

MANAGERS OF AGED CARE RESIDENTIAL SERVICES IN AUSTRALIA 2006-2021: TRANSFORMATION REFORM

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ABSTRACT

INTRODUCTION:

Aged care in Australia is going through a transformation reform to respond to the growing number of aged people in need of support in daily living. Given the importance of ensuring quality and safety in aged care, it is relevant and informative for this study to assess the changes that have taken place in the number and characteristics of managers of aged care residential services in relation to the people they serve.

OBJECTIVES:

This article provides analyses of the number and characteristics of managers of aged care residential services in relation to number of aged people, residents of aged care facilities and people employed in them.

DESIGN:

The research design follows specifications provided by the authors for tabulations prepared by the Australian Bureau of Statistics (ABS) from the censuses of population conducted by ABS in 2006 and 2021. Analyses undertaken by the authors show changes that have taken place in the number of managers of aged care residential facilities in relation to the number of aged people, residents of aged care facilities, and people employed in them. Further, the analyses examine changes in the demographic characteristics of managers, their working hours and income, over time.

FINDINGS:

There was a substantial decline in the proportion of the growing number of people aged 70 years and over who lived in aged care residential services during the 15-year period. While there was a large increase in the number of employees and managers per resident, and a slight increase in the number of managers per employee. The proportion of female managers fell, and the average age of managers increased slightly. The proportion of managers at graduate level rose substantially. Although the average income of aged care residential services managers was similar to that in all industries in 2021, their increase was larger than in all industries during the 15-year period. Average hours worked remained similar over time. The proportion of Australia-born managers declined while that of managers born in Asia rose substantially, and the proportion of indigenous managers about doubled during the 15-year period.

IMPLICATIONS:

Relevance to those concerned with the evolving transformation of aged care in Australia and those interested with management training of the growing number of managers of aged care residential services.

KEYWORDS

Health service managers, aged care residential services, health labour force, training and career path development.

INTRODUCTION

The number of aged people has increased substantially and will continue to grow rapidly, as the Baby Boomer generation born after World War II (in the later 1940s and earlier 1960s) gets in their 70s and 80s. Accordingly, the number of people 70 years of age and over rose from about 1.9 million to 3.1 million (+63.2%) in the 15-year period from 2006 to 2021 [1]. As the numbers are bound to rise over the next decades, and as disability increases with age, the need for support of various kinds will grow [2]. The federal Department of Health (DH) reported that the federal government subsidy for aged care residential services amounted to \$14.1 billion in 2021 [3]. It represented about 59.7% of the federal government funding for aged care services that included support in the home. In spite of the increase in aged care services provided in the home, the number of people in aged care residential services rose from about 154,900 in 2006 to 183,900 in 2021 [3, 4], an increase of 18.7%. This proportional growth is well below the rise in the number of people aged 70 years and over, as efforts were made to support older people in their own homes.

The appropriateness of services rendered to aged people in need of support has been the object of considerable concern and has gone through what has been described earlier as a transformation reform to enhance the effectiveness of the services subsidised by the federal government [5]. Nevertheless, a more recent Royal Commission into Aged Care Quality and Safety has found that ...there is no clear statement in the Aged Care Act of the basic responsibility of approved providers to ensure that the care provided to residents is safe and of high quality... [6] and ...We consider that changes need to be made to improve the governance and leadership of aged care providers... [6]. These concerns were added to with the emergence of the COVID-19 epidemic [7]. Therefore, it is relevant and informative to assess the changes that have taken place in the number and characteristics of managers of aged care residential services. This is the subject of the following analysis.

DATA SPECIFICATIONS

The data used in the following assessment was provided by the Australian Bureau of Statistics (ABS) sourced from the censuses of the Australian population carried out in 2006 and 2021, following specifications prepared by the authors. Consequently, it follows ABS's Australian occupation and industry classifications. Detailed definitions of ABS's classifications were provided and available in Martins & Isouard [8]. However, definitions regarding manager classifications are provided in the Appendix. As in the case of other data from the censuses, the data used in the analysis is from answers to related questions posed in the censuses. However, the answers to the questions are the subject of post-enumeration surveys and tests to ensure the quality and reliability of the data. The data relates to managers in aged care residential services in both the public and private sectors. The classification of managers follows the classification used by ABS with four categories: (i) managers no further defined, (ii) chief executive officers and general managers, (iii) specialist managers and (iv) service managers. The data also follow ABS's coding for age, sex, marital status, field and level of education, indigenous status, country of birth, hours worked and individual income. To allow the comparison of attributes the authors requested ABS to provide similar data for health service and all industries managers. To protect the confidentiality of individual data, ABS made some small changes to the numbers provided in some cells. These were adjusted by the authors without significant material impact. The sources for other data used are in accordance with the references given. The figures for managers in all industries for 2006 excluded managers in agriculture. Nevertheless, this does not result in any differences in findings in a material way for managers in all industries. The authors have followed ABS' definition of sex and gender. Sex is the biological characteristics of males and females, while gender is the psychological and social characteristics that are culturally determined from belief systems of what masculine and feminine behaviour is or ought to be [9].

As stated, the data used in the analysis are from tabulations provided by ABS. It is relevant to point out that the information given in the various tables are the result of the analysis carried out by the authors. Accordingly, although

the sources usually given in the tables are those from ABS' original sources, the results shown are the work of the authors.

GROWING DEMAND AND STAFF

Efforts to support people in their own homes, in more recent years, meant that their number in aged care residential services (ACRS) rose at a much slower pace than in the past. An expression of the drive to improve care led to a substantial increase in both the number of people employed in ACRS and the number of managers. This

meant that the number of ACRS residents to employees declined from 1.21 residents per employee in 2006 to 0.71 in 2021. In parallel, the number of employees per manager also fell to some extent from a ratio of 20.7 employees per manager in 2006 to that of 18.2 in 2021 (Table 1).

