged care workers putting themselves at risk, and resources being stretched to their limits to protect our most vulnerable citizens, the need for reform of our aged care sector is once again in the spotlight.

Unfortunately, this does not come as a surprise. Rather, it follows startling evidence and interim findings of the Royal Commission into Aged Care Quality and Safety in 2019, which confirmed that our current system of residential aged care is failing older Australians. To our nation's great shame, the Royal Commission's Interim Report found that Australia's aged care system does not guarantee the delivery of safe or high quality care, is often unkind and uncaring towards older people and, in too, many instances, neglects them.¹

Australia's residential aged care sector is not fit for purpose. Inadequate funding, poor transparency and a range of workforce challenges are failing older Australians. International comparisons reveal that based on current staff ratios, **only 42.5 per cent of Australian Aged Care Homes would be considered satisfactory under the star rating system used in the United States of America.** Australian aged care residents receive fewer total hours of care than international counterparts. As our population ages and the number of people relying on residential aged care services increases, the failures evident in the system will only get worse.

In this report we review the challenges confronting residential aged care in Australia, including the low quality of care afforded by the current system and challenges confronting the aged care workforce. We explore a range of responses recommended by the Royal Commission, including lifting quality standards through greater transparency, increased funding, a new pricing model and addressing the inadequate pay of the hard-working aged care workforce. Drawing on original research and modelling, we forecast the additional cost of such a system and provide a number of options to fund additional expenditure.

The additional cost of delivering high quality, decent care to older Australians in residential aged care is between \$2 billion and \$20 billion over four years, depending on the ambition of reform. This reform lifts quality by increasing the number of staff caring for aged care residents and attracting and retaining a caring and skilled workforce by lifting wages above the minimum wage. To meet these costs, the Medicare Levy would need to increase by between 0.1 and 0.65 per cent.

High quality, safe and decent care for older Australians can be achieved if we can agree as a society to lift the Medicare Levy from its current level of 2 per cent to 2.65 per cent. This analysis demonstrates that high quality, decent residential aged care is achievable in Australia.

The recent health crisis and its sustained impact on the broader economy, demonstrate that ignoring the most vulnerable, poses a significant risk to all Australians. We cannot afford, nor can we continue to accept, the neglect of our elderly.¹

About the Authors

Equity Economics is a unique economic consultancy firm committed to more inclusive economic growth and social policy. Founded in 2013, Equity Economics provides high-quality economic analysis and policy advice to a broad range of not for profit, community, corporate and government organisations.

Our team is united by a commitment to addressing issues surrounding inequality and promoting access to quality services. Our skills span economic and health policy, social inclusion and participatory development. A driving motivation for our team is ensuring the community sector has access to the economic and financial skills and resources needed to thrive.

About the Health Services Union

The Health Services Union NSW/ACT/Qld represents some 43,000 members working in diverse areas including public health, private health, community health, ambulance services, aged care, disability services, pathology, and medical imaging.

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Introduction

On the face of it Australia's aged care system is working well, delivering 300,000 Australians care every day. The majority are in residential aged care, with 188,000 residents and a further 109,000 people receive long term care in their own home.² In 2017-18 Australia's aged care system quality assurance system judged that 97 per cent of residential aged care providers met the minimum standards.³ These impressive statistics hid systematic issues with quality and safety of care across the residential aged care system uncovered by the Aged Care Royal Commission.⁴ The system has revealed itself to be fragmented, unsupported and underfunded.⁵

“We have found that the aged care system fails to meet the needs of our older, often very vulnerable, citizens. It does not deliver uniformly safe and quality care for older people. It is unkind and uncaring towards them. In too many instances, it simply neglects them.”

Aged Care Royal Commission Interim Report, 2019.



Counsel assisting the Royal Commission have noted that in order to achieve high quality, safe and person-centred aged care services there needs to be action on staffing numbers and mix, skill levels, remuneration and conditions of work.⁶ ***Addressing these issues today will ensure that a growing number of Australians that will rely on residential aged care into the future can be assured of receiving quality and safe care.***

But as recognised by the Royal Commission in its 24 June 2020 Consultation Paper on Financing Aged Care, this will require additional spending that will need to be funded through either increased taxation, new models of financing or increased user fees⁷.

Case study: The Perspective of a family member of an aged care resident

Extract of Lisa Backhouse's statement to the Aged Care Royal Commission, Darwin, 11 July 2019.

The aged care sector has undergone a monumental shift over the past decade, but reform has not kept pace.

When Mum entered the system the majority of residents were low care. The facility was essentially a supporting living arrangement where meals, laundry, cleaning and medical services were provided but normal life continued to a substantive degree. By the time Mum was deemed high care the centre had also morphed, much like a frog in boiling water, into a secure dementia facility where the doors no longer opened without code access, and hoists, electric hospital beds and medical paraphernalia were the norm.

The majority of residents are now (sic) high care patients and around half suffering some form of dementia. Their needs are greater than ever before and the work of the carer so much more important.

The vast majority of carers are loving, compassionate and diligent people who bring a wealth of pride to their work. They have extremely hard jobs and they do it well under the circumstances. However, they desperately need more training and better qualifications to meet the increasing demands and the complex needs of residents.

The workforce must be professionalised to improve standards and quality of care and, yes, that means regulation and appropriate funding and remuneration. It means developing proper career pathways to attract and retain the best employees. It is expensive and it's going to become more so as the baby boomers enter the system, but change must come, and it must come quickly.

Older Australians like mum have given of their bodies, minds and spirits to grow a future for their families and communities and have laid the foundations of a society we enjoy today. Growing old should be a dignified experience where self-respect can be maintained.

The next generation must have confidence that their basic physical, psychological and human needs will be met and hopefully exceeded when they are at their most vulnerable. The current situation is heartbreaking at best, criminal at worst. When we look back in years to come, much like the orphanages of yesteryear, this will be our country's greatest shame.

² Australian Institute of Health and Welfare (2020.) GEN fact sheet 2018–19: People using aged care. Canberra: AIHW.

³ Dyer SM, Valeri M, Arora N, Ross T, Winsall M, Tilden D, Crotty M (2019). Review of International Systems for Long-Term Care of Older People. Flinders University, Adelaide, Australia.

⁴ Royal Commission into Aged Care Quality and Safety (2019), Interim Report: Neglect

⁵ Ibid.

⁶ Royal Commission into Aged Care Quality And Safety Counsel Assisting's Submissions On Program Redesign (2020), Adelaide Hearing, 4 March 2020

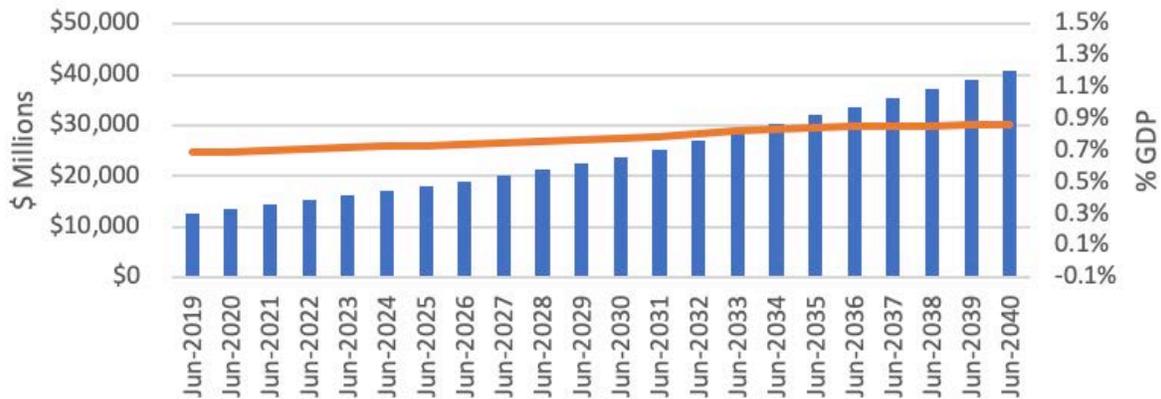
⁷ Royal Commission into Aged Care Quality and Safety (2020), Consultation Paper 2: Financing Aged Care, 24 June 2020

Growing Costs of Aged Care

There is a widely held concern that the costs of aged care are going to skyrocket and become unaffordable as the population ages. Due to Australia’s ageing population the amount the Government spends on residential aged care will increase over the next twenty years, from around \$13 billion in 2020 to almost \$40 billion in 2040.⁸ However, as a percentage of GDP this is only an increase from around 0.9 per cent of GDP in 2020 to 1.1 per cent of GDP in 2040.⁹

