



Research Insights

Does competition in aged care deliver better outcomes?

Despite market reforms aimed at making Australian residential aged care more affordable and higher quality, competition in the market hasn't improved quality or cost. Why hasn't it worked?



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Market reforms in aged care

On 26 June 2013, the government passed the Aged Care (Living Longer Living Better) Act, aiming to deliver more support and care at home, allow more consumer choice and greater control and provide greater recognition of diversity and support to carers. Under the umbrella of this Act, a series of market-oriented reforms were implemented to promote consumer choice and competition in aged care. For instance, significant changes have occurred in home care, with consumers given greater control over their package and greater choice of providers. In residential care, consumers can choose the form of payments to suit their circumstances and preferences. Through these reforms, the government has intended to increase competition in the market. How these reforms influence aged care quality and prices remains unclear.

Our analytical research examined how competition among providers is associated with quality of care and prices in the residential aged care sector. To quantify the association between competition and quality of care, as well as the association between competition and prices, we first need to find a measure to quantify the intensity of competition in a market. The measure we employed is called Herfindahl-Hirschman Index (HHI). We used a comprehensive set of anonymised data on quality of care, prices and residential aged care facility characteristics provided by the Royal Commission into Aged Care Quality and Safety.

The Herfindahl-Hirschman Index

The HHI is a commonly accepted measure of market concentration. It is calculated by squaring the market share of each service provider competing in a market and then summing the resulting numbers. It ranges from 0 (perfectly competitive) to 1 (monopoly). A market with an HHI below 0.15 is generally considered to be competitive, whereas one with an HHI greater than 0.25 is regarded as highly concentrated, i.e. non-competitive.

We examine how HHI is associated with six quality measures covering different quality domains:

- Antipsychotic use
- Premature mortality
- Reported assaults
- Number of complaints
- Staffing hours (total care and registered nurse hours per resident per day) (Royal Commission, 2020)
- Whether competition is related to the average price paid by consumers.

Key Insights



There is no evidence that competition has significantly impacted quality and price

Across the board, there seems to be no clear association between competition and quality of care or price. Table 1 shows how competition relates to price and quality measures in the aged care sector. The reference group in this table is the most competitive market (where the value of HHI is within the range of 0 and 0.02) and each row shows the difference in quality measures between this reference market and other markets where the value of HHI is higher and therefore less competitive. If the difference is statistically significant at the five per cent level, it is noted with an asterisk, such as all the figures in the column of "Registered nurse hrs" having an asterisk indicating these differences in registered nurse hours are statistically significant. Intuitively speaking, this means there is deterministic evidence in our data showing that there is an association between competition measured by HHI and the quality measure of registered nurse hours per day.

As the table shows, for all employed quality measures, except for the registered nurse hours per resident per day, there is no evidence in our data showing that there is a systemic association between market competition and the quality of aged care services. The effects of competition on price are also not statistically significant, as not noted with an asterisk at all in the last column. Taken together, our results suggest markets have failed to produce desirable outcomes in the residential aged care sector. Several reasons may explain this:

 Market failures occur when market mechanisms do not result in an efficient allocation of resources and better outcomes. Competition should encourage providers to innovate, be more efficient, and deliver better quality services at a lower price. But this can only happen if information about quality and prices is transparent such that consumers can choose the highest quality and lowest cost providers. Neither is true for the residential aged care sector in Australia (Yang et al., 2021)

- Aged care residents and their families may have difficulties exercising choice, even if they had better information. Residents often rely on family members who need to choose a facility quickly so there is little time to search extensively and gather trusted information
- Aged care services also tend to have a 'lock-in' effect, since it can be exceedingly difficult and costly to switch providers
- Supply of residential care places is restricted by the government through a process known as the Aged Care Approvals Round (ACAR), which places limits on both the number of places and the locations where they can be offered. This helps to control the overall costs but may also reduce the alternatives available and prevents entries into the market
- An increase in market concentration has further reduced competition and choice; the share of very large providers (with more than 5000 beds) has risen steadily from 16 per cent in 2009/10 to 39 per cent in 2018/19 (Royal Commission, 2021). The average number of facilities owned by a provider has increased 14 per cent from 2014/15 to 2018/19. Increasing concentration reduces the alternatives available to consumers, reducing competition and choice.

Table 1: Estimated effects of market concentration on quality of age care measures

	Antipsychotic use	Premature mortality	Assaults	Registered nurse hrs	Total care hrs	Complaints	Consumer price	
Reference group: Most competition (0≤HHI≤0.02)								
0.02 <hhi≤0.05< td=""><td>-0.0117</td><td>0.0005</td><td>-0.0007</td><td>-0.0505*</td><td>-0.0716</td><td>-0.0030</td><td>0.00670</td></hhi≤0.05<>	-0.0117	0.0005	-0.0007	-0.0505*	-0.0716	-0.0030	0.00670	
0.05 <hhi≤0.15< td=""><td>-0.0135</td><td>0.0007</td><td>-0.0004</td><td>-0.0731*</td><td>-0.0094</td><td>-0.0025</td><td>0.1076</td></hhi≤0.15<>	-0.0135	0.0007	-0.0004	-0.0731*	-0.0094	-0.0025	0.1076	
0.15 <hhi≤0.60< td=""><td>-0.0163</td><td>0.0003</td><td>-0.0006</td><td>-0.0838*</td><td>-0.0267</td><td>-0.0022</td><td>0.0639</td></hhi≤0.60<>	-0.0163	0.0003	-0.0006	-0.0838*	-0.0267	-0.0022	0.0639	
HHI>0.60	-0.0213	0.0002	-0.0022	-0.0921*	0.0461	-0.0009	0.1306	
(least competition)								

