

**Counting on Care Work in
Australia**

*economic Security4Women
(eS4W)*

**Final Report
April, 2012**

economic
S4W Lifelong
Economic
Wellbeing
for Women



AECgroup
Outcome Driven

Acknowledgements

This research project benefited from ongoing support from the economic Security4Women advisory group comprised of Dalma Jacobs (Australian Federation of Graduate Women), Elaine Butler (Women in Adult and Vocational Education), and Sandra Cook (BPW Australia).

Dr Patricia Short, University of Queensland, provided detailed feedback which enhanced the analysis in this report.

Published by economic Security4Women [eS4W] ISBN: 978-0-9850418-1-6

www.security4women.org.au

This document should be cited as follows:

Hoenig, S.A., and Page. A.R.E., (2012). *Counting on Care Work in Australia*. Report prepared by AECgroup Limited for economic Security4Women, Australia.

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Summary: Findings & Implications

For the Reader

There are significant gaps in the amount of available data on the topic of care work. In order to develop estimates of the paid and unpaid care sector, some assumptions have been used. For details on the datasets used in this study, please refer to the Methodology and Data Framework provided in **Chapter 2** of the report.

Summary of Key Findings

The care sector is highly significant to Australia, worth an estimated \$762.5 billion in 2009-10 (\$112.4 billion paid care and \$650.1 billion imputed value of unpaid care).

This sector provides nearly 20% of all paid employment in Australia.

For the purposes of this report, the care sector is defined as “the total (paid and unpaid) labour required to meet the needs of children to be cared for and educated, everybody’s physical and mental health that requires attention, and the needs of individuals who require assistance with the activities of daily living because of illness, age or disability” (Albelda et al., 2009, p.4). The care sector is comprised of paid care, unpaid care and government investment in the care sector.

Table ES.1 provides a high order overview of the key data findings from this study with key implications of the research conducted throughout the project included below the table. Limitations of the research are summarised on page iv of this Executive Summary.

Table ES.1: Summary of Key Findings from this Study

Indicator	Care Economy Statistic
Paid Care	
Number of Australian workers (in FTE) employed by the care sector in 2009-10	1.8 million (providing nearly 20% of all paid employment in Australia)
Total value of wage and salaries earned in the paid care industry in 2009-10	\$112.4 billion (equates to 8.8% of GDP and \$5,033 per capita)
Earning of the average care sector worker compared to the average Australian worker	96 cents for every dollar
Earning of the average female care sector worker compared to the average male care sector worker	84 cents for every dollar ¹
Unpaid Care	
Total number of hours on unpaid care work undertaken in 2009-10	21.4 billion
Equivalent number of FTE positions in 2009-10	11.1 million (1.2 times the total Australian FTE workforce)
Imputed value of the unpaid care sector in 2009-10	\$650.1 billion ^(a) (equivalent to 50.6% of GDP and \$29,120 per capita)
Contribution of women aged between 25 and 64 years to unpaid care provision	60%
Percentage of female carers who are primary carers	36%
Percentage of male carers who are primary carers	21%
Government Investment in the Care Sector	
Total investment in 2009-10 ²	\$135.9 billion (10.6% of GDP)
Federal Government Investment in 2009-10 per capita	\$3,540
Total Government Investment in 2009-10 per capita	\$6,084

Note: (a) Estimates of the imputed value of unpaid care work range between \$601 billion (replacement cost valuation method) and \$699 billion (opportunity cost valuation method). This is not a transacted value and examines the imputed value against GDP for comparison purposes only. Source: ABS (2008a, 2010a, 2010c, 2011c, 2010d, 2011a, 2011c, 2011d, 2011f)

¹ This is influenced by the higher number of males in higher-level roles.

² Excludes wages and salaries and social security payments.

Summary of Key Implications

- Care work is an example of a public good and creates positive externalities, such as increased productivity of the parents of children in childcare. However, these are not reflected in the market price. Government intervention in the form of public policy and funding is required to ensure appropriate levels of care are available.
- This is the first comprehensive quantification of the Australian care sector, paid and unpaid, using both replacement and opportunity cost methods.
- Given the complexity of care work and its profound implications for the overall wellbeing of a nation it is crucial that this sector is identified and valued as a distinct segment of economic activity.
- The economic value of the paid care sector does not account for significant skills shortages. If skills shortages are addressed, it is likely the value of the care sector would increase.
- Average earnings remain lower for women than for men, even in female-dominated industries such as the care sector. This is due to the larger number of men in higher-level, managerial roles which tend to be higher paying.
- Women are the primary care givers in Australia, in both paid and unpaid sectors. As women's role in the formal workforce expands, men will be required to assist in providing greater unpaid care.
- Significant amounts of unpaid care are provided each day. Replacing this care with the formal care sector is impossible. However, the strain on both the unpaid and paid care sectors is likely to increase over the coming decades.
- Countries with higher levels of government investment in the paid care sectors tend to have a more equitable split of unpaid care work. Australia ranks 24th and 22nd in terms of government investment as a percentage of total investment in health, and primary and secondary school education spending (OECD, 2011b).
- Due to the broad nature of the care sector, it belongs to several Federal and State ministers. This presents a limitation as policy reforms in one sector of the care sector are lost and not carried through the whole of the care sector.
- Further work is required to fully understand the nature and extent of the informal care sector. In particular, the inclusion of remote Australians and Indigenous Australian groups in the scope, coverage and data collection for the time use survey is needed. Additional funding for this research is a core component of addressing these issues.
- Further research into the ageing Australian population and its ramifications for the health care and social assistance sectors is required. Australia needs to begin planning for this social change as soon as possible. Changes to eligibility criteria for carers' payments will be needed to support the provision of unpaid care.
- Further research into the career choices of young women is essential. Would increased education or career planning in high schools, vocational training and tertiary education institutions assist women working in the care sector (and all other sectors) in attaining higher-paid roles in the future? Providing additional incentives to students (in terms of lower HELP costs) can assist in attracting more students into care sector disciplines.
- Research into the long-term impacts, particularly for women, of career breaks mainly for caring purposes is essential and should be undertaken to uncover methods for reducing these impacts. In particular, research into policies which will allow women to prepare for their retirement and financial security through/ahead of their career break is required.



Executive Summary

Understanding & Measuring Care Work: An Emergent Necessity

Care work is highly significant to the Australian society and economy.

Care work affects all aspects of the community, and thus has a significant influence upon the social and economic wellbeing of a nation. The care sector must be identified as a discrete part of the Australian economy because the overall wellbeing of a nation is reflected in its human capital infrastructure.

Both paid and unpaid carers work in the areas of education and health and provide assistance to community members suffering from mental illness, chronic ill-health, terminal illness, disability and the frail aged. The volunteer sector is a key component of the care economy. The labour involved in providing this assistance is known as 'care work'. Although there is vast literature on different aspects of the Australian care economy, until recently there has been no comprehensive mapping of it. Given the complexity of care work and its profound social and economic implications for a nation, it is crucial that this sector is defined and valued as a distinct segment of economic activity.

In June 2010, economic Security4Women (eS4W), a national women's alliance under the Australian Government's Office for Women, prepared *Scoping the Australian Care Economy - A Gender Equity Perspective* (Adams, 2010). This report recognised the importance of the care economy and made a series of recommendations to address some of the issues facing the sector. Adams' report highlighted that the lack of "comprehensive mapping" of the Australian care economy (which encompasses both microeconomic and macroeconomic factors) was a limitation.

In order to rectify this lack, the Counting on Care work project was designed to replicate similar work completed in Massachusetts and, for the first time, quantify the Australian care economy. This report highlights the highly gendered nature of the care sector in the implications this has for women and the nation's economy.

To further the scope of its report, eS4W engaged AECgroup to:

- Examine the three intersecting spheres of paid care work, unpaid care work and government investment in the care sector;
- Examine the labour and resources devoted to the daily care of Australians, in particular:
 - Children and those who are elderly or disabled;
 - Provision of Kindergarten to year 12 education; and
 - Provision of health care to both well and sick citizens regardless of age;
- Develop categories, concepts and measures of care work to enable international comparisons; and
- Include policy recommendations in the final report for future advocacy work.

This project differs from those already undertaken in Australia due to the inclusion of the formal care sector, the government investment in the care sector and the inclusion of informal care of Australians who are neither disabled nor ill.

Who are Australia's Carers?

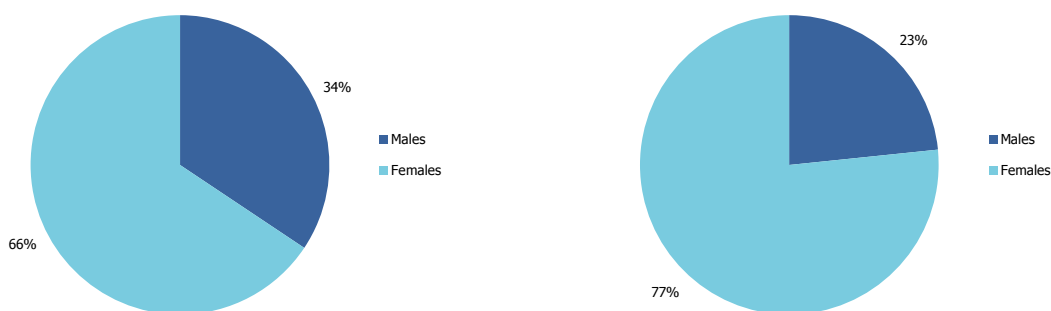
Nearly 1.8 million Australians (in FTE³ terms) were employed in the paid care sector and over 21.4 billion hours of unpaid care work were undertaken in 2009-10 (ABS, 2008a, 2011f). **Women contributed to 77% of paid care work and 66% of unpaid care work** (see Figure ES.1).

³ Full time equivalent, where one FTE equates to one person working full-time for a full year.

Figure ES.1: Contribution to the Care Sector

Total Unpaid Care - Hours Worked

Total Paid Care - Employment



Source: ABS (2008a, 2011a, 2011f)

Value of Paid Care in Australia

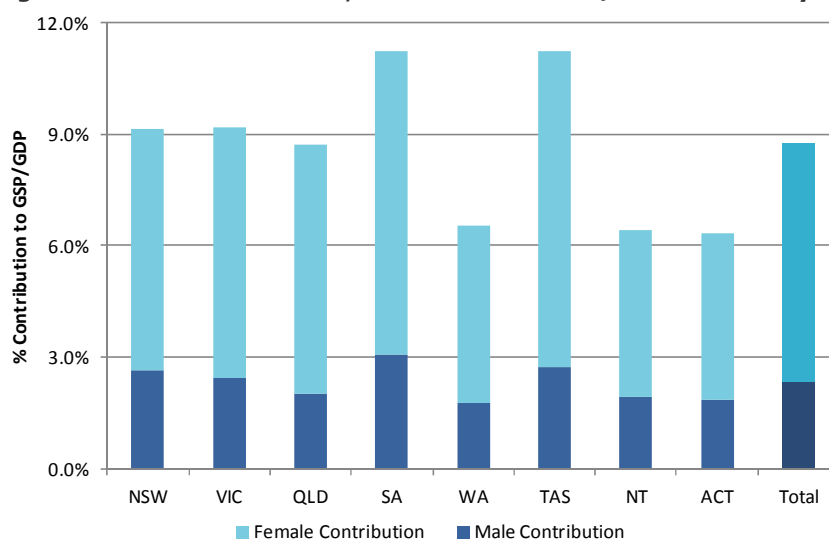
Paid carers are an essential part of the national human infrastructure. Understanding the economic value of paid care work is fundamental to the continued provision of care in the community.

