Australian Longitudinal Study on Women's Health

Detailed Report for the Australian Government Department of Health and Ageing

Changes in Caring Roles and Employment in Mid-Life: Findings from the Australian Longitudinal Study on Women's Health

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Summary of findings

Caring

- Most women (75%) did not provide care for an ill, frail or disabled person.
- Women who provided care were almost three times more likely to care for someone living elsewhere than for someone living with them.
- More than half of women providing care at Survey 3 or Survey 4 did not do so at both surveys. This suggests that caring roles are transient and changeable.
- The intensity of caring remained stable in more than half of women who provided care. Where the level of care changed it was more likely to increase.

Employment

- At Survey 3, 33% of women were not in the labour force. At Survey 4 this figure had increased to 39%. A substantial number of women included as ‘not in the labour force’ actually did unpaid work such as in a family business.
- Women in the labour force were more likely to do full-time than part-time work; however, this difference became smaller at Survey 4.
- Part-time workers were the most changeable in their work status (40%). They more often stopped working than switched to full-time.
- Women not in the labour force were the least changeable in their employment status (only 20% between Survey 3 and 4). Those who changed were most likely to start part-time work.

Changing patterns of caring and employment

- Women who did not provide care at either survey were more likely to work full time and less likely not to be in the labour force than those who did provide care at either survey.
- Carers at both surveys were more likely not to work, or to work part-time compared to non-carers.
- Women who started caring were more likely to cut down on working than those who did not start caring.
- Women who stopped caring were more likely to increase working than those who did not stop caring. They were, however, more likely to decrease working than to increase working.

Characteristics of carer transition groups

- Women who did not provide care at either survey were more likely to be in the 'manager/professional' occupation group than those who did. They managed more easily on their available income. At Survey 3, those who went on to become carers already had more trouble managing on their available income than those who did not become carers.

- At Survey 3, high levels of stress and feeling rushed or pressured was most common in those who went on to quit caring duties. The non-carers were the least rushed or pressured.

- Non-carers were least likely to care for grandchildren/other people's children. Those who went on to take up caring duties already cared more frequently for children than those who did not take up caring for a frail, ill or disabled person.

- Levels of physical and mental wellbeing were highest in the non-carers. The number of symptoms experienced was highest in the 'Continued Care' group. The number of medical diagnoses was greatest in the 'Continued Care' and the 'Stopped Caring' groups.

Employment and taking up caring duties

- Women who quit or reduced work when starting care were more likely to care regularly for children at Survey 3.

- They were also more likely to be stressed, to report only poor to fair health and to report frequent visits to a GP compared to women who maintained hours of paid employment when starting care.

Employment and discontinuing care duties

- When caring stopped, women who started participating in the labour force were likely to be in better (self-reported) health compared to those who did not take up work.

Policy Implications

- Policy responses to these findings could include greater access to subsidised respite care and approaches that encourage the 'normalisation' of family caregiving for those with a long-term illness, disability or frailty in the same way that the impact of caring for children on work life is 'normal'.

- Flexible working arrangements would enhance the ability of family caregivers to continue to participate in the workforce. For example, greater availability of part-time work arrangements and job sharing.

- Greater access to carers' leave, including the option to negotiate an extended period of paid or unpaid leave, similar to provisions for maternity leave, would also enable carers to maintain their involvement in work.

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Chapter 1 General introduction

1.1 Background

This is the second of three reports commissioned by the Australian Government Department of Health and Ageing to provide information to support policy development for the Employed Carers Innovative Project (ECIP) and also to provide a good base from which to build more focussed research questions on employed carers and carers generally.

To inform the development of the Employed Carers Innovative Project, the Australian Government Department of Health and Ageing contracted researchers at the University of Queensland to analyse data from the Australian Longitudinal Study on Women's Health (ALSWH). Specifically, the analyses were on women who were identified as carers and who were either in employment or not in employment from data collected since 1996.

The first report examined paid employment and responsibilities for caring for another person with a long-term illness, disability or frailty among 10,905 women aged 53 to 58 who participated in the fourth ALSWH survey for Mid-aged women[1]. The preliminary report showed that carers, particularly live-in carers, had less involvement in the workforce, more involvement with caring for children, less social support, and more negative outcomes in terms of mental health, optimism, stress, sleep problems and physical symptoms. Live-in carers were also heavy users of health services.

This second detailed report examines changes in caring roles and employment as detailed below. A third report will provide documentation and results of a pilot sub-study of women's caregiving and employment transitions and the role of health services in lessening the impact of caregiving on women's lives.

1.2 Overview of the Australian Longitudinal Study on Women's Health

The Australian Longitudinal Study on Women's Health explores social, behavioural and economic factors and their relationship to health outcomes and use of health and related services, and how they influence lifestyle choices around family and workforce participation at key points in women's lives. The Study advances understanding of the factors that enhance or inhibit good health in women.

In 1994, the Department tendered the research to a research team based at the Universities of Newcastle and Queensland, to collect and analyse the data. The Study was projected to run for 20 years and provides information on trends in areas such as

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[1] Lucke, J., Tooth, L., Hockey, R. & Dobson, A. (2006). *Employed Carers in Mid-Life: Findings from the Australian Longitudinal Study on Women's Health.* Preliminary Report for the Australian Government Department of Health and Ageing.

healthy ageing; chronic conditions; health service use; weight; physical activity; alcohol consumption; tobacco and other drugs; mental health; paid work; planning for retirement and partner violence, on women in metropolitan, rural and remote areas of Australia. The data items include caring for family members or friends. Linkage of the Study with the Medicare and Pharmaceutical Benefits Scheme datasets provides additional information on the health service use by participants.