Despite Australia having a larger percentage of our over 80 population living in residential accommodation, it currently spends less than comparable countries in the OECD on long term care.¹⁰ Australia spends an estimated 1.2 per cent of GDP on long term health and social care, which includes approximately 0.9 per cent of GDP on residential care.¹¹

Figure 1: Increasing Costs of Aged Care



⁸ Calculations by Equity Economics (see Appendix)

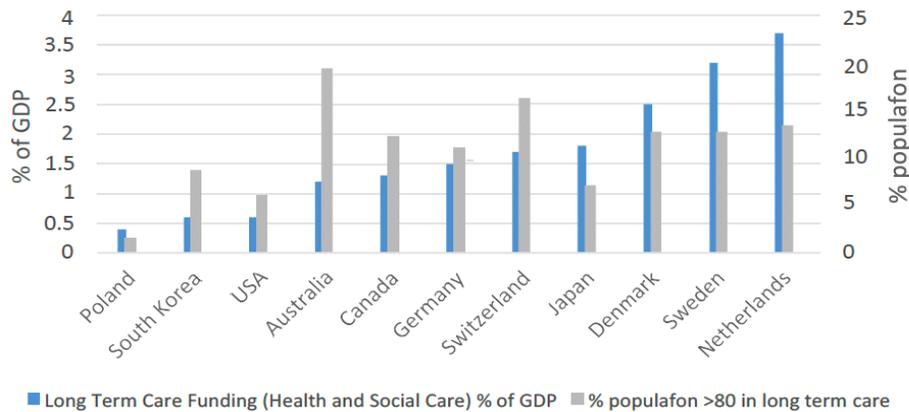
⁹ Calculations by Equity Economics (see Appendix)

¹⁰ Dyer SM, Valeri M, Arora N, Ross T, Winsall M, Tilden D, Crotty M (2019). Review of International Systems for Long-Term Care of Older People. Flinders University, Adelaide, Australia.

¹¹ Dyer SM, Valeri M, Arora N, Ross T, Winsall M, Tilden D, Crotty M (2019). Review of International Systems for Long-Term Care of Older People. Flinders University, Adelaide, Australia and author’s own calculations.

To match comparable countries, Australia needs to spend an additional 0.5 per cent of GDP, which is equivalent to an additional \$9.7 billion per year on long term aged care services annually.¹²

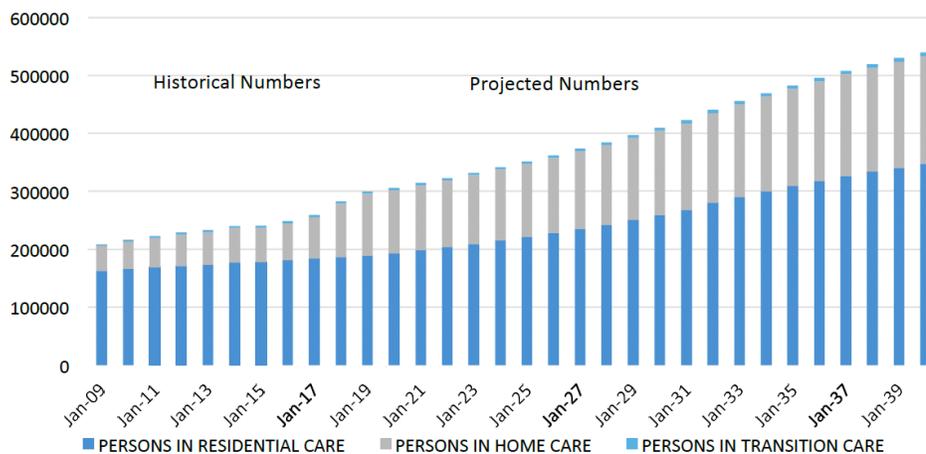
Figure 2: International Comparisons¹³



Growing Number of Australians Needing Care

Over 188,000 Australians currently live in residential aged care facilities¹⁴, because they are unable to be cared for at home. **Due to an ageing population the number of Australians living in residential aged care is projected to increase to around 350,000 by 2040.**¹⁵

Number of Receiving in Aged Care



The number of Australians with dementia is expected to continue to grow, from around 459,000 in 2019 up to 800,000 by 2040.¹⁸ Additional complexity makes the provision of high quality care more important to outcomes, but also adds to the need for a highly skilled, trained and adequately resourced workforce in aged care.

¹² Equity Economic calculation

¹³ OECD Health Statistics 2019

¹⁴ Australian Institute of Health and Welfare 2020. GEN fact sheet 2018–19: People using aged care. Canberra: AIHW.

¹⁵ Calculations by Equity Economics (see Appendix)

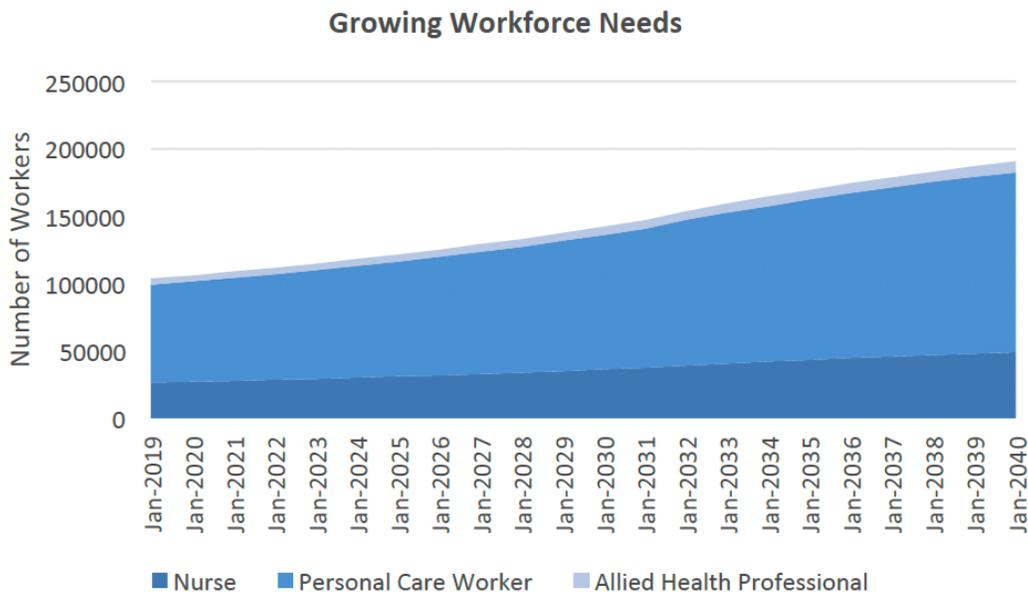
¹⁶ Aged Care Workforce Strategy Taskforce (2018), A Matter of Care Australia's Aged Care Workforce Strategy, June 2018

¹⁸ Australian Institute of Health and Welfare (2014), Australia's health 2014. Australia's health series no. 14. Cat. no. AUS 178. Canberra.

Growing Workforce Needs

In order to meet the future demand for aged care services the aged care workforce needs to grow. Ensuring that the sector continues to attract and retain highly skilled workers will become more difficult, particularly as demand for care workers in the disability sector is also growing.¹⁹

We estimate that residential aged care will require an additional 100,000 workers over the next twenty years due to an ageing population, taking the total caring workforce to 200,000.²⁰



The Government’s 2018 Workforce Strategy highlighted some of the issues facing the industry in meeting these future needs, including the undervaluing of the personal care worker's role.²¹ Personal care workers in aged care are amongst the lowest paid workers in our society, despite being the most important persons in the day to day care of aged care residents.

For example:

- Retail Sales Assistant (ALDI) – Average Hourly Pay \$25.58
- Gas Meter Reader – Average Hourly Pay \$22.97
- **Average Personal Care Worker - \$22.87**

Source: Wage comparator website: payscale.com.au

However, there is currently no Government strategy in place to lift wages and address the undervaluing of the workforce, which drives shortages of qualified care workers. This presents a real risk of shortages and skill gaps that will further undermine the quality of care received by older Australians in residential aged care. Moving towards a system that provides high quality and safe care for all Australians needing residential aged care will require systematic reforms to funding of aged care; improving transparency and the quality of information on aged care; and expanding the aged care workforce. With Australia’s aged care system in crisis, and future pressures looming, the market structure of the sector is critical. In the next chapter we explore the market for aged care services in Australia, how it compares to international best practice and what reforms are needed to deliver high quality care.