The total value of wages and salaries earned by paid care workers in 2009-10 totalled \$112.4 billion in 2009-10 (8.8% of total Australian GDP⁴, see Figure ES.2). On a per capita basis, the value of the paid care sector equated to \$5,034 per Australian resident.

Of this total, **women earned 73% (or \$82.3 billion) of the total value of the paid care sector, equating to 6.4% of total GDP.**

The graph below demonstrates the significant contribution women make to the paid care sector throughout Australia.

Figure ES.2: Paid Care Sector, Contribution to GSP/GDP 2009-10 by Sex



Source: ABS (2007, 2010a, 2010c, 2011a, 2011c, 2011d), AECgroup

Imputed Value of Unpaid Care in Australia

In 2009-10, Australian males and females undertook an estimated **21.4 billion hours of unpaid care work** (equating to 11.1 million FTE workers) (ABS, 2008a, 2011f).

⁴ Gross Domestic Product .

The imputed value of unpaid care work in Australia is estimated between \$601 billion (replacement cost valuation method) and \$699 billion (opportunity cost valuation method). **The mid-point (\$650 billion), which if actually transacted, equates to just over half of Australia’s GDP (see Figure ES.3) and approximately \$29,120 per capita.**

These figures demonstrate the significant value of unpaid care to the Australian economy. Females account for more than 60% of the total estimated value of the unpaid care sector.

Figure ES.3: Total Unpaid Care Work Imputed Value, as a Percentage of GSP/GDP 2009-10 by Sex (Mid-Point) 2009-10

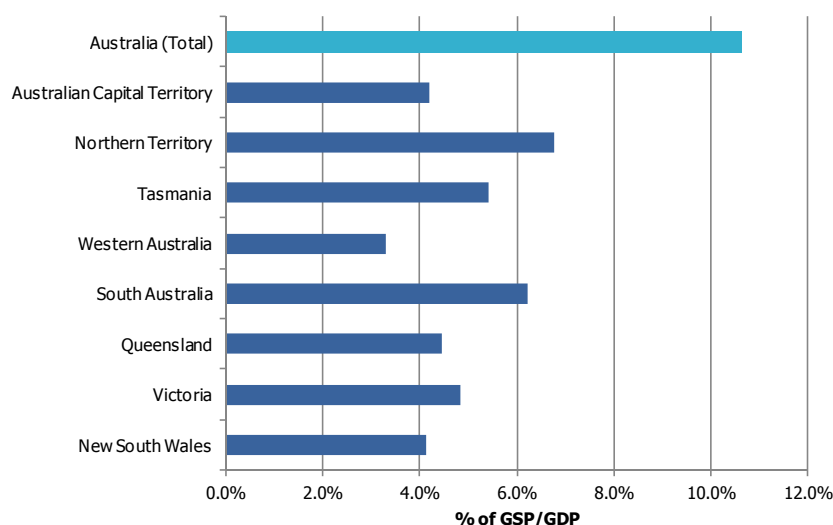


Source: ABS (2007, 2008a, 2010a, 2010c, 2011a, 2011b, 2011f), AECgroup

Government Investment in the Care Sector

In the 2009-10, local, State/Territory and Commonwealth governments invested a total of \$135.9 billion⁵ in the care sector. This equates to 10.6% of Australian GDP and \$6,085 per capita. This expenditure was comprised health 57.4%, education services 26.0% and social security and welfare 16.6%.

Figure ES.4: Government Investment in the Care Sector, 2009-10 - Percentage of GSP/GDP



Source: ABS (2010d, 2011d, 2011f)

⁵ Excludes wages, salaries and social security payments.

Key Findings & Limitations

"The notion of the 'care economy' has emerged out of the past two decades of feminist critiques of the conventional conceptualisation of how economies operate and the gender impacts of government policy. Mainstream economists have traditionally only considered goods and services in the market as productive in an economy. These conventional conceptualisations of the economy leave out much of the productive activities (or work) that women undertake on an unpaid basis. Feminists argue that gender equality and women's economic well-being require a new vision of economic life that counts women's care work in statistics, explains the role of care (as well as commodities) in the working of economies and integrates the care economy into policy." (Adams, 2010, p1)

Key Findings (Economic Value)

The care sector is highly significant to Australia, worth an estimated \$762.5 billion (\$112.4 billion paid care and \$650.1 billion imputed value of unpaid care). The economic value of the paid care sector does not account for significant skills shortages. If skills shortages are addressed, it is likely the value of the care sector would increase.

This sector provides nearly 20% of all paid employment in Australia. The value of unpaid care is likely to be underestimated since it does not account for:

- The opportunity costs of providing unpaid care;
- The value placed on emotional wellbeing;
- The financial cost of caring; and
- Key cultural diversity factors are excluded from key data sources.

Seventy-seven percent (77%) of paid care sector employees are women (ABS, 2011c), hence, women are of critical importance within the care sector. However, the importance of women is not reflected in their earnings with the average female care sector worker earning only 84c for every dollar earned by the average male care sector worker.

Women bear 65-80% of the unpaid and paid care responsibility. The sustainability of the care sector comes into question as social, political and economic factors change the way in which society operates. For example, there is a negative correlation between a nation's female employment rate and the average time a woman spends participating in unpaid care work. Only a portion of this time is taken over by men, leaving a gap in the provision of unpaid care (OECD, 2011). This means that as female Australians spend more time in the workforce, their ability and propensity to contribute to the unpaid care sector is compromised which has implications for the overall wellbeing of the nation.

Further research is required to address the long-term economic and social requirements for sustainable care in Australia, particularly in view of the ageing population, with projections indicating that a quarter of the Australian population will be aged over 65 years by 2101.

Key Findings (Paid care work)

- Women are the primary paid care providers in Australia, with three times as many women employed in the paid care sector as men.
- The average paid care sector worker earns 96 cents for every dollar earned by the average Australian worker.
- Women in the paid care sector earn 84 cents for every dollar earned by their male counterparts⁶.

Key Findings (Unpaid care work)

- Women are the primary unpaid care providers.

⁶ This does not reflect pay discrepancies for males and females in the same roles, rather it reflects the number of males in higher level (and higher paid) roles.

- Women are more involved in voluntary activities and undertake a greater share of domestic duties.
- Per day, women spend two thirds more time providing unpaid care than men.
- Women are more likely to complete child caring duties and housekeeping duties whilst men are more likely to perform maintenance duties around the house.
- Forty-two percent (42%) of women not in the labour force cite family reasons. Caring for children is the key factor.

Key Findings (Government Investment)

- Commonwealth, State/Territory and local government invested \$135.9 billion⁷ in the care sector. This equates to 10.6% of Australian GDP and \$6,085 per capita. Much of this investment was in health 57.4%, education services 26.0%, social security and welfare 16.6%.

Key Considerations

The rising cost of living in Australia

The cost of home ownership in particular has resulted in a greater need for two-income households. Rising living costs are likely to be at least partially responsible for increasing female labour force participation rates. In Australia, this rate has steadily increased from 43.7% in February 1979 to 58.9% in July 2011 (ABS, 2010b).

The OECD (2011a) found a negative correlation between a nation's female employment rate and the average time a woman spends participating in unpaid care work. Only a portion of this time is gradually being taken over by men, leaving a gap in the provision of unpaid care.

Delaying retirement

Australia's total participation rate has increased from 62.4% in January 2000 to 65.4% in July 2011 (ABS, 2010b). Some of this increase is likely to be the result of older people delaying retirement. Better health care means people are living longer, and staying in the workforce longer. Additionally, the Global Financial Crisis has impacted self-funded retirees, who have suffered lower superannuation balances and lower interest rates. A number of these people have returned to the workforce as a result of their financial situation. As Australians spend more time in the workforce, their ability and propensity to contribute to the unpaid care sector is compromised.

Future sustainability of the care sector

As social, political and economic factors change the way in which society operates, the sustainability of the Australian care sector is questionable. Further government investment in paid and unpaid care is likely to be required to ensure adequate future provision. More needs to be done to attract workers into the care sectors and to assist Australians in their unpaid care responsibilities.

International comparisons

Australia continues to record low rankings on an international comparison of government investment as a percentage of total investment in formal care (i.e., primary and secondary education, and health). The nations with higher government investment in the formal care sectors (notably Norway, Sweden and Ireland) tended (though not uniformly) to rank lower in terms of value of the unpaid care sector (particularly using the replacement cost method).

Economies which spent more on formal care are less reliant on the unpaid care sector. These nations also tend to have greater equity in terms of performance of unpaid work, which is reflected in this report's findings. Men and women perform similar proportions of unpaid domestic work, in the less than 15 hours of per week category, but contributions from women rise significantly above 15 hours per week. This suggests that nations

⁷ Excludes wages, salaries and social security payments.

requiring lower levels of unpaid care are likely to reduce the care responsibility for women.

Policy Direction

In light of the above findings and recommendations, policy changes are required to assist in equalising the gender share of care provision. Along with gender share is the key issue of gender and industry wage penalties. Key policy recommendations stemming from the findings of this report include:

- **Meeting data limitations head-on:** Increased funding for the collation of care-sector data (including paid and unpaid care) to be directed towards the Australian Bureau of Statistics;
- **Planning for future demand:** Increased incentives for students studying in the fields of care including education and health care. Policy directions should consider addressing gender and industry wage differentials and access to education and training for direct care sector workers; and
- **Improving carers' quality of life:** Removal of the assets and income test associated with the carer payments and reassessment of the level of funding provided to assist people in the unpaid care sector.

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1. Introduction

"The notion of the 'care economy' has emerged out of the past two decades of feminist critiques of the conventional conceptualisation of how economies operate and the gender impacts of government policy. Mainstream economists have traditionally only considered goods and services in the market as productive in an economy. These conventional conceptualisations of the economy leave out much of the productive activities (or work) that women undertake on an unpaid basis. Feminists argue that gender equality and women's economic well-being require a new vision of economic life that counts women's care work in statistics, explains the role of care (as well as commodities) in the working of economies and integrates the care economy into policy." (Adams, 2010, p1)

1.1 Background

The University of Massachusetts conducted the *Counting Care Work - Human Infrastructure in Massachusetts Study* in 2009. The study was an attempt to measure the role of care work in Massachusetts. It defined care work as the total labour required to meet the needs of children to be cared for and educated, everybody's physical and mental health that requires attention, and the needs of individuals who require assistance with the activities of daily living because of illness, age or disability.

