Improving the quality of residential aged care

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Summary

Average stays before death are about 38 months in not-for-profit homes, but only about 33 months in for-profit homes. These quicker deaths may represent unacceptably low quality of care in many for-profit homes, rather than differences in resident ages or health conditions.

Consumer experience reports show more positive responses in not-for-profit, non-metropolitan and smaller homes. Higher staff numbers, including volunteers, may be partly responsible for these differences.

Newly introduced quality of care measures are labour intensive, vulnerable to fraud, and of limited value for care or research. Quality data should be collected by sensors and centrally recorded. Privacy concerns have to be met, but should not protect low-quality providers.

There is no system to follow persons who have been approved for residential care, but have not entered such care. This makes it harder to ensure places are available, and to pay providers appropriately.

Providers are not required to report financial data in standard form, making it impossible to know their profitability and capital adequacy in aggregate. Data for some providers are not publicly available.

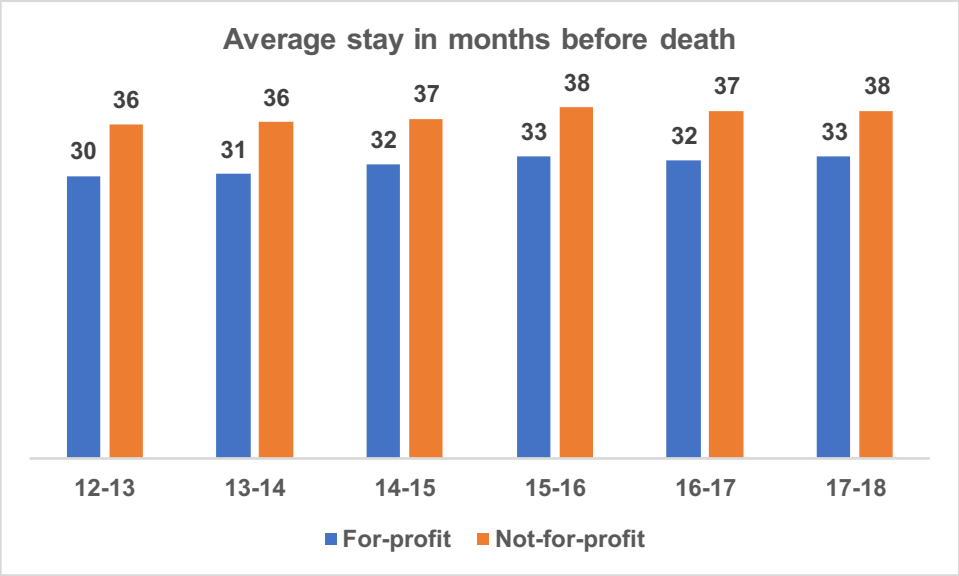
For-profit providers had debts that were 5 times their net assets at 30 June 2014, and 9.7 times at 30 June 2018. These high debt ratios make it increasing likely that a large provider will fail. The Department of Health should be responsible for prompt repayment of accommodation deposits.

The Royal Commission is required to report on the causes of any systematic quality failures, and on any actions that should be taken in response. We suggest some possible causes and actions. We are happy to provide further details about these suggestions.

1. Poor quality of care in for-profit homes

1.1 Shorter stays before death in for-profit homes

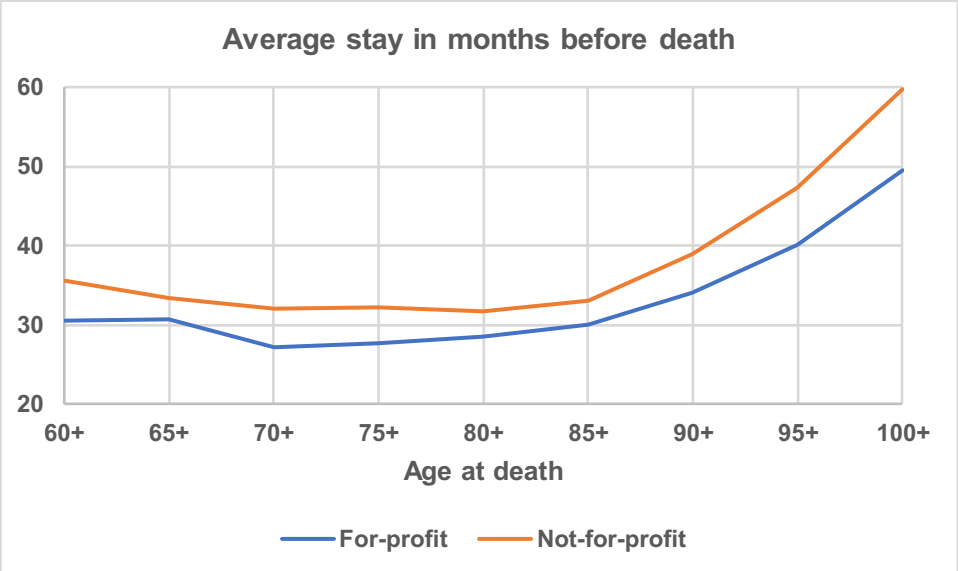
Figure 1: Average stays before death in financial years