Building a stronger market for aged care

The aged care sector in Australia has been established as a quasi-market, with providers funded largely by Government based on the number of residents in care and residents free to choose their aged care provider. Providers are free to charge consumers above the Government subsidies.

There are alternative models to fund aged care, including block funding, competitive tendering and government provision. We do not explore these in this report, instead focusing on what theory and empirical research indicates about the market characteristics needed to drive high quality and safe care in quasi-markets. Economists champion markets as the best way to drive optimal levels of quantity and quality. More competition between providers drives more efficient allocation of resources. However, in order for this to occur the market for aged care needs to conform with the characteristics of a perfect market.

The market for aged care has a number of ‘imperfections’ including:

- Measuring outcomes and success is difficult.²² This is because the impact of provider effort on outcomes is hard to determine due to the differences between residents that are unobservable and the long time frames over which outcomes occur.
- Quality has many dimensions and assessment of quality is subjective and heavily influenced by the relationship between carers and users.²³
- Residents with high care needs often have to rely on others to make decisions about care.²⁴
- The absence of private insurance markets to cover costs of social care means that Governments dominate the financing of the sector.
- There is asymmetry of information with providers possessing more information about service quality and how it impacts residents²⁵ leading to adverse selection and moral hazard.
- The use of aged care services is not discretionary as residents rely on the services provides for their day to day living needs.²⁶
- Aged care is an experience good, meaning that assessing quality before moving into an aged care service is difficult, and the heavy reliance on services for day to day needs increases the negative consequences of making a poor decision. This creates high transaction costs for users contemplating a change of aged care provider.

These inherent imperfections in the market for aged care services mean that the impact of competition depends on the specific features of the market.²⁷

In particular the price-setting mechanism and the ability of users to accurately observe price and quality will determine whether competition can deliver high quality and efficient care.²⁸

²² Knapp, M., Hardy, B., & Forder, J. (2001). Commissioning for quality: ten years of social care markets in England. *Journal of social policy*, 30(2), 283-306.

²³ Malley, J., & Fernández, J. L. (2010). Measuring quality in social care services: theory and practice. *Annals of public and cooperative economics*, 81(4), 559-582.

²⁴ Knapp, M., Hardy, B., & Forder, J. (2001). Commissioning for quality: ten years of social care markets in England. *Journal of social policy*, 30(2), 283-306.

²⁵ *Ibid*

²⁶ *Ibid*

Market Features

All markets have specific characteristics, which define how they operate. In aged care we are interested in the impact of six characteristics under competition on quality, costs and access:

1. Price setting – whether prices are set centrally by Government or the market determines the price.
 2. Level of prices – whether prices are set above or below the marginal cost of providing services.
 3. Risk structure of compensation in finance – whether the price setting mechanism includes adjustments for residents more likely to need higher levels of care.
 4. Quality information – whether residents have reliable and easy to understand quality information
 5. Quality oversight – whether the regulators enforce firm or weak quality oversight
 6. Supply restrictions – whether providers are free to enter the industry, or restrictions are placed on supply.
- The theoretical and empirical research is summarised in Table 1.

Table 1: Impact of Competition on Quality and Costs

		Australia's Aged Care System	Impact on Quality	Impact on Costs
Price Setting	Fixed Prices		↑	↓
	Price Competition	✓	↓	↑
Level of Prices	Prices set above marginal cost	✓	↑	-
	Prices set below marginal cost		↓	-
Risk Structure included in Finance	Price reflects cost of higher needs patients	✓	↑	↓
	Price does not reflect cost of higher needs patients		↓	↑
Quality Information	Quality Information available		↑	↓
Quality Oversight	No Quality Information Available	✓	↓	↑
	Strong Quality Oversight	✓	↑	↓
	Weak Quality Oversight		↓	↑
Restrictions on Supply	Free entry		↑	↓
	Regulated Entry	✓	↓	↑

Price Setting

In order for the market for aged care services to deliver an optimal outcome, competition needs to occur on quality and not on price. This is because where providers compete on price it becomes the dominant signal in the market and allows providers to skimp on quality.

If prices are set centrally, then price competition cannot occur. The central setting of prices is a core requirement in a market with inherent information asymmetries to allow for quality competition.

Level of Prices

Prices need to be set above the marginal cost of production in order for providers not to be incentivised to skimp on quality. The marginal cost of production is the price of producing one extra unit of a good.

A key feature of markets with asymmetry of information is that providers can reduce quality without any penalty. If the price paid for services is below the marginal cost of providing services at a certain quality, providers will simply skimp on quality in order to make a profit. They can do this because no one in the market can provide a quality service for the price paid.

Risk Structure of Compensation in Finance

Adequate risk structure in finance arrangements ensures there are no inherent incentives to cream skim or skimp on quality²⁹. The nature of payments and the degree to which the individual characteristics of users linked to resource use are imbedded determines the risk structure. Greater competition in a market with inadequate risk structure will enhance incentives to cream skim or skimp on quality and may result in a reduction in overall quality or an increase in costs.³⁰

Quality Information

There are two interconnected pathways through which publication and access to performance information can improve quality. First, users reward higher quality providers by selecting the provider. Without quality information there is no penalty for low quality providers in the market, as it cannot be observed by users. Second, providers can identify where they underperform and improve.³¹

Under competition these two pathways are connected by the providers motivation to maintain and expand market share, which competition can strengthen.

Quality Oversight

Government regulation and oversight of quality in social care markets is an important determinant in minimising quality differences across geographical areas. The extent to which the Government sets minimum requirements and enforces these standards can underpin the operation of quasimarkets and maintain quality.

Supply Restrictions

Supply restrictions which limit new entrants can ensure that new providers are able to provide a basic level of service and strengthen general quality oversight. On the other hand, restrictions act to limit competition, reducing the penalties for providing poor service, and may lead to insufficient supply in certain markets.

Price Setting

Aged care funding in Australia works through a combination of Government subsidy and private contributions, with aged care providers free to compete on price. Residents can be asked to provide an upfront accommodation bond of \$550,000 and a daily accommodation charge.

A summary of subsidies is below.

Table 2: Daily ACFI Subsidy Rates³²

Level	Activities of Daily Living (ADL)	Behaviour (BEH)	Complex Health Care (CHC)
Nil	\$0.00	\$0.00	\$0.00
Low	\$37.16	\$8.49	\$16.48
Medium	\$80.92	\$17.60	\$46.95
High	\$112.10	\$36.70	\$67.79

Because providers can set prices above this level, they can use this to signal higher quality – which may or may not actually exist - leading to higher costs and skimping on quality.

Level of Subsidies

In recent years the level of subsidies has not kept pace with cost increases in the residential aged care sector, undermining the financial viability of an increasing number of providers. Savings of over \$1.6 billion in the 2018-19 Budget further undermined the profitability of the sector.³³

Prices set below marginal cost will lead to skimping on quality, as providers are able to reduce quality to make a profit without being penalised in the market. As occurs in the funding of hospitals, setting prices based on average cost leads to better outcomes where providers are not incentivised to skimp on quality.

Risk Structure Included in Finance

The level of subsidy is linked to broad levels of need (see Table 2), and supplements are provided for additional care needs. While this provides a degree of risk structure in the finance mechanism, it is not comprehensive and is likely to lead to cream-skimming on quality and higher costs.

Quality Information

There is currently no clear and accessible quality information for users of aged care in Australia, such as a star rating system. As a result, providers do not have to compete on quality and high quality providers are not effectively rewarded in the market. This leads to lower overall quality.

Quality Oversight

While there are quality standards in Australia, oversight is largely through self-regulation with a limited role for inspections. The fact that a vast majority of care homes clear these requirements and yet quality remains such an issue points to fundamental issues with these standards and how they are measured. Improving quality oversight could help improve quality and reduce costs across the aged care sector.

Restrictions of Supply

There are restrictions on the supply of subsidised aged care beds in Australia. These restrictions make it less likely that poorly performing aged care providers will leave the industry – due to the lack of competition. This acts to reduce quality and increase the cost of provision.

Strengthening the Market

A number of major reforms have been proposed in the Aged Care Sector, by the Government and in submissions to the Age Care Royal Commission. We discuss these below, before making a number of recommendations on strengthening the aged care market.