^{*}statistically significant difference from the reference group at 5 per cent level



Competition varies across regions. Over time, competition has remained stable with slight decreases in urban and remote areas and minor increases in regional Australia

There is large variation in competition across regions, slight increase in HHI in major cities and remote areas, as illustrated in Figure 1 and Table 2 below. In 2018/19 the market concentration in regional areas was almost 9 times larger than in major cities. Although the competition in regional areas on average has slightly increased from 2008/09 to 2018/19, after years of market-oriented reforms, there is in fact a

as shown in Table 2. This points to a decrease in competition in the aged care sector in major cities and remote areas, rather than an increase in competition as intended by the Living Longer Living Better act.

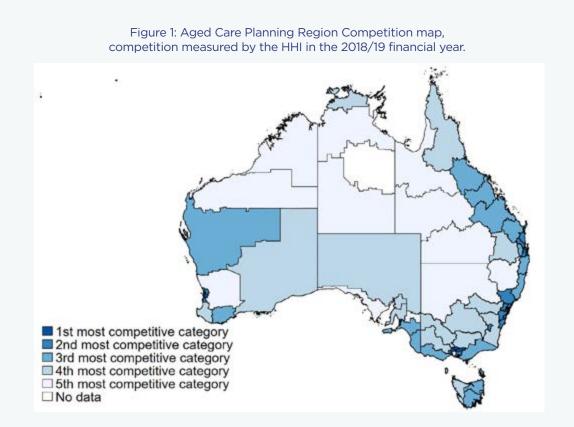


Table 2: Average HHI by financial year and area in Australia

	Major City	Reginal Australia	Remote Australia
2008/09	0.059	0.558	0.904
2015/16	0.063	0.560	0.979
2018/19	0.061	0.545	0.978

Notes: Higher HHI indicates lower competitiveness.

Policies should focus on increasing transparency and increasing the regulation of providers

The Aged Care Royal Commission has called for increased funding in their final report (Royal Commission, 2021), but more money does not by itself solve the aged care problem.

Third, consumers need an advocate to be on the side in their bargaining with providers. The advocate in the independent, have no vested interest in the transaction, and understand the needs and

First, a system of public rating and reporting of quality of care aimed at facilitating consumer choice should be a key infrastructure urgently needed in the residential aged care sector. Such a system would allow older people and their families to make meaningful comparisons of the quality and safety performance of services and providers. This is in line with the Royal Commission's report (Recommendation 24).

Second, price transparency, or the lack of it, is another source of market failure that requires policy actions. The current pricing structure should be simplified so that consumers can compare products and services from different providers with reasonable ease. A government-vetted and run comparison website is a solid alternative. While the Royal Commission recommends an independent pricing authority (Recommendation 6), there is no mention of simplifying the pricing structure in aged care.

Third, consumers need an advocate to be on their side in their bargaining with providers. The advocate must be independent, have no vested interest in the transaction, and understand the needs and preferences of the consumer, and services provided in the local area. The setting up of advocacy services is a recommendation made by the Royal Commission (Recommendation 106). We suggest that the advocacy role could be integrated as a mandatory element in home care services. Given that most consumers transition from home care to residential care, this will provide an integrated pathway for consumers as their needs change.

Fourth, the policy focus on consumer choice is important, but If consumer choice alone is unable to drive competition, more government involvement and regulation will be required to drive quality up and prices down. Following years of market-oriented reforms, we have seen the competition in the aged care market has hardly increased and it seems more competition alone does not translate into better outcomes. Hence, additional mechanisms should be considered. This could include a system of pay for performance for providers, that links funding to the quality of care provided.

References t

- Productivity Commission (Australia), 2011. Caring for Older Australians, Report No. 53, Final Inquiry Report, Canberra..
- Royal Commission into Aged Care Quality and Safety, 2020. Residential Care Quality Indicator Profile Vol 1 – By Provider Type,. https://agedcare.royalcommission.gov.au/sites/default/ files/2020-11/acrc-residential-care-quality-indicator-profile-vol-1by-provider-type.pdf (accessed 7 April 2021)
- Royal Commission into Aged Care Quality and Safety, 2021. Royal Commission Final Report, https://agedcare.royalcommission.gov.au/publications/final-report (accessed 1 March 2021).
- 4. Yang, O., Yong, J., Zhang, Y. & Scott, A. 2021, Competition, prices and quality of residential aged care in Australia. Melbourne Institute Working Paper No.02/21, Available at SSRN: https://ssrn.com/abstract=3765840

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Further Information

Datasets

We use de-identified data accessed under contract from the Royal Commission into Aged Care Quality and Safety. The data cover aspects of quality of care, prices, and facility characteristics such as ownership status and size of nursing homes. The analyses focus on data on nursing home facilities that provide residential care on a permanent basis. The data cover financial years 2008/09, 2013/14 to 2019/20. The dataset contains around 2,900 facilities each year, which nearly include all facilities in Australia.

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