The Australian Longitudinal Study on Women's Health commenced in 1995 and involves surveying over 40,000 women sampled from the Australian population with over 60% from rural or remote areas. There are approximately 12,000 women in each of three age cohorts: Young women who are currently (in 2007) aged 28-33 years; Mid-aged women who are currently aged 55-60 years; and Older women who are currently aged 80-85 years.

Each cohort group is surveyed every three years and sub-studies may be conducted each year for the two groups not involved in a main survey. There are now more than 10 years of data available for analysis for various research purposes. The Mid-aged group is currently being surveyed (in 2007) for the fifth time. Further details about ALSWH are presented in Appendix 1.

1.3 Aims of this report

This detailed report identifies main patterns of caring and employment, focussing on transition groups i.e. women who took up caring between Survey 3 and 4, those who stopped caring, compared to those who were carers at both surveys and those who did not have caring roles. Women in these care transition groups are analysed in relation to their employment status. The most recent surveys for Mid-aged women are analysed (Survey 3 in 2001, when the women were aged 50-55 years and Survey 4 in 2004, when the women were aged 53-58 years). Care transition groups and employment transition groups are described and compared in terms of demographics, lifestyle, health and use of health services. The aim of the report is to answer the following questions:

1. **How do employment patterns vary according to changes in caring status?** For example, do women who stop caring take up or increase participation in paid employment?

2. **What demographic characteristics are associated with changes in caring and employment?** For example, are women who do not participate in the labour force and take up caring more likely to have lower levels of education? Do they have trouble managing on their income?

3. **What health characteristics are associated with changes in caring and employment?** For example, are women who care and stop working in poorer health than those who continue to work?

4. **What health services use and lifestyle characteristics are associated with changes in caring and employment?**

Chapter 2 Caring transitions from Survey 3 to Survey 4

2.1 Introduction

This chapter describes the changes in caring roles of 9994 Mid-aged women who provided information at both Surveys 3 and 4 about whether or not they were caring for someone with a long term illness, disability or frailty. It identifies the major groups of carers and changes in caring roles, i.e. women who stopped or started providing care from one survey to the next; women who maintained their caring duties or those who did not have caring duties.

2.2 Changes to and from care group

Care Groups

The identification of care groups is based on whether women regularly provide care or assistance to another person who is ill, disabled or frail. Women are categorised as one of the following:

- Caring for someone living with them
- Caring for someone living elsewhere
- Not providing care (non-carer)

Also see 'Employed Carers in Midlife: Findings from the Australian Longitudinal Study on Women's Health (Lucke, et al., 2006)' Chapter 2 for further details.

Table 2.1 shows the caring categories at Surveys 3 and 4. The majority of women were non-carers (75% at Survey 3, 71% at Survey 4). There were more women providing care for someone living elsewhere than women who cared for someone living with them; 3 times more at Survey 3, 2.7 times more at Survey 4. Transitions between caring for someone living with the carer and caring for someone living elsewhere from Survey 3 to 4 were relatively uncommon. Therefore care transition categories are simplified to represent whether the woman was providing care or not (Table 2.2). There were more women who changed caring status than there were women who continued providing care (22% vs 15%). Those who changed care status were more likely to start caring than to stop caring. In other words, providing care for someone appeared to be a temporary arrangement; more than half of the women who participated in caregiving in 2001 or 2003 either moved into, or out of care giving.

2.3 Changes to and from care index group

Care Index

The intensity of care duties is summarised in a care index. The care index is created by combining answers to questions about frequency of caring (ranging from daily to every few weeks) and duration of caring (ranging from all day/night to caring for about an hour at a time). Whether the carer lives elsewhere or at the same place with the person cared for is not considered in the calculation of the care index. Care frequency and duration scores are multiplied and the resulting score is grouped into three categories:

- **Low**: For example, cares once per week for one hour at a time; or cares every few weeks for several hours at a time

- **Medium**: For example, cares several times per week for several hours at a time; or cares every day for about an hour

- **High**: For example, cares all day, several times a week, or cares every day for several hours at a time

Also see 'Employed Carers in Midlife: Findings from the Australian Longitudinal Study on Women's Health (Lucke et al., 2006)' Chapter 2 for further details.

Table 2.3 shows the care index categories for those women who were carers at both Survey 3 and Survey 4. 'Medium' is the largest care index category at both surveys. Table 2.4 shows the care index transition categories. Just over half the carers maintained their level of caring from Survey 3 to Survey 4. Of those who did change in care intensity, there were more who increased in care index (26% vs 19% of carers). Most care index transitions were up or down only one care index level; few women increased from low to high care (3%) or from high to low (2%). Those who stopped or started caring from Survey 3 to Survey 4 are not included in Table 2.4.

2.4 Tables

Table 2.1 Care Groups at Survey 3 and at Survey 4.

	Care Group at Survey 4			
	Live with	Live elsewhere	Non-carer	Total
Care Group at Survey 3				
Live with	338	94	195	627
Live elsewhere	122	994	745	1861
Non-carer	324	1012	6170	7506
Total	784	2100	7110	9994

Table 2.2 Care Group transitions from Survey 3 to Survey 4.

	n	%
Care Group transition categories		
Continued caring	1548	16
Never cared	6170	62
Started caring	1336	13
Stopped caring	940	9
Total	9994	100

Table 2.3 Care index categories at Survey 3 and Survey 4.