LARGE GROWTH IN MANAGERS

It is apparent that the increase in the number of managers in ACRS grew at considerable faster rate (+128.7%) than that of all industries (+25.2%) during the 15-year period 2006-2021. The growth is even higher than the large increment in health services (+119.6%) during the same period (Table 2).

TABLE 1. NUMBER OF AGED PEOPLE AND STAFF OF AGED CARE RESIDENTIAL SERVICES, AUSTRALIA, 2006 AND 2021

People and staff	2006	2021	2021 /2006
People aged 70 & over (000s)	1,887.0	3,079.5	+1,507.0
ACRS residents	154,900	183,900	+29,000
ACRS employees	128,300	258,500	+130,200
ACRS managers	6,200	14,200	+8,000
<i>ACRS residents per 1,000 people aged 70 & over</i>	<i>82.1</i>	<i>59.7</i>	<i>-22.4</i>
<i>ACRS residents per employee</i>	<i>1.21</i>	<i>0.71</i>	<i>-5.0</i>
<i>ACRS residents per ACRS manager</i>	<i>25.0</i>	<i>13.0</i>	<i>-12.0</i>
<i>ACRS employee per ACRS manager</i>	<i>20.7</i>	<i>18.2</i>	<i>-2.5</i>

Note: (ACRS) is aged care residential services. The numbers have been rounded to the nearest hundred.

Sources: References [1] [3] [4] [10] [11]. Analysis made by the authors.

TABLE 2. NUMBER OF MANAGERS OF AGED CARE RESIDENTIAL SERVICES, HEALTH SERVICES AND ALL INDUSTRIES, AUSTRALIA, 2006 AND 2021

Service	Number of managers		% increase 2021/2006
	2006	2021	
Aged care residential services	6,200	14,200	+129.0
Health services	19,400	42,600	+119.6
All industries	1,202,300	1,505,300	+25.2

Note: The numbers have been rounded to the nearest hundred.

Sources: References [10] [11]. Analysis made by the authors

The growth in manager numbers was greatest at the top level (the combined number of chief executive officers/general managers/managers no further defined) (+167.2%) during the 15-year period 2006-2021. It was lowest but still large (+120.8%) at the specialist manager level, which includes managers more concerned with direct resident support and service. However, growth in numbers was even more substantial among service support managers engaged in such services as food, hospitality and cleaning services (+132.5) (Table 3)

The uneven growth in different categories of staff led to substantial changes in the ratios between top managers and other managers. Thus, the number of specialist and service managers per top managers declined from 8.6 in 2006 to 7.2 in 2021. The change was particularly large in the case of the ratio of specialist managers that fell from 6.1 in 2006 to 5.0 in 2021. The changes in ACRS managers between 2006 and 2021 were larger than those in health services over the same period (Figure 1).

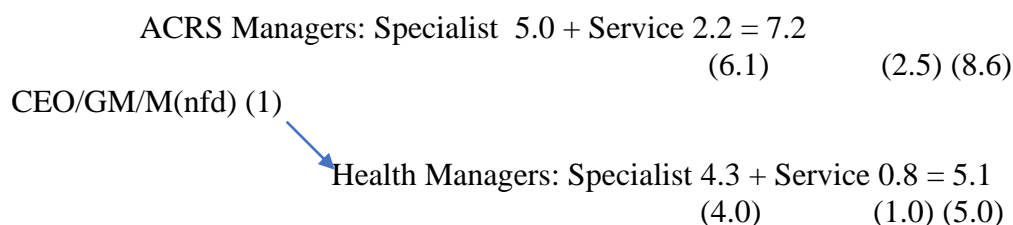
TABLE 3. MANAGERS OF AGED CARE RESIDENTIAL SERVICES, BY CATEGORY, AUSTRALIA, 2006 AND 2021

Category	Number of managers		% increase 2021/2006
	2006	2021	
CEO/GM	526	1,474	+180.2
Managers no further defined	123	260	+111.4
Sub-total	649	1,734	+167.2
Specialist	3,932	8,681	+120.8
Service	1,619	3,764	+132.5
All managers	6,200	14,179	+128.7

Note: (CEO/GM) are chief executive officers and general managers; M(nfd) are managers no further defined.

Sources: References [10] [11]. Analysis made by the authors.

FIGURE 1. AVERAGE SPECIALIST AND SERVICE MANAGERS PER CHIEF EXECUTIVE OFFICER, AGED CARE RESIDENTIAL AND HEALTH SERVICES, AUSTRALIA, 2006 AND 2021



Note: (CEO/GM/M(nfd)) is the combined categories of chief executive officer/general manager/manager no further defined. (ACRS) is aged care residential services. The figures in brackets are the ratios for 2006.

Sources: References [10] [11]. Analysis made by the authors

SEX OF MANAGERS

The majority of employees in ACRS are females and so are the managers. However, while 82.5% of employees were females in 2021 only 64.5% of managers were females, this led to a gap of 18.0% between the two proportions. Nevertheless, this represents a reduction in the gap by 3.2% between 2006 and 2021 (Table 3).

The differences in the proportions of female and male managers becomes more accentuated when the proportions are assessed by category of managers. Accordingly, the gap in the proportion of female managers in relation to of female employees is considerably higher in the case of chief executive/general manager category (-27.5%) than that of specialist managers (-11.2%), but the gap became even larger in the case of service managers (-29.7%). Nevertheless, this is a substantial change from even larger gaps in 2006 (Table 5).

TABLE 4. AGED CARE RESIDENTIAL SERVICES PROPORTION OF FEMALE MANAGERS AND EMPLOYEES, AUSTRALIA, 2006 AND 2021

Year	Female %		% Gap managers-employees
	Employees	Managers	
2006	87.4	66.2	-21.2
2021	82.5	64.5	-18.0

Sources: References [3] [4] [10] [11]]. Analysis made by the authors.

