



MONASH University

Is care work undervalued?

An analysis of wages in Australia's growing aged care and disability service sectors

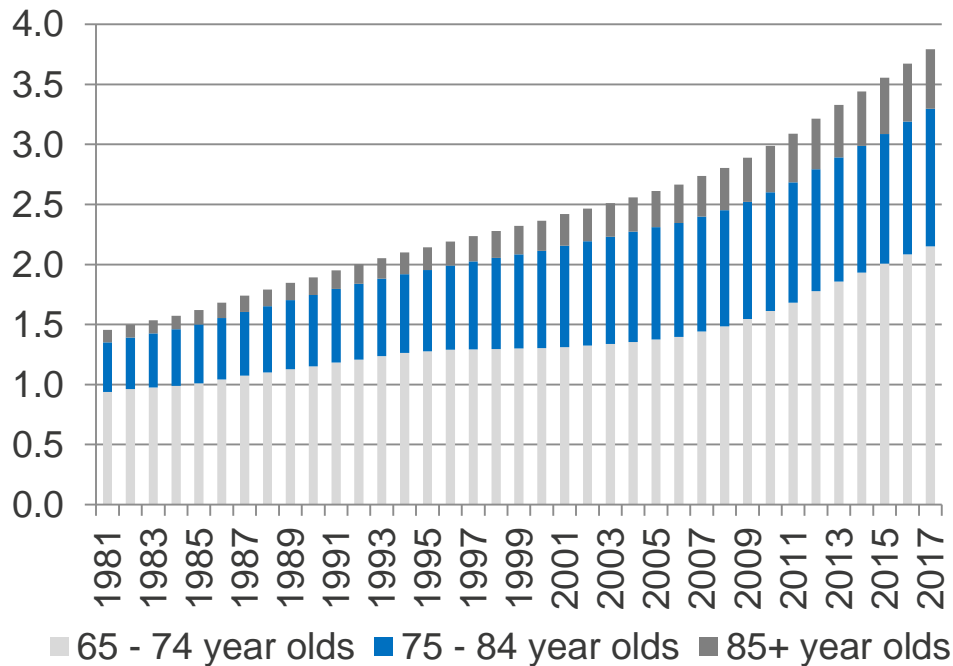
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Introduction

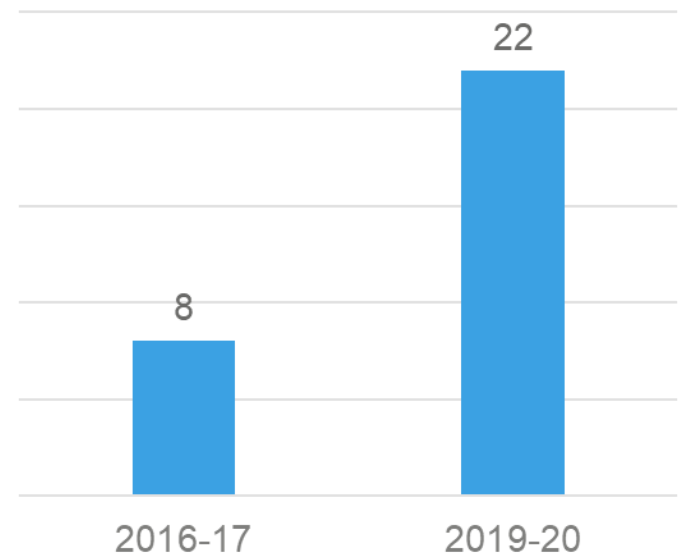
- Australia is pursuing ambitious reforms to expand access to aged care and disability support services.

Growth in older Australians (millions)