Although there is vast literature on different aspects of the Australian care economy, to date it has not been comprehensively mapped (refer **Appendix A** for further details). Given the complexity of care work and its profound implications for the overall wellbeing of a nation it is crucial that this sector is identified and valued as a distinct segment of economic activity.

In June 2010, economic Security4Women (eS4W), a national women's alliance under the Australian Government's Office for Women, prepared *Scoping the Australian Care Economy - A Gender Equity Perspective Report* (Adams, 2010). This report recognised the importance of the care economy and made a series of recommendations to address some of the issues facing the sector.

To further the scope of the Gender Equity Perspective Report, eS4W engaged AECgroup to:

- Examine the three intersecting spheres of paid care work, unpaid care work and government investment in the care sector;
- Examine the labour and resources devoted to the daily care of Australians, in particular:
 - Children and those who are elderly or disabled;
 - Provision of Kindergarten to year 12 education; and
 - Provision of health care to both well and sick citizens regardless of age;
- Develop categories, concepts and measures of care work to enable international comparisons; and
- Include policy recommendations in the final report for future advocacy work.

This report therefore comprises the first comprehensive quantification of the Australian economic activity stemming from the care sector including paid care, unpaid care and government investment in the care sector.

For the purposes of this report, the care sector is defined as

"the total (paid and unpaid) labour required to meet the needs of children to be cared for and educated, everybody's physical and mental health that requires attention, and the needs of individuals who require assistance with the activities of daily living because of illness, age or disability" (Albelda et al., 2009, p.4).

1.2 Project Purpose

The project involves an overall assessment of the Australian care economy with the objective of developing a comprehensive measure of the role of care work (as defined in section 3) in Australia. Specific aims of the study include:

- Examining paid care work, unpaid care work and government investment in the care sector;
- Examining the labour and resources devoted to the daily care of Australians; and
- Developing categories, concepts and measures of care work to enable international comparisons regarding various issues concerning care work.



2. Methodology & Data Framework

This chapter introduces the concepts of paid and unpaid care. It also summarises the data sources that are used throughout this study.

2.1 Definition of Care

Currently, there is no consensus regarding a single definition of care work. Generally, care work includes both paid and unpaid services, usually involving an element of personal connection and relationship between the carer and the recipient. An analysis of various definitions of care work is provided in **Appendix A**.

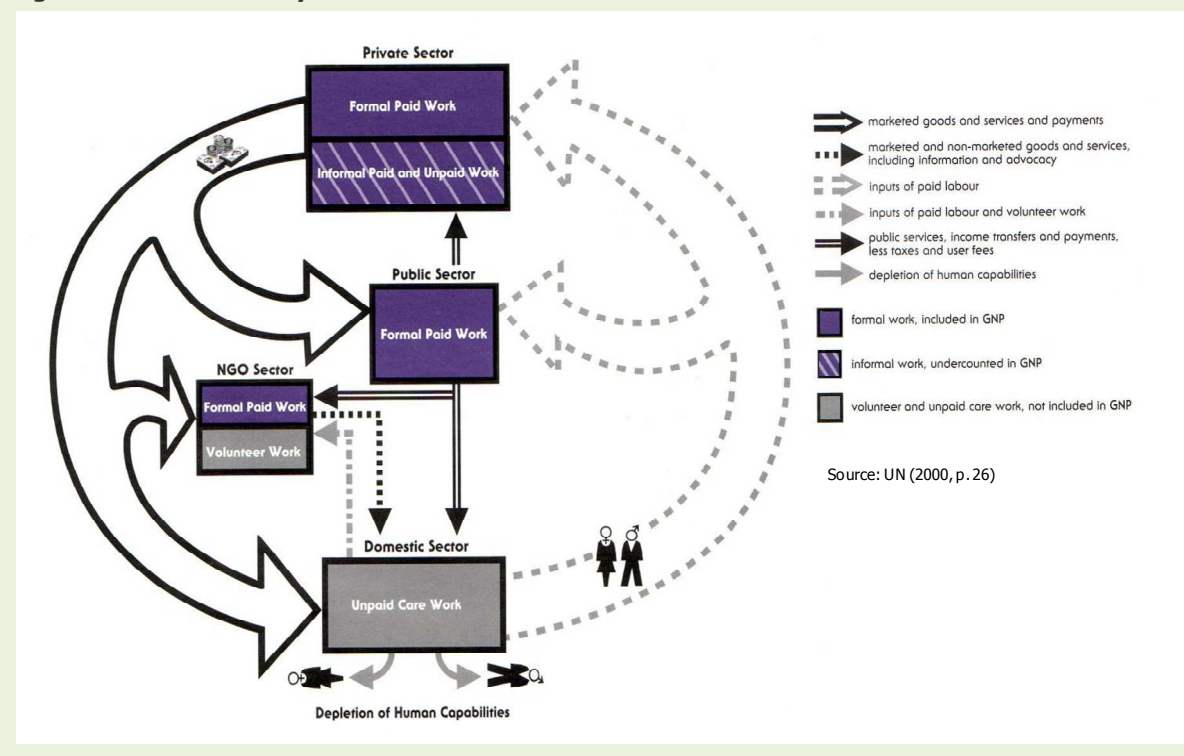
The definition of care work provided by Albelda *et al.* (2009, p.4) forms the basis for developing a comprehensive measure of the role of care work, and this has been adopted for this report.

"the total (paid and unpaid) labour required to meet the needs of children to be cared for and educated, everybody's physical and mental health that requires attention, and the needs of individuals who require assistance with the activities of daily living because of illness, age or disability".

UN Women's Progress Report (UN, 2000)

The diagram below (Figure 2.1) provides an alternative view of the economy, highlighting the efforts of the domestic and NGO sectors. According to the UN (2000, p. 25), "The four sectors are linked by both market and nonmarket channels. The domestic sector supplies people to work in all other sectors. The private sector sells goods to all the other sectors. The public sector levies taxes and user fees and makes income transfers to the other sectors, as well as providing them with public services. The NGO sector provides services, such as health, education, social services and cultural and recreational services to the domestic sector, sometimes free of charge, sometimes for a fee." This chart also highlights the opportunity cost of undertaking unpaid care work, denoted by the depletion of human capabilities. Those undertaking care work are often less able to participate as extensively in the paid sector as others. This is particularly influential on women's participation in the work force.

Figure 2.1: The Economy and the Care Sector



In addressing and quantifying this definition it is important to define and examine two key components of the care sector:

- **Interactive care work** is defined as “labour that directly responds to the needs of a patient, family member, student, or client through a face-to-face relationship” (Albelda *et al.*, 2009, p7).
- **Support care work** ensures the smooth functioning of care institutions and usually does not require direct interaction between the care provider and the care recipient (Albelda *et al.*, 2009, p7).

Care work contributes to key sectors, including education and training, and health care and social assistance. Key subsectors of these industries are outlined in Table 2.1.

Table 2.1: Australian Care Industries

ANZSIC Subdivision Code	Industry Sector	Description
80	Preschool and school education	<ul style="list-style-type: none"> • Preschool Education (8010) • Primary Education (8021) • Secondary Education (8022) • Combined Primary and Secondary Education (8023) • Special School Education (8024)
84	Hospitals	<ul style="list-style-type: none"> • Hospitals (8401) • Psychiatric Hospitals (8402)
85	Medical and other health care services	<ul style="list-style-type: none"> • General Practice Medical Services (8511) • Specialist Medical Services (8512) • Pathology and Diagnostic Imaging Services (8520) • Dental Services (8531) • Optometry and Optical Dispensing (8532) • Physiotherapy Services (8533) • Chiropractic and Osteopathic Services (8534) • Ambulance Services (8591) • Other Health Care Services (8599, 8539)
86	Residential care services	<ul style="list-style-type: none"> • Aged Care Residential Services (8601) • Other Residential Care Services (8609)
87	Social assistance services	<ul style="list-style-type: none"> • Child Care Services (8710) • Other Social Assistance Services (8790)
95/96	Personal and other services	<ul style="list-style-type: none"> • Personal Care Services (951) • Funeral, Crematorium and Cemetery Services (952) • Other Personal Services (953) • Religious Services (954) • Civic, Professional and Other Interest Group Services (955) • Private Households Employing Staff and Undifferentiated Goods (960)

Source: ABS (2006)

The value of the Australian care economy comprises the total value of paid and unpaid care sectors. It includes total public sector investment in the Australian care sector in industries such as education, health, and social security and welfare.

The project approach is compatible with methodology used in the *Counting Care Work - Human Infrastructure in Massachusetts* study undertaken by the University of Massachusetts in 2009 (Albelda *et al.*, 2009). Further details on the methodology used can be found in **Appendix B**. Detailed findings can be found in **Appendix C**.

2.2 Review of Literature

Several key lessons have been learnt from the literature review, see **Appendix A**, undertaken as part of the project. Some of the key implications for the project are briefly discussed below:

- The various documents in the literature review consistently highlighted the lack of general consent among scholars regarding a single comprehensive definition of ‘care work’. For the purposes of the project, the definition provided in the 2009 University of Massachusetts Study will be used as the basis for economic modeling that will be undertaken to estimate the value of care work in Australia.

- The various domestic and international studies examined as part of the literature review have commonly used the replacement and opportunity cost methodologies to estimate the value of unpaid care work. It is observed that the estimated value of unpaid care work is highly sensitive to the methodology used. Thus to ensure consistency and comparability of the project outcomes with similar studies previously conducted, the value of unpaid care work in Australia will be estimated using both replacement and opportunity cost methods, specifically highlighting the model assumptions for each approach.
- It is further observed that time-use surveys are perhaps the only comprehensive data source available for measuring unpaid care work across many countries. For the purposes of the project, the 2006 ABS Time-use Survey will be used as the primary data source for determining the time Australians spend on unpaid care activities.
- Most documents in the literature review highlighted the gender inequity issue associated with care work, consistently emphasising that women do relatively more care work (both paid and unpaid) compared to males. As part of the project, the issues of gender inequity and wage disparity associated with care work will be considered with reference to female and male contributions to the total value of care work in Australia.

2.3 Paid Care

The total value of paid care work in Australia in 2009-10 was computed using total employment figures (ABS, 2011c) and average sub-industry (sector) wages (in each state) across various paid care industries by sex (ABS, 2010a), including:

- Preschool and school education;
- Hospitals;
- Medical and other health care services;
- Residential care services;
- Social assistance services; and
- Personal and other services.