TABLE 5. AGED CARE RESIDENTIAL SERVICES PROPORTION OF FEMALE MANAGERS BY CATEGORY, AUSTRALIA, 2006 AND 2021

Category	Female percentage (%)		2021 Percentage (%) managers-employees
	2006	2021	
CEO/GM	42.6	55.0	--27.5
Managers no further defined	56.1	63.1	-19.4
	45.1	56.2	-26.3
Specialist managers	74.0	71.3	-11.2
Service managers	55.7	52.8	-29.7
All managers	66.2	64.5	-18.0

Note: (CEO/GM) are chief executive officers and general managers.

Sources: References [3] [4] [10] [11]]. Analysis made by the authors.

AGE OF MANAGERS

The average age of managers of ACRS of about 49.4 years in 2021 was similar to that in 2006. However, it continued to be older than the average for health services managers (47.3 years in 2021) and the much younger average for managers in all industries (45.3 years in 2021) (Table 6).

The average age of chief executive officers/general managers in ACRS was substantially older (52.9 years) than

the average of other managers in the same outfits in 2021. It was also older than that in both health services (50.0 years) and all industries (49.9 years). This was also an increase on the average age for 2006 (50.6 years). While the average ages of the more numerous specialist managers declined between 2006 and 2021 (49.5 and 48.2 years respectively) that of service managers rose somewhat (from 48.8 to 51.0 years) (Table 7).

TABLE 6. AGE OF MANAGERS OF AGED CARE RESIDENTIAL SERVICES, HEALTH SERVICES AND ALL INDUSTRIES, AUSTRALIA, 2006 AND 2021

Age	Age (years)		
	Aged care residential	Health	All industries
2021			
Average	49.4	47.3	45.3
Median	50.3	47.4	45.0
Standard deviation	11.3	11.2	12.1
Coefficient of variation	0.23	0.24	0.27

2006			
Average	49.2	46.0	43.5
Median	50.1	46.6	43.5
Standard deviation	10.0	10.0	11.6
Coefficient of variation	0.20	0.22	0.27

Sources: References [10] [11]. Analysis made by the authors.

TABLE 7. AGE OF MANAGERS OF AGED CARE RESIDENTIAL SERVICES, HEALTH SERVICES AND ALL INDUSTRIES, AUSTRALIA, 2006 AND 2021

Category	Age (years)		
	Aged care residential	Health	All industries
2021			
CEO/GM	52.9	50.0	49.9
Managers no further defined	48.1	48.3	47.9
Specialist	48.2	47.1	45.3
Service	51.0	45.8	43.4
All managers 2021	49.4	47.5	45.3
2006			
CEO/GM	50.6	47.8	47.4
Managers no further defined	53.1	47.4	47.2
Specialist	49.5	45.7	43.5
Service	48.8	45.4	41.9
All managers 2006	49.2	46.0	43.5

Note: (CEO/GM) are chief executive officers and general managers.

Sources: References [10] [11]. Analysis made by the authors.

FIELD OF STUDY OF MANAGERS

In 2021, the field of study of 30.6% of managers in ACRS was management and commerce. This was also the most common field of study of managers in health services and all industries. It was followed by health studies (24.5%) in line with health services (28.4%), but as would be expected much different from the average in all industries (3.7%). The third most common field of study was that of social and related fields (14.8%) followed by food, hospitality and personal services (4.5%), that was above the proportion in health services (1.7%), where much of related services are outsourced. As might be expected, the pattern was substantially different from that of the average for all industries, as shown by the relative difference standard index of 46.9 (Table 8).

Although there were some communalities in the fields of study of female and male managers of ACRS, there were also some differences. In 2021, females were more likely to have health as their field of study (32.0%) than males (10.8%), the same applied to social and related fields (17.4% versus 9.9%), and also in education (3.0% versus 1.5%). While males were more likely to have engaged in engineering (9.8% versus 0.5%), architecture (8.1% versus 0.4%), food and hospitality (6.6% versus 3.4%), information technology (4.2% versus 0.9%). The proportions were more closely related in the largest group of managers with management and commerce qualifications (males 34.0% and females 28.7%), and also in the case of the few with academic training in natural and physical sciences (males 1.3% and females 1.0%) (Table 9).

TABLE 8. FIELD OF STUDY OF MANAGERS OF AGED CARE RESIDENTIAL SERVICES, HEALTH SERVICES AND ALL INDUSTRIES, AUSTRALIA, 2021

Field of study	Percentage of total (%)		
	Aged care residential	Health	All industries
Management & commerce	30.6	29.2	28.6
Health	24.5	28.4	3.7
Social & related fields	14.8	12.7	12.1
Food, hospitality & personal services	4.5	1.7	3.3
Engineering & related technologies	3.8	3.6	11.2
Architecture & building	3.1	1.0	5.5
Education	2.5	2.4	4.2
Information technology	2.0	2.8	4.0
Natural & physical sciences	1.1	5.5	3.0
Other	13.1	12.7	24.4
All managers	100.0	100.0	100.0
Relative difference index	46.9	53.8	Standard

Note: The relative difference index= $\frac{|\sum (a_i/b_i) \cdot 100 - 100|}{2 \cdot n}$; where (ai) is the proportion of managers in field of study (i) in given service; (bi) is the proportion of managers in field of study (i) in all industries; (n) is the number of fields of study groups. (Other) includes managers whose field of study was inadequately described, not stated, or without field of study (in relation to post-school qualifications).

Source: Reference [10]. Analysis made by the authors.