Source – ABS, 3101.0 Australian Demographic Statistics

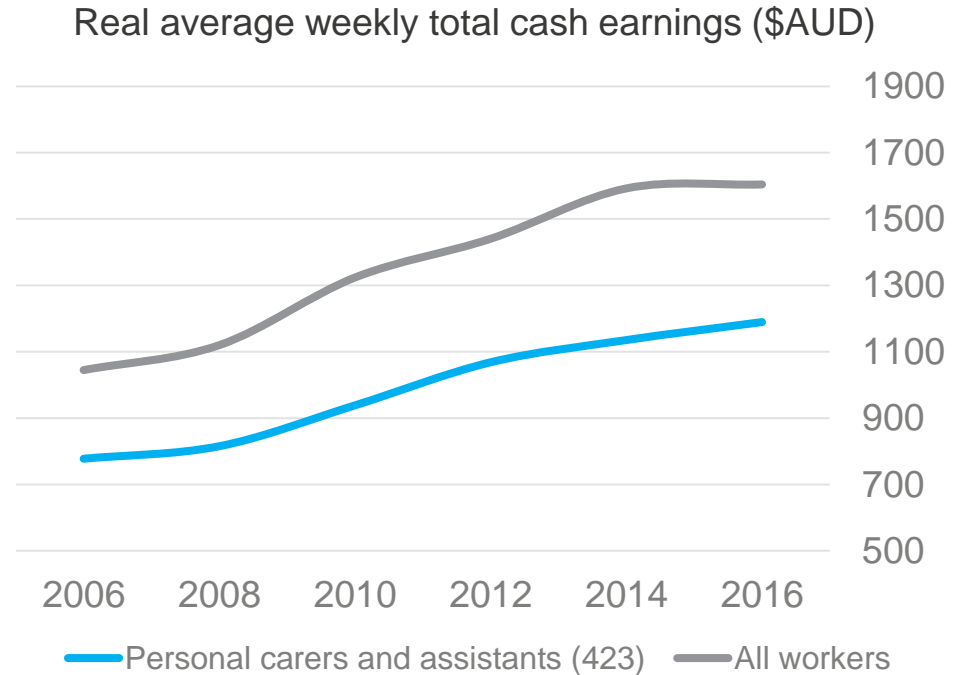
Disability support funding, per year (billions)



Source – PC 2017, p. 8

Introduction

- To keep up with demand:
 - the aged care workforce will need to quadruple by 2050 (PC 2011)
 - an additional 70,000 disability care workers will be needed by 2020 (PC 2017)
- Wages are often suggested as the main barrier to growth, however, other ways to support workforce supply have been pursued instead.



Source – ABS 2016, *Employee Earnings and Hours*

Introduction

A&D care workers are:

- 79% women
- Notable proportion of migrants, with 32% of residential care workers born overseas
- On average work less hours than general population
- More likely to be casually employed and have a Cert III/IV as highest level of education (51% vs 15% in general population)

Research question

In this study I assess:

1. Does a wage differential exist for aged and disability care work in Australia?
2. Could gender-based undervaluation explain the existence of any wage differential?

Motivation and contribution

1. **Limited evidence on worker's perspective and comparative wages**
2. **Penalties for care work appear common, but not a given**
 - International studies have found evidence of a wage penalty for broader care work.
 - Australian studies present conflicting findings of a wage penalty, its size and the correlation with worker gender and gendered based undervaluation.

What could explain a wage gap?

Competitive labour market theory

- Gordon (2012), Budig & Misra (2010)

Efficiency wage theory

- Government funding constraints e.g. Charlesworth (2010), Daly (2002)
- Industrial relations system e.g. Machin & Manning (2004), Gordon's (2012)

Compensating differentials

- Money is not the primary motivation of workers (PC 2017)

What does gender economics say?

- Convenient for providers to depict work as natural for women (Palmer & Eveline's 2012)
- Parts of care work are systematically unrecognised (Austen 2016)
- Care that most closely resembles unpaid caring work in the home receives the lowest pay (Charlesworth 2010)

'care workers are implicitly expected to prove their proper motivation by accepting a wage penalty'

England, Budig and Folbre (2002, p. 457)

Data

- Use the Household, Income and Labour Dynamics in Australia (HILDA) Survey, 2001 – 2016.
- Sample are workers with occupation of 'Aged and Disabled Carers' or 'Nursing Support and Personal Care Workers' (ANZSCO).
- Use characteristics that are known to impact wage e.g. education, time in labour force, typical work hours.
- Final sample – 282 aged and disability care workers across 16 years (1,300 observations) versus ~50,000 observations of other workers

