Royal Commission
into Aged Care Quality and Safety

AUSTRALIA'S AGED CARE SYSTEM: THE QUALITY OF CARE EXPERIENCE AND COMMUNITY EXPECTATIONS

RESEARCH PAPER 20

FEBRUARY 2021

The Royal Commission into Aged Care Quality and Safety was established by Letters Patent on 8 October 2018. Replacement Letters Patent were issued on 6 December 2018, and amended on 13 September 2019 and 25 June 2020.

The Honourable Tony Pagone QC and Ms Lynelle Briggs AO have been appointed as Royal Commissioners. They are required to provide a final report by 26 February 2021.

The Royal Commission intends to release consultation, research and background papers. This research paper has been prepared by the Caring Futures Institute, Flinders University, for the information of Commissioners and the public. The views expressed in this paper are not necessarily the views of the Commissioners.

This paper was published on 16 February 2021.

ISBN 978-1-921091-85-8 (online)

Flinders UNIVERSITY | Caring Futures Institute

INSPIRING ACHIEVEMENT

Australia's aged care system: the quality of care experience and community expectations

A research study for the Royal Commission into Aged Care Quality and Safety

November 2020

Australia's aged care system: the quality of care experience and community expectations

Julie Ratcliffe[1], Gang Chen[2], Jyoti Khadka[1], Sheela Kumaran[1], Claire Hutchinson[1], Rachel Milte[1], Steven Savvas[3], Frances Batchelor[3]

[1] Caring Futures Institute, Flinders University

[2] Centre for Health Economics, Monash University

[3] National Ageing Research Institute

Acknowledgements

We thank Christa Dang and Anabelle Peck, National Ageing Research Institute; Jenny Cleland and Billingsley Kaambwa, Flinders University; Grant Whitesman, Sam Bye and Thomas Pearce from the Data & Research section of the Royal Commission into Aged Care Quality and Safety for their respective contributions and support for this study. We also wish to express our gratitude to the many younger and older Australians who generously gave up their time to participate and without whom this study would not have been possible.

Suggested citation: Ratcliffe J, Chen G, Khadka J, Kumaran S, Hutchinson C, Milte R, Savvas S, Batchelor F (2020). Australia's aged care system: the quality of care experience and community expectations. Caring Futures Institute, Flinders University, South Australia.

Contents

Executive Summary 2

1. Background 4

2. The quality of the care experience of care recipients 5

Table 1: Home care sample socio-demographic characteristics and types of services accessed 6

Table 2: Residential care sample socio-demographic characteristics 7

Figure 1: Quality of care experience summary scores: home care 8

Figure 2: Quality of care experience summary scores: residential care 9

Table 3: Proportions of respondents passing quality of care experience thresholds# 9

3. The community's expectations 10

Table 4: General Public sample socio-demographic characteristics 10

Figure 3: Community opinion of the importance of attributes to quality aged care, by level of understanding of the aged care system 13

Table 5: Percent of people who rated the quality attribute Not/Slightly/Moderately important 15

Table 6: Chi-square test results between an attributes' perceived importance and the level of understanding of the aged care system 16

4. Discussion and conclusions 17

5. References 18

Executive Summary

- Several national research projects were undertaken during the life of the Royal Commission into Aged Care Quality and Safety that have substantially improved understanding of the quality of aged care services and the community's expectations for higher quality care to be achieved in the future. This report summarises the results from those national research projects and provides additional analysis about how the results were distributed.

- The national research projects utilised a large-scale general public survey of Australians and two surveys of older people receiving home care and residential care in Australia (or their family carer as a proxy). The general public survey included questions about respondents' perception of the importance of various aged care quality attributes, their understanding of the aged care system, and their willingness to pay for care that they regard as 'satisfactory' and 'high' quality. The surveys of people receiving care used a new questionnaire that measures the Quality of Care Experience (QCE) in aged care containing 6 attributes rated on a 5-point Likert response scale. The attributes were:
    - I am treated with respect and dignity
    - I am supported to make my own decisions about the care and services I receive
    - I receive care and support from aged care staff who have the appropriate skills and training
    - I receive services and support for daily living that are important for my health and wellbeing
    - I am supported to maintain my social relationships and connections with the community
    - I am comfortable lodging complaints, with confidence that appropriate action will be taken (this attribute was separated into multiple components that were amalgamated for the analysis in this report)

- Results from the national surveys of care recipients were alarming. Only 24% of people receiving residential care, and 20% of people in home care, felt their care needs were always met across all quality of care experience attributes (including the amalgamated complaints attribute). To put this into context, the separate national survey of the general public indicated that at least 15% of the public consider that people in care must have their needs met 'always' across all attributes for the care to qualify as 'satisfactory'. Even if one takes the view that 'satisfactory' care is care that 'mostly' meets peoples' needs, the share of care recipients meeting this lower threshold was just 58% for residential care and 50% for home care.

- The separate national general public survey showed that aged care is seen as a vital social service by most Australians. All quality of care attributes were viewed as important or very important by the vast majority, regardless of how well they understand the aged care system. This was particularly true for females and older people, and there were only small differences between people born in Australia and those born other countries. Most in the community also felt that the aged care system is in need of reform to become a high quality system and, to that end, were willing to fund the substantial costs of delivering high quality care for all Australians.

The majority of current income taxpayers (61%) indicated they would be willing to pay more income tax to support aged care. These taxpayers were willing to pay an additional 1.4% per year on average to ensure that all Australians in need have access to a satisfactory level of quality aged care, and an additional 3.1% per year on average to ensure that all Australians in need have access to a high level of quality aged care.

- These surveys provide Australia with an important set of baseline data from which to evaluate aged care reform and public expectations in the future. Importantly, they also enabled the development and validation of the QCE which has filled the gap in the research toolkit needed to measure the overall quality of care experience from the care recipient's perspective.

- Routine measurement and public reporting of quality of care experience, as well as quality of life, are essential to understanding the effectiveness of aged care in Australia and internationally. By repeating the surveys at regular intervals, it will be possible to monitor the progress of Australian aged care, promote continuous quality improvement among service providers, and move more quickly to address problems within the system. Routine measurement will also be critical for maintaining the public's understanding of the aged care system's performance, whether their expectations for high quality are being achieved, and to foster public confidence.