Estimated average stays from first entry to a home until death are from data on each assessment made from the start of the Aged Care Funding Instrument (ACFI) system on 20 March 2008 to 30 June 2018 [1]. Average stays in not-for-profit homes have been about 5 months longer than in for-profit homes, and in 17-18 were 38 months compared with 33 in for-profit homes.

1.2 Resident ages do not explain the stay differences

Figure 2: Average stays before death by age at death



Residents in for-profit homes on 30 June 2018 were on average 85.5 years old, compared with 85.0 in not-for-profit homes, but this does not explain their lower average stays before death. The above graph shows that average stays are higher in not-for-profit homes, at all age-groups from 60-64 on. The data are for all deaths in the 3 years to 30 June 2018.

1.3 Similar health conditions in for-profit and not-for-profit homes

Table 1 shows that the proportions of residents with each major health condition at 30 June 2018 were broadly similar for not-for-profit and for-profit homes. The data are from each ACFI assessment current at that date. The shorter stays before death in for-profit-homes do not appear to be due to these health conditions.

Table 1: Proportions of residents with major health conditions at 30 June 2018

Health condition	ACAP codes	% with condition FP	% with condition NFP	FP as % of NFP
Cancers	200-299	6.1%	5.9%	104%
Endocrine, nutritional & metabolic	400-499	16.6%	16.5%	101%
Dementia	500-530	53.5%	51.4%	104%
Depression	550A	50.8%	47.5%	107%
Nervous system	600-699	12.4%	11.8%	105%
Circulatory system	900-999	41.1%	44.2%	93%
Respiratory system	1000-1099	9.7%	10.5%	93%
Digestive system	1100-1199	4.4%	5.3%	83%
Musculoskeletal system	1300-1399	51.8%	56.1%	92%
Genitourinary system	1400-1499	18.3%	20.3%	90%

Notes: ACAP codes are from [2]. FP = for-profit, NFP = not-for-profit.

1.4 Why are stays before death shorter in for-profit homes?

For-profit homes vary in quality, and the best of them may be comparable with the best of not-for-profit homes. But the 38 months average stay before death in not-for-profit homes, compared with the 33 months for for-profit homes, is probably due to systemic quality of care failures in many for-profit homes.

It is likely that a range of mechanisms are involved. For example, unpalatable food and interrupted meal-times may result in some residents not eating enough, and dying through malnutrition. Overuse of sedatives or pain-killers may cause physical inactivity and pressure injuries. Inappropriate combinations of pharmaceuticals may be prescribed. Lack of night-time care for the incontinent may have adverse effects. Barren institutional environments may reduce the will to live.

In section 4 we suggest ways in which better data can be obtained, and used to provide better care.

1.5 Are shorter stays before death in many homes acceptable?

Object (b) of the Aged Care Act 1997 is “to promote a high quality of care and accommodation for the recipients of aged care services that meets the needs of individuals”. Ultimately, it is up to the Australian public to decide what “high quality of care and

accommodation" means. Many might think that public money should be used to provide reasonable but not luxury accommodation. Many might also think that providers receiving public money should not allow residents to die prematurely through neglect or mis-treatment.

2. Residents prefer not-for-profit, non-metropolitan and smaller homes

Consumer experience reports were introduced by the Australian Aged Care Quality Agency in May 2017, as part of reaccreditation procedures. Randomly chosen residents, or their representatives, are asked 10 quantitative questions, including "Do staff treat you with respect", Do you feel safe here?", "Do staff follow up when you raise things with them?" and "Do you like the food here?".