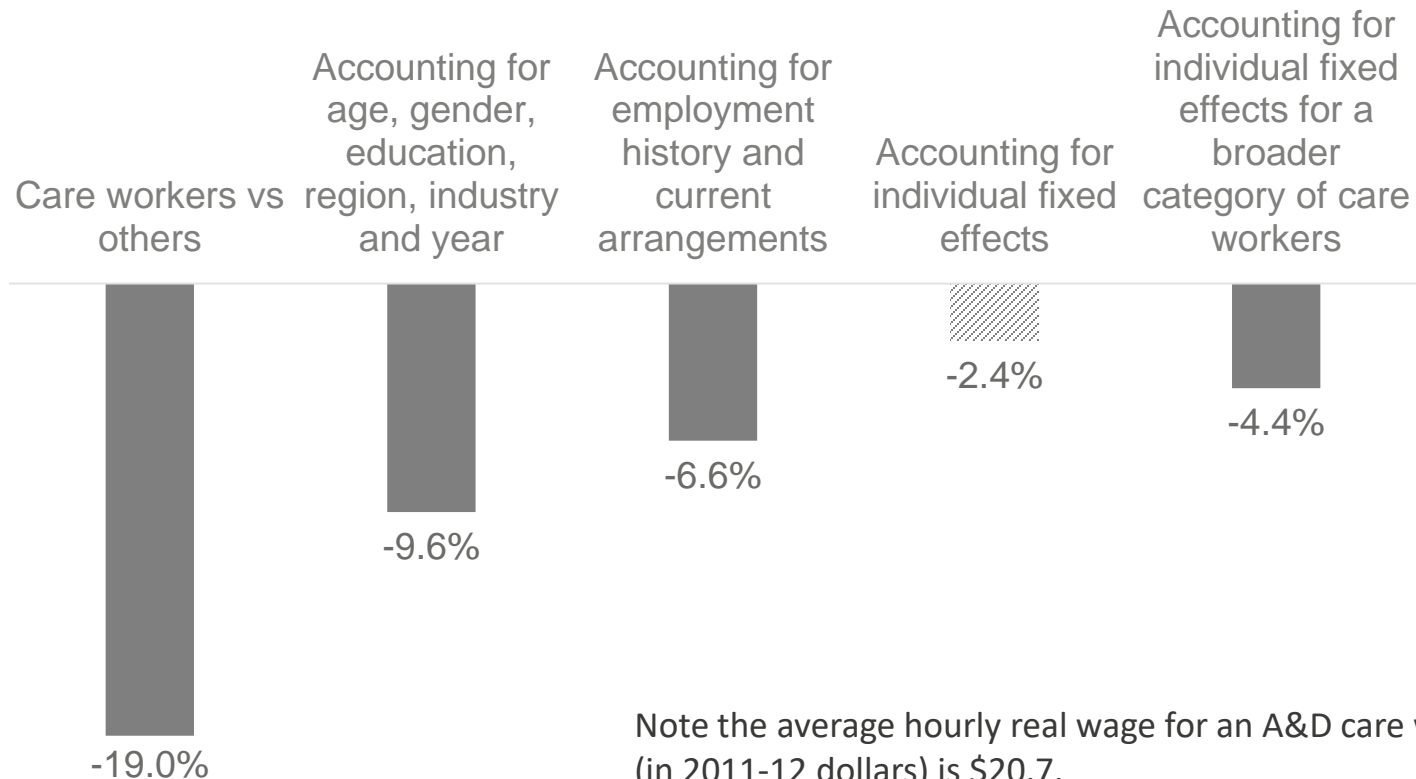
Methodology

- Regression model:

$$w_{ijrt} = \alpha + \beta X_{ijrt} + \gamma Z_{ijrt} + \delta_j + \delta_r + \delta_t + \varepsilon_{ijrt}$$

- Fixed effects include industry, region and year.
- Limitations – still possible that aged and disability care workers are self-selecting, unable to use individual fixed effects.

Results



- Aged and disability care workers earn 6.6% less than expected.
- Individual characteristics may explain the differential. However broader care workers still face a wage penalty even accounting for this.