The gender split of employment numbers and wages earned in each of the paid care industries were determined for each work type i.e. *Support Care Work* and *Interactive Care Work*. The type of care work by occupation (see Table 2.2) is based on the 2006 ABS Census data (ABS, 2007) including Employment by Industry, Occupation and Sex and the 2010 ABS data on Employee Earnings by Industry (ANZSIC), Occupation (ANZSCO) and Sex (ABS, 2010a).

Table 2.2: Interactive and Support Care Categories

Occupation Group	Type of Care Work
Managers	Support
Professionals	Interactive
Technicians and Trades Workers	Support
Community and Personal Service Workers	Interactive
Clerical and Administrative Workers	Support
Sales Workers	Support
Machinery Operators and Drivers	Support
Labourers	Support

Source: ABS (2007), AECgroup

2.4 Unpaid Care

The 2006 ABS Time-Use Survey (ABS, 2008a) was used as the primary data source to compute the total quantum of labour (in full time employment (FTE)⁸ terms)⁹. Activities counted as care work include:

- Domestic activities;
- Child care; and
- Voluntary work and care.

Care should be taken in interpreting the results as there is a propensity for participants in the survey to overestimate their time spent on various activities. Additionally, households in very remote areas or Indigenous communities are excluded from this survey. For a total number of care hours, data on the Estimated Resident Population in Australia, by Age, Sex and State (ABS, 2011f) was used.

The value of unpaid care work was calculated using two distinct methodologies:

- **Replacement cost:** The average wage for each paid care industry was used as a proxy to measure the value of an equivalent service/ task performed by an unpaid care worker. This was based on the premise that the value of unpaid care work is best measured based on what the unpaid care service would have cost had it been provided by the paid care sector.
- **Opportunity cost:** This method used the weighted average wage for all industries to measure the value of total labour engaged in unpaid care work. It was based on the rationale that unpaid care work leads to productivity losses. Thus, in the absence of caring responsibilities, the equivalent time/ effort would be spent in the paid workforce.

Having computed the value of unpaid care work, the total employment and wages in unpaid care sector was broken down by work type and gender (based on 2006 ABS-Time Use Survey (ABS, 2008a)). Distinctions between *support* and *interactive care work* were estimated using the categories outlined in Table 2.3.

Table 2.3: Unpaid Care Activities

Activity	Type of Work
Domestic Activities	
Food and drink preparation/cleanup	Support
Laundry and clothes care	Support
Other housework	Support
Grounds and animal care	Support
Home maintenance	Support
Household management	Support

⁸ One FTE equates to one person working full-time for a full year.

⁹ 2006 time use data has been used, however, population and incomes data used to calculate the total value of the unpaid care sector is for 2009-10.

Activity	Type of Work
Associated travel	Support
Child Care	
Care of children	Interactive
Teaching, helping, reprimanding children	Interactive
Playing, reading, talking with child	Interactive
Minding child	Interactive
Visiting child care establishment/school	Interactive
Associated travel	Support
Other	Support
Voluntary Work and Care	
Support for adults	Interactive
Unpaid voluntary work	Interactive
Associated travel	Support
Other	Support

Source: ABS (2008a), AECgroup

2.5 Government Investment

The total value of government investment in the relevant care sector industries within the health, education and, social security and welfare sectors was estimated using the 2009-10 Australian Commonwealth and State Financial Accounts (general Government Expenses by Purpose) (ABS, 2011d). Wages, salaries and social security payments were excluded from the total (ABS, 2010d). Government investment in the care sector includes acute care facilities, other health institutions, community health services pharmaceutical and primary and secondary school facilities expenditure.

2.6 Data Framework

Table 2.4 outlines the data used to value the paid and unpaid care sectors as well as government investment in the care sector.

Table 2.4: Data Framework for Measuring Australian Care Economy, 2009-10

No.	Description	Data Description	Data Source
Paid Care Sector			
1	Total number of paid care workers in Australia - male, female and total	<ul style="list-style-type: none"> • Employment by Industry and by Sex 2006. • Labour Force by Industry, 2009-10 (for extrapolation). 	<p>ABS 2007</p> <p>ABS 2011c</p>
2	Wages for each Paid Care Sector (across different Australian States and Territories) - male, female and total	<ul style="list-style-type: none"> • Average Weekly Earnings by Full-Time non-managerial adults by Industry by Sex (ANZSIC 2006) for each Australian State and Territory, May 2010. 	ABS 2010a
3	Total number of workers in <i>Paid Support Care Work</i> in Australia - female, male and total	<ul style="list-style-type: none"> • Employment by Industry by Occupation (2006 ANZSCO unit groups) and by Sex for each Australian State and Territory, 2006. 	ABS 2007
4	<i>Support Care Work</i> wages - male, female and total	<ul style="list-style-type: none"> • Average Weekly Earnings by Full-Time non-managerial adults by Industry (ANZSCO 2006) for each Australian State and Territory, May 2010. 	ABS 2010a
5	Total number of workers in <i>Paid Interactive Care Work</i> in Australia - female, male and total	<ul style="list-style-type: none"> • Employment by Industry by Occupation (2006 ANZSCO unit groups) and by Sex for each Australian State and Territory, 2006. 	ABS 2007
6	<i>Interactive Care Work</i> wages - male, female and total	<ul style="list-style-type: none"> • Average Weekly Earnings by Full-Time non-managerial adults by Industry (ANZSCO 2006) for each Australian State and Territory, May 2010. 	ABS 2010a
7	Demographic Characteristics:		
7a	Age	<ul style="list-style-type: none"> • Employment by Industry and by Age, 2006. • Labour Force, 2009-10 (for extrapolation). 	<p>ABS 2007</p> <p>ABS 2011c</p>
7b	Sex	<ul style="list-style-type: none"> • Employment by Industry and by Age, 2006. • Labour Force, 2009-10 (for extrapolation). 	<p>ABS 2007</p> <p>ABS 2011c</p>
8	<i>Paid Care Sector</i> Contribution to GDP (\$ & %)	<ul style="list-style-type: none"> • Australian National Accounts (GDP), 2009-10. • Value of <i>Paid Care Sector</i> computed using data sets mentioned in point 1& 2. 	ABS 2011a
Unpaid Care Sector			
9	Replacement Cost Method:		
9a	Total FTE of unpaid care work - male, female and total	<ul style="list-style-type: none"> • Australian's Use of Time, 2006. • Estimated Regional Population by Sex, Age and State, 2010. 	<p>ABS 2008a</p> <p>ABS 2011f</p>
9b	Wages accrued by <i>Unpaid Care Sector</i> had it been performed by private sector - male, female and total	<ul style="list-style-type: none"> • Average Weekly Earnings by Full-Time non-managerial adults by Industry by Sex (ANZSIC 2006) for each Australian State and Territory, May 2010. 	ABS 2010a
10	Opportunity Cost Method:		
10a	Total FTE of unpaid care work - male, female and total (same as point 9a)	<ul style="list-style-type: none"> • Australian's Use of Time, 2006. • Estimated Regional Population, 2010. 	<p>ABS 2008a</p> <p>ABS 2011f</p>
10b	Average weighted industry wage - male, female, total	<ul style="list-style-type: none"> • Average Weekly Earnings by Full-Time non-managerial adults by Industry (ANZSIC 2006) for each Australian State and Territory, May 2010. 	ABS 2010a



No.	Description	Data Description	Data Source
11	Total FTE in <i>Unpaid Support Care Work</i> in Australia - male, female and total	<ul style="list-style-type: none"> Australian's Use of Time, 2006. 	ABS 2008a
12	Wages accrued in <i>Unpaid Support Care Work</i> had this been performed by private sector - male, female and total	<ul style="list-style-type: none"> Average Weekly Earnings by Full-Time non-managerial adults by Industry by Sex (ANZSIC 2006) for each Australian State and Territory, May 2010. 	ABS 2010a
13	Total FTE in <i>Unpaid Interactive Care Work</i> in Australia - male, female and total	<ul style="list-style-type: none"> Australian's Use of Time, 2006. 	ABS 2008a
14	Wages accrued in <i>Unpaid Interactive Care Work</i> had this been performed by private sector - male, female and total	<ul style="list-style-type: none"> Average Weekly Earnings by Full-Time non-managerial adults by Industry by Sex (ANZSIC 2006) for each Australian State and Territory, May 2010. 	ABS 2010a
15	Demographic Characteristics		
15a	Age	<ul style="list-style-type: none"> Census of Population & Housing, 2006. 2009 Survey of Disability, Aging & Care. 	ABS 2007 ABS 2009
15b	Sex	<ul style="list-style-type: none"> Census of Population & Housing, 2006. 2009 Survey of Disability, Aging & Care. 	ABS 2007 ABS 2009
15c	Labour Force Status	<ul style="list-style-type: none"> Household, Income and Labour Dynamics in Australia Survey. Persons not in Labour Force, Australia, Sep 2010 	Melbourne Institute 2011 ABS 2011e
16	<i>Unpaid Care Sector</i> contribution to GDP (\$ and %) had this work been paid for	<ul style="list-style-type: none"> Australian National Accounts (GDP), 2009-10. Value of <i>Unpaid Care Sector</i> computed using Replacement and Opportunity Cost methods (see points 9 and 10 for more details). 	ABS 2011a
Government Investment in Care Sector			
17	Commonwealth, State and Local Government Expenditure on <i>Care Sector</i> industries such as health, education etc	<ul style="list-style-type: none"> Government Finance Statistics, 2009-10 	ABS 2010d
18	Wages and Salaries paid by the government	<ul style="list-style-type: none"> Employment and Earnings, Public Sector 2009-10 	ABS 2010d
19	Government Investment in Care Sector Contribution to GDP (\$ and %)	<ul style="list-style-type: none"> Australian National Accounts (GDP), 2009-10. Value of Government Investment in the Australian care sector computed using figures estimated in point 17 and 18. 	ABS 2011a

Source: AECgroup



3. Overview of the Care Sector

This chapter provides an overview of the Australian care sector, including a review of the demographic composition of both the paid and unpaid care sectors and the incomes earned in the paid care sector.

3.1 The Public Role in Care

Care work provides a number of long term public benefits. For example, stable, high quality day care is correlated with the increased productivity. Initially, parents are more productive and later, the children themselves, as they become better students, workers and community members (Albelda *et al.*, 2009, p.5).

Care work is an example of a public good, where “individual participants in a market exchange cannot preclude others from benefiting from that exchange, and the cost of additional consumers or users is low” (Albelda *et al.*, 2009, p.5). Public outcomes from paid and unpaid care include (Albelda *et al.*, 2009, p.5):

- A well-educated workforce;
- Healthy and productive adults;
- The security of knowing that there will be care when individuals become sick or age; and
- The general well-being of the population, especially of those who cannot care for themselves.