	Care index at Survey 4			
	Low	Med	High	Total
Care index at Survey 3				
Low	206	199	52	457
Med	167	388	157	712
High	33	103	250	386
Total	406	690	459	1555

Table 2.4 Care index transitions from Survey 3 to Survey 4.

	n	%
Care index transition categories		
Continued low care index	206	13
Continued medium care index	388	25
Continued high care index	250	16
Increased care index	408	26
Decreased care index	303	19
Total	1555	100

2.5 Conclusions

The majority of Mid-aged ALSWH women (75%) did not provide care for an ill or disabled person.

Women who provided care were almost three times more likely to care for someone living elsewhere than for someone living with them.

More than half of women providing care at Survey 3 or Survey 4 did not do so at both surveys, suggesting that caring roles are transient.

The intensity of caring remained stable in more than half of women who provided care. Where the level of care changed it was more likely to increase.

Chapter 3 Employment status transitions from Survey 3 to Survey 4

3.1 Introduction

This chapter describes the changes in employment status of Mid-aged women who responded to both Survey 3 and Survey 4. It identifies substantial groups of women who have made employment transitions; women who started working full-time or part-time, quit working, switched from part-time to full-time or vice-versa, as well as those who maintained their employment status.

3.2 Changes to and from employment group

Employment groups

Employment status is categorised into three groups:

- Working part-time (1-34 hours per week)
- Working full-time (35 hours or more per week)
- Not in the labour force/unemployed

The category 'not in the labour force' includes unpaid workers and the unemployed; for example, women who work but do not receive pay are those who work in a family business.

Note that the inclusion of unpaid workers in the category 'not in the labour force' substantially affects the size of employment groups. At Survey 3, 33% of women were not in the labour force when this category included unpaid workers; when it did not, there were only 22% of women classified as not in the labour force. At Survey 4 the figures are 39% and 28% respectively.

Also see 'Employed Carers in Midlife: Findings from the Australian Longitudinal Study on Women's Health (Lucke et al., 2006)' Chapter 2 for more details.

Employment status at Survey 3 and Survey 4 is shown in Table 3.1. Full-time work was more common than part-time work; 38% vs 28% at Survey 3; 32% vs 29% at Survey 4. The percentage of women not participating in the labour force increased from Survey 3 to Survey 4, regardless of whether unpaid workers were included in this category. Labour force transitions are shown in Table 3.2. Those who started working (part-time or full-time) and those who switched from part-time to full-time were categorised as 'increased working'; those who switched from full-time to part-time or quit working were grouped as 'decreased working'. Women who were not in the labour force at Survey 3 were least likely to change employment status with only 20% ((473+195)/3331) who started working, usually part-time. Of the part-time workers at Survey 3, 40% ((658+469)/2840) changed group, more often to stop working than to switch to full time. In the full-time group 32% ((536+704)/3823) changed groups, switching to part-time or stopping work (18% and 14% respectively).

3.3 Tables

Table 3.1 Employment status at Survey 3 and Survey 4.

	Employment group at Survey 4			
	Not in labour force/unemployed	1-34 hours (part-time)	35+ hours (full-time)	Total
	n	n	n	n
Employment group at Survey 3				
Not in labour force / unemployed	2663	473	195	3331
1-34 hours (part-time)	658	1713	469	2840
35+ hours (full-time)	536	705	2582	3823
Total	3857	2891	3246	9994

Table 3.2 Employment status transitions from Survey 3 to 4.

	n	%
Paid work transition categories		
Never in labour force or unpaid	2663	27
Continued working	4295	43
Decreased working	1899	19
Increased working	1137	11
Total	9994	100

3.4 Conclusions

At Survey 3, 33% of women were not in the labour force. At Survey 4 this figure had increased to 39%. A substantial number of women included as ‘not in the labour force’ actually did unpaid work such as in a family business.

Women in the labour force were more likely to do full-time than part-time work; however, this difference became smaller at Survey 4.

Part-time workers were the most changeable in their employment status (40%). They more often stopped working than switched to full-time.

Women not in the labour force were the least changeable in their employment status (only 20% between Survey 3 and 4). Those who changed were most likely to start part-time work.

Chapter 4 The relationship between caring and employment transitions

4.1 Introduction

This chapter describes the relationship between caring and employment. It aims to identify patterns of employment in women who started or stopped caring between Survey 3 and Survey 4, those who care for someone at both surveys, or at neither survey.

4.2 The relationship between caring and employment transitions

4.2.1 Were women who did not provide care the most likely to be working full time?

The employment status at Survey 3 for the various care transition groups is shown in Table 4.1. Compared to women who provided care at either or both surveys, the women who 'never cared' were more likely to be working full time (41% vs 30%, 37% and 33% for those who continued, started and stopped caring, respectively). Women who did not provide care were also less likely to be 'not in the labour force' (32% vs 38%, 34% and 37% for those who continued, started and stopped caring, respectively).

4.2.2 Were women who continued providing care less likely to be in the labour force?

Women who cared for someone at Survey 3 and Survey 4 (i.e. continued caring) were slightly more likely at Survey 3 to be in the group not participating in the labour force than women who never cared, started or stopped caring (38% vs 32%, 34% and 37% respectively).They were more likely to be doing part-time work and less likely to be doing full-time work than those who started, stopped or never cared (see Table 4.1).

4.2.3 Were women who started caring more likely to quit or reduce work?

For the care transition groups, employment transitions from Survey 3 to Survey 4 are shown in Table 4.2. Women who started caring were more likely to decrease working than women who did not change their caregiving status or women who stopped caring (22% vs 18%, 19% and 17% respectively). A substantial proportion of these women actually took up or increased working as well as starting caring duties (12%).