TABLE 9. FIELD OF STUDY OF MANAGERS OF AGED CARE RESIDENTIAL SERVICES, BY SEX, AUSTRALIA, 2021

Field of study	Percentage of total (%)		
	Females	Males	Persons
Management & commerce	28.7	34.0	30.6
Health	32.0	10.8	24.5
Social & related fields	17.4	9.9	14.8
Food, hospitality & personal services	3.4	6.6	4.5
Engineering & related technologies	0.5	9.8	3.8
Architecture & building	0.4	8.1	3.1
Education	3.0	1.5	2.5
Information technology	0.9	4.2	2.0
Natural & physical sciences	1.0	1.3	1.1
Other	12.7	13.8	13.1
All managers	100.0	100.0	100.0

Note: (Other) includes managers whose field of study was inadequately described, not stated, or without field of study (in relation to post-school qualifications).

Source: Reference [10]. Analysis made by the authors.

LEVEL OF EDUCATION OF MANAGERS

The level of education of ACRS managers rose substantially during the 15-year period 2006-2021. The graduate level rose from 44.9% in 2006 to 53.2% in 2021. This proportional rise

was similar to that in health services but lower than that in all industries. Nevertheless, the average level in ACRS was higher than that in all industries (45.9%), but lower than that in health services (65.7%) (Table 10).

The rise in the proportion of ACRS managers at graduate level was associated with a higher proportion of female

managers at that level (55.1%) than males (49.7%) in 2021 (Table 11).

Further assessment of the level of education of ACRS managers showed that chief executive officers/general managers had a considerable higher proportion at graduate level (72.3%) than the average for all managers (53.2%). This was followed by specialist managers (63.9%) and managers no further defined (60.4%). The level of education of most service managers usually concerned with food, hospitality and other related services was mostly at diploma/certificate level (54.2%) in 2021 (Table 12).

TABLE 10. LEVEL OF EDUCATION OF MANAGERS OF AGED CARE RESIDENTIAL SERVICES, HEALTH AND ALL INDUSTRIES, AUSTRALIA, 2006 AND 2021

Education level	Percentage of total (%)		
	Aged care residential	Health	All industries
2021			
Postgraduate	20.6	32.6	17.4
Bachelor	32.6	32.4	28.5
Graduate subtotal	53.2	65.7	45.9
Diploma/certificate	34.2	23.2	31.9
Other	12.6	11.8	22.2
All managers 2021	100.0	100.0	100.0
2006			
Postgraduate	15.0	25.8	9.6
Bachelor	29.9	30.0	19.9
Graduate subtotal	44.9	55.8	29.5
Diploma/certificate	31.9	24.2	31.5
Other	23.2	20.0	39.0
All managers 2006	100.0	100.0	100.0

Note: (Other) includes managers whose field of study was inadequately described, not stated, or without field of study (in relation to post-school qualifications).

Sources: [10] [11]. Analysis made by the authors.

TABLE 11. LEVEL OF EDUCATION OF MANAGERS OF AGED CARE RESIDENTIAL SERVICES BY SEX, AUSTRALIA, 2021

Level of education	Percentage of total (%)		
	Females	Males	Persons
Postgraduate	20.0	21.7	20.6
Bachelor	35.1	28.0	32.6
Graduate subtotal	55.1	49.7	53.2

Diploma/certificate	32.4	38.1	34.3
Other	12.5	12.2	12.5
All managers	100.0	100.0	100.0

Note: (Other) includes managers whose field of study was inadequately described, not stated, or without field of study (in relation to post-school qualifications).

Source: Reference [10]. Analysis made by the authors.

TABLE 12. LEVEL OF EDUCATION OF MANAGERS OF AGED CARE RESIDENTIAL SERVICES, BY CATEGORY, AUSTRALIA, 2021

Level of education	Percentage of total (%)				
	CEO/GM	M (nfd)	Specialist	Service	All
Postgraduate	36.2	30.0	23.8	6.5	20.6
Bachelor	36.1	30.4	40.1	14.0	32.6
Graduate subtotal	72.3	60.4	63.9	20.5	53.2
Diploma/certificate	20.5	31.2	28.2	54.2	34.3
Other	7.2	8.4	7.9	25.3	12.5
All managers	100.0	100.0	100.0	100.0	100.0

Note: (Other) includes managers whose field of study was inadequately described, not stated, or without field of study (in relation to post-school qualifications).

Source: Reference [10]. Analysis made by the authors.

INCOME OF MANAGERS

The average weekly income of ACRS managers was \$2,139 in 2021. It was lower but close to the average for all industries (\$2,154) and more substantially lower than the average for all health services (\$2,303) (Table 13). Their income was the equivalent of about \$111,400 per year in 2021.

The rise in weekly income of ACRS managers of 62.5% between 2006 and 2021 was somewhat larger than the average for all industries (60.6%) and even more so than that for health services (53.6%) (Table 14).

The average weekly income of ACRS top managers in 2021 was 46.8% higher than the average for all ACRS managers.

Further, on average the ACRS weekly income of female managers was 10.3% lower than that of males. The difference prevailed for managers in all categories, but it was larger (-16.2%) in the case of specialist managers and lower in the case of service managers (-6.9%) (Table 15).

In 2021, the average weekly income of ACRS managers tended to peak in their middle fifty years of age. It is noticeable that the difference between the more highly paid male managers and those of females tends to be larger in the age range from their 30s to their 50s, but close earlier and later in their working lives (Chart 1).

TABLE 13. AVERAGE WEEKLY INCOME OF MANAGERS OF AGED CARE RESIDENTIAL SERVICES, HEALTH AND ALL INDUSTRIES, AUSTRALIA, 2021

Weekly income	Aged care residential	Health	All industries
Average weekly income (\$)	2,139	2,303	2,154
Median weekly income (\$)	1,934	2,177	1,892
Standard deviation (\$)	1,022	1,039	1,167
Coefficient of variation	0.48	0.45	0.54

Note: The average and median are for the weekly gross income of managers in the week before the census. The figures exclude those managers who did not declare their income at the time of the census about 0.4%, 0.5% in the case of health services and 0.6% in all industries.