Funding

The Australian Government has proposed a new model for residential aged care funding, the Australian National Aged Care Classification (ANAC)³⁴. Funding will consist of three components:

- An initial upfront adjustment payment
- A fixed price per day for the cost of care that are shared equally by all residents, which will vary by location and other factors;
- A variable price per day for the costs of individualised care for each resident based on their case mix class.

Importantly the price paid per day for the cost of care would be set by an independent body, which should help ensure that it is sufficient to deliver quality care. These reforms will ensure that the pricing regime properly reflects risk, and therefore will improve quality, reduce costs and improve access. However, if the new regime sets reimbursements below marginal cost it may continue to undermine quality.

Case study: The perspective of an aged care provider

Frank Price has been the CEO of Royal Freemason's Benevolent Institution since 2016. RFBI is an awarding winning aged care provider that operates 22 residential aged care villages, 20 retirement villages as well as home care services across NSW and ACT. RFBI employs 1900 people and cares for 2500 older Australians each day, of which 1335 are in residential aged care.

We always endeavour to provide high quality care to our residents, but the system is under pressure, making it harder and harder to deliver. Over the past 5 years there have been considerable changes made to the legislative and the quality framework adding to the workload of aged care providers, yet funding has been reduced. Residents are coming into aged care much older and with more complex health care needs. There has also been a shift in the type of residents who are being admitted, with a much greater number coming into aged care with dementia. This has significant impacts on the care that is required and the type of living space they need to live well. **The current model of funding is not consistent with the sector meeting the Government's quality standards.** I am proud of the care we provide to our residents, but the aged care system needs to be redesigned so that providers are rewarded for keeping pace with the changing needs and preferences of residents. The current model does not align with the quality standards and simply does not reward us for providing quality care. If our residents improve in their health or mobility, our funding is reduced. There is no incentive to provide more personalised – usually more costly – care interventions.

Quality ultimately reflects the culture of an organisation. If the funding model remunerated providers based on the quality of their service, then poor performers would soon be weeded out. Workforce is another key issue that has plagued the sector for a long time. As our ageing population requires care, there has been a surge in demand for aged care workers – and indeed health care workers across the board. Aged Care is not typically highly valued and aged care workers are paid less than other health care workers, making it very hard to attract and retain the best people. The issues are even greater in rural and regional areas, where there is a smaller local workforce to draw from and it is more difficult attract people to move to these areas from a city location. These challenges then drive up costs as you are required to contract agency labour whilst trying to recruit qualified personnel. This also affects quality of care due to the fact that you don't have consistency in the workforce.

Critical to ensuring residents are able to access affordable and high-quality care and services is having an appropriate financial model whereby providers are paid appropriately for the services that we deliver and one that allows providers to attract better qualified and experienced people into the industry. This financial model at the moment is driven by the Federal Government and as such does not reflect the requirements of the consumer and provider.

Quality

There is a long history of reports into Australia's aged care sector recommending ratings along the lines used in England or the USA: in the 2004 'Hogan Review', the Productivity Commission's 2011 Caring for Older Australians inquiry and, most recently, in the 2017 Carnell-Paterson Review, which led to the new Aged Care Quality and Safety Commission³⁵. There were reports that the Government will introduce greater transparency regarding the quality of aged care providers from 1 July 2020, however this did not eventuate and there were no details of this new system available at the time of finalisation of this report. The key feature of these systems is that they allow users to differentiate based on quality, as this drives competition.

A star rating system, as is used in the United Kingdom, would help consumers choose between providers and reward providers of high quality care³⁶. Concerns have been raised that the majority of Australian care homes would not meet a reasonable standard and do so would require substantial additional funding. For example, ***based on current staff ratios only 42.5 per cent of Australian Aged Care Homes would be considered satisfactory under the star rating system used in the United States of America***³⁷. Fear of not meeting basic standards should not be a reason for not implementing such standards.

Star Rating System Case Study – United Kingdom

After first implementing a star system back in 2004, the Care Quality Commission introduced the current system in 2014. The Care Quality Commission inspects care in nursing homes. During inspections, each home is rated against five questions:

- is it safe,
- is it effective,
- is it responsive,
- it is caring and
- is it well led?

The four ratings are:

- ★★★★ outstanding,
- ★★★ good,
- ★★ requires improvement, or
- ★ inadequate.

Homes must display their ratings on the physical premises and on their website.

Research has found that these ratings are a reliable measure of how residents feel about their life in the home.

Homes with lower rates of staff turnover and fewer vacancies have higher star ratings.

35 Royal Commission into Aged Care Quality and Safety (2019), Interim Report: Neglect

36 Eagar K, Westera A, Snoek M, Kobel C, Loggie C and Gordon R (2019) How Australian residential aged care staffing levels compare with international and national benchmarks. Centre for Health Service Development, Australian Health Services Research Institute, University of Wollongong.

37 Dyer SM, van den Berg MEL, Barnett K, Brown A, Johnstone G, Laver K, Lowthian J, Maeder AJ, Meyer C, Moores C, Ogrin R, Parrella A, Ross T, Shulver W, Winsall M, Crotty M (2019). Review of Innovative Models of Aged Care. Flinders University, Adelaide, Australia.

Recommendations:

The market characteristics of the current aged care system are driving the poor performance across the sector, and these need to be reformed if Australians are going to have a high quality and safe aged care into the future.

The priorities for reform should focus on the following areas, which will ensure that the market for aged care services operates efficiently and delivers high quality and safe care:

Recommendation One: Implement a new funding mechanism proposed by the Australian Government.

The ANAC proposal would ensure that the level of funding received by providers reflected the true costs of providing care. This will help ensure there is not cream-skimming and improve quality and efficiency.

Recommendation Two: Ensure that the price paid is set above the marginal cost to deliver care.

The price-setting mechanism needs to ensure that sufficient funding is provided to deliver an acceptable standard of care, but it should not support inefficient or poorly managed providers or provide higher than necessary funding.

The financial impact of this recommendation is modelled in the following section.

Recommendation Three: Produce easy to understand quality information.

Regardless of the funding mechanism, it is critical that users are making choices between providers based on easy to understand and reliable quality information. This will ensure there is an incentive or reward for providers that offer quality care and help safeguard against poor practices.

While implementing Recommendation One is possible within the current funding envelope for residential aged care services, additional investments will be required for Recommendations Two and Three.

Recommendation Three will require a modest investment to develop and implement quality star ratings, which we estimate at \$5 million to establish and \$20 million ongoing.

The implementation of Recommendation Two will depend on choices about the level of quality and the measures needed to attain that level. We discuss these fully in the next section of the report.

Achieving High Quality Aged Care

While there is widespread understanding and support for an increase in the quality of care within the sector, community and government, there is a less clear understanding as to the cost of such an increase would be and how that could be funded.

To ensure that the price paid for aged care services is not below the marginal cost of delivering high quality and safe care will require additional funding.

There are arguments as to whether case mix funding or staff ratios are the best way to deliver higher quality care, with evidence for each approach.³⁸ Given the existing use of a choice and competition in Australia, there is logic in using the case mix system, as currently proposed by the Government, as it allows for innovation and as noted in the previous section with the right market settings can deliver higher quality care.

Either approach however requires a determination of the optimal level of quality. This is beyond on the scope of this report and is ultimately a decision for the Government. However, we can explore the fiscal implications of measures to increase the quality of care. There are a number of determinants of care quality received by residents of aged care homes, including the condition of physical facilities, the training and management of staff, the turnover of staff and the number and type of staff that provide care services.³⁹

We focus on the understanding the costs that would be associated with two measures that have been widely recommended in a number of reviews of the aged care system to support higher quality care:⁴⁰

- an increase in care hours; and
- an increase in the salaries of care workers services.

These measures alone may not be adequate, with a focus on staff training and the physical infrastructure of residential care homes also important.⁴¹ However, they represent the biggest cost drivers of improving quality of care.

Increasing care hours would directly improve quality of care of residents, but also reduce the level of staff turnover, which is also an important factor in care quality. Seventy-five per cent of personal care workers cite working conditions as a reason for considering leaving the industry.

Lifting the salary of care workers to reflect the value of the work they perform would also improve retention and attract the additional workers to the industry required to deliver high quality care into the future.⁴²

38 McNamee J, Poulos C, Seraji H et al. (2017) Alternative Aged Care Assessment, Classification System and Funding Models Final Report. Centre for Health Service Development, Australian Health Services Research Institute, University of Wollongong.