4.2.4 Were women who stopped caring likely to take up or increase labour force participation?

Women who stopped caring between Survey 3 and Survey 4 were most likely to increase working (Table 4.2). Although they were more likely to increase working compared to other caring groups, they were more likely to decrease than to increase working (17% vs 14%).

4.3 Tables

Table 4.1 Employment status at Survey 3 for the caregiving transition categories for Survey 3 to Survey 4.

	Caregiving transition categories				
	Continued caring	Never cared	Started caring	Stopped caring	Total
Employment Status	n	n	n	n	n
Not in labour force/unemployed	594	1970	457	348	3369
1-34 hours (part-time)	488	1682	393	287	2850
35+ hours (full-time)	474	2553	491	312	3830
Total (n)	1556	6205	1341	947	10049

	Caregiving transition categories			
	Continued caring	Never cared	Started caring	Stopped caring
Employment Status	%	%	%	%
Not in labour force/unemployed	38	32	34	37
1-34 hours (part-time)	31	27	29	30
35+ hours (full-time)	30	41	37	33
Total (%)	100	100	100	100

Table 4.2 Employment transition categories and caregiving transition categories for Survey 3 to Survey 4.

	Caregiving transition categories				
	Continued caring	Never cared	Started caring	Stopped caring	Total
	n	n	n	n	n
Paid work transition categories					
Never in labour force or unpaid	485	1555	356	267	2663
Continued working	617	2763	528	387	4295
Decreased working	280	1166	295	158	1899
Increased working	166	686	157	128	1137
Total (n)	1548	6170	1336	940	9994

4.4 Conclusions

Women who did not provide care at either survey were more likely to work full time and less likely not to be in the labour force than those who did provide care at either survey.

Carers at both surveys were more likely not to work, or to work part-time compared to non-carers.

Women who started caring were more likely to cut down on working than those who did not start caring.

Women who stopped caring were more likely to increase working than those who did not stop caring. They were, however, more likely to decrease working than to increase working.

Chapter 5 Factors associated with caring and employment transitions

5.1 Introduction

Variables of interest in the care and employment transition groups are determined at Survey 3. The ‘started caring’ group was not yet involved in caring at Survey 3, the ‘stopped caring’ group ended their caring duties after Survey 3 and before Survey 4.

5.2 Defining variables of interest

Demographics

Variables considered in this analysis are:

- Marital status
- Area of residence
- Occupation
- Highest educational qualification completed
- Language spoken at home
- Ability to manage on available income

Marital status is categorised as ‘married’ or ‘other’; ‘married’ including the formal marital status, ‘other’ including never married, separated, divorced and widowed.

Health service use and lifestyle variables

Variables considered in this analysis are Survey 3 responses to questions about:

- How often they had visited a GP or a specialist in the last 12 months
- Whether they take medication for nerves/stress, depression or for sleeping
- How often they feel rushed or pressured
- Whether they care regularly for grandchildren or other people’s children

Health variables

Variables considered in this analysis are Survey 3 responses about:

- Number of symptoms experienced (such as allergies, indigestion, back pain, headaches, night sweats)
- Medical history (number of diseases diagnosed, such as diabetes, stroke, breast cancer, thrombosis)
- Self-rated health

The physical component score (PCS) and mental component score (MCS) of the SF-36 are used to measure health-related quality of life. Scores are standardised against the ALSWH sample at Survey 1.

Health behaviour

These items include:

- Level of physical activity (categorised into exercise groups)
- Body mass index (weight(kg) / height $(cm)^2$)
- Smoking status categorised as currently smoking daily or not
- Alcohol related health risk based on drinking pattern (National Heart Foundation (NHF) Risk Factor Prevalence Study recommendations)

Also see 'Employed Carers in Midlife: Findings from the Australian Longitudinal Study on Women's Health (Lucke, et al., 2006)' Chapter 2 for more details.

5.3 Factors associated with care transitions

Sociodemographic variables that differed across care transition groups were occupation and ability to manage on income (Table 5.1a). There were no significant differences in marital status, area of residence, level of education, or language spoken at home. Current occupation differed between caring groups with those who were carers at both surveys having a lower percentage of managers and professionals than those who never cared, started or stopped caring. Managing on available income was easier for women in the 'never cared' group compared with the 'caring' groups. At Survey 3 the group who went on to start caring did not find it as easy to manage on their available income as the group who did not become carers ('never care').

Health service use was not significantly different between care transition groups in terms of the frequency of visits to a GP or specialist in the last 12 months, or use of medication for nerves/stress, depression or sleeping (Table 5.1b). There were differences in the lifestyle variables, 'feeling rushed or pressured' and providing care for (grand) children. Feeling rushed or pressured a few times a week or more was more common in the group who later stopped caring than in the other care groups. Those who did not care for someone in Survey 3 or Survey 4 were less likely to feel pressured a few times a week or more, and more likely to be rushed/pressured only once a month or less, than those who cared at Survey 3, Survey 4 or at both surveys. At Survey 3 women who went on to be carers were already feeling rushed or pressured more than those who did not become carers. Caring for grandchildren or other people's children daily or weekly was more likely among women who were carers in Survey 3, Survey 4 or at both surveys. Never caring for other people's children was more likely in women not identified as carers. Those who went on to become carers were already caring for others' children more frequently at Survey 3 than those who did not become carers.