Table 2: Odds ratios from regression analyses of consumer experience reports

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Mean
not-for-profit	1.50*	1.25*	1.16	1.29*	1.39*	1.23*	1.23*	1.27*	1.26*	1.41*	**1.30**
government	1.62*	1.07	1.24	1.06	1.39*	0.97	0.94	1.22	1.51*	1.11	**1.21**
regional	1.08	1.54*	1.43*	1.15	1.06	1.08	1.34*	1.55*	1.14*	1.39*	**1.28**
remote	1.46*	1.64*	1.42*	1.34*	1.25*	1.40*	1.38*	1.53*	1.20*	1.60*	**1.42**
medium	1.12	1.17	1.19	1.28*	1.26*	1.08	1.09*	1.36*	1.32*	1.12	**1.20**
small	1.07	1.51*	1.48*	1.45*	1.28*	1.33*	1.15*	1.58*	1.59*	1.17*	**1.36**

These odds ratios were obtained by logistic regression of 1689 consumer experience report summaries with interview start dates from 9 May 2017 to 18 June 2019 [3, 4]. They are based on the probabilities of getting positive responses to the 10 quantitative questions. The reference categories are for-profit, metropolitan and large (more than 90 places). A regional home is one with a Modified Monash Model code of 2 to 4, and a remote home is one with a code of 5 to 7 (small rural towns, and remote or very remote communities). A medium home has 56 to 90 beds, and a small home has less than 56 beds. An asterisk indicates significance using a 95% confidence interval.

Not-for profit homes are about 1.30 times more likely to report positive satisfaction than for-profit homes, all other factors being equal. Regional homes are about 1.28 times more likely to report positive satisfaction, and remote homes about 1.42 more likely, than metropolitan homes. Medium homes are about 1.20 times more likely to report positive satisfaction than large homes, and small homes about 1.36 times more likely than large homes.

Smaller homes may be less prone to overcrowding and regimentation, and homes outside cities may be less separate from their communities. Not-for-for profit homes are likely to have more volunteers.

The responses to consumer experience reports are subjective in nature. But they help confirm that for-profit homes have generally lower quality of life, and suggest that large sizes and metropolitan sites may also lower quality of life.

3. Limitations of quality indicators made mandatory on 1 July 2019

Three indicators of quality of care were made mandatory on 1 July 2019 - pressure injuries, use of physical restraint and unplanned weight loss [5]. There are many shortcomings in these three indicators:

- Incidence rates are manually calculated by providers and reported quarterly, creating substantial work for providers, as well as the possibility of errors.
- The consent of the resident is needed for their data to be included, creating an opportunity for providers to avoid recording problems.
- No forms of individual care response appear to be planned in response to the indicators.
- Complex judgements are needed to distinguish between six different stages of pressure injuries.
- Many different practices are classed as physical restraints, and providers are required to self-report their use of any of them.
- Significant unplanned weight loss is defined as unplanned weight loss equal to or greater than three kilograms over a three-month period, and consecutive unplanned weight loss is unplanned weight loss of any amount every month over three consecutive months of the quarter. Neither of these two definitions may apply to clinically important changes, such as abrupt weight loss immediately on entry to residential care.
- No form of risk adjustment is proposed for the calculated indicators, so that a provider with more complex residents may be unfairly represented as having worse quality.
- No confidence limits have been proposed for the published indicators, so that users will not be able to distinguish between random variations and serious deviations from normal quality levels.
- The incidence levels of some reportable conditions, such as stage 6 pressure injuries, will be very low, creating problems of statistical significance.
- To gain statistical significance, quality indicators should be calculated across all sites for a provider with multiple sites, as well as for each site separately.

4. Ways to get better data on care quality

4.1 Calculations by a central agency

The burden on providers could be reduced substantially by having providers report data immediately to a central agency, responsible for making all calculations. This would eliminate the possibility of providers making calculation errors. The central agency for the mandatory indicators is currently the Department of Health, but it would make more sense for the central agency to be the Aged Care Quality and Safety Commission. This would help the Commission carry out its accreditation role, and use the expertise it is developing in areas such as chemical restraints.

4.2 Resident consents to information flows

Resident consent is needed for the three quality indicators that became mandatory on 1 July 2019. It is not clear why this is so. A wide range of health information has been collected on each ACFI assessment since 20 March 2008, apparently without any privacy

issues arising. Using strong de-identification measures to protect residents and providers, the Australian Institute of Health and Welfare has been making parts of the ACFI data available for research purposes. This may be happening under section 86.3 of the Aged Care Act 1997, which gives the Secretary of the Department of Health the power to release information, if it is the public interest to do so, to such people and for such purposes as the Secretary determines.

4.3 Frequent transmission of quality data

A major advantage of transmitting quality data to a central agency is that all data can be transmitted as measured, with the intervals between measurements depending on the type of measurement and the resident's history. For example, weekly data on weight might be appropriate for recently admitted residents. The central agency could have automated systems to detect residents with problems needing attention by providers.

4.4 Reporting physical measurements rather than event numbers

The new quality indicators require providers to report the numbers of times particular events have occurred. The definitions of the events to be reported may have been derived by industry consultation, but may not necessarily be useful. It would be better to report physical measurements, such as weight and activity, allowing research to determine what patterns are significant indicators of quality failures.