1. Background

Despite the high numbers of older Australians currently accessing aged care and predicted to do so in the future, there has not been an adequate understanding of the overall quality of the care experienced for people in the aged care system. The level of importance given by society overall to achieving universal quality of care has also been unclear.

These gaps in knowledge were the subject of several national research projects undertaken during the life of the Royal Commission into Aged Care Quality and Safety.

- The Caring Futures Institute at Flinders University recently conducted on a large-scale survey of over 10,000 people which investigated what quality of care in aged care means to the Australian general public and how important it is that quality be achieved [Ratcliffe et al, 2020]. A major component of this work comprised the development of a new 'Quality of Care Experience' (QCE) questionnaire. The QCE was developed from a comprehensive literature review to extract the key characteristics that define quality of care experience in aged care from the perspective of older people and family carers.
- The QCE was subsequently included in two surveys conducted by the National Ageing Research Institute, working in partnership with Ipsos and the Social Policy Research Centre of the University of New South Wales. The surveys investigated the care experience of over 1,000 older people receiving aged care in home and residential settings [Batchelor et al, 2020]. The surveys involved interviews with older people directly or their proxy family carers.

This new study summarises the results about the quality of care experience from those national research projects and provides additional analysis about how the results were distributed. The study was undertaken by the Caring Futures Institute in collaboration with the Centre for Health Economics at Monash University and the National Ageing Research Institute.

2. The quality of the care experience of care recipients

The quality of the care experience for older people currently receiving home care or living in residential care facilities was measured by incorporating the Caring Futures Institute's QCE within two surveys undertaken by the National Ageing Research Institute [Batchelor et al, 2020].

The home care survey involved telephone interviews with a sample of clients or their representatives receiving a Home Care Package (HCP), Commonwealth Home Support Program (CHSP) respite services (in home, centre, cottage or flexible respite) or residential respite services. The sample was stratified by State/Territory, remoteness (major city, inner regional, and outer regional), and provider type (profit, non-profit, government). The sampling frame was stratified into six groups: Home Care Package (HCP) levels 1-4, CHSP respite and residential respite. A total of 1,223 interviews were completed. This comprised 865 interviews for HCP, 155 interviews for CHSP respite and 203 interviews for residential respite. Overall care recipients comprised 50.2% of the total number of respondents to this survey and proxies comprised 49.8%. Only the results for the HCP respondents are presented in this report; CHSP respite and residential respite respondents are excluded as these people answered the survey in relation to only the respite services they received, which would be a relatively small part of their overall care experience. The socio-demographic characteristics of the home care sample and the types of services accessed are presented in Table 1. The results presented in this report are weighted to be representative of the home care population in Australia by HCP level (1-4), location (State/Territory, metropolitan/non-metropolitan areas) and organisation type (for-profit, non-profit, government).

The residential care survey involved a computer assisted personal interview (CAPI) with residents or resident representatives where necessary. The residents were drawn randomly from a sample of 67 Australian residential aged care facilities. These residential aged care facilities were randomly sampled to achieve a nationally representative sample. Randomisation was proportionally stratified by State/Territory, metropolitan/non-metropolitan areas determined by Greater Capital City Statistical Areas (GCSSA), organisation type (for-profit, non-profit, government), and facility size (number of beds: 0-60, 61-100, >100). A total of 391 interviews were completed with 367 (93.9%) completed by residents and 24 (6.1%) were completed by proxies. The socio-demographic characteristics of the residential care sample are presented in Table 2. The weighted results presented in this report are weighted to be representative of the residential care population in Australia by location (metropolitan or rural) and organisation type (for-profit, non-profit or government).

For both the home care and residential care samples, respondents were asked to evaluate their experiences of care quality and their confidence in lodging complaints using the 5-point Likert scale with the response options: never, rarely, sometimes, mostly, always. The attributes rated were:

- I am treated with respect and dignity
- I am supported to make my own decisions about the care and services I receive
- I receive care and support from aged care staff who have the appropriate skills and training
- I receive services and support for daily living that are important for my health and wellbeing
- I am supported to maintain my social relationships and connections with the community
- I know how to lodge a complaint
- I am comfortable lodging complaints
- I am confident that appropriate action will be taken when I lodge a complaint

Table 1: Home care sample socio-demographic characteristics and types of services accessed