Results

	(1)	(2)	(3)	(4)	(5)
Aged and disability care worker	-0.19***	-0.096**	-0.066*	-0.024	
Broader care worker					-0.044*
Age		0.0031***	0.0030***	0.047***	0.047***
Gender		-0.077***	-0.10***	0.22**	0.22***
Highest education level – VET		0.081***	0.088***	0.13***	0.13***
Highest education level - tertiary		0.32***	0.32***	0.34***	0.34***
Tenure in current occupation			0.0043***	0.00053	0.00053
Time unemployed			-0.034***	-0.044***	-0.044***
Time out of labour force			-0.0068***	-0.027***	-0.027***
Hours per week usually worked			-0.0037***	-0.0087***	-0.0087***
Casual worker			0.052***	0.034***	0.034***
Constant	3.17***	2.72***	2.81***	1.08***	1.08***
<i>Fixed effects</i>					
Year	No	Yes	Yes	Yes	Yes
Region	No	Yes	Yes	Yes	Yes
Industry	No	Yes	Yes	Yes	Yes
Individual	No	No	No	Yes	Yes
R squared	0.0023	0.3459	0.4159	0.7097	0.7146
Number of observations	55,177	55,176	50,378	50,379	50,142

The significance of results is marked by *0.10 **>0.05 *** 0.01

- Aged and disability care workers earn 6.6% less than expected.
- Individual characteristics may explain the differential. However broader care workers still face a wage penalty even accounting for this.

Additional findings – gender

Extension	Finding
<i>Female dominated occupations</i>	No significant wage differential
<i>Broader definition of carer</i>	Wage penalty of 4.4%

Additional findings – other

Extension	Finding
<i>Individual traits</i>	Accounting for personality and cognitive ability reduces wage penalty to 5.5 – 6%
<i>Wage setting process</i>	Do not seem to enjoy the same wage benefits as other workers
<i>Migrants</i>	Minimal impact

Conclusions – the analysis

- Australian aged and disability care workers appear to face a wage penalty that cannot be explained by standard labour characteristics and economic theories.
- **Process of elimination makes a more compelling case that gender-based undervaluation of A&D work is a potential cause, but this is difficult to empirically test.**
- Helpful extensions:
 - Individual fixed effects
 - Trends in government funding and IR arrangements
 - Wages across different gender segregated and care occupations

Conclusions – the implications

For...	Possible implications
<i>Care workers</i>	Continue to bear the load of the community's care needs without expected financial compensation?
<i>Care recipients</i>	May not have enough workers to meet growing demand?
<i>Governments</i>	Risk of trying to 'buy' more services at the same price – potential for market failures in quality and supply of care?



APPENDIX

Literature review - key works

- Kreuger & Summers' (1998) - industry based wage differentials net of worker and job characteristics
- England, Budig & Folbre (2002) – caring occupation wage penalty of 5-6% for both men and women net of worker and job characteristics
- Budig & Misra (2010) – comparison of 12 countries found wage penalty for care work common, but not a given
- Martin (2007) – no wage penalty for Australian aged care workers compared to similarly qualified women, 30% compared to men
- Productivity Commission (2011) - disability care workers face a 13% wage differential based on aggregate labour indicators
- Gordon (2012) – wage differential caused by oversupply of women 45 – 64 years and high use of award rates to set pay
- Charlesworth (2010) – government funding models undervalue care work and institutional settings neglect 'non-standard' workers
- Machin & Manning (2004) – little within firm wage variation for aged care workers, suggesting poor linking between performance and pay
- Austen (2016) – parts of care work are systematically unrecognised
- Palmer & Eveline's (2012) – aged care providers depict work as unskilled and natural for women
- Fair Work Commission (2012) – gender undervaluation has led to a wage gap for social and community service workers in non-government sector

Descriptive statistics

	A&D care workers		Others	
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
Age last birthday at June 30 2001	43.7	(11.6)	48.4	(16.2)
Time in paid work - years	19.6	(11.2)	23.2	(13.8)
Time unemployed and looking for work - years	0.98	(1.6)	0.75	(2.0)
Time not working and not looking for work - years	6.71	(7.6)	7.81	(12.1)
Hours per week usually worked in all jobs	30.1	(12.8)	37.9	(14.7)
Hours per week usually worked in main job	28.7	(11.8)	37.1	(14.7)
Hours would like to work	32.2	(12.2)	35.5	(12.9)
Tenure in current occupation (years)	6.77	(6.7)	11.0	(10.8)
Current weekly gross wages & salary - all jobs (\$) [imputed]	621.3	(334.1)	1052.0	(795.6)
Current weekly gross wages & salary - main job (\$) [imputed]	584.2	(277.9)	1029.1	(781.8)

Descriptive statistics (cont.)