Additionally, care work carries a number of positive externalities, where others obtain benefits without paying for them. Because the benefits of care work extend beyond the individual, they are not accurately reflected in the market price. Both public goods and externalities are forms of market failure, where the private market fails to produce the right amount of goods and services (quantity and quality of care) (Albelda *et al.*, 2009, p.6). Public policy and funding is therefore required to correct the failure.

Care work is an example of a public good and creates positive externalities, such as increased productivity of the parents of children in childcare. However, these are not reflected in the market price. Government intervention in the form of public policy and funding is required to ensure appropriate levels of care are available.

3.2. Demographics of the Care Sector

3.1.1 Paid Care

Key Findings

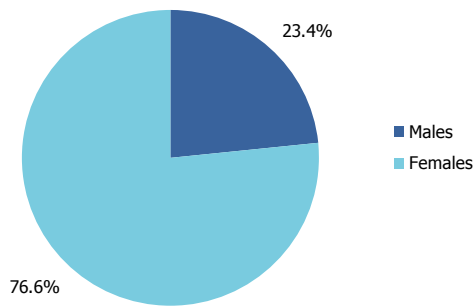
- Women are the primary paid care providers in Australia, with three times as many women employed in the paid care sector as men.
- The average paid care sector worker earns 96 cents for every dollar earned by the average Australian worker.
- Women in the paid care sector earn 84 cents for every dollar earned by their male counterparts¹⁰.

Employment by Sex

In Australia, three quarters of the care sector workforce (see Figure 3.1) were women. The sector employs approximately 1.4 million females compared to 400,000 male employees (ABS, 2011c).

¹⁰ This does not reflect pay discrepancies for males and females in the same roles, rather it reflects the number of males in higher level (and higher paid) roles.

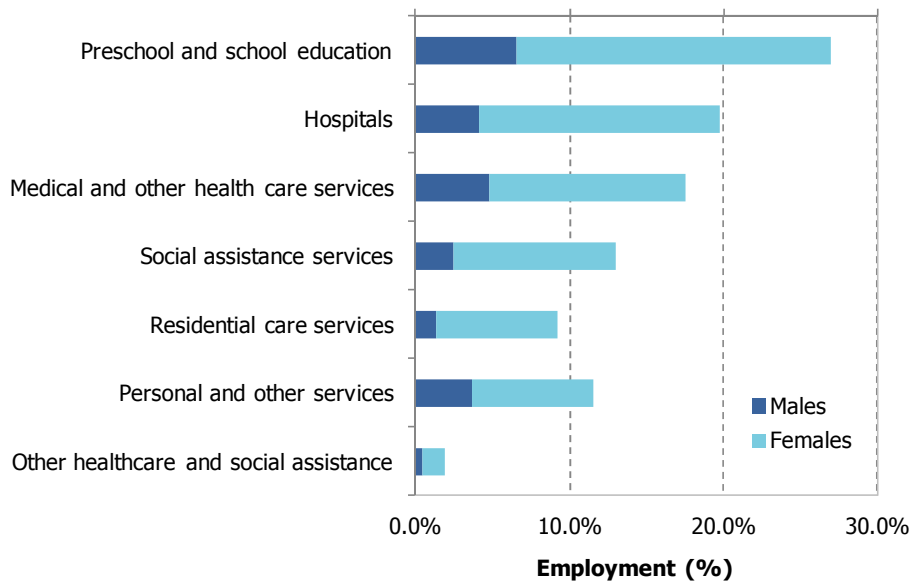
Figure 3.1: Contribution to Total Employment, 2010



Source: ABS (2011c)

Figure 3.2 shows that health (including hospitals), and medical and other health care services employs 29% of women. Preschool and school education employs another 20% (ABS, 2011c). Women make up 75% of employment in the preschool and school education, and medical and other health care services sectors, 80% of the hospital sector, and 85% in the residential care services sector (ABS, 2011c).

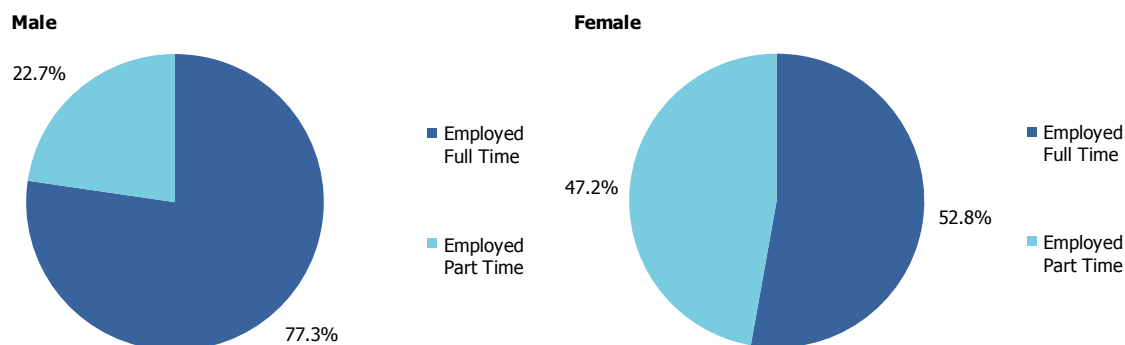
Figure 3.2: Paid Care Sector Employment, 2010



Source: ABS (2007, 2011a)

The proportion of part time care sector employees is significantly larger for females than males. Almost half of all female care sector employees (690,000) work part time, compared to 22.7% of males (95,000) (ABS, 2011b). By contrast, 77% (or 320,000) of male care sector employees work full time, compared with 53% (or 770,000) for females (ABS, 2011b). This is shown in Figure 3.3.

Figure 3.3: Employed Full Time and Part Time Paid Care Sector Employees, 2010



Source: ABS (2011b)

Income by Sex

Whilst women make up the majority of care workers, they are paid less than their male counterparts (see Figure 3.4). The average weekly incomes of females are lower than for males across all industries. The exception is social assistance services, where women earn \$150 per week more than men¹¹ (ABS, 2010a). Research demonstrates that occupations dominated by women have lower wage rates than those dominated by men (Adams, 2010).

There is a significant gap between the average weekly incomes of men and women in the health care sector, including medical and other health care services, hospitals, and other health care and social assistance. In the medical and other health care services sector, this is partly attributable to lower ordinary time cash earnings per hour (a gap of \$12 per hour, due to role disparity) and males performing more overtime (ABS, 2010a).

The following professions are generally more highly paid and have a higher proportion of male workers (ABS, 2007, 2011a):

- Generalist medical practitioners;
- Internal medicine specialists;
- Psychiatrists;
- Surgeons; and
- Other medical practitioners.

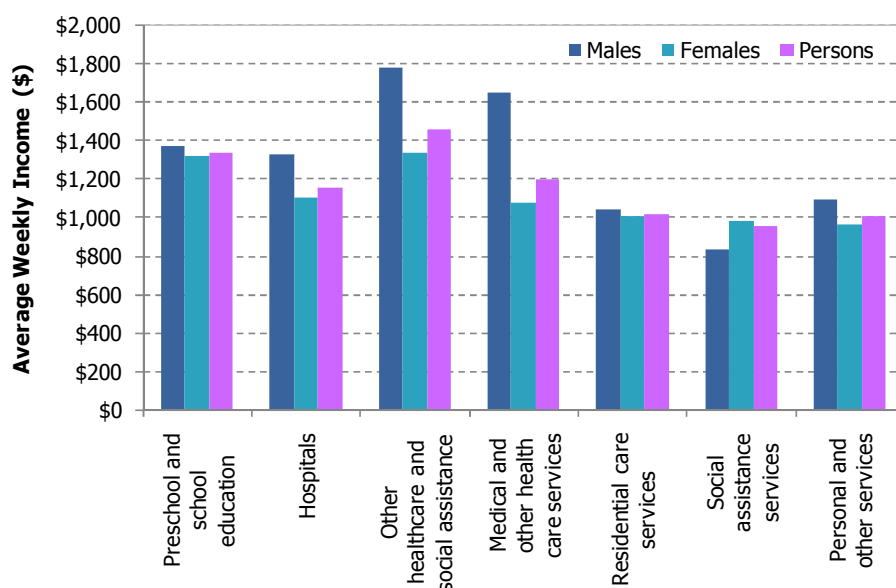
Lower paid occupations include (ABS, 2007, 2011a):

- Nursing, where female registered nurses make up 90% of registered nurses (197,000 compared with 20,000 males).
- Nursing support and personal care workers (59,000 females compared with 14,000 males), including midwives, enrolled and mothercraft nurses and related professionals; and
- Health science workers.

Despite the higher proportion of females employed across the preschool and school education sector (75%), the average weekly income for females is \$50 lower than for males. This could be due to the significantly higher representation of females in the traditionally lower paid occupations in the sector, including, early childhood teachers (98%), education aides (92%), primary school teachers (85%) and special education teachers (86%). There is a more even balance between males and females in higher paid occupations within the industry, such as school principals (50% females), secondary school teachers (59% females), middle school teachers (65% females), and other education managers (57%) (ABS, 2007).

¹¹ This is attributable to the gap in overtime hours between males and females in this industry (0.4 hours per week for women compared with 0.1 hours for men). The difference could also be due to the significantly higher number of female psychologists in the industry (around 13,000 females compared with around 4,000 males) (ABS, 2007, 2011a).

Figure 3.4: Average Weekly Income, 2010



Source: ABS (2010a)

3.1.2 Unpaid Care

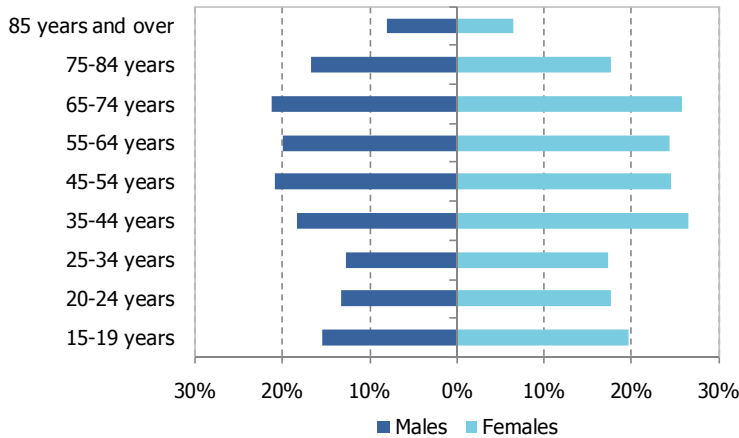
Key Findings

- Women are the primary unpaid care providers.
- Women are more involved in voluntary activities and undertake a greater share of domestic duties.
- Per day, women spend two thirds more time providing unpaid care than men.
- Women are more likely to complete child caring duties and housekeeping duties whilst men are more likely to perform maintenance duties around the house.
- Forty-two percent (42%) of women not in the labour force cite family reasons. Caring for children is the key factor.