Health and health behaviour differed significantly between care transition groups in terms of level of stress, number of symptoms, medical history, PCS and MCS but not in the level of exercise, body mass index, smoking status, alcohol health risk or self-rated health (Table 5.1c). Stress was more likely to be very high in the caring groups compared to the group that never cared. Not being stressed at all was more common in the group who never cared, and was least common in those who went on to stop caring. Having no stress was less likely in women who went on to become carers than those who did not. Experiencing three or more symptoms was more common among women who provided care at both surveys than in the other groups. Having experienced no symptoms was most likely in the non-carer group. A history of no

medical conditions was most likely in the non-carers group. Having two or more diagnosed conditions was most likely in women who went on to stop caring and in those who provided care at both surveys. PCS and MCS were highest among non-carers, indicating a higher level of physical and mental wellbeing (Table 5.1d).

5.4 Care transition and employment status transition

5.4.1 Women who started caring: continuing labour force participation vs. reducing or stopping work

Of the women who took up caring there were 388 who maintained or even increased their time spent working; 295 women switched from full-time to part time or quit work. Those not in paid employment before starting to care were excluded from the following analysis (the results of which are shown in Table 5.2).

Comparing variables at Survey 3 (before caring started) between women who maintained or increased work and those who decreased or quit, there were no significant differences in the area of residence, level of education, language spoken at home, or the ability to manage on income.

Health and health behaviour variables differed in the level of stress with women who continued working reporting lower levels of stress at Survey 3. Self-rated health was more likely to be ‘poor’ or ‘fair’ in women who went on to reduce or quit work (15% vs. 9%).

Women who maintained work hours were less likely to provide regular care for grandchildren/other people’s children. Frequent visits to a GP were more common in women who went on to decrease or stop working.

5.4.2 Women who stopped caring: taking up work vs. continuing not to participate in the labour force participation

There were 345 women who stopped caring between Survey 3 and Survey 4 and who were not in paid employment at Survey 3. The following analysis compares those who stopped caring and started working to those who stopped caring and did not take up work.

There were 267 women who did not take up work between Survey 3 and Survey 4 and only 78 who had taken up employment by Survey 4. Variables at Survey 3 are analysed (women in the labour force at this time are not included in analysis).

There were no significant differences between sociodemographics (such as marital status, area of residence, level of education) or health service use and lifestyle variables (such as the number of visits to a GP or a specialist and caring for grandchildren). There were differences in the self-rated health: women who continued not working were much more likely to report their health to be fair or poor (21%) compared to those who took up work (5%).

The physical health component score (PCS) was higher for women who took up work (median of 51.2 vs 47.5), while the mental health component score (MCS) was not statistically different. These results suggest that women with better physical health

while still caring are more likely to take up work when they are no longer providing care.

5.5 Tables

Table 5.1(a) Sociodemographic characteristics by caring transition category.

	Caregiving transition categories				
	Continued caring n=1564 %	Never cared n=6247 %	Started caring n=1348 %	Stopped caring n=953 %	Statistic
Marital status					
Married	77	76	77	78	χ^2 =2.4
Other	23	24	23	22	df=3, p=0.49
Area of residence					
Metro	38	37	39	34	χ^2 =5.8
Rural/remote	62	63	61	66	df =3, p=0.12
Occupation					
Managers/ Professionals	32	38	37	37	χ^2 =52 *
Trades/ Clerical/Sales/Service	26	27	27	25	df =9, p<0.0001
Labourers/ Production/Transport	13	15	14	15	
No paid job	29	20	22	23	
Highest qualification completed					
School certificate or less	48	48	46	49	χ^2 =2.5
Higher school certificate or more	52	52	54	51	df =3, p=0.47
Language spoken at home					
English	96	96	96	97	χ^2 =3.4
Other	4	4	4	3	df =3, p=0.33
Ability to manage on available income					
Difficult all the time/impossible	12	10	12	12	χ^2 =33 *
Difficult some of the time	29	26	27	29	df =3, p=0.0001
Not too bad	43	44	44	43	
Easy	16	20	17	16	

* Denotes significant differences between categories at p=0.005.

Table 5.1(b) Health service use and lifestyle descriptive data by caring transition category (data at Survey 3).

	Caregiving transition categories				
	Cont'd caring %	Never cared %	Started caring %	Stopped caring %	Statistic
Feeling rushed or pressured					
A few times a week or more	59	52	55	61	χ^2 =55 *
Once a week	21	20	21	19	df=6, p<0.0001
Once a month or less	20	28	24	20	
Regularly provide care for grandchildren or other peoples children					
Daily/Weekly	18	13	16	17	χ^2 =86 *
Occasionally	33	27	29	32	df=6, p<0.0001
Never	49	60	55	51	
GP visits the last 12 months					
Four visits or less	71	73	71	68	χ^2 =12
More than four visits	29	27	29	32	df=3, p=0.007
Consulted a specialist in the last 12 months					
Four visits or less	95	94	94	95	χ^2 =2.3
More than four visits	5	6	6	5	df=3, p=0.51
Took medication for nerves/stress					
No	92	93	91	91	χ^2 =8.5
Yes	8	7	9	9	df=3, p=0.036
Took medication for depression					
No	93	93	92	94	χ^2 =2.7
Yes	7.13	7	8	6	df=3, p=0.43
Took sleeping medication					
No	91	92	91	90	χ^2 =11
Yes	9	8	9	10	df=3, p=0.015

* Denotes significant differences between categories at p=0.005.

Table 5.1 (c) Health and health behaviour by caring transition category.