39 House of Representatives Standing Committee on Health, Aged Care and Sport (2018), Report on the Inquiry into the Quality of Care in Residential Aged Care Facilities in Australia

40 Royal Commission into Aged Care Quality and Safety (2019), Interim Report: Neglect

41Eagar K, Westera A, Snoek M, Kobel C, Loggie C and Gordon R (2019) How Australian residential aged care staffing levels compare with international and national benchmarks. Centre for Health Service Development, Australian Health Services Research Institute, University of Wollongong.

42 Aged Care Workforce Strategy Taskforce (2018), A Matter of Care Australia's Aged Care Workforce Strategy, June 2018

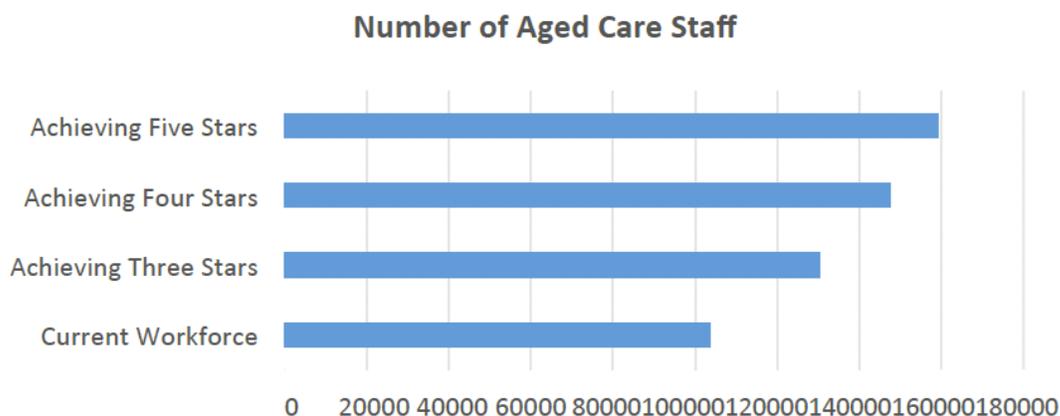
Increase in Care Hours

A 2019 survey of aged care workers found that 87 per cent of aged care workers have to rush residents in their care because they have too many tasks to complete, and 94 per cent do not have enough time to talk to residents.⁴³ ***Australian aged care residents receive fewer total hours of care than international counterparts.***⁴⁴

A study undertaken for the Aged Care Royal Commission highlights the deficiencies of the Australian system compared to a number of international counterparts. Australians in aged care receive less care hours on average than in comparable countries.⁴⁵ Only 42.5 per cent of Australian care homes would meet the satisfactory level of three stars under the United States system.⁴⁶ Increasing the number of care hours received on average by Australian residents of aged care facilities to match those received in the United States and Canada would help drive quality improvements across the sector.

	Current Average Minutes Per Residents	Increase in Minutes per Resident to Meet 3 Stars	Increase in Minutes per Resident to Meet 4 Stars	Increase in Minutes per Resident to Meet 5 Stars
Registered Nurse	36	4	11	28
Aged Care Worker	144	19	43	48
Allied Health Professional	8	13	13	13
Total Increase in Care Minutes		36	67	89

It should be noted that these are average figures and some residents would require more care and others less care. Increasing care minutes would increase the number of staff needed to care for residents in residential aged care. With the increase in the residential aged care workforce of between 28,000 and 59,100 in 2019-20.



⁴³ United Workers Union (2019). Submission to the Royal Commission in to Aged Care and Quality, December 2019

⁴⁴ Eagar K, Westera A, Snoek M, Kobel C, Loggie C and Gordon R (2019) How Australian residential aged care staffing levels compare with international and national benchmarks. Centre for Health Service Development, Australian Health Services Research Institute, University of Wollongong.

⁴⁵ Ibid

⁴⁶ Ibid

Increase in Salaries of Care Workers

Personal care workers provide the majority of care in aged care homes and are on very low rates of pay.⁴⁷ But they are critical to the industry and provider organisations, spending the maximum amount of time with residents and working with them daily in close proximity.⁴⁸ A number of reviews have recommended that increasing the rate of pay would help lift quality in the sector, but there is a need for government to increase funding to pay for any increase.⁴⁹

Full time personal care workers on award rates of pay earn between \$20.73 per hour and \$25.18 per hour, which is only marginally above the minimum hourly wage set by the Fair Work Commission of \$19.49 per hour.

This undermines quality because it makes attracting and retaining high quality and well-trained staff difficult. Increasing rates of pay for personal care workers would further help address the quality of aged care provision.

Case study: The perspective of an aged care worker

Helen is 55 years of age and has been an aged care worker for ten years. Helen works at an aged care facility in Western Sydney that has 90 residents. 'I love my job and being able to care for our elderly. I enjoy hearing their stories and being needed. It is humbling to provide the personal care that they need, washing them, feeding them and cutting their nails.

'Coming from Western Sydney and living in the local area, I enjoy being able to connect to the residents and bond with them. Knowing them is really important. The quality of care – it's not just about showering, changing pads or feeding – it's about connecting with them – that's the important part of quality of care. We learn that familiarity is important for the residents with dementia, but I see it as just as important for other residents. Because I have that relationship when I walk into their room in the morning, I can see if they are unhappy today, or in pain, or not well.

'Time – it's a dream – to have more time to do our job. People are sore – the work is physically demanding as well as requiring emotional and caring skills. Looking after 18 patients with only two of us at any one time, we are flat out the entire shift and never have time to tend to the resident's emotional needs. Everything becomes rushed, and clinical. Simple things, like sitting down and taking care to cut their nails and talking to residents, are not possible. We need more time. Covid-19 has placed additional pressure on us. The stress has given me headaches, and while everyone else in health care is recognised – once again we are left unrecognised. This is reflected in how much we are paid.

'It is ok for me; I've earned my money before I started in aged care but for the younger workers it is hard to make ends meet. They could earn more at Woolworths, and with less stress. What I hope is that by the time I retire the industry provides better jobs, where we can deliver high quality care. For that we need more staff. And we need to be paid a fair wage.'

Labour costs are the biggest proportion of aged care costs, with approximately 100,000 full time equivalent care staff employed across Australia. The majority of staff are personal care attendants, representing almost 70 per cent of all care staff⁵⁰. In addition, there are almost 10,000 enrolled nurses working in aged care centres and almost 4,000 allied health professionals.⁵¹

A shortage of staff and high turnover in the aged care workforce have been found to have negative impacts on quality of care.⁵² An unbreakable cycle of high turnover, low staff satisfaction, increased costs of recruitment and training and negative quality of care has been widely reported.⁵³ There are several channels through which turnover influences quality. High turnover reduces staff levels and availability, in turn rendering residential aged care homes unattractive places to work and making it harder to fill vacancies.

High turnover also increases recruitment and training costs, reducing available budgets for quality measures.⁵⁴ The Health Services Union is pursuing an increase in wages of 25 per cent in real terms over four years for personal care workers, which would improve retention in the sector and help attract the new workers needed to deliver higher quality care.

	2020-21	2021-22	2022-23	2023-24
Increase	12.5	7.5	7.5	7.5
Inflation	2.5	2.5	2.5	2.5
Real Increase	10.0	5.0	5.0	5.0

The wage increase if successful would add the costs of providing age care services but would help ensure that quality and safety in the aged care sector was addressed.

⁵⁰ Aged Care Workforce Strategy Taskforce (2018), A Matter of Care Australia's Aged Care Workforce Strategy, June 2018

⁵¹ Ibid

⁵² Ibid

⁵³ OECD/European Commission 2013a, A Good Life in Old Age? Monitoring and Improving Quality in Long-term Care, OECD Publishing.

⁵⁴ Castle, N., & Engberg, J. (2005). Staff Turnover and Quality of Care in Nursing Homes. Medical Care, 43(6), 616-626.