Variables		All (n=755)			Self (n=521)			Proxy (n=234)		
		n	Unweighted %	Weighted %	n	Unweighted %	Weighted %	n	Unweighted %	Weighted %
Gender	Male	236	31.3	31.7	148	28.4	28.4	88	37.6	38.8
	Female	519	68.7	68.3	373	71.6	71.6	146	62.4	61.2
Age	45-54 years	3	0.4	0.3	3	0.6	0.5	-	-	-
	55-64 years	13	1.7	1.5	12	2.3	2.1	1	0.4	0.2
	65-74 years	131	17.4	16.9	105	20.2	19.3	26	11.1	11.7
	75 - 84 years	316	41.8	41.3	234	44.9	44.9	82	35.1	33.7
	85 - 94 years	265	35.1	35.9	154	29.6	30.2	111	47.4	48.1
	95 years and older	25	3.3	3.5	11	2.1	2.2	14	6.0	6.3
	I'd prefer not to say	2	0.3	0.6	2	0.4	0.8	-	-	-
Remoteness region	Major Cities of Australia	489	64.8	67.4	320	61.4	64.4	169	72.2	73.8
	Inner Regional Australia	186	24.6	25.4	143	27.5	27.8	43	18.4	20.3
	Outer Regional/Remote/Very Remote	80	10.6	7.2	521	11.1	7.8	22	9.4	5.9
Provider type	For profit	146	19.4	20.4	94	18.1	19.6	52	22.2	21.9
	Not For Profit	501	66.4	72.3	347	66.7	72.5	154	65.8	71.9
	Government	107	14.2	7.3	79	15.2	7.8	28	12.0	6.2
HCP level	Level 1	123	16.3	8.0	106	20.3	19.1	17	7.3	3.6
	Level 2	246	32.6	42.6	198	38.0	50.6	48	20.5	25.6
	Level 3	182	24.1	20.2	118	22.7	18.9	64	27.3	23.0
	Level 4	204	27.0	29.2	99	19.0	20.5	105	44.9	47.8
Home care duration	Less than 1 year	116	15.4	13.0	95	18.2	15.3	21	9.0	8.0
	1 - 2 years	363	48.1	49.7	258	49.5	51.2	105	44.9	46.6
	3 - 5 years	207	27.4	28.5	124	23.8	25.8	83	35.5	34.4
	Over 6 years	63	8.3	8.1	41	7.9	7.2	22	9.4	9.9
	Don't know	6	0.8	0.7	3	0.6	0.5	3	1.3	1.1
Interpreter required	No	706	93.5	92.8	480	92.1	91.2	226	96.6	96.2
	Yes	49	6.5	7.2	41	7.9	8.8	8	3.4	3.8
Types of services accessed										
Personal care	No	407	53.9	52.5	322	61.8	60.3	85	36.2	35.9
	Yes	348	46.1	47.5	199	38.2	39.7	149	63.7	64.1
Nursing	No	616	81.6	81.6	454	87.1	87.0	162	69.2	70.0
	Yes	139	18.4	18.4	67	12.9	13.0	72	30.8	30.0
Allied Health	No	333	44.1	43.0	250	48.0	47.6	83	35.5	33.3
	Yes	422	55.9	57.0	271	52.0	52.4	151	64.5	66.7
Respite care	No	638	90.5	89.7	488	93.7	93.1	195	83.3	82.5
	Yes	72	9.5	10.3	33	6.3	6.9	39	16.7	17.5
Meal preparation	No	581	77.4	78.3	409	78.5	79.4	175	74.8	76.0
	Yes	171	22.65	21.7	112	21.5	20.6	59	25.2	24.0
Social/activity support	No	491	65.0	65.3	348	66.8	66.4	143	61.1	62.8
	Yes	264	35.0	34.7	173	33.2	33.6	91	38.9	37.2
Transport	No	380	50.3	50.1	246	47.2	47.5	134	57.3	55.9
	Yes	375	49.7	49.9	275	52.8	52.5	100	42.2	44.1
Domestic assistance/cleaning	No	73	9.7	9.8	36	6.9	6.3	37	15.8	17.2
	Yes	682	90.3	90.2	485	93.1	93.7	197	84.9	82.8
Assistive technology	No	433	57.4	56.3	320	61.4	60.2	113	48.3	48.0
	Yes	322	42.6	43.7	201	38.6	39.8	121	51.7	52.0
Home maintenance	No	385	51.0	50.7	255	48.9	47.9	130	55.6	56.5
	Yes	370	49.0	49.3	266	51.1	52.1	104	44.4	43.5

Table 2: Residential care sample socio-demographic characteristics

Variables		All (n=328)			Self (n=317)			Proxy (n=11)		
		n	Unweighted %	Weighted %	n	Unweighted %	Weighted %	n	Unweighted %	Weighted %
Gender	Male	116	35.4	36.4	113	35.6	37	3	27.3	21.2
	Female	212	64.6	63.6	204	64.4	63	8	72.7	78.8
Age	45-54 years	2	0.6	1.4	2	0.6	1.4			
	55-64 years	7	2.1	2.1	7	2.2	2.1			
	65-74 years	43	13.1	12.7	43	13.6	13.2			
	75 - 84 years	101	30.8	30.2	97	30.6	30.2	4	36.4	29.9
	85 - 94 years	135	41.2	42.8	129	40.7	41.9	6	54.5	63.1
	95 years and older	36	11	10.3	35	11	10.4	1	9.1	7
	Missing	4	1.2	0.7	4	1.3	0.7			
Marital status	Single (never married)	39	11.9	12.7	38	12	12.9	1	8	13.9
	Married/de-facto	83	25.3	25.7	80	25.2	25.8	3	21.9	33.3
	Divorced/Separated	38	11.6	11	37	11.7	11.1	1	7.7	8.3
	Widowed	167	50.9	50.3	161	50.8	49.8	6	62.4	44.4
	Missing	1	0.3	0.3	1	0.3	0.3			
Region	Metro	215	65.5	60	207	65.3	60	8	72.7	58.3
	Regional	113	34.5	40	110	34.7	40	3	27.3	41.7
Type of facility	For profit	112	34.1	41	108	34.1	40.7	4	36.4	48.2
	Government	29	8.8	5.1	28	8.8	5	1	9.1	8
	Non-profit	187	57	53.9	181	57.1	54.3	6	54.5	43.8
Facility size	0-60	82	25	27	80	25.2	27.5	2	18.2	15
	61-100	95	29	25.5	89	28.1	24.7	6	54.5	43.1
	100+	151	46	47.6	148	46.7	47.8	3	27.3	41.9
Duration of stay in the aged care home	6 weeks to 6 months	40	12.2	12	40	12.6	12.5			
	Between 6-12 months	54	16.5	17.3	53	16.7	17.8	1	9.1	7
	1-2 years	66	20.1	20.5	65	20.5	21	1	9.1	7.7
	2-5 years	114	34.8	33	108	34.1	32.6	6	54.5	42.8
	5-10 years	33	10.1	11.8	30	9.5	10.5	3	27.3	42.5
	Over 10 years	15	4.6	4.1	15	4.7	4.3			
	Don't know	6	1.8	1.3	6	1.9	1.4			
Frequency of visitors	Daily	37	11.3	10.9	32	10.1	9.8	5	45.5	35.3
	A few times a week	119	36.3	35.7	115	36.3	35.1	4	36.4	50.5
	Once a week	79	24.1	26.6	79	24.9	27.7			
	2-3 times a month	46	14	13.9	45	14.2	14.2	1	9.1	6.5
	Once a month	21	6.4	5.8	21	6.6	6			
	Less often	17	5.2	4.6	16	5	4.5	1	9.1	7.7
	Never	9	2.7	2.6	9	2.8	2.7			
Capacity to participate in interview	Yes	313	95.4	94.9	313	98.7	98.9			
	No, but can participate	4	1.2	1.1	4	1.3	1.1			
	No, Proxy completed	11	3.4	4.1				11	100	100
Interpreter required	No	324	98.8	98.8	313	98.7	98.7	11	100	100
	Yes	4	1.2	1.2	4	1.3	1.3			

After completion of the survey, comprehensive psychometrics and validity assessments were conducted on the QCE. The assessments confirmed the QCE questionnaire as a fit for purpose tool to assess the quality of care experience from the perspective of older people and family carers in residential aged care and home care settings [Khadka et al, 2020].