Source: Reference [10]. Analysis made by the authors

TABLE 14. AVERAGE WEEKLY INCOME OF MANAGERS OF AGED CARE RESIDENTIAL SERVICES, HEALTH AND ALL INDUSTRIES, AUSTRALIA, 2006 AND 2021

Year	Aged care residential	Health	All industries
2021 Average weekly income (\$)	2,139	2,303	2,154
2006 Average weekly income (\$)	1,316	1,499	1,341
% Increase 2006-2021	+62.5	+53.6	+60.6

Note: The average and median are for the weekly gross income of managers in the week before the census. The figures exclude those managers who did not declare their income at the time of the census about 0.4%, 0.5% in the case of health services and 0.6% in all industries.

Source: References [10 [11]. Analysis made by the authors

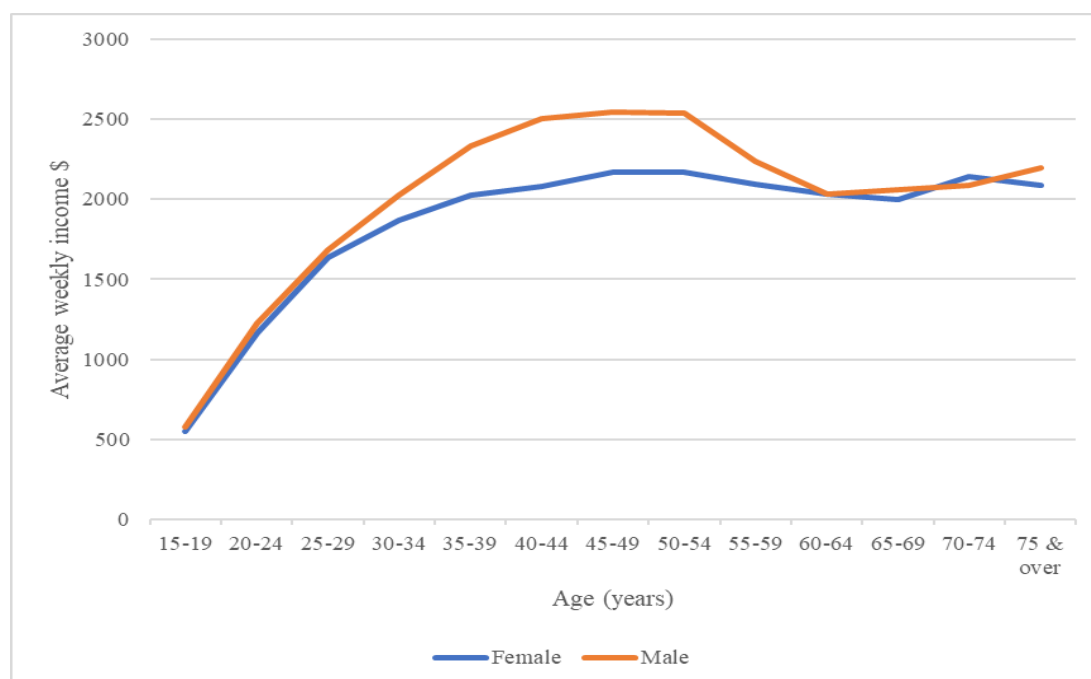
TABLE 15. AVERAGE WEEKLY INCOME OF MANAGERS OF AGED CARE RESIDENTIAL SERVICES, BY CATEGORY, AUSTRALIA, 2021

Manager category	Average weekly income (\$)			Female percentage below male income (%)
	Female	Male	Persons	
CEO/GM	2,956	3,364	3,139	-12.1
Managers no further defined	2,332	2,672	2,463	-12.7
Specialist	2,144	2,559	2,263	-16.2
Service	1,387	1,490	1,436	-6.9
All managers	2,055	2,292	2,139	-10.3
CEO/GM % above average	+43.8	+46.8	+46.8	

Note: (CEO/GM) are chief executive officers and general managers. The average income of managers is their weekly gross income of managers in the week before the census. The figures exclude those managers who did not declare their income at the time of the census about 0.4%.

Source: Reference [10]. Analysis made by the authors

CHART 1. AVERAGE WEEKLY INCOME FEMALE AND MALE MANAGERS AGED CARE RESIDENTIAL SERVICES, BY AGE, AUSTRALIA, 2021



Source: Reference [10]. Analysis made by the authors.

HOURS WORKED BY MANAGERS

On average managers of ACRS worked 42.2 hours per week in 2021. This is closer to the average for all industries (42.8 hours) than the lower average for health services (41.1 hours). These were somewhat shorter hours than in 2006, especially in the case of managers in all industries, which average declined by 4 hours. However, there were considerable differences among managers as the coefficients of variation indicate (0.40 in ACRS and 0.43 for all industries) (Table 16).

Chief executive officers/general managers worked on average 6.7 hours per week longer than the average for all managers in ACRS (42.2 hours) in 2021. This was close to the average of that category of managers for all industries (48.3 hours), but more than that for health services (45.6 hours). Service managers in ACRS worked on average considerably less hours (37.5 hours), while other managers worked somewhat above average (Table 17).

On average, in 2021, ARCS male managers worked about one hour (1.1 hours) longer than female managers. This difference was similar but shorter than that in health services and in all industries (Table 18).