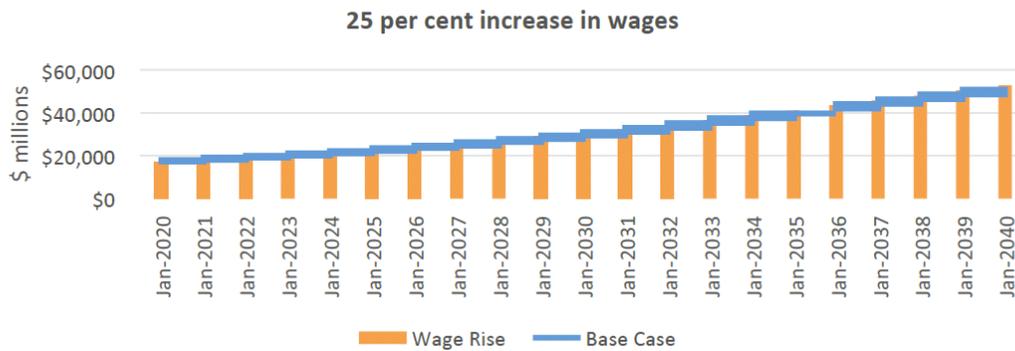
The Cost of Sustainable Quality Aged care

Delivering a higher quality and safe aged care system will require substantial additional investment, but also a number of choices. Below we estimate the costs over the forward estimates and out to 2040 of increasing rates of pay for personal care workers and increasing the average care hours to meet the three, four and five star benchmarks in the United States (see Appendix for methodology).

Increasing Salaries By 25 per cent over Four Years

A pay rise for aged care personal care workers of 25 per cent over four years in real terms would increase the cost of aged care by \$2.2 billion over four years. This would increase the spending on residential aged care in Australia from 0.94 per cent of GDP to 0.98 per cent of GDP over four years.

	2020-21	2021-22	2022-23	2023-24
Impact on Aged Care Costs (\$m)	324	464	620	795



Increasing Salaries By 25 per cent and Increasing Care Hours to Three Stars

A pay rise for aged care personal care workers of 25 per cent over four years in real terms and increasing the number of care hours to meet the three star benchmark would increase the cost of aged care by \$10.2 billion over four years. This would increase the spending on residential aged care in Australia from 0.94 per cent of GDP to 1.08 per cent of GDP over four years.

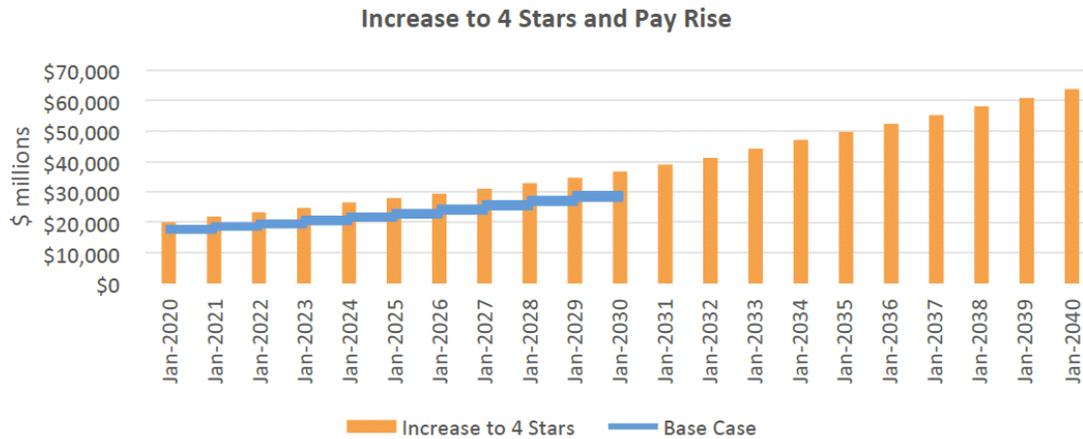
	2020-21	2021-22	2022-23	2023-24
Impact on Aged Care Costs (\$m)	2,130	2,391	2,680	2,999



Increasing Salaries By 25 per cent and Increasing Care Hours to Four Stars

A pay rise for aged care personal care workers of 25 per cent over four years in real terms and increasing the number of care hours to meet the four star benchmark would increase the cost of aged care by \$15.7 billion over four years. This would increase the spending on residential aged care in Australia from 0.94 per cent of GDP to 1.19 per cent of GDP over four years.

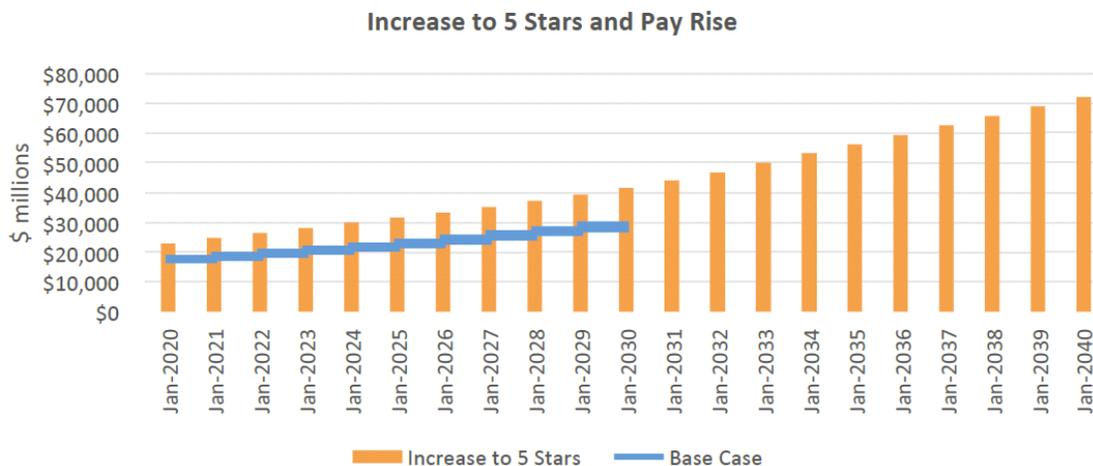
	2020-21	2021-22	2022-23	2023-24
Impact on Aged Care Costs (\$m)	3,371	3,717	4,098	4,515



Increasing Salaries By 25 per cent and Increasing Care Hours to Five Stars

A pay rise for aged care personal care workers of 25 per cent over four years in real terms and increasing the number of care hours to meet the five star benchmark would increase the cost of aged care by \$20.4 billion over four years. This would increase the spending on residential aged care in Australia from 0.94 per cent of GDP to 1.19 per cent of GDP over four years.

	2020-21	2021-22	2022-23	2023-24
Impact on Aged Care Costs (\$m)	4,464	4,866	5,308	5,789



Funding High Quality Aged Care

The early findings of the Royal Commission into Aged Care confirm the need for greater investment, regulation and care for our elderly. These recommendations come with additional costs, as modelled in the previous chapter. The challenge confronting all Australians now is how to optimally fund this essential investment. As outlined in the Royal Commission's recent consultation paper on Financing Aged Care⁵⁵ options exist that are both affordable and implementable, if the Australian Government determines decent aged care for older Australians is a priority.

As with any public investment or expenditure a range of funding options are available to government. In economic theory, government funding is justified when there is a public good or market failure in the provision of functions or services. Market failure may arise where there is a public good that can be consumed collectively, as opposed to private goods that can be exclusively used, or where distributional factors mean income and wealth inequality would fail to ensure the quality or level of access to services which society considers necessary and 'fair'. As discussed above in Building a Stronger Aged Care Market, there are a number of 'market imperfections' in aged care that necessitate a role for government in both the regulation and funding of aged care. Government has a range of options available to increase funding of aged care, from fully funding the provision of services, to a mix of public and private contributions, and finally privately funded services appropriately regulated.

1. Increased public funding

requires additional revenue from taxation or a reallocation of existing expenditure. Given existing fiscal pressure on a range of policies areas, such as unemployment benefits, pensions, education and health costs, an argument for a major reprioritisation of the existing budget to meet the proposed increase in funding of aged care will be challenging. Increased public funding consequently likely requires increased taxation. In the case of aged care this could include measures such as increasing the Medicare Levy or other taxes, considered further and costed below.

2. Rebalancing public and private funding contributions

to increase the total funding available for aged care. This could be achieved by increasing the share of private funding required to meet total costs. Options in aged care to achieve this include increasing daily co-contributions by incorporating the family home into the asset tests for aged care or increasing the use of reverse mortgages, also discussed further below.