In our analysis of the responses of the QCE in this report, we have amalgamated the 3 attributes about complaints and coded according to the response provided to the final question "I am confident that appropriate action will be taken when I lodge a complaint". Individual responses to each QCE question were then coded on a 0-4 scale where 0 equates to that particular attribute never being achieved and 4 equates to that particular attribute always being achieved. These values were then summed to provide a total raw summary score with a minimum possible score of 0 and a maximum possible score of 24.

Figures 1 and 2 below present the distribution of total QCE scores for the home and residential care samples. For both samples the majority of respondents scored towards the higher end of the scale. However, in both samples a significant proportion of respondents indicated relatively low levels of care quality. It can also be seen that proxy respondents tended to report lower quality of care on average than older people reporting for themselves, particularly in the home care sample.

Figure 1: Quality of care experience summary scores: home care

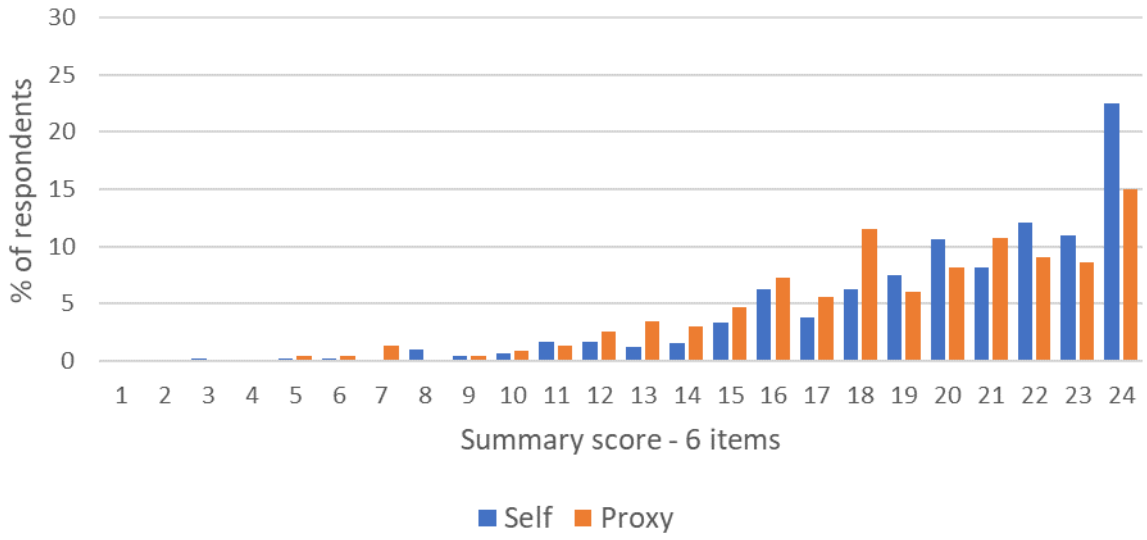
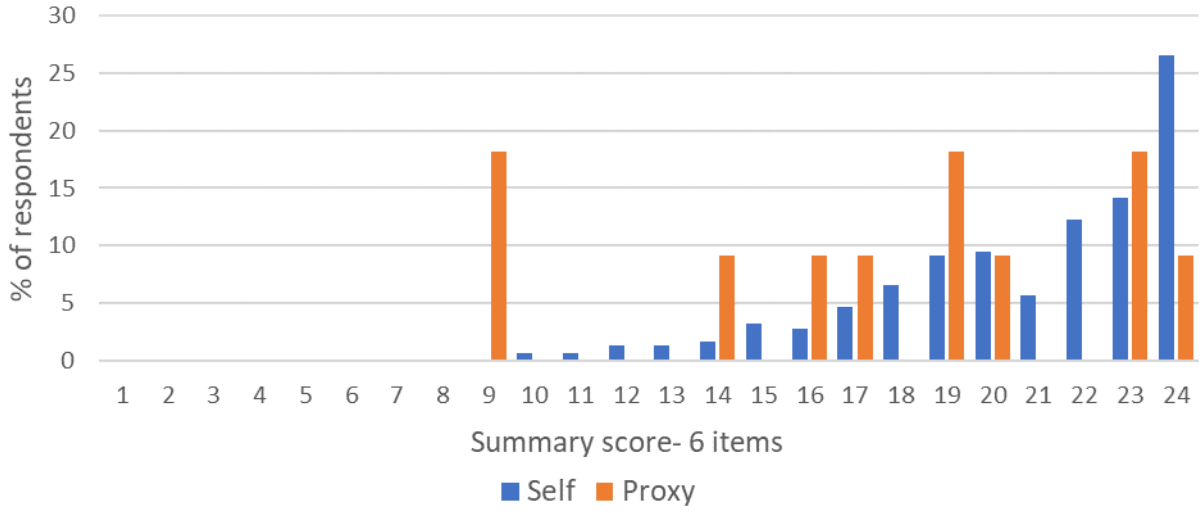


Figure 2: Quality of care experience summary scores: residential care



When further considering individual responses to the QCE, Table 3 presents the proportions of respondents passing various quality thresholds across all 6 attributes, including complaints. A minority of respondents (24% for the residential care sample and 20% for the home care sample) passed the highest quality threshold by indicating the highest level 'always' for all attributes. Higher proportions of respondents passed lower quality thresholds by responding at least 'mostly' in all attributes and responding at least 'sometimes' in all attributes. Again, the discrepancies between self and proxy reported quality of care experience is evident with proxy respondents tending to report lower total QCE scores on average than older people reporting for themselves. It is possible that 'gratitude bias' (feeling grateful for the level of care and support received from their service provider, even if this was not perceived as of optimal quality) may have influenced older people's responses [Laver et al 2011; Phillips et al, 2002]. Other possible reasons for the more favourable responses from care recipients include 'participation bias' whereby only those older people who were reasonably happy with the care they were receiving chose to participate in the survey [Slonim et al, 2013].

Table 3: Proportions of respondents passing quality of care experience thresholds#

QCE 6 attributes	unweighted % passing cut-off						weighted % passing cut-off					
	Home care			Residential care			Home care			Residential care		
	All	Self	Proxy	All	Self	Proxy	All	Self	Proxy	All	Self	Proxy
Always in all attributes	20.1	22.5	15.0	25.9	26.5	9.1	20.4	22.6	15.8	24.1	24	27.2
At least 'Mostly' in all attributes	48.2	50.9	42.3	59.2	59.9	36.6	50.2	52.5	45.2	57.8	58.2	48.7
At least 'Sometimes' in all attributes	68.5	69.3	66.7	85.4	86.7	45.5	69.9	71.2	67.1	84.4	85.6	56.4

inclusive of responses to the complaints attribute which was excluded in the similar analysis by Batchelor et al, 2020

3. The community's expectations

The importance of quality aged care in the eyes of the general community was measured in the earlier survey conducted by the Caring Futures Institute [Ratcliffe et al, 2020].