Unpaid Care by Sex

Around 22% of females participate in voluntary activities compared with around 17% of males (ABS, 2007). Figure 3.5 shows there are a higher number of female volunteers across all demographics except the 85 years and over group. Volunteering levels for both sexes is highest between the ages of 35 and 74 years.

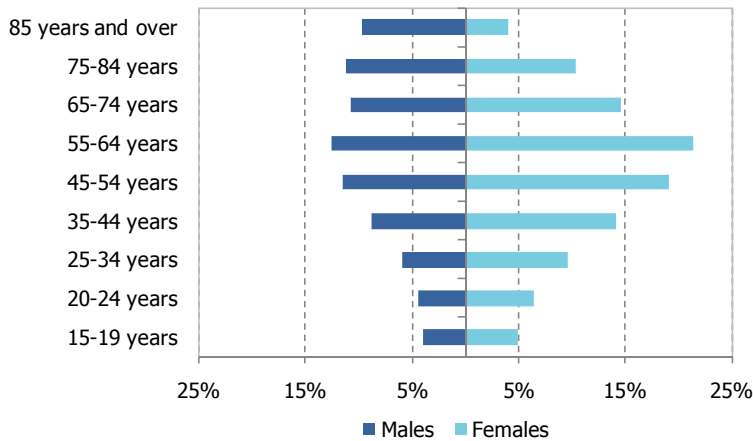
Figure 3.5: Performance of Voluntary Work by Gender, 2006



Source: ABS (2007)

Thirteen percent (13%) of women and 9% of men provide unpaid care (ABS, 2007). Figure 3.6 shows that the proportion of persons providing unpaid care increases around retirement age, and that significantly women engage in unpaid care than men. Women aged between 25 and 64 provide over 60% to total unpaid care (ABS, 2007).

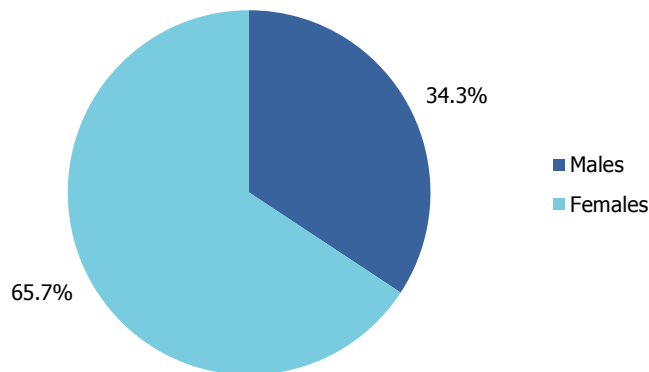
Figure 3.6: Proportion of Population Providing Unpaid Care Australia, 2006



Source: ABS (2007)

Women spend two thirds more time providing unpaid care than men (see Figure 3.7). Women spend 4.25 hours per day providing unpaid care in comparison to 2.2 hours for men (ABS, 2008a). This equates to around 66% of total unpaid time spent on care activities per day (ABS, 2008a, 2011f).

Figure 3.7: Total Unpaid Care Sector Hours, 2006



Source: ABS (2008a)

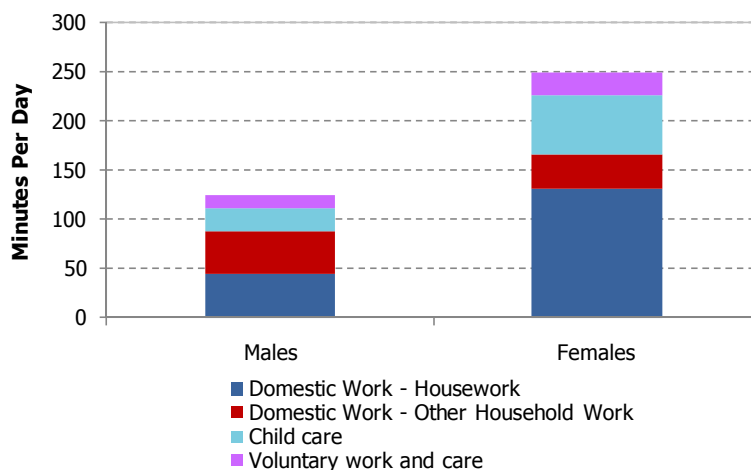


The Nature of Unpaid Care Work

Domestic activities make up a major component of women’s time spent on unpaid care. They also revealed the largest discrepancy between men and women in total time spent on care activities per day. Figure 3.8 shows that in 2006, women spent an average of 172 minutes a day on domestic activities, compared to 97 minutes for men (ABS, 2008a).

Figure 3.8 shows that women perform 75% of housework activities (e.g. meal preparation, laundry), 73% of child care, and 62% of voluntary work and care (e.g. support for adults and unpaid voluntary work). Men perform 56% of other household work such as grounds care, household maintenance, and household management. A detailed breakdown of each category by activity is provided in **Appendix B**.

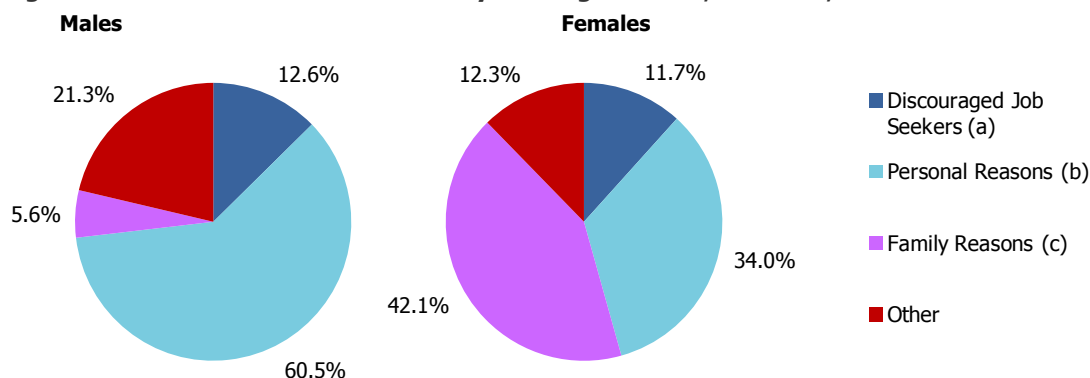
Figure 3.8: Minutes per Day Spent on Unpaid Care Sector Activities, 2006



Source: ABS (2008a)

The higher representation of women performing unpaid care has flow-on implications for labour force participation. Sixty three percent (63%) of the 8.5 million Australians not in the labour force are women (ABS, 2011e). From Figure 3.9, 42.1% of women cited ‘family commitments’ as their main reason compared to 5.6% men. Seventy percent (70%) of these women were caring for children.

Figure 3.9: Main Reason for Not Actively Looking for Work, Australia, 2010



Notes: (a) includes reasons such as: considered too young or old by employers, lack of necessary skills and experience, difficulties because of language or ethnic background and no jobs in the line of work; (b) includes reasons such as: own short-term or long-term illness/ disability, pregnancy, studying and other personal reasons; (c) includes reasons such as: family member being sick, caring for children and other family considerations.

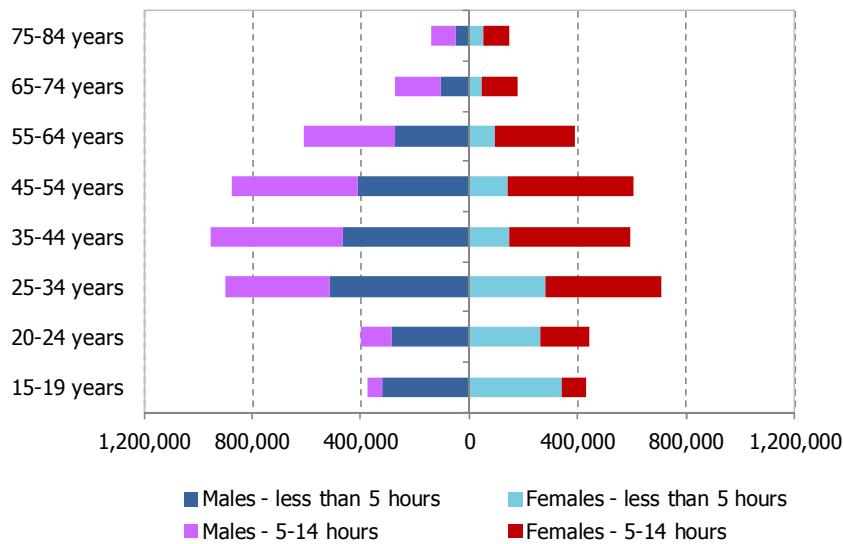
Source: ABS (2011e)

Increasingly more women, the main providers of care, are entering the labour force due to demographic and policy shifts (Commonwealth of Australia, 2011). It is therefore likely that many will be faced with negotiating “the competing demands of caring and paid employment.” Commonwealth of Australia (2011) contends that due to a lack of alternative care arrangements, many carers will respond by reducing or leaving employment, detrimentally affecting their financial security (both short-term and long-

term) as well as retirement outcomes. Commonwealth of Australia (2011) cited an Australian study that determined that “carers had the lowest collective wellbeing of any population group examined by researchers.”

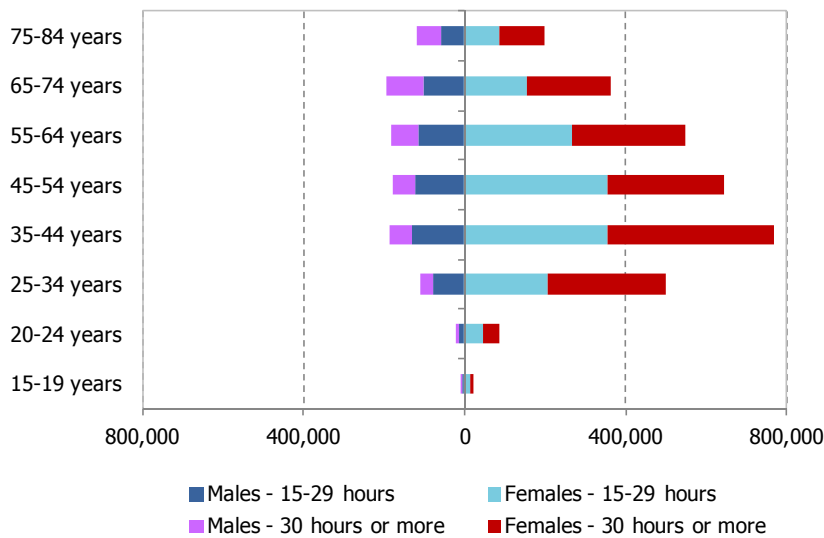
A larger number of men (4.6 million compared to 3.6 million women) perform less than 15 hours per week of domestic work (see Figure 3.10). However, 3.2 million women (compared with 1.0 million men) perform 15-30 hours per week (Figure 3.11). This reflects the findings from Figure 3.8.