	Caregiving transition categories				
	Cont'd caring	Never cared	Started caring	Stopped caring	Statistic
	%	%	%	%	
Physical activity group					
Nil or low	53	55	54	55	χ^2 =2.5
Moderate	21	21	21	21	df=6, p=0.87
High	26	24	25	24	
Body Mass Index					
BMI<25	53	52	53	52	χ^2 =6.0
BMI 25-30	29	27	27	29	df=6, p=0.42
BMI>30	18	21	20	19	
Smoking status					
Smoke daily	11	12	12	12	χ^2 =0.62
Other	89	88	88	88	df=3, p=0.89
Alcohol related health risk					
Rarely/non-drinker	40	36	37	36	χ^2 =12
No/low risk drinker	59	63	62	62	df=6, p=0.058
Intermediate/high risk drinker	1	1	1	2	
Number of symptoms experienced often					
None	32	37	34	34	χ^2 =20 *
One or two	33	33	34	33	df=6, p=0.003
Three or more	35	30	32	33	
Medical history (number of diagnoses)					
None	40	44	41	38	χ^2 =20 *
One	3	31	32	33	df=6, p=0.003
Two or more	28	25	27	29	
Self-rated health					
Excellent	9	12	11	9	χ^2 =15
Good or very good	78	76	75	78	df=6, p=0.023
Fair or poor	13	12	14	13	

* Denotes significant differences between categories at p=0.005.

Table 5.1 (d) Physical and mental health component and stress scores by caring transition category (data at Survey 3).

	Caregiving transition categories				
	Cont'd caring	Never cared	Started caring	Stopped caring	Statistic
Physical component score (PCS)	50.7 (42.6-55.5)	51.7 (44.3-56.0)	51.2 (42.3-55.8)	50.4 (41.9-55.3)	$\chi^2=23$ df=3 $p<0.0001$
Mental component score (MCS)	54.1 (45.6-58.3)	55.2 (48.3-58.7)	54.0 (44.1-58.0)	54.2 (44.9-58.3)	$\chi^2=43$ df=3 $p<0.0001$
Score for perceived stress	0.56 (0.30-0.90)	0.40 (0.20-0.80)	0.50 (0.30-0.90)	0.56 (0.30-0.90)	$\chi^2=120$ df=3 $p<0.0001$

Data are given as median and interquartile range. Statistic is computed using the Kruskal Wallis Test.

Table 5.2 Characteristics at Survey 3 of those who started caring and continued to work vs. those who stopped working or switched from full-time to part-time work.

	Continued working N=588 %	Switched to part-time or stopped working N=295 %	Statistic
Self-rated health			
Excellent	12	11	χ^2=8.7
Good or very good	79	74	df=2, p=0.013
Fair or poor	9	15	
Regularly provide care for grandchildren or other peoples' children			
Daily/Weekly	12	18	χ^2=10.7
Occasionally	27	31	df=2, p=0.0049
Never	61	51	
GP visits the last 12 months			
Four visits or less	76	69	χ^2=4.5
More than four visits	24	31	df=1, p=0.033
Score for perceived stress	0.50 (0.30-0.89)	0.60 (0.30-1.00)	χ^2=8.3 df=2, p=0.016

Only women who started caring between Survey 3 and Survey 4 are included, and only those in the labour force at Survey 3. Perceived stress score is given as medians and interquartile ranges. Variables not statistically different between groups (p>0.05) are not shown.

5.6 Conclusions

5.6.1 Characteristics of carer transition groups

Women who did not provide care at either survey were more likely to be in the 'manager/professional' occupation group than those who did. They managed more easily on their available income. At Survey 3, those who went on to become carers already had more difficulty managing on their available income than those who did not become carers.

At Survey 3, high levels of stress and feeling rushed or pressured were most common in those women who later quit caring duties. The non-carers were the least rushed or pressured.

Non-carers were least likely to care for grandchildren/other people's children. Those who went on to take up caring duties already cared more frequently for grandchildren than those who did not take up caring for a frail, ill or disabled person.

The number of symptoms experienced was highest in the continued caring group. The number of medical diagnoses was greatest in the groups who continued or stopped caring.

Levels of physical and mental wellbeing (expressed as PCS and MCS) were highest in the non-carers.

5.6.2 Employment and taking up care duties

Women who quit or reduced work when starting to care were more likely to care regularly for (grand) children.

They were also more likely to be stressed, to report only poor or fair health and to report frequent visits to a GP compared to women who maintained employment status when starting care.

5.6.3 Employment and discontinuing care duties

When caring stopped, women who started participating in the labour force were likely to have reported better health at Survey 3 compared to those who did not take up work.

Chapter 6 Summary and Conclusions

6.1 Caring transitions (Chapter 2)

Of 10,905 Mid-aged women participating in the Australian Longitudinal Study on Women's Health (ALSWH) at Survey 3 in 2001, one in four regularly cared for a frail, ill or disabled person. This was usually someone living elsewhere; only one in four of those cared for lived in the same house with the carer. Women who started caring, stopped caring, continued caring or never cared were identified based on their caring roles in 2001 (Survey 3) and 2004 (Survey 4). Care transition groups were large; there were more women who started or stopped caring from one survey to the next than there were women who remained carers. In other words, caring appears to be transient in Mid-aged women. The intensity of caring (frequency and duration of care) remained stable in the majority of continuing carers, and where it changed it was more likely to increase.