Survey respondents comprised a representative sample (by age, gender and state or territory) of over 10,000 Australian adults not currently receiving aged care services, aged 18 to 91 years. Table 4 presents the characteristics of the survey respondents. Survey respondents were sourced from Quality Online Research, an online fieldwork provider with an extensive panel network and national coverage. Panel members were invited to participate if they met the selection criteria (aged 18 years and over, able to read and respond in the English language, residing in Australia, no personal experience of accessing aged care services). In order to ensure that a broad representation of the views of the Australian adult population was achieved, demographic quotas were applied. In addition to the application of demographic quotas, the final dataset was weighted to further align the respondent data with population statistics of the Australian population according to age group, gender and state or territory. The weights were based upon the June 2018 population estimates provided by the Australian Bureau of Statistics [ABS, 2018].

Table 4: General Public sample socio-demographic characteristics

Variable	Labels	N (10,315)	Unweighted %	Weighted %
Gender	Female	5,357	51.9	50.8
	Male	4,958	48.1	49.2
Age category (years)	18-29	2,102	20.4	25.2
	30-39	1,846	17.9	17.7
	40-49	1,724	16.7	16.1
	50-59	1,671	16.2	15.1
	60-69	1,402	13.6	12.6
	70+	1,570	15.2	13.3
State	New South Wales	3,434	33.3	32.1
	Victoria	2,644	25.6	25.2
	Queensland	1,774	17.2	20.0
	Western Australia	1,003	9.7	10.0
	South Australia	830	8.0	6.9
	Tasmania	302	2.9	2.8
	Australian Capital Territory	211	2.0	1.9
	Northern Territory	117	1.1	1.1
Living arrangements (Do you live with)	On your own	2,232	21.6	22.1
	With spouse	4,555	44.2	42.3
	With family	3,080	29.9	30.8
	With other-not relatives	448	4.3	4.8
Highest education level	Primary school	61	0.6	0.6
	Some secondary school	970	9.4	9.1
	Completed high school	1,737	16.8	17.2
	Some additional training	3,120	30.2	29.4
	Undergraduate University	2,902	28.1	28.8
	Postgraduate University	1,525	14.8	14.9

Variable	Labels	N (10,315)	Unweighted %	Weighted %
Country of birth	Australia	7,424	72.0	71.1
	Europe	756	7.3	6.9
	Asia	719	7.0	7.3
	Other	1,416	13.7	14.1
Close family member receiving aged care	Yes	2,223	21.6	21.8
	No	8,092	78.4	78.2
Employment status	Full-time	3,787	36.7	38.4
	Part-time	1,985	19.2	19.4
	Student	459	4.4	5.3
	Retired	2,402	23.3	21.0
	Unemployed	1,026	9.9	9.9
	Other	656	6.4	6.0
Annual household Income	Up to $19,999	834	8.1	8.6
	$20,000-$39,999	1,829	17.7	17.4
	$40,000-$79,999	2,766	26.8	26.3
	$80,000-$124,999	2,118	20.5	20.6
	$125,000 plus	1742	16.9	17.0
	Prefer not to say	1,026	9.9	10.1

A key objective of the survey was to estimate the amount of money that the community is willing to pay to achieve satisfactory and high/very high quality aged care. This was achieved with a series of questions about the willingness to pay additional income tax or co-contributions (individual payments or fees). As expected, those with higher incomes were more likely to pay larger amounts.

The income tax questions were framed so that the additional tax was to ensure satisfactory or high quality aged care for all Australians in need. The vast majority (87%) either 'agreed' or 'strongly agreed' that the government should provide more funding for aged care, and most indicated that they would be willing to support aged care quality improvements by paying more tax. Two-thirds of the sample indicated that they currently pay income tax and the majority of current income taxpayers (61%) indicated they would be willing to pay more income tax to support a quality aged care system. These taxpayers were willing to pay an additional 1.4% per year on average to ensure that all Australians in need have access to a satisfactory level of quality aged care, and an additional 3.1% per year on average to ensure that all Australians in need have access to a high level of quality aged care. This would be a very significant amount of additional funding (an extra three-quarters or so of aged care's current funding allocation) which shows the community sees quality aged care as very important to achieve.

The importance that the community places on aged care was also reflected in the responses to the co-contributions questions. These were framed so that the payment would be to ensure the person's own access to satisfactory or high quality aged care. The co-contributions questions also differentiated between home (community based) and residential (nursing home) care. On average, respondents who indicated a willingness to pay a co-contribution indicated that they would pay $162.52 per week to receive a satisfactory level of quality home care and $240.95 per week to receive a high level of quality home care (equating to an additional quality payment of $78 per week or 48%). Consistent with Australian's preference to remain living at home, 72% of respondents were willing to pay a co-contribution fee to facilitate staying in their own home and avoid moving into a residential care facility.

The average co-contribution amount these respondents were willing to pay to avoid moving into residential care was $184 per week (equating to $9,568 per year). If unable to avoid moving into a residential care facility, the average co-contribution amount people were willingness to pay increased to $528.75 per week for satisfactory quality residential care and $693.11 per week for high quality residential care (equating to an additional quality payment of $164 per week or 31%).

Another key objective of the survey was to understand the level of importance the community places on different aspects of aged care. This was achieved by asking respondents to rate, in their opinion, the importance of 10 attributes in ensuring quality aged care. The attributes used in this question were an expanded and somewhat modified version of the 6 used in the QCE that enabled more detail to be gathered on the person-centred aspects of care. The ratings used a five-point Likert scale ranging from 'Not important' to 'Very important'. Respondents were also asked about their level of understanding of the aged care system on a five-point scale ranging from 'Not at all' to 'Very well', which we have used for further analysis in this study.

All of these quality attributes were rated 'Very important' by a majority of respondents and the vast majority rated them 'Important' or 'Very important'. The attributes the community rated highest were: the older person being treated with respect and dignity; staff skills and training; and the older person being safe and comfortable. Slightly less important to the community were the attributes about the older person having choice and control, being valued for their personal identify and history, and supported to maintain social relationships. These findings were highly consistent regardless of how much someone knew about the aged care system, as shown in Figure 3.