4.5 Automatic measurement and transmission of quality data

Ideally, data should be measured and transmitted automatically to the quality agency. This would save staff time, and help avoid fraud. Because vast quantities of data can be stored at little cost [6], measurements can be frequent, and immediate help provided to residents.

Weight sensors fitted to beds could measure static weight, and also measure activity levels. Low activity at night could be a sign of over-sedation. Falls can apparently be reliably detected by motion sensors. Each physical restraint device could transmit when it was in use (apart from informal restraints such as furniture). Incontinence problems could be automatically detected. Provider staff could transmit photos of pressure injuries, allowing the use of pattern recognition software to classify stages.

The quality agency should be informed immediately about each prescription written for a resident. The agency could detect inappropriate drug combinations, and monitor drug use by providers.

4.6 Using resident data to determine risk-adjusted quality indicators

The Canadian Institute of Health Information uses statistical data on all continuing care residents to risk adjust quality indicators for continuing care providers in most of the Canadian provinces [7]. This is intended to allow fairer comparisons between providers. For example, it would be feasible to average stays before death for each provider, adjusting for resident age differences.

4.7 Using provider payment data as a supplementary data source

Section 1 of this submission is based on data contained in ACFI assessments made by providers. These data are only supplied intermittently, do not contain relevant data (such as weight and prescriptions), and are sometimes exaggerated to increase provider revenue. The ACFI system may be replaced by a resident classification system involving even less data about each individual. The payment system may still be a valuable way of recording dates of entry and exit from residential care, and the causes of exit.

5. Following persons unable to enter residential care

Object (c) of the Aged Care ACT 1997 is "to facilitate access to aged care services by those who need them, regardless of race, culture, language, gender, economic circumstances or geographic location".

There is no system to follow persons who receive approval for residential aged care, but who do not enter such care. Failure to enter residential care may result from the receipt of adequate home care, or from death soon after approval. But failure to enter residential care may also reflect a shortage of approved places in the area, or characteristics of the person making them unattractive to residential care providers.

Initial analysis of feedback on a consultation paper on a proposal for a new residential care funding system [8] said:

"Regarding recommendation 16 (facilities not be advised of the resident's exact AN-ACC class until after the person is in care), some providers expressed concern that this limited provider autonomy in how they run their in-take process. Currently, many facilities will run a pre-ACFI to determine whether the prospective resident is suitable for their facility."

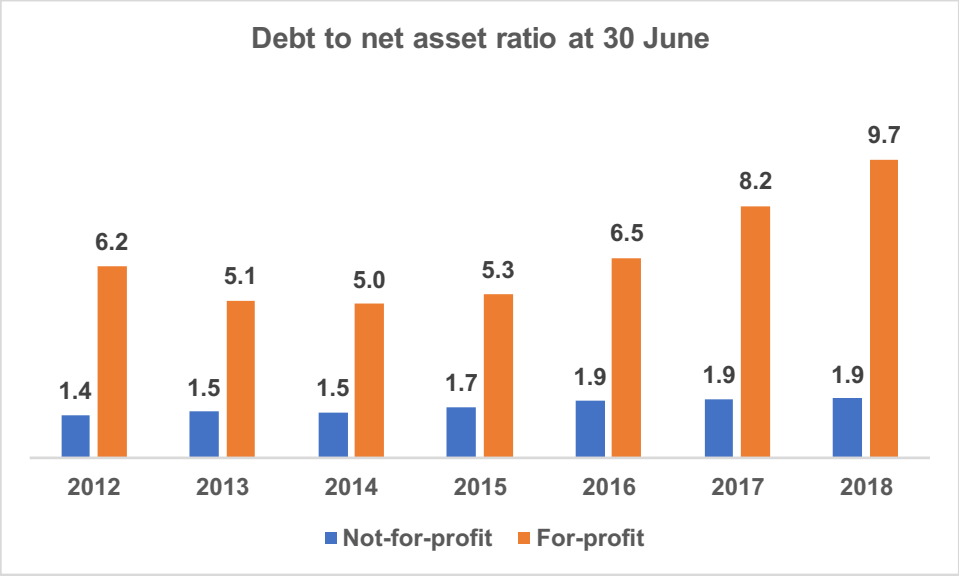
Estimates of the payments likely to be received for a potential resident clearly affect admittance decisions by some providers. Financial considerations, such as willingness to pay an accommodation deposit, may also affect some admittance decisions. Providers are not obliged to admit applicants, and there are no central waiting lists.