6.2 Employment transitions (Chapter 3)

In 2001, 33% of responding women were not in paid employment. In 2004 this was 39%. A substantial number of women included as 'not in the labour force' actually did unpaid work such as in a family business. Paid employment was more likely to be full-time than part-time; this difference had become smaller by Survey 4. Employment transition groups were identified to describe changes in employment status between Survey 3 and Survey 4. Part-time workers were the most changeable in their work status (40%). They were more likely to stop working than switch to full-time work. The most stable in their (un)employment status were women not in the labour force, only one in five took up work between Surveys 3 and 4; this was more likely to be part-time than full-time work.

6.3 Care transition and employment (Chapter 4)

Patterns in care and employment transition groups were identified. Women not providing care at either survey were most likely to be in full-time employment. Those who cared at both surveys were more likely not to work, or to work part-time compared to non-carers. Women who started caring between Survey 3 and Survey 4 were more likely to reduce work compared to those who did not start caring. Women who stopped caring were more likely to increase working than those who do not stop caring. They were however more likely to decrease working than to increase working.

6.4 Demographics of care and employment transition groups (Chapter 5)

Care transition groups were compared in terms of demographics, health, health behaviour, lifestyle and health service use. Women who did not provide care at either survey were more likely to be in the 'manager/professional' occupational group than those who cared at Survey 3 or Survey 4 (or both). They also found it easier to manage on their available income. At Survey 3, those who went on to become carers already had more trouble managing on their available income than those who do not become carers. These women were also more likely to care for (grand) children than those who did not become carers. Non-carers were least likely to care for (grand) children. Levels of physical and mental wellbeing (expressed as PCS and MCS) were

highest in non-carers. At baseline, high levels of stress and feeling rushed or pressured were most common in those who stopped caring for someone by Survey 4. The non-carers were the least rushed or pressured. The number of symptoms experienced (such as headaches, sleeping difficulties, indigestion, hot flushes) was highest in the continued caring group. The number of medical diagnoses (such as arthritis, stroke, osteoporosis, depression, thrombosis) was greatest in the groups who continued caring and who stopped caring.

Women who quit or reduced work when they started caring, also cared for (grand) children more often. They were more likely to have high levels of stress, only poor to fair health and to report frequent visits to a GP compared those who did not reduce/quit work when taking up care.

A small group of women who stopped caring and were not employed at Survey 3 took up work by Survey 4. They were in better (self-reported) health compared to those who did not take up work. A reduction in work when also starting to care was associated with stress and (poor) health/wellbeing. Taking up work when stopping caring was associated with greater physical wellbeing.

6.5 Conclusions

Women in their 50's are at a life stage when, if they are in the workforce, their participation is decreasing. At the same time about one in four is involved in caring for someone who is frail, ill or disabled. Women who provide such care are typically less economically advantaged and in poorer health than women who do not care for anyone. For many women this caring role is transitory and interacts with their workforce participation. When working women start caring they reduce their working. However when women stop caring, while some return to their former employment status, proportionally more decrease their working. Thus, on balance, caring appears to accelerate women's departure from the workforce.

6.6 Policy Implications

Caring is often a transitory state which impacts on workforce participation. There are a number of parallels which could be drawn between the circumstances of mid-aged women caring for someone with a long-term illness, disability or frailty and women with young children. Policy responses to enable women with young children to work have included subsidised child care and more flexible working options. With the ageing population and the consequent increased need for care, it makes sense to consider policy responses to allow women flexibility to combine paid work and other caregiving responsibilities.

Policy responses could include greater access to subsidised respite care and approaches that encourage the 'normalisation' of family caregiving for those with a long-term illness, disability or frailty in the same way that the impact of caring for children on work life is 'normal'.

Flexible working arrangements would enhance the ability of family caregivers to continue to participate in the workforce. For example, greater availability of part-time work arrangements and job sharing. Greater access to carers' leave, including the option to negotiate an extended period of paid or unpaid leave, similar to provisions for maternity leave, would also enable carers to maintain their involvement in work.

Appendix 1: The Australian Longitudinal Study on Women's Health

The Australian Longitudinal Study on Women's Health (ALSWH) – widely known as Women's Health Australia - is a longitudinal population-based survey, funded by the Australian Government Department of Health and Ageing. The Project began in 1996 and examines the health of over 40,000 Australian women[2].

The ALSWH involves three large, nationally representative, cohorts of Australian women representing three generations:

- The Younger women, aged 18-23 when first recruited in 1996 (n=14247), are in their late 20s – early 30s, the peak years for relationship formation, childbearing, and establishing adult health habits (e.g. physical activity, diet) and paid and unpaid work patterns.
- The Mid-aged women, initially aged 45-50 (n=13716), are experiencing menopause, as well as changes in household structure, family care giving, and impending retirement, which are common at this life stage. Some are showing early signs of age-related physical decline, while some are adopting new health behaviours in preparation for a healthy old age.
- The Older women, aged 70-75 when first recruited (n=12432), are in their 80s and facing the physical, emotional and social challenges of old age.

Features of the Study design include:

- Women were randomly selected from the Medicare Australia database and invited to participate in the longitudinal study.
- Women in rural and remote areas of Australia were intentionally over-sampled to ensure adequate numbers for statistical analysis.
- After Survey 1 in 1996, the three age cohorts have been surveyed sequentially, one cohort per year, on a rolling basis starting in 1998.

The Study was designed to explore factors that influence health among women who are broadly representative of the entire Australian population. The Study assesses:

- Physical and emotional health (including well-being, major diagnoses, symptoms)
- Use of health services (GP, specialist and other visits, access, satisfaction)

[2] Brown, W. J., Bryson, L., Byles, J. E., Dobson, A. J., Lee, C., Mishra, G., et al. *Women's Health Australia: recruitment for a national longitudinal cohort study.* Women & Health, 1998, 2*8*(1), 23-40.