Figure 3.10: Males and Females Performing Unpaid Domestic Work (Less than 15 Hours per week) by Age Group, Australia, 2006



Source: ABS (2007)

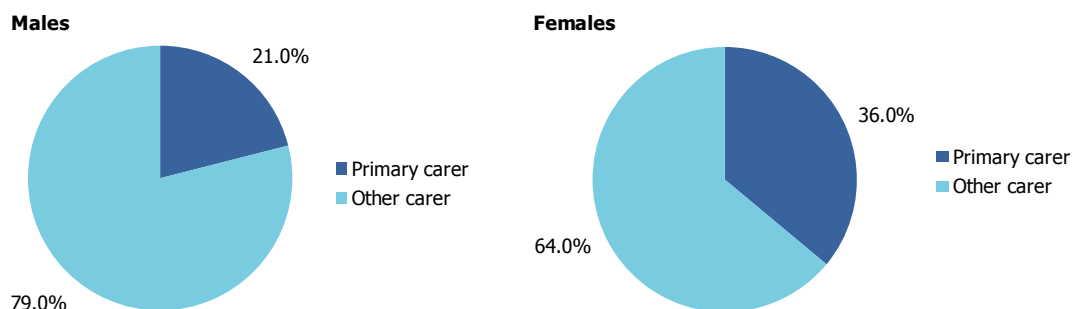
Figure 3.11: Males and Females Performing Unpaid Domestic Work (More than 15 Hours per week) by Age Group, Australia, 2006



Source: ABS (2007)

Figure 3.12 shows that more women (36%) take on a primary carer role compared to men (21%). Women also account for 70% (523,200) of all primary carer roles of aged and disabled persons (ABS, 2010b).

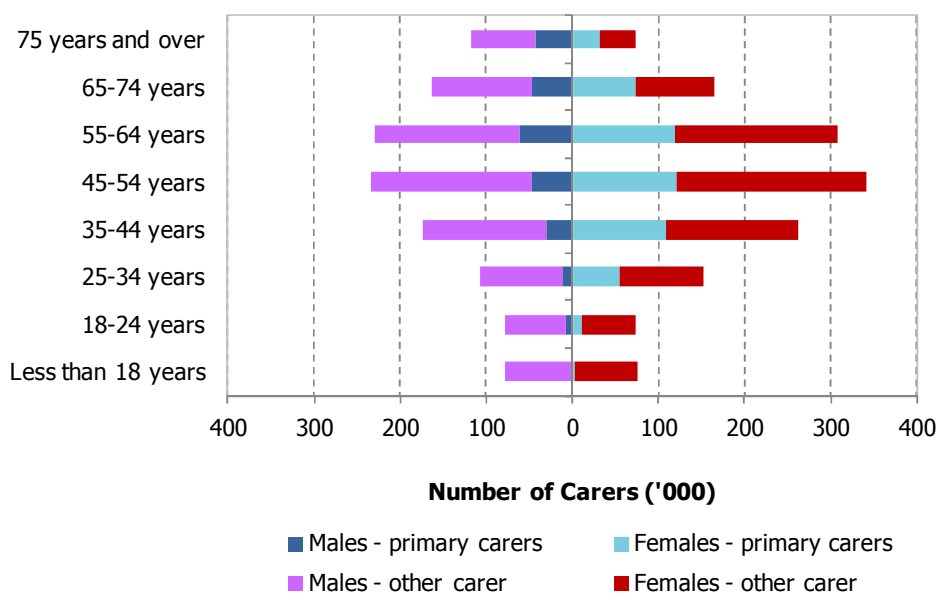
Figure 3.12: Carer Status by Sex (of persons living in households), Australia, 2009



Source: ABS (2010b)

The majority primary carers for both sexes are aged between 35-64 years (see Figure 3.13). Further, the role of men and women as non-primary carers is similar across most age groups. However, for total care, Figure 3.13 as with Figure 3.6, highlights women provide more unpaid care than men. From Figure 3.13, the primary care gap between men and women is largest in the 25-44 year age groups, with women making up almost 80% of this group. These women are of child bearing age and from Figure 3.9, most of them are likely to be looking after children.

Figure 3.13: Carer Status by Age and Sex (of persons living in households), Australia, 2009



Source: ABS (2010b)

Using HILDA survey data, Commonwealth of Australia (2011) "identifies carers who are poor with respect to different dimensions of economic disadvantage: low income, high housing costs, perceiving oneself to be poor, and having difficulties managing financially." Key findings from the analysis include:

- Overall, at the aggregate level, carers had higher rates of poverty than non-carers on all measures;
- Carers who had been caring for two years had higher poverty rates than non-carers and were more likely to be in persistent poverty; and
- Overall, caring increased the risk of financial stress, even when controlling for income and wealth. It is suggested that this may indicate higher costs for carers than non-carers.

4. Economic Value of the Care Sector

This chapter discusses the economic value of the Australian care sector. Specifically, it discusses the value of the paid care sector, the imputed value of the unpaid care sector and the value of government investment in the Australian care sector for 2009-10.

4.1 Paid Care

Nearly two million Australians (18.5% of the total FTE labour force) work in the paid care sector. Approximately 900,000 workers (part-time and full-time) are public sector employees (ABS, 2010d).

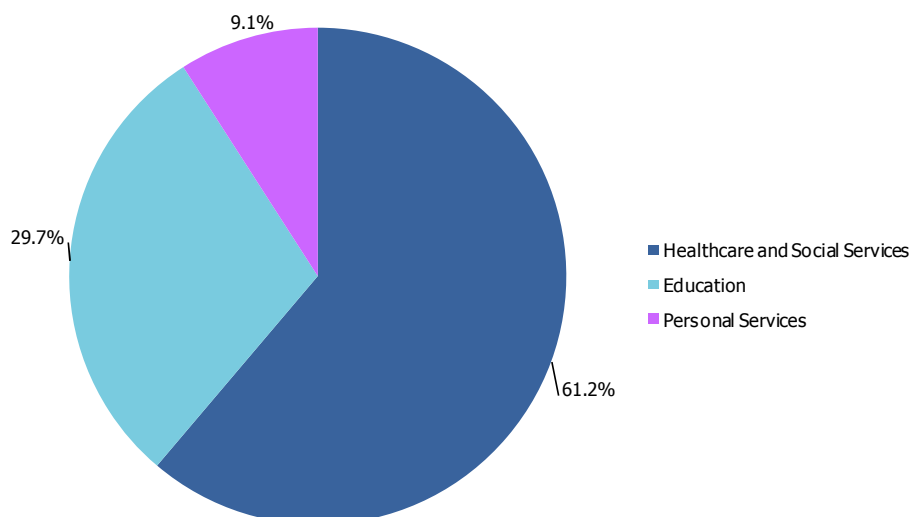
The paid care sector includes workers in pre-school and school education, the health care and social services sector, and the personal services sector (including religious workers and household staff). **Appendix C** provides further details of the paid care sector including state breakdowns.

4.1.1 Interactive Care Work

Interactive care work is defined as “labour that directly responds to the needs of a patient, family member, student, or client through a face-to-face relationship” (Albelda *et al.*, 2009, p.7). This type of work includes doctors, nurses, teachers, social workers, child care workers, and others who work directly with recipients of care (Albelda *et al.*, 2009, p.7).

Forty-three percent (43%) of paid care workers (754,373) were interactive care workers in 2009-10 (ABS, 2011c). Most of these (over 62%) were employed in health care and social assistance (ABS, 2011c). Interactive care workers contributed to \$47.3 billion in economic value (in terms of total incomes earned) in 2009-10. This equated to 3.7% of total GDP and \$2,117 per capita. Figure 4.1 shows that healthcare and social services made the highest economic contribution (61.2%).

Figure 4.1: Economic Contribution to the Interactive Care Sector by Industry, 2009-10

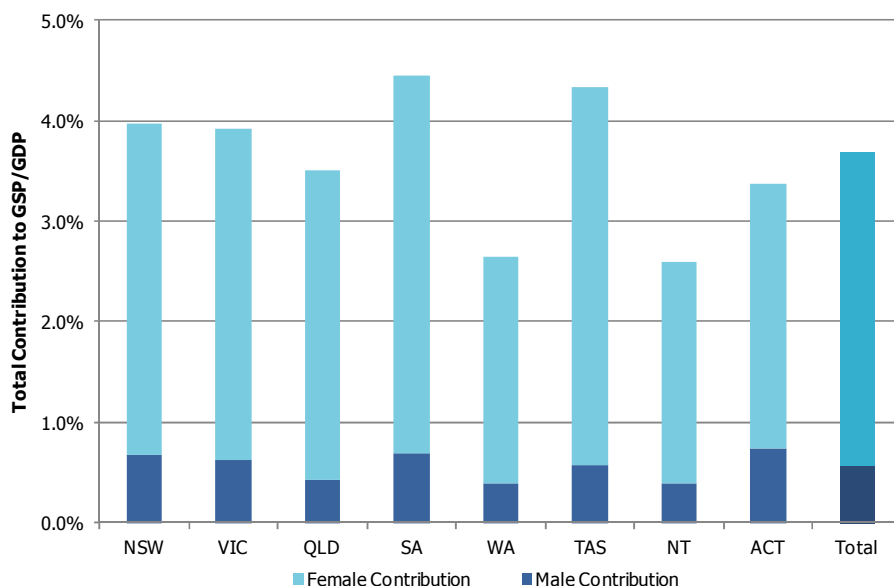


Note: Only identified sub-sectors of the care economy have been included.
Source: ABS (2007, 2010a, 2010c, 2011a, 2011c, 2011d), AECgroup

Women in the interactive care industries form 14.8% of the total female labour force (ABS, 2011c). Women formed 87% of the interactive care workforce and contributed 85% of the sector’s economic value in 2009-10. The differential between the female contribution to employment and to the economic value reflects women’s lower wages (ABS, 2010a). This is driven by the prominence of males in higher-level roles, despite the female dominance in the industry (see Figure 4.2).

Women in the paid interactive care sector contributed 3.1% (\$39.9 billion) of total Australian economic activity in 2009-10, while men contributed 0.6% (\$7.3 billion).

Figure 4.2: Paid Interactive Care Work Contribution to GSP/GDP in 2009-10 by Sex



Source: ABS (2007, 2010a, 2010c, 2011a, 2011c, 2011d), AECgroup

The economic value of the paid care sector does not account for significant skills shortages (see Table 4.1). If skills shortages are addressed, the value of the care sector would increase.