3. Social Insurance Models

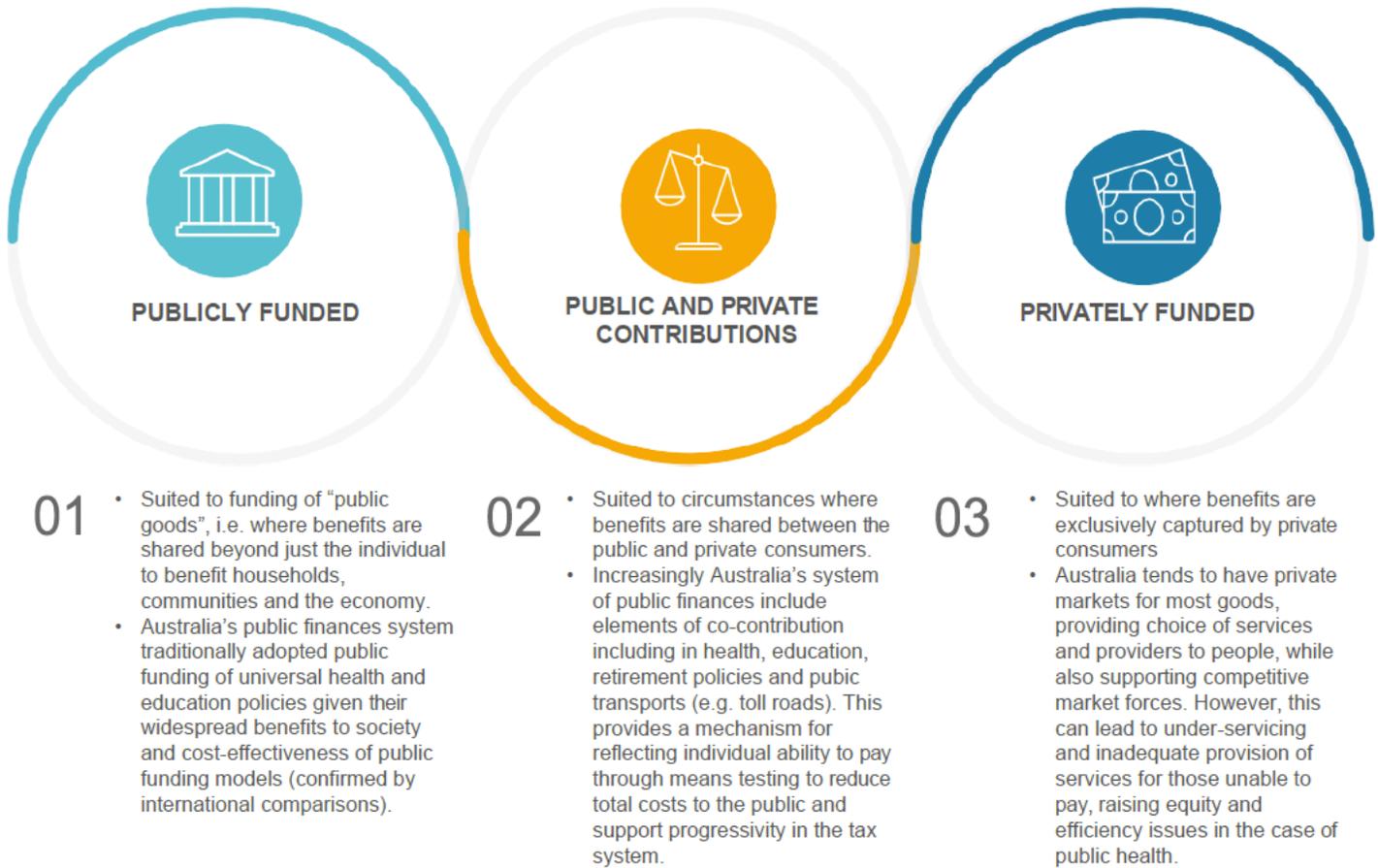
would work by requiring contributions to a dedicated, pooled fund that is then used to finance aged care costs for eligible individuals. While these models can

incentivise more efficient allocation of resources, without corresponding reforms to the market for aged care services they would have little additional benefit over the tax based systems currently used.

4. Increased use of private insurance and other financial products

have been variously explored in the past, however the inherent market failures in private insurance for long term care have limited the success of these markets, and they remain a relatively small part of financing arrangements in most countries. While expansion may help fund increased aged care costs, private insurance is unlikely to meet the bulk of additional financing needs. As such, this option is not developed further here, though we note that the market for aged care should continue to provide flexibility and choice for self-funded aged care, including fee-for services whether they be in home care, private hospital cover or other retirement facilities, appropriately regulated. The Australian government currently adopts a mix of public and private funding for aged care. The challenge in lifting the quality of aged care is identifying sources of public funds and determining the right mix of public and private contributions to meet higher cost for quality care.

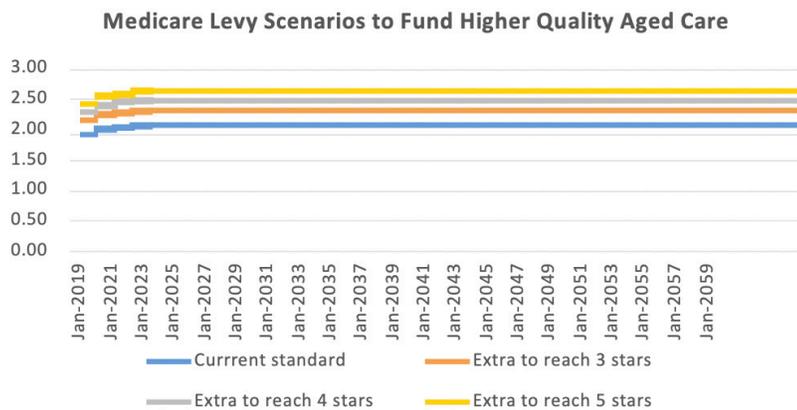
Spectrum of funding options



This simplified framework for public finances suggests a range of potential options for funding higher quality aged care. Consideration has been given to tax measures that raise significant revenue, changes to superannuation that could produce the required savings and reforms to asset tests that would increase private contributions to aged care. Each of the available options involves policy choices and political challenges. But all present an affordable way forward to address the inadequate investment currently being made in aged care in Australia.

Australia's health care system is the envy of the world. Our goal is to achieve an equivalent reputation in aged care. This is an achievable aspiration for Australia, being amongst the wealthiest nations in the world, with an established system for the provision of cost effective, quality health care and social services.

Drawing on the lessons of Medicare, it is possible to envisage a quality aged care system, universally available to all elderly Australians in need. Australia’s universal health system is funded, in part, through the Medicare Levy. This model has managed to ensure high quality health care, train and afford a skilled workforce, supported innovation through a range of providers, while constraining costs to the individual and public purse. One funding option is to apply the Medicare Levy model to aged care, which similarly seeks to provide access to care to all elderly Australians who cannot afford their own care, with the ultimate goal of improving health outcomes and living standards, benefiting the entire community. The Medicare Levy is a progressive tax, currently levied at 2% of taxable income. Depending on people’s circumstances, those with low incomes may get a reduction or exemption from paying the levy. The Medicare Levy is collected in the same way as income tax, making it a relatively efficient and simple tax to administer. **To meet the proposed costs of higher quality aged care (involving additional costs of between \$2 billion to \$27 billion over four years), the Medicare Levy would need to increase by between 0.1 and 0.65 per cent.** (See Annex A for the Medicare Levy costing methodology).



Increasing taxation is always challenging. However, there is evidence that the public is prepared to support higher taxation where the revenue is being applied to clear areas of need, with costs and benefits broadly shared across the community. This was demonstrated with the unanimous support displayed in the then Parliament, for the Medicare Levy increase to fund the National Disability Insurance Scheme, delivering long-overdue support for people living with a disability. Public support for higher quality aged care in Australia is also widely endorsed and accepted by the community, lending support to the case for a Medicare Levy increase to fund aged care. As is the case with the existing Medicare Levy, the related tax revenue would not necessarily be hypothecated to health or aged care, given that total health and aged care costs would continue to exceed the Medicare Levy. This is important for maintaining the general principle of fiscal consolidation and sound fiscal management.

However, by linking the increase in the Medicare Levy to higher quality aged care, the public can better appreciate the purpose of tax reform, contributing to long overdue investments in aged care and strengthening Australia’s fiscal position at a critical time for economic recovery.