TABLE 16. AVERAGE HOURS WORKED PER WEEK BY MANAGERS OF AGED CARE RESIDENTIAL SERVICES, HEALTH AND ALL INDUSTRIES, AUSTRALIA, 2006 AND 2021

Weekly work hours	Aged care residential	Health	All industries
2021			
Average weekly hours worked	42.2	41.1	42.8
Median weekly hours worked	39.9	40.2	40.4
Standard deviation	17.0	16.9	18.3
Coefficient of variation	0.40	0.41	0.43
2006			
Average weekly hours worked	43.3	41.9	46.9
Median weekly hours worked	39.8	39.7	43.6
Standard deviation	16.1	17.8	19.6
Coefficient of variation	0.42	0.42	0.42
2021-2006			
% difference of average	-2.6	-1.9	-9.2

Note: The average working hours of managers are those in the week before the census. The figures exclude 0.4% of managers who did not state the number of hours worked in aged care residential services, 0.4% in health and 0.7% in all industries.

Sources: References [10] [11]. Analysis made by the authors.

TABLE 17. AVERAGE HOURS WORKED PER WEEK BY MANAGERS OF AGED CARE RESIDENTIAL SERVICES, HEALTH AND ALL INDUSTRIES, BY CATEGORY, AUSTRALIA, 2021

Category	Average hours worked per week		
	Aged care residential	Health	All industries
CEO/GM	48.9	45.6	48.3
Managers no further defined	43.4	39.3	42.4
Specialist	43.1	41.4	44.2
Service	37.5	36.2	38.3
All managers	42.2	41.1	42.8

Note: (CEO/GM) are chief executive officers and general managers. The average working hours of managers are those in the week before the census. The figures exclude 0.4% of managers who did not state the number of hours worked in aged care residential services, 0.4% in health and 0.7% in all industries.

Source: Reference [10]. Analysis made by the authors.

TABLE 18. AVERAGE HOURS WORKED PER WEEK BY MANAGERS OF AGED CARE RESIDENTIAL SERVICES, HEALTH AND ALL INDUSTRIES, FEMALE AND MALE, AUSTRALIA, 2021.

Weekly work hours	Average hours worked per week					
	Aged care residential		Health		All industries	
	Female	Male	Female	Male	Female	Male
Average	41.8	42.9	39.3	43.8	38.7	45.6
Median	39.7	40.1	40.0	40.5	39.5	40.7
Standard deviation	17.4	16.5	16.9	16.7	17.7	18.1
Coefficient of variation	0.41	0.38	0.43	0.38	0.46	0.40

Note: The average working hours of managers are those in the week before the census. The figures exclude 0.4% of managers who did not state the number of hours worked in aged care residential services, 0.4% in health and 0.7% in all industries.

Source: Reference [10]. Analysis made by the authors.

This slightly longer average hours of work by males applied to all categories, with exception of managers no further defined, when female managers worked on average 4.9 hours longer than males in 2021 (Table 19).

TABLE 19. AVERAGE HOURS WORKED PER WEEK BY MANAGERS OF AGED CARE RESIDENTIAL SERVICES, BY SEX, AUSTRALIA, 2021

Category	Average hours worked per week		
	Female	Male	Persons
CEO/GM	49.1	48.7	48.9
Managers no further defined	45.4	40.5	43.4
Specialist	42.4	44.7	43.1
Service	36.7	38.4	37.5
All managers	41.8	42.9	42.2

Note: The average working hours of managers are those in the week before the census. The figures exclude 0.4% of managers who did not state the number of hours worked in aged care residential services.

Source: Reference [10]. Analysis made by the authors.

On average, full-time managers worked 46.8 hours per week in 2021. Chief executive officers/general managers worked 6.7 hours longer than the average, and service managers 3.6 hours less than the average, with managers no further defined and specialist managers at respectively 48.8 and 46.9 hours. Female managers worked on average 0.6 hours more than male managers on average. The average number of hours worked were similar in the categories of chief executive officers/general managers, managers no further defined and specialist managers, but female service managers worked longer hours than male service managers (+1.8 hours) (Table 20).

TABLE 20. AVERAGE HOURS WORKED PER WEEK BY FULL-TIME MANAGERS OF AGED CARE RESIDENTIAL SERVICES, BY SEX AND CATEGORY, AUSTRALIA, 2021

Category	Average hours worked per week		
	Female	Male	Persons
CEO/GM	53.4	53.8	53.5
Managers no further defined	48.7	48.9	48.8

Specialist Service	46.8	47.1	46.9
All managers	44.2	42.4	43.2
	47.0	46.4	46.8

Note: (CEO/GM) are chief executive officers and general managers. Full-time managers are those who worked 35 hours or more per week. The average working hours of managers are those in the week before the census. The figures exclude 0.4% of managers who did not state the number of hours worked in aged care residential services.

Source: Reference [10]. Analysis made by the authors.

MANAGER MARITAL STATUS

At the time of the 2021 census, 62.6% of ACRS managers were married or in a partnership. This was close to that in health services (63.0%) and the average for all industries (61.9%). The proportion of never married ACRS managers (17.5%) was lower than in health services (21.7%), but more

so than in all industries (25.7%), while the proportion of divorced/separated (18.3%) was higher than the proportions in health services (14.2%), and the much lower average for all industries (11.5%) (Table 21). In this context, it is relevant to mention that the average age of ACRS managers is older than that of managers in health services and all industries (Table 6).

TABLE 21. MARITAL STATUS OF MANAGERS IN AGED CARE RESIDENTIAL SERVICE, HEALTH AND ALL INDUSTRIES, AUSTRALIA, 2021

Marital status	Percentage of total (%)		
	Aged care residential	Health	All industries
Never married	17.5	21.7	25.7
Married	62.6	63.0	61.9
Divorced/separated	18.3	14.2	11.5
Widowed	1.6	1.1	0.9
All	100.0	100.0	100.0

Note: (Married) includes those in a partnership.

Source: Reference [10]. Analysis made by the authors.