The relative importance of quality of care attributes were also explored through a Discrete Choice Experiment (DCE) within the survey. Each respondent was presented with a series of 6 scenarios comprising two aged care providers with different quality of care characteristics based on the QCE. Respondents were asked to indicate their preferred providers and most scenarios presented a mix of alternative characteristics such that no single provider clearly dominated. Respondents were therefore required to make trade-offs in the quality characteristics of the two presented providers within each choice question. Following the completion of each DCE scenario, respondents were asked to rate the quality of care provided by their chosen provider on a five-point Likert scale ranging from 'unacceptable' to 'very high'. The general public sample provided a total of 61,349 individual quality ratings (6 quality ratings responses per respondent). Econometric modelling (including conditional logit, mixed logit regression and fixed-effect multinomial logit models) were then used to estimate the relative importance of the various quality attributes to the choice of aged care provider and the quality rating assigned by respondents.

The modelling from the ratings task in the DCE found that the most important quality of care attributes which elevated a provider from being rated as 'Unacceptable/Poor' to 'Satisfactory' quality were: older people being treated with respect and dignity; aged care staff having the skills and training needed to provide appropriate care and support; and services and supports for daily living that assist older people's health and wellbeing (see Figure 4). The most influential characteristics in elevating a provider from being rated as 'Satisfactory' to 'High/Very high' quality were found to be: the ability to lodge complaints with confidence that appropriate action will be taken; aged care staff skills and training; and services and supports that assist older people's health and wellbeing (see Figure 5). The person being supported to make their own decisions about care and services was one of the less influential

characteristics. These findings mirror to a great extent the results from the attitudinal questions shown in Figure 3.

Figure 3: Community opinion of the importance of attributes to quality aged care, by level of understanding of the aged care system