	A&D care workers	Others
	%	%
Sex		
<i>Male</i>	20.27	48.76
<i>Female</i>	79.73	51.24
Highest education level achieved		
<i>Year 11 and below</i>	18.59	31.12
<i>Year 12</i>	15.62	14.62
<i>Cert III or IV</i>	51.18	21.14
<i>Advance diploma, diploma</i>	6.14	10.16
<i>Bachelor or <u>honours</u></i>	6.62	13.07
<i>Graduate diploma</i>	0.20	5.69
<i>Postgrad – masters <u>ect.</u></i>	1.64	4.16
<i>Undetermined</i>	0.00	0.03
Worker status		
<i>Permanent</i>	70.14	79.97
<i>Casual</i>	29.86	20.03
Union or employee association membership		
<i>Yes</i>	29.01	27.55

Occupation and industry descriptions

OCCUPATION

Aged and Disabled Carers (4231)

- Provide general household assistance, emotional support, care and companionship for aged and disabled persons in their own homes (ABS, 2013)

Nursing Support and Personal Care Workers (4233)

- Provide assistance, support and direct care to patients in a variety of health, welfare and community settings (ABS, 2013).

INDUSTRY

Other Social Assistance Services (8790) – 38%

- Provide a wide variety of social support services directly to clients, including adult day care centre operation, aged care assistance and disabilities assistance. These services do not include accommodation services, except on a short stay basis.

Aged Care Residential Services (8601) – 37%

- Provide residential aged care (e.g. in nursing homes) combined with either nursing, supervisory or other types of care as required (including medical).

Hospitals (8401) – 15%

- Provide diagnostic, medical or surgical services as well as continuous in-patient medical care in specialised accommodation.

Additional results – individual traits

- Accounting for personality and cognitive ability reduces wage penalty to 5 – 6%

	(1)	(2)
Aged and disability care worker	-0.062*	-0.050
Extroversion	0.0068	
Agreeableness	-0.013	
Conscientiousness	0.024***	
Emotional stability	0.00073	
Openness to experience	0.0047	
Backwards digits score		0.0000043
Word pronunciation score		0.0064***
Symbol-digit modalities score		0.0041***
Constant	3.21***	3.16***
Year	Yes	Yes
Region	Yes	Yes
Industry	Yes	Yes
Individual	No	No
<i>R squared</i>	0.3258	0.3073
<i>Number of observations</i>	9,622	5,458

Additional results – employer and IR

- Do not seem to enjoy the same wage benefits as other workers, reduces wage penalty to 5%

	(1)	(2)
Aged and disability care worker	-0.13**	-0.071*
Government	0.073**	
Government / A&D care worker	-0.062	
For profit	0.012	
For profit / A&D worker	-0.030	
Paid via agreement	0.071***	
Paid via agreement / A&D care worker	-0.065***	
Union membership or employee association	-0.057***	
Union membership / A&D care worker	0.026	
Born overseas		-0.0082
Constant	3.48***	2.73***
Year	Yes	Yes
Region	Yes	Yes
Industry	Yes	Yes
Individual	No	No
<i>R squared</i>	0.3420	0.3602
<i>Number of observations</i>	26,233	55,132

Additional results – gender

- A wage differential exists for broader care work, but not for female dominated occupations

	(1)	(2)
Worker in female dominated occupation		
Broader care worker	-0.011	-0.044*
Age	0.048***	0.047***
Gender	0.20**	0.22***
Highest education level – VET	0.15***	0.13***
Highest education level - tertiary	0.39***	0.34***
Tenure in current occupation	0.00033	0.00053
Time unemployed	-0.044***	-0.044***
Time out of labour force	-0.028***	-0.027***
Hours per week usually worked	-0.0080***	-0.0087***
Casual worker	0.050***	0.034***
Constant	1.01***	1.08***
<i>Fixed effects</i>		
Year	Yes	Yes
Region	Yes	Yes
Industry	Yes	Yes
Individual	Yes	Yes
R squared	0.7098	0.7146
Number of observations	50,355	50,142