The Medicare Levy is one of a range of potential funding options to deliver decent aged care to older Australians. Other funding options involve varying degrees of challenges in terms of public support, impacted groups, equity and efficiency, particularly relative to the Medicare Levy discussed above. The choice of revenue options - whether personal income tax, superannuation taxes, company taxes, land or housing taxes, amongst others - will depend on the goal's government is seeking to achieve from tax reform. Different taxes will be better suited to particular policy goals. For instance, if the goal is increasing the progressivity of the tax system by targeting those most able to pay, increasing marginal tax rates on personal income may be preferable. If the goal is to reduce inefficient or highly distortionary taxes, the government may opt for negative gearing or capital gains tax reform, though the link to aged care is less clear. If aligning the revenue measure to the beneficiaries of the expenditure is desirable - which can also help to make the case for tax reform - superannuation taxes or even franking credits could be considered.

The generally accepted principles of good tax policy are that it is equitable, simple, efficient (low transaction costs) and certain (allowing people to plan their finances without the risk of sudden or dramatic changes). Weighing these principles, arguments can be made for and against funding options. The challenge for Australia is to insist aged care be prioritised and support funding of this critical investment. No funding option is without its challenges or opponents. However, as the world grapples with disruption and an economic downturn more severe than the Great Depression, it's time to think differently about how we shape the nation we want for the future. And that includes a high quality, decent aged care system where every elderly Australian can feel safe, valued and cared for.

Conclusion

Even before the Aged Care Royal Commission started its proceedings, there had been a number of reports calling for an increase in funding for residential aged care in Australia. However, none of these reports have put a number on the increase in funding needed. We have developed the costing and shown that increasing funding from between \$2 billion and \$20 billion is necessary to ensure that a sustainable workforce and improvements in the safety and quality of residential aged care.

Underfunding and a lack of transparency in the quality of care has hampered the operation of the market and resulted in a system that is not meeting the basic needs of residents. We are currently making a choice, in not funding a quality and safe care for older Australians. Cost is often cited as the reason for a lack of reform. However, this report demonstrates that the cost of providing a decent level of care to older Australians is well within our reach.

Depending on the level of quality chosen additional costs could be met by a modest increase in the Medicare Levy of 0.5 per cent and would ensure every Australian needing residential aged care as they age receives quality care.

It would provide personal aged care workers with a needed pay rise and ensure that the industry can continue to attract and retain high quality staff. And importantly it would allow for an increase in care hours that underpins quality and safety in the sector. Aged care is an investment we can no longer afford to ignore. We have an opportunity to support the most vulnerable Australians, a critical workforce and lift the standards of care we will all ultimately face.



References

- Aged Care Workforce Strategy Taskforce (2018), A Matter of Care Australia's Aged Care Workforce Strategy, June 2018
- Australian Government Department of Health (2019), Proposal for a New Aged Care Funding Model – Consultation Paper
- Australian Government Department of Health (2020), Schedule of Subsidies and Supplements for Aged Care, <https://www.health.gov.au/resources/publications/schedule-of-subsidies-and-supplements-foraged-care>
- Australian Institute of Health and Welfare (2020.) GEN fact sheet 2018–19: People using aged care. Canberra
- Australian Institute of Health and Welfare (2014), Australia's health 2014. Australia's health series no. 14. Cat. No. AUS 178. Canberra.
- Berwick, D. M., James, B., & Coye, M. J. (2003). Connections between quality measurement and improvement. *Medical care*, 41(1), 1-30.
- Castle, N., & Engberg, J. (2005). Staff Turnover and Quality of Care in Nursing Homes. *Medical Care*, 43(6), 616-626.
- Dranove, D., & Satterthwaite, M. A. (2000). The industrial organization of health care markets. *Handbook of health economics*, 1, 1093-1139.
- Dyer SM, Valeri M, Arora N, Ross T, Winsall M, Tilden D, Crotty M (2019). Review of International Systems for Long-Term Care of Older
- Eagar K, Westera A, Snoek M, Kobel C, Loggie C and Gordon R (2019) How Australian residential aged care staffing levels compare with international and national benchmarks. Centre for Health Service Development, Australian Health Services Research Institute, University of Wollongong.
- House of Representatives Standing Committee on Health, Aged Care and Sport (2018), Report on the Inquiry into the Quality of Care in Residential Aged Care Facilities
- Knapp, M., Hardy, B., & Forder, J. (2001). Commissioning for quality: ten years of social care markets in England. *Journal of social policy*, 30(2), 283-306.
- Malley, J., & Fernández, J. L. (2010). Measuring quality in social care services: theory and practice. *Annals of public and cooperative economics*, 81(4), 559-582.
- Mcnamee J, Poulos C, Seraji H et al. (2017) Alternative Aged Care Assessment, Classification System and Funding Models Final Report. Centre for Health Service Development, Australian Health Services Research Institute, University of Wollongong.
- OECD Health Statistics 2019
- OECD/European Commission 2013a, A Good Life in Old Age? Monitoring and Improving Quality in Longterm Care, OECD Publishing, Paris
- People. Flinders University, Adelaide, Australia.
- Propper, C. (2018). Competition in health care: lessons from the English experience. *Health Economics, Policy and Law*, 13(3-4), 492-508.
- Royal Commission into Aged Care Quality and Safety (2019), Interim Report: Neglect
- Royal Commission into Aged Care Quality And Safety Counsel Assisting's Submissions On Program Redesign (2020), Adelaide Hearing, 4 March 2020
- Royal Commission into Aged Care Quality and Safety (2020), Consultation Paper 2: Financing Aged Care, 24 June 2020
- The Commonwealth of Australia (2018), Budget 2018-19
- United Workers Union (2019), Submission to the Royal Commission in to Aged Care and Quality, December 2019

Annex A: Model assumptions and methodology

Projections for the number of people in care

Projections for the Australian population by age cohort were derived from Australian Bureau of Statistics (ABS) data for the current population (Australian Demographic Statistics, September 2019, ABS cat. no. 3101.0), and ABS estimates of future population (Population Projections, 2017 (base) to 2066, ABS cat. no. 3222.0). The particular ABS population estimates used to derive the projections are from series B.

Projections for the number of people in care, by age cohort, were derived by assuming that the proportion of people in care (relative to the relevant population cohort) remains constant over time. Data on the current number of people in care (by age cohort) is from the Australian Institute of Health and Welfare (People using aged care services, 2018-19).

Projections for amount of care required

A number of projections for total staff minutes of care were derived. Data on the number minutes of care for individuals (per day) were obtained from material prepared for the Royal Commission into Aged Care Quality and Safety (Research paper 1: How Australian residential aged care staffing levels compare with international and national benchmarks). This data includes the current minutes of care, as well as estimates for minutes of care required to meet benchmarks consistent with the US Centres for Medicare and Medicaid Services (CMS) system. The data includes minutes of care by different types of aged-care professional. The above data, combined with projections for the number of people in care by age cohort, was used to derive projections for total staff minutes stratified by; age cohort, the level of care and type of aged-care professional. These projections were further stratified for the time of day when care occurs. The intensity of care differs throughout a day – for example, during the day versus during the night. Data for the relative intensity of intra-day care was obtained from the above Royal Commission data source. In the aggregate, the degree of required care differs across age cohorts due to a variety of physical and cognitive factors. Data on the relative care needs of age cohorts was obtained from the Resource Utilisation and Classification Study (Report 5: A funding model for the residential aged care sector). The projections were adjusted accordingly, and aggregated by age cohort. Finally, the revised set of projections for total staff minutes were converted to staff FTEs – stratified by; the level of care, the time of day and type of aged-care professional.

Projections for total wage costs

Wages for each aged-care professional were based on the relevant (current) award rates of pay. Projections for total wage costs were derived for each level of care (aggregating the projections for FTEs stratified by time of day and type of aged-care profession, and the relevant rates of pay).

Projections for total costs

Projections for total costs, by the level of care, were derived by scaling-up total wage costs by the relevant factor(s). The Resource Utilisation and Classification Study (Report 3: Structural and individual costs of residential aged care services in Australia) contains estimates of the total fixed costs of aged-care facilities relative to total wage costs, by facility size. Data on the number of facilities, by size, was obtained from the Australian Institute of Health and Welfare (People using aged care services, 2018-19).

Output of model

The model can be used to estimate the total cost of a particular increase in wages for the current level of care, but also where the level of care is set to increase to a particular CMS benchmark. The increase in total costs from the baseline (current level of care and current rates of pay that increase with CPI inflation) are reported in dollar-terms, and also as a required increase in the Medicare Levy