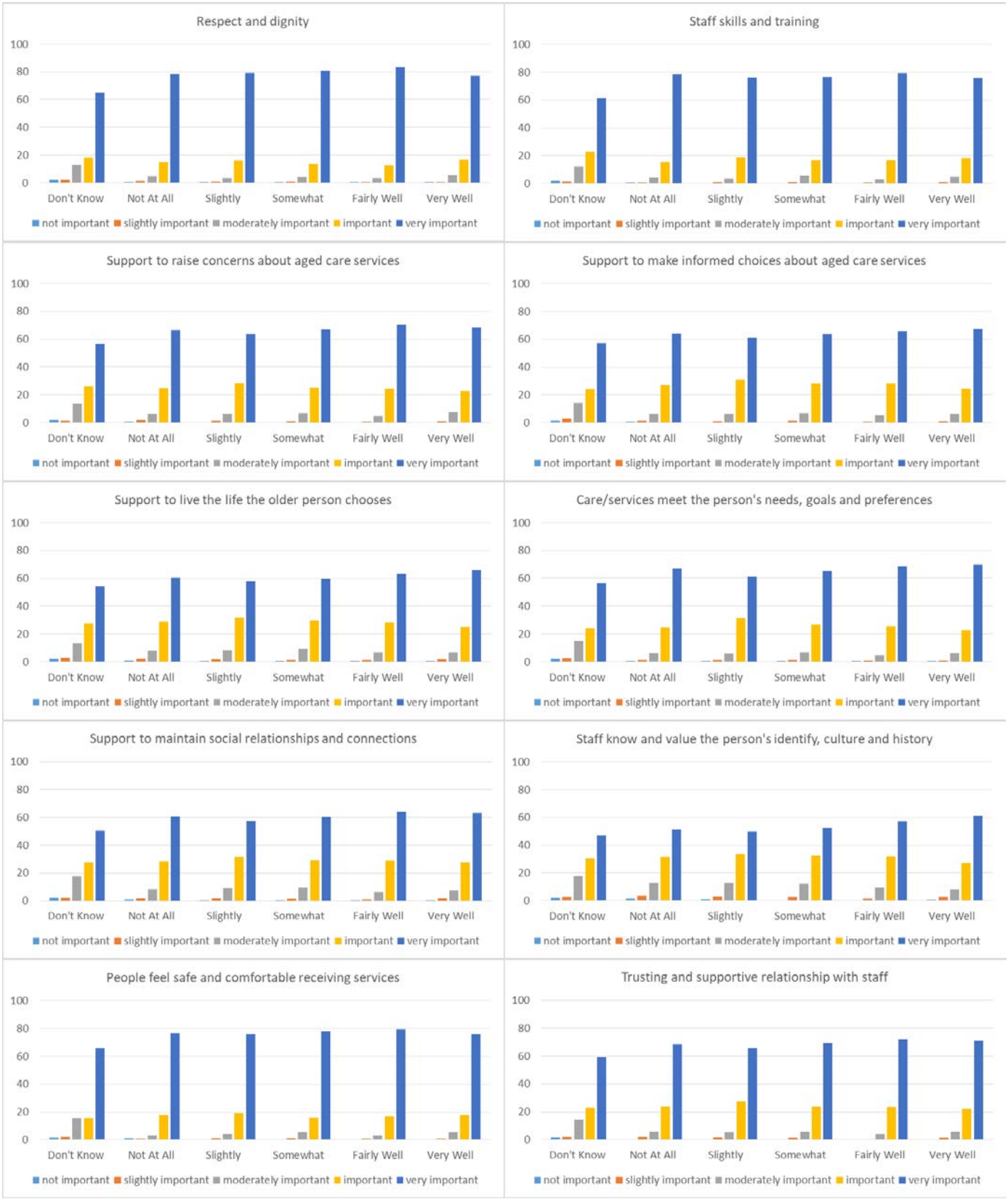
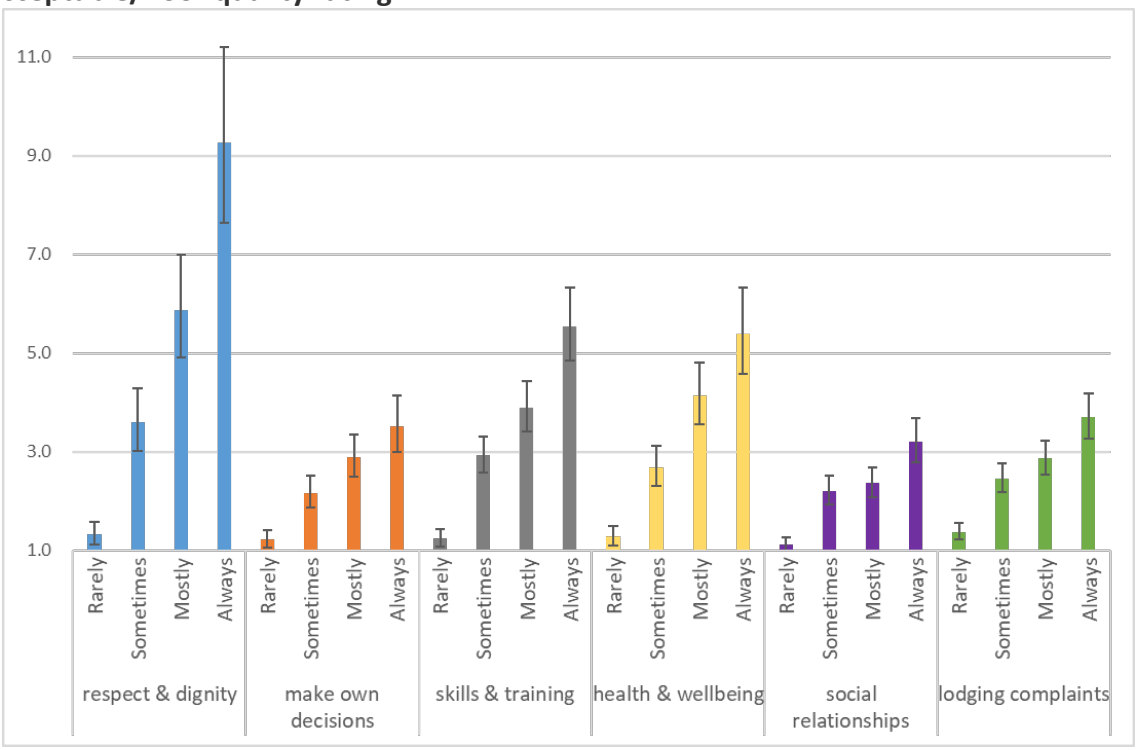
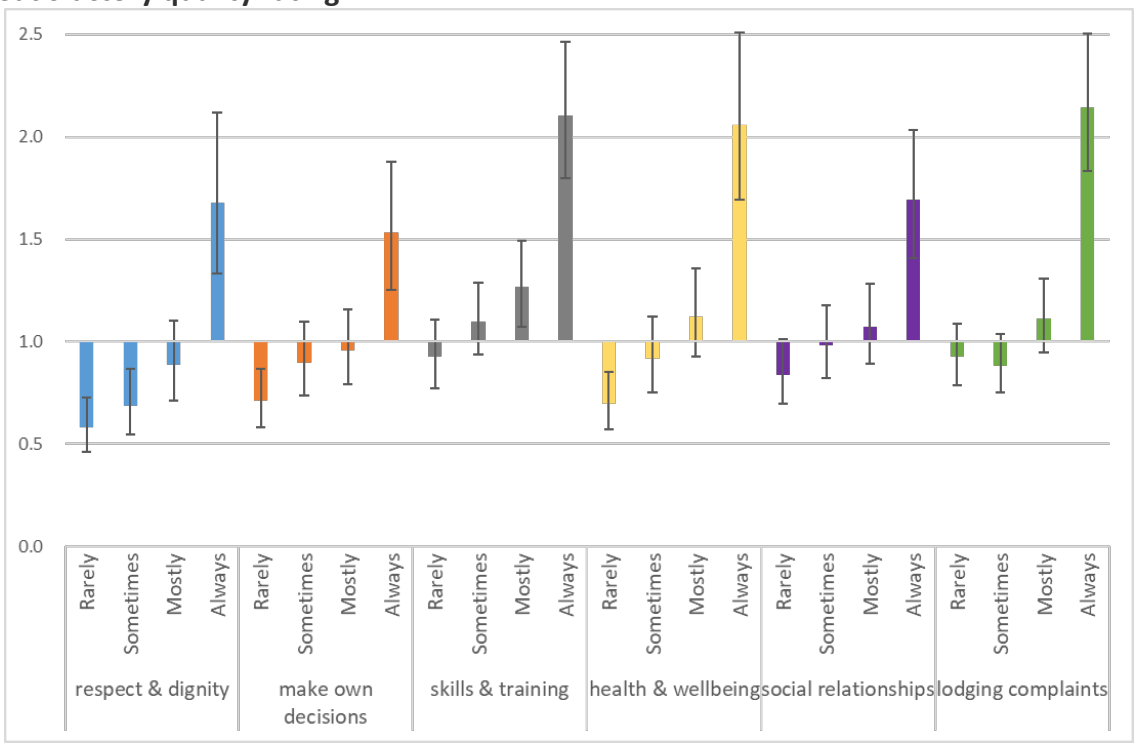


Figure 4: Relative importance of attributes to achieve a Satisfactory quality rating compared with an Unacceptable/Poor quality rating



Note: The values are Relative risk ratios calculated from the multinomial logit coefficients and error bars represent 95% confidence intervals.

Figure 5: Relative importance of attributes to achieve a High/Very High quality rating compared with a Satisfactory quality rating



Note: The values are Relative risk ratios calculated from the multinomial logit coefficients and error bars represent 95% confidence intervals.

Though the vast majority of people in the community see the various aspects of aged care as Important/Very important, it is evident in Figure 3 that there are relatively small shares who see them as Not/Slightly/Moderately important. When we examined the characteristics of these people we found they were mostly males and younger people. There were only relatively small differences in results for those born in Australia and other countries.

As shown in Table 5, 8-20% of males rated the individual aged care attributes as Not/Slightly/Moderately important, whereas 4-10% of females gave these lower ratings. Females also rated attributes Very important far more frequently than males (differences in the sample share of between 13-20% depending on the attribute). Younger people (below 65 years) rated the attributes as Not/Slightly/Moderately important 7-17% of the time, compared to 1-9% among older people. Older people also gave Very important ratings for the various attributes much more often than younger people (differences of 9-15% of the sample share depending on the attribute).