COUNTRY OF BIRTH OF MANAGERS

There has been a substantial change in the country of birth of managers of ACRS in the 15-years 2006-2021. Accordingly, the proportion of ACRS managers who were born in Australia declined from 73.5% in 2006 to 65.7% in 2021. This is akin to the decline in the proportions of Australian born managers in health services (74.3% in 2005 to 69.0% in 2021) and all industries (73.2% in 2006 and 67.6% in 2021). A major change was the drop in the proportion of ACRS managers born in other countries in Europe from 9.4% in 2006 to 3.3% in 2021, while those in other countries outside Europe rose substantially from 2.6% in 2006 to 18.2% in 2021. This is attributed to a much greater proportion of ACRS managers

born in Asian countries. These changes were like those in health services and all industries (Table 22).

The proportion of Australia-born ACRS managers was highest in the chief executive officer/general manager category (71.0%) in 2021, and lowest in the specialist manager category (63.7%). Similar pattern applied to the those born in the United Kingdom and Ireland. While the proportion of those managers born elsewhere, including Asia, was highest in the specialist manager category (Table 23).

TABLE 22. COUNTRY OF BIRTH OF MANAGERS IN AGED CARE RESIDENTIAL SERVICES, HEALTH AND ALL INDUSTRIES, AUSTRALIA, 2021

Country of birth	Percentage of total (%)		
	Aged care residential	Health	All industries
2021			
Australia	65.7	69.0	67.6
New Zealand & Oceania	4.0	3.5	3.5
United Kingdom & Ireland	8.8	8.9	7.1
Other Europe	3.3	2.9	3.6
Other	18.2	15.7	18.2
All managers 2021	100.0	100.0	100.0
2006			
Australia	73.5	74.3	73.2
New Zealand & Oceania	3.9	3.0	3.5
United Kingdom & Ireland	10.6	10.7	8.4
Other Europe	9.4	8.4	10.9
Other	2.6	3.6	4.0
All managers 2006	100.0	100.0	100.0

Note: The figures do not include 0.4% of managers in aged care residential services, 0.2% of health managers and 0.2% of all industries managers who did not state their country of birth in the census.

Sources: References [10] [11]. Analysis made by the authors.

TABLE 23. COUNTRY OF BIRTH OF MANAGERS IN AGED CARE RESIDENTIAL SERVICES BY CATEGORY, AUSTRALIA, 2021

Country of birth	Percentage of total (%)				
	CEO/GM	M(nfd)	Specialist	Service	All
Australia	71.0	68.4	63.7	68.0	65.7
New Zealand & Oceania	4.3	5.6	3.8	4.4	4.0
United Kingdom & Ireland	9.1	9.4	8.8	8.8	8.8
Other Europe	2.8	5.6	3.3	3.6	3.3
Other	12.8	11.0	20.4	15.2	18.2
All managers	100.0	100.0	100.0	100.0	100.0

Note: : (CEO/GM) are chief executive officers and general managers; M(nfd) are managers no further defined. The figures do not include 0.4% of managers in aged care residential services who did not state their place of birth in the census.

Source: Reference [10]. Analysis made by the authors.

INDIGENOUS STATUS

The proportion of ACRS managers of indigenous status was 1.4% in 2021. This was about the same as that for all industries (1.3%), but lower than that for health services (2.1%). The ACRS proportion in 2021 was a substantial increase on that in 2006 (0.6%), as was the case in health and the average for all industries (Table 24).

A feature of the substantial change was that it resulted in a higher proportion of indigenous managers of ACRS in the chief executive officer/general manager category (2.2%) and manager no further defined (3.1%) than the average for the more numerous categories of specialist (1.3%) and service (1.3%) managers (Table 25).

TABLE 24. INDIGENOUS STATUS OF AGED CARE RESIDENTIAL SERVICE MANAGERS, HEALTH AND ALL INDUSTRIES, BY SEX, AUSTRALIA, 2006 AND 2021

Sex	Indigenous percentage (%)		
	Aged care residential	Health	All industries
2021			
Females	1.6	2.4	1.6
Males	1.1	1.6	1.1
All managers 2021	1.4	2.1	1.3
2006			
Females	0.8	1.3	0.8
Males	0.1	1.1	0.5
All managers 2006	0.6	1.2	0.6

Note: The figures do not include 0.2% of managers in aged care residential services, 0.2% in health and 0.2% in all industries who did not state their indigenous status.

Sources: References [10] [11]. Analysis made by the authors.

TABLE 25. INDIGENOUS STATUS OF AGED CARE RESIDENTIAL SERVICE MANAGERS, BY SEX AND CATEGORY, AUSTRALIA, 2021

Category	Percentage of total (%)		
	Female	Male	Persons
CEO/GM	2.2	2.2	2.2
Managers no further defined	1.9	4.9	3.1
Specialist	1.5	0.8	1.3
Service	1.7	0.8	1.3
All managers	1.6	1.1	1.4

Note: (CEO/GM) are chief executive officers and general managers. The figures do not include 0.2% of managers in aged care residential services, who did not state their indigenous status.

Source: Reference [10]. Analysis made by the authors.

DISCUSSION

Efforts to keep aged people in their own homes and avoid institutionalisation have resulted in a substantially lower rate of growth in the number of people in ACRS, in recent years. Apprehension with the quality of care provided in ACRS was expressed by a Royal Commission, however, previous concerns led to a substantial rise in the number of people employed in ACRS, the number of managers and the level of their qualifications before the Royal Commission. Among other things, this meant that the number of employees and managers per resident rose substantially during the 15-year period under review.

Accordingly, the number of ACRS managers more than doubled from 2006 to 2021 (+128.7%) and the number of CEO/GMs rose by 180.2%. It is noteworthy that most of the managers of ACRS were female (64.5%), however, this proportion was much lower than the proportion of female ACRS employees (82.5%) in 2021. Thus, leaving a considerable gap between the proportion of female employees and that of female managers. The proportion of female CEO/GMs was also considerably lower (55.0%) than that of all ACRS managers (64.5%).