- Health behaviours and risk factors (diet, exercise, smoking, alcohol, other drugs)
- Time use (including paid and unpaid work, family roles, and leisure)
- Socio-demographic factors (location, education, employment, family composition)
- Life stages and key events (such as childbirth, divorce, widowhood).

The Study provides a valuable opportunity to examine associations over time between aspects of women's lives and their physical and emotional health. It provides an evidence base to the Australian Government Department of Health and Ageing – as well as other Australian and State/Territory Departments – for the development and evaluation of policy and practice in many areas of service delivery that affect women. An overview of the Study and investigators, copies of the questionnaires, and abstracts of publications and presentations can be located on the study's website www.alswh.org.au

Participation and retention

Participation response rates to Survey 1 (1996) cannot be exactly specified as some women selected for the sample may not have received the invitation. For example, deaths or changes of address may not have been notified to the Health Insurance Commission (now Medicare Australia). It is estimated that 41-42% of the Younger women, 53-56% of the Mid-aged women and 37-40% of the Older women agreed to participate in the longitudinal Study. Comparison with the 1996 Census showed that the respondents were broadly representative of the general population of women of the same age, with some over-representation of women with tertiary education and under-representation of immigrant women of non-English speaking background.

The Project has been able to retain a very high proportion of the original participants, particularly among the Mid-aged and Older women.

Table A.1 Participation and retention of Mid-aged women.

	Survey 1	Survey 2	Survey 3	Survey 4
Age in years	45-50	47-52	50-55	53-58
Eligible at previous survey		13716	13606	13309
Ineligible				
deceased between surveys		50	66	88
frailty (e.g. dementia, stroke)		7	14	14
withdrawn before mailout survey date		53	217	229
Total ineligible		*110*	*297*	*331*
Eligible at current survey		13606	13309	12978
Non-respondents				
withdrawn from the study		156	155	136
contacted but did not return		254	999	887
unable to contact participant		858	929	1052
Total non-respondents		*1268*	*2083*	*2075*
Respondents				
completed survey	13716	12338	11226	10903
Retention rate as % eligible		90.7%	84.3%	84.0%

Retention has been high among the Mid-aged women; 91% responded to Survey 2 in 1998 and 84% responded to Survey 3 in 2001 and Survey 4 in 2004 (Table A.1). The major reasons for non-response among Mid-aged women were that the research team

was unable to contact the women (6%, 7% and 8% of eligible women at Survey 2, Survey 3 and Survey 4 respectively) and non-return of questionnaires by women who could be contacted (2%, 8% and 7% of eligible women at the second, third and fourth surveys). Mid-aged women typically lead busy lives, often working as well as caring for their parents and children. Our data revealed that the women who could not be contacted were more likely to be separated, divorced or widowed.

Data from the 1996 and 2001 Censuses were used to compare demographic characteristics (country of birth, marital status, education, employment and living arrangements) of women of the same age in the Australian population with Mid-aged respondents at Survey 1 (1996) and Survey 3 (2001). There were few differences, however there was some under-representation of women from non-English speaking countries and women who were separated or divorced at both surveys.

Table A.2 Completion of Surveys by Mid-aged women (n=13716).

Completion of Surveys	
Respondent at Surveys 2, 3 and 4	9874
Respondent at Surveys 2 and 3, non-respondent at Survey 4	823
Respondent at Surveys 2 and 3, deceased/ withdrawn due to frailty at Survey 4	74
Respondent at Surveys 2 and 3, other ineligible at Survey 4	38
Respondent at Survey 2, non-respondent at Survey 3, respondent at Survey 4	577
Respondent at Survey 2, non-respondent at Surveys 3 and 4	701
Respondent at Survey 2, non-respondent at Survey 3, deceased/ withdrawn due to frailty Survey 4	15
Respondent at Survey 2, non-respondent at Survey 3, other ineligible at Survey 4	122
Respondent at Survey 2, deceased/ withdrawn due to frailty by Survey 3	63
Respondent at Survey 2, other ineligible by Survey 3	51
Non-respondent at Survey 2, respondent at Surveys 3 and 4	299
Non-respondent at Survey 2, respondent at Survey 3, non-respondent at Survey 4	107
Non-respondent at Survey 2, respondent at Survey 3, deceased/ withdrawn due to frailty Survey 4	5
Non-respondent at Survey 2, respondent at Survey 3, other ineligible at Survey 4	6
Non-respondent at Surveys 2 and 3, respondent at Survey 4	153
Non-respondent at Surveys 2, 3 and 4	444
Non-respondent at Surveys 2 and 3, deceased/ withdrawn due to frailty at Survey 4	8
Non-respondent at Surveys 2 and 3, other ineligible at Survey 4	63
Non-respondent at Survey 2, deceased/ withdrawn due to frailty at Surveys 3 and 4	17
Non-respondent at Survey 2, other ineligible at Surveys 3 and 4	166
Deceased/ withdrawn due to frailty by Survey 2	57
Other ineligible by Survey 2	53

Table A.2 shows the numbers of Mid-aged women who were enrolled in Survey 1 according to their history of completing Surveys 2, 3 and 4. Seventy-two percent of the Mid-aged women completed all four surveys. A further 12% completed three of the four surveys and 9% completed two of the four surveys. Women were mainly ineligible to continue in the Study due to withdrawal.