Table 5: Percent of people who rated the quality attribute Not/Slightly/Moderately important

Attribute	Males	Females	Older (age 65+)	Young (aged <65)
Respect and dignity	8	4	1	7
Staff skills and training	9	4	1	8
Support to raise concerns about aged care services	12	5	3	10
Support to make informed choices about aged care services	11	6	3	10
Support to live the life the older person chooses	15	7	5	12
Care/services meet the person's needs, goals and preferences	11	5	2	10
Support to maintain social relationships and connections	15	6	6	11
Staff know and value the person's identify, culture and history	20	10	9	17
People feel safe and comfortable receiving services	8	4	1	8
Trusting and supportive relationship with staff	10	5	3	9

In Figure 3 we can also see there is a small tendency for the quality attributes to be rated more highly by the people who had a greater understanding of the aged care system. To confirm this tendency we used chi-square statistical tests between a person's understanding of the aged care system and their perceived importance of each quality attribute. These tests used all the potential response categories for both variables. For all attributes the statistical relationship was significant (see Table 6). The strength of the associations, as measured by Cramer's V, were relatively small (where a result of 0 means no association and 1.0 means perfect association, with a small effect generally considered 0.1 or less). The quality attributes with the most association between perceived importance and system understanding were, by a small margin: staff knowing and valuing the care recipient's identity, culture and history; and the care and services meeting the care recipient's needs, goals and preferences. These

results suggest that greater community understanding of the aged care system would have at least a small positive effect on the community's perception of the importance of all aspects of quality care.

Table 6: Chi-square test results between an attributes' perceived importance and the level of understanding of the aged care system

Attribute	Probability	Cramers V
Respect and dignity	<0.0001	0.0366
Staff skills and training	<0.0001	0.0364
Support to raise concerns about aged care services	<0.0001	0.0343
Support to make informed choices about aged care services	0.0015	0.0306
Support to live the life the older person chooses	<0.0001	0.0369
Care/services meet the person's needs, goals and preferences	<0.0001	0.0404
Support to maintain social relationships and connections	<0.0001	0.0369
Staff know and value the person's identify, culture and history	<0.0001	0.0516
People feel safe and comfortable receiving services	<0.0001	0.0372
Trusting and supportive relationship with staff	<0.0001	0.0350

4. Discussion and conclusions

One of the legacies of the Royal Commission is that Australia now has a substantially improved understanding of the quality of aged care services and the community's expectations for higher quality care to be achieved in the future.

Results from the national surveys of care recipients showed only 24% of people receiving residential care, and 20% of people in home care, felt their care needs were always met across all quality of care experience attributes. To put this into context, the separate national survey of the general public indicated that at least 15% of the public consider that people in care should have their needs met 'always' for the care to qualify as 'satisfactory'. While views vary within the community about exactly what should be considered to be 'satisfactory' care, and what the additional requirements are for 'high' or 'very high' quality care, the state of aged care in Australia is undeniably alarming. Even if one takes the view that 'satisfactory' care is care that 'mostly' meets peoples' needs, the share of care recipients meeting this lower threshold was just 58% for residential care and 50% for home care.

The separate national general public survey showed that aged care is seen as a vital social service by most Australians. All quality of care attributes were viewed as 'important' or 'very important' by the vast majority of people, regardless of how well they understand the aged care system. This was particularly true for females and older people. Most in the community also felt the aged care system is in need of reform to become a high quality system and, to that end, were willing to fund the substantial costs of delivering high quality care for all Australians.

These surveys provide Australia with an important set of baseline data from which to evaluate aged care reform and public expectations in the future. Importantly, they also enabled the development and validation of the QCE which has filled the gap in the research toolkit needed to measure the overall quality of care experience from the care recipient's perspective. Routine measurement and public reporting of quality of care experience, as well as quality of life, are essential to understanding the effectiveness of aged care in Australia and internationally.

By repeating the surveys at regular intervals, it will be possible to monitor the progress of Australian aged care, promote continuous quality improvement among service providers, and move more quickly to address problems within the system. Routine measurement will also be critical for maintaining the public's understanding of the aged care system's performance, whether their expectations for high quality are being achieved, and to foster public confidence.

5. References

Australian Bureau of Statistics (ABS), Population Projections Australia 2017-2066, Australian Bureau of Statistics, Canberra, November 2018.

Batchelor F, Savvas S, Dang C, Goh A, Levinger P, Peck A, Katz I, Dow B. Inside the system: aged care residents' perspectives. National Ageing Research Institute: Parkville, Victoria, Australia, Oct 2020.

Batchelor F, Savvas S, Peck A, Dang C, Wade C, Goh A, Dow B. Inside the system: home and respite care clients' perspectives. National Ageing Research Institute: Parkville, Victoria, Australia, Oct 2020.

Bech M, Gyrd-Hansen D. Effects coding in discrete choice experiments. Health Economics Letters. 2005;14:1079-1083.

Greene WH, Hensher DA. A latent class model for discrete choice analysis: contrasts with mixed logit. Transportation Research part B: Methodological. 2003;37(8):681-98.

Hole AR. Fitting mixed logit models by using maximum simulated likelihood. The Stata Journal. 2007;7: 388–401.

Laver K, Ratcliffe J, George S, Burgess L, Crotty M. Is the Nintendo Wii Fit really acceptable to older people? A discrete choice experiment. BMC Geriatrics 2011;11:84.

McFadden D, Train K. Mixed MNL models for discrete choice. Journal of Applied Econometrics. 2000;5:447-70.

Nguyen T, Robinson J, Nguyen S, Chinh T. Examining ordering effects in discrete choice experiments: a case study in Vietnam. Economic Analysis and Policy 2015;45:39-57.

Phillips K, Johnson F, Maddala T. Measuring what people value: A comparison of "Attitude" and "Preference" Surveys. Health Services Research. 2002;37:1659–1679

Ratcliffe J, Chen G, Cleland J, Kaambwa B, Khadka J, Hutchinson C, Milte R. Australia's aged care system: assessing the views and preferences of the general public for quality of care and future funding. Caring Futures Institute, Flinders University, South Australia, July 2020.

Khadka J, Ratcliffe J, Chen G, Kumaran S, Milte R, Hutchinson C, Milte R, Savvas S, Batchelor F (2020). A new measure of quality of care experience in aged care: psychometric assessment and validation of the Quality of Care Experience (QCE) questionnaire. Caring Futures Institute, Flinders University, South Australia.

Slonim R, Wang C, Garbarino E, Merrett D. Opting-in: Participation bias in economic experiments. Journal of Economic Behavior & Organization. 2013;90:43–70.