The Department currently controls the allocation of places and capital grants for home construction, as well as the system which pays providers for their residents. Without data on persons failing to enter residential care, the Department cannot properly fulfil any of these functions. The consequences for persons needing residential care, but unable to obtain it, may be disastrous.

6. Higher failure rates of for-profit providers

A guarantee scheme exits to refund accommodation deposits to residents in cases where a provider has become insolvent. Since the introduction of the scheme in 2006, about 12 provider failures have resulted in payments from the scheme. All the providers involved have been for-profit [9]. The estimates in Figure 3 and Table 3 are from the Aged care Financing Authority [10], and similar earlier reports. "Debt" is total liabilities, and "net assets" are total assets less total liabilities.

Figure 3: Debt to net asset ratios at the end of each financial year



The failures of for-profit providers may reflect their high debt to net asset ratios, which have risen from 5.0 at 30 June 2014 to 9.7 at 30 June 2018. Table 3 shows that in these four years for-profit providers reported profits of $2162 million from their residential aged care operations, and may have withdrawn about $2507m. These estimates make no allowances for income tax.

Table 3: Profits and estimated cash withdrawals in the 4 years to 30 June 2018

Statistic	Not-for-profit $m	For-profit $m
Profit 4 years to 30/6/18	1574	2162
Net assets 30/6/14	7201	2277
Net assets 30/6/18	8954	1932
Increase in net assets	1753	-345
Cash withdrawals	**-179**	**2507**

The Department of Health has recently completed a consultation on managing prudential risk in residential aged care. The consultation process was opaque, with the identities of the submitters, and their submissions, not available. A summary of the views of four provider associations was obtained under a Freedom of Information request [11], together with an unhelpful summary map [12]. None of the 24 submissions were from organisations representing consumers.

There can be long delays before the guarantee scheme is triggered, causing severe distress to residents and their families seeking deposit repayments:

"There may be a considerable interval during which the resident, estate or government seek retrieval of the funds before a formal insolvency event … ACFA recognises that in some cases there may be protracted delay in the refund of an accommodation payment" (Aged Care Financing Authority [13]).

The abrupt closure of Earle Haven Nursing Home on 11 July 2019, following a dispute between the owner and a subcontractor, shows the need for processes to ensure continuing

care to residents in failing providers. These processes should include immediate refunds of accommodation deposits by the Department of Health, with subsequent repayment of the Department by the guarantee scheme.

7. Suggested causes for quality failures, and actions in response

7.1 Data are needed on the quality of care provided to individuals

The present systems of provider approval and penalties for poor performance are based on subjective assessments of provider systems. Detailed data on the quality of care provided to individuals are also needed.

7.2 Central storage of reliable data on the continuing health of each resident

Apart from intermittent data provided through the provider payment system, there is no central storage of reliable data on the continuing health of each resident. We suggest such central storage could

- help providers provide better individual care to residents
- help external assessors under the proposed provider payment system [14]
- help the Department ensure that a high quality of care is given to each resident
- help research into methods of providing better care
- help public consultations on care methods and payment systems.

7.3 Use of electronic recording and transmission of health data to central storage

We suggest electronic recording and transmission of health data on each individual could

- reduce provider staff costs
- reduce provider exaggeration
- allow very frequent recording of quickly changing conditions
- allow the use of artificial intelligence to detect significant patterns.

7.4 Central storage of data on staff and volunteer times

To allow analyses of relationships between staffing and quality, data on staff and volunteer times should be automatically recorded and stored in the central system.

7.5 Publication of risk-adjusted quality indicators

Risk-adjusted quality indicators should calculated from the centrally stored data, together with statistical confidence limits, and be publicly available

7.6 Monitoring of persons unable to enter residential care

A system is needed to follow persons approved for residential care, but not entering such care.

7.7 Adoption of scientific research methods

Data to allow research should be publicly available, at no charge. Independent research should be funded. Research reports should give full details of the data, methods used and results obtained, so that the results can be independently checked. Large-scale trials should be made of alternative methods.

7.8 The financial structure and capital adequacy of providers should be controlled

In aggregate, for-profit profit providers are reducing their capital to dangerously low levels. Without controls on structure and capital adequacy, the abrupt failure of a large provider is likely.

7.9 Financial statements in standard form should be publicly available for each provider

Prompt availability of financial statements in standard form would allow expert analysis and informed choices by potential residents.

7.10 Residents in homes run by failing providers should be assisted

The Department should refund accommodation deposits on request.in any cases where refunds are delayed, with the Department obtaining reimbursement from the guarantee scheme. In an abrupt failure, alternative care will need to be urgently arranged for all residents.

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