ACRS managers tended to be much older (49.4 years) than the average for all industries (45.3 years), and even older than those in health services (47.3 years) in 2021. This was

similar to 2006. As might be expected, CEO/GMs were on average older (52.9 years) than other ACRS managers and those at similar level in health services (50.0 years), and the average for all industries (49.9 years).

As might be expected, the analysis of the field of study of ACRS managers showed a considerable difference in composition from that for all industries: the proportion of ACRS managers with health qualifications was much higher (24.5%) in comparison to that in all industries (3.7%), but closer to the proportion in health services (28.4%). Concern with the qualifications of ACRS managers was associated with a rise of the proportion at graduate level from 44.9% in 2006 to 53.2% in 2021. This was substantially higher than the average for all industries (45.9%) but lower than that in health services (65.7%) in 2021. The proportion of ACRS CEO/GMs with graduate qualifications was much higher at 72.3% than the average of 53.2% for all ACRS managers in 2021. In spite of their higher academic qualifications, ACRS managers earned less on average per week (\$2,139) than the average for all industries (\$2,154) and even lesser than those in health services (\$2,303) in 2021.

The observed larger proportion of managers born overseas, especially in Asia, in all industries and health services also took place in ACRS. Thus, the number of ACRS managers born in Australia declined from 73.5% in 2006 to 65.7% in 2021. This change was similar to that in all industries, but somewhat lower than that in health services. The proportion of ACRS managers born outside Europe and Oceania declined substantially while the proportion of others born elsewhere, especially in Asia, rose from 2.6% in 2006 to 18.2% in 2021. Similarly, the proportion of ACRS managers who identified themselves as of Indigenous status almost doubled from 0.6% in 2006 to 1.4% in 2021. This was about the same average as that for all industries (1.3%) but below the proportion in health services of 2.1% in 2021.

The critical comments of the Royal Commission mentioned earlier after the considerable increase in the number of ACRS managers, the rise in their qualifications, and the larger number of people employed per resident leads to the Commission's comment that changes are necessary in the governance and leadership of ACRS that are not necessarily entirely addressed by the larger number of higher qualified managers. A study of senior management perspectives in a limited number of ACRS in Queensland points to some of the leadership skills and attributes perceived as important in the provision of effective ACRS: stewardship, professional development, knowledge of the

healthcare environment, information technology and finance [12].

LIMITATIONS

This paper provides a rare contribution to the analysis of the substantial changes that have taken place in the number and characteristics of managers of aged care residential services in Australia. However, this effort has limitations. The data used is that provided in the Australian population censuses for 2006 and the most recent in 2021. It uses data at national level. Therefore, it does not handle differences that must exist between states and territories or features not included in the censuses. Accordingly, it provides an important but restricted view of the management of aged care residential services in Australia, and by implication of the quality and appropriateness of the services provided.

CONCLUSION

In the period 2006-2021 major changes took place in the number of people employed in ACRS with an increase in the number of employees per resident. Thus, the number of employees per resident about doubled during that period. Whilst the growth in the number of managers resulted in a smaller number of employees per manager. Accordingly, not only did the number of employees grow but they were potentially more closely supported by the larger number of managers. This was especially so in the case of chief executive officer/general managers whose numbers more than doubled during the 15-year period. This considerable growth in the number of ACRS managers was associated with a rise in their academic qualifications. In spite of their higher academic qualifications, ACRS managers earned less on average in 2021 than the average for managers in all industries. This might reflect, the observed lower average income of female managers than that of males in all industries but also in health services. The problems encountered in ACRS during the COVID 19 crisis points to the importance of continuing to improve the management of aged care residential services.

Abbreviations

- ABS** Australian Bureau of Statistics
- ACRS** Aged Care Residential Services
- ANZCO** Australian and New Zealand Standard Classification of Occupations
- CEO/GM** Chief Executive Officer/General manager

DH Commonwealth Department of Health

M(nfd) Managers no further defined

\$ Australian dollars

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MANAGER CLASSIFICATIONS

The classification of managers in this paper is in accordance with ABS's adopted ANZCO: Australian and New Zealand Standard Classification of Occupations. According to it, managers are engaged in the planning, organisation, direction, control, coordination and review of organisations and/or departments. In other words, managers set the overall direction and objectives of organisations and/or their departments to make certain that set objectives are met. They are concerned with the allocation of assets and resources. They direct, control and/or coordinate the activities of organisations and/or their departments, either personally or through subordinates. They are concerned with monitoring and evaluating the overall or departmental performance of the organisation and changing policies and processes to make certain that set objectives are met. They are also engaged in the representation and/or negotiation of the interests of their organisations and/or departments.

Chief executive officers and general managers are engaged and responsible for the planning, organisation, direction, control, coordination and review of the overall operations of organisations, their major activities and representation of and negotiation on behalf of their organisations. Their tasks include the setting of the overall direction and goals of their organisations. They are concerned with the overall setting of the operations of their organisations. In addition, they are responsible for the performance of their organisation is in line with set objectives. Further, they represent their organisations in public relations and negotiations with other organisations and regulatory authorities.

Specialist managers have more direct duties in the planning, organisation, control and coordination of given functions within the overall organisational setting, such in the production and distribution of services, the management of human and financial resources and other ancillary functions. Thus, their tasks include development and implementation of strategies concerned with monitoring and ensurance that policies and plans are followed and evaluation of their outcome, in terms of work progress, performance, and adjustment of processes and resources to achieve set goals. They control budget planning and report on performance and control of expenditure in their area of responsibility. They are involved in personnel planning and training and their performance. They may be involved in the representation of their organisation at given levels and also negotiations with other departments and other outside organisations, such as suppliers of good and services.

Hospitality and service managers are concerned with the organisation and operation of accommodation, cleaning, transport and provisions such as food. They are concerned with the selection, training and supervision of related staff [13].