Table 4.1: Skills Shortages in Australia

Occupation	Level of Shortage
Child care centre managers	National shortage
Early childhood teachers	National shortage
Secondary school teachers	Recruitment difficulty
Special needs teachers	Recruitment difficulty
Medical diagnostic radiographers	National shortage
Medical radiation therapists	National shortage
Sonographer	National shortage
Dentist	Shortage in regional areas
Physiotherapist	National shortage
Podiatrist	National shortage
Audiologist	National shortage
Speech pathologist	Shortage in regional areas
Midwife	National shortage
Registered nurse	All specialisations
Clinical psychologist	National shortage
Enrolled nurse	National shortage
Child care worker	National shortage

Source: DEEWR (2010)

Anecdotal evidence suggests there is a general skills shortage in the aged care sector. Management of these skills shortages is required to ensure sufficient provision of interactive care provision in the future. Previous research (DEEWR, 2011) has found "Employers in the aged care sector report increased difficulty recruiting qualified staff, and high staff turnover. They attribute this to relatively low remuneration and difficult working conditions."

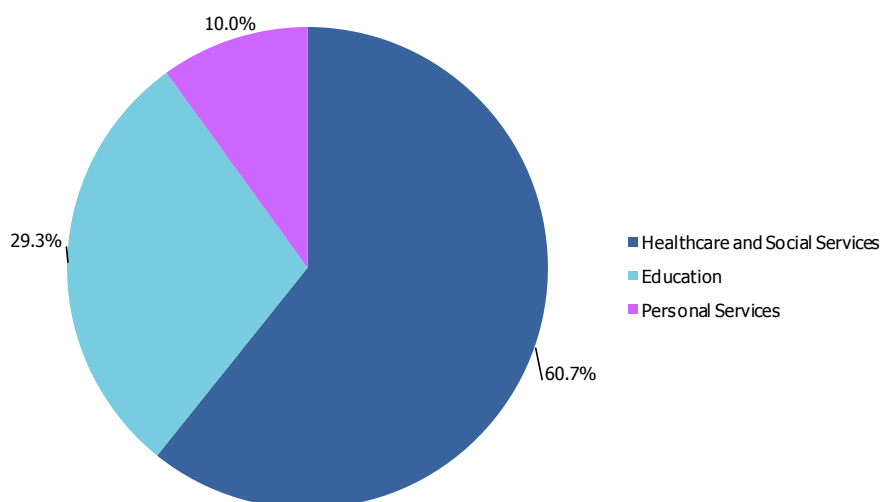
4.1.2 Support Care Work

Support care work includes “unpaid and paid activities that are not considered interactive care and yet are essential to the care sector.” Examples include administrative assistants, managers, janitors, and cafeteria cooks and servers who work in schools, hospitals, and nursing homes (Albelda *et al.*, 2009, p.7).

The majority of paid care workers in Australia in 2009-10 (57.2%, over 1 million workers) were support care workers, of which, 60.9% were healthcare and social assistance workers (ABS, 2011a). Support care workers contributed to \$65.1 billion in economic value (in terms of income earned) in 2009-10. This equated to 5.1% of GDP in 2009-10 and \$2,917 per capita. The composition of the support care sector is similar to the interactive care sector.

Healthcare and social services contribute the largest proportion of total economic value of the care sector (60.7%, see Figure 4.3). Australian hospitals are key employers of interactive and support care workers, employing nearly 4% of FTE workers (ABS, 2011c). The education sector is a prominent industry within the care sector, despite the exclusion of universities and other post-secondary school education in our care sector definition.

Figure 4.3: Economic Contribution to the Support Care Sector by Industry, 2009-10

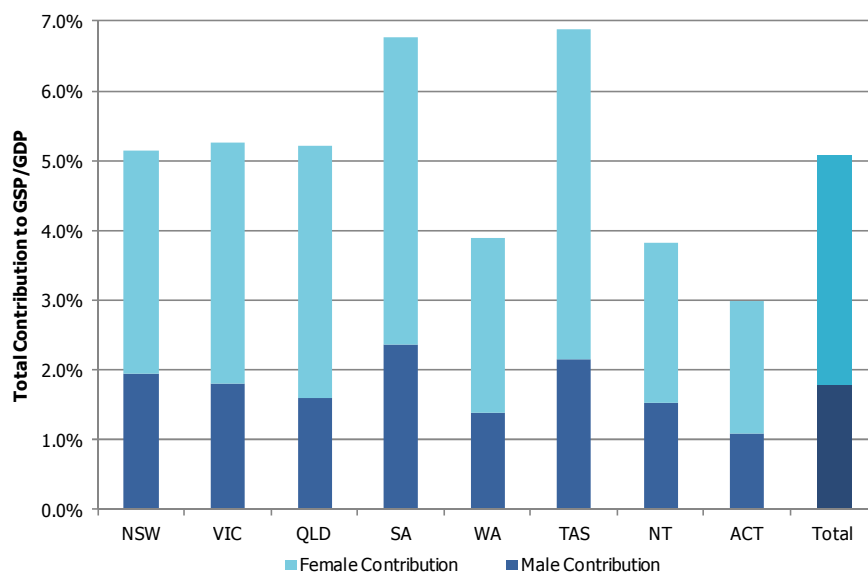


Note: Only identified sub-sectors of the care economy have been included.
Source: ABS (2007, 2010a, 2010c, 2011a, 2011c, 2011d), AECgroup

Women in support care roles form 15.7% of the total Australian female workforce (ABS, 2011c). Women comprised 69% of the workforce and contributed 65% of the sector’s economic value in 2009-10. The differential between the female contribution to employment and to the economic value reflects the prominence of men in higher-paid managerial roles, despite the female dominance in the industry (see Figure 4.4).

Women in the paid support care industry contributed 3.3% (\$42.3 billion) of total Australian economic activity in 2009-10, while men contributed 1.8% (\$22.7 billion).

Figure 4.4: Support Care Work, Contribution to GSP/GDP in 2009-10 by Sex



Source: ABS (2007, 2010a, 2010c, 2011a, 2011c, 2011d), AECgroup

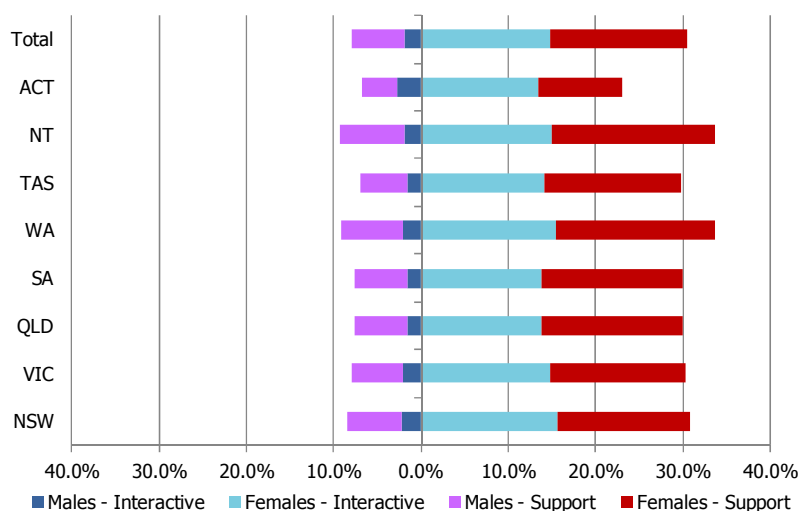
4.1.3 Total Paid Care Work

The paid care sector is crucial to the Australian economy. Income earned by care sector workers in 2009-10 was \$112.4 billion, equating to 8.8% of total GDP and \$5,033 per capita. Workers in the care sector earn an average of 96 cents for every dollar earned by the average Australian worker (ABS, 2010a). Women in the paid care sector earn on average 84 cents for every dollar earned by their male counterparts, due to the prominence of males in higher-level roles (ABS, 2010a).

The paid care sector employs 1.8 million people, forming 18.5% of the Australian workforce. The sector is female dominated (77%) (ABS, 2011c). Key industries include education (i.e., pre-school, primary school and high school), health care and social assistance, and personal services (i.e., child care, religious services and household services such as nannies and cooks).

Women employed in interactive care and support care comprise 14.8% and 15.7% of the total Australian female workforce, respectively (see Figure 4.5). Men are more likely to be employed as support care workers (6.1%) than interactive care workers (1.9%). These findings follow general employment trends which show women dominating community and personal services (69%) (ABS, 2007) compared to all other employment categories.

Figure 4.5: Contribution of Paid Care to the Total Labour Force, 2009-10



Source: ABS (2007, 2011a, 2011c), AECgroup

Women formed 77% of the paid care workforce and contributed 73% of the sector’s total economic value in 2009-10 (see Figure 4.6). Lower female incomes within the paid care sector (see section 3.1.1) explain the differential. This income gap can have further reaching ramifications for women, including lower employer superannuation contributions and, in some industries, lower bonus payments.

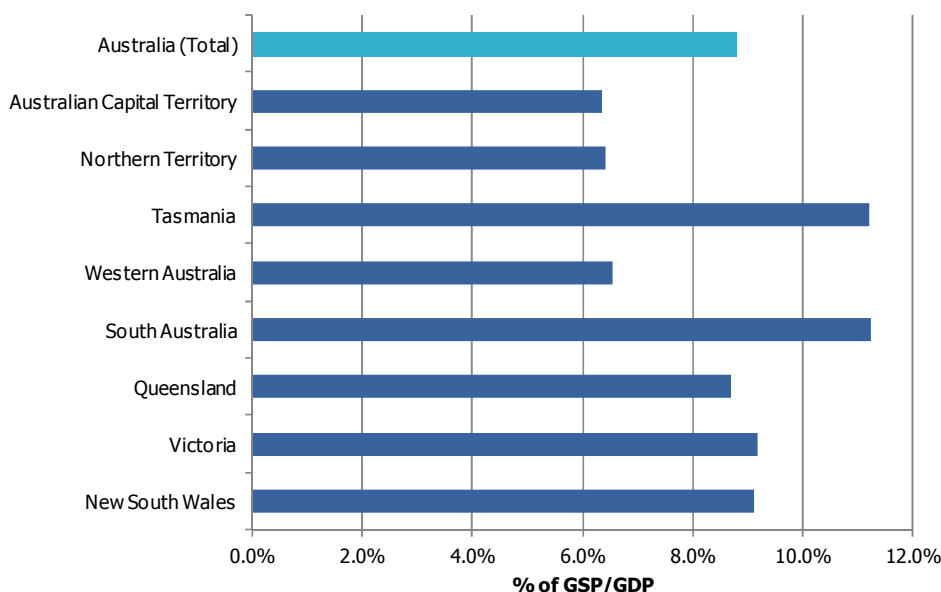
Figure 4.6: Paid Care Sector, Contribution to GSP/GDP 2009-10 by Sex



Source: ABS (2007, 2010a, 2010c, 2011a, 2011c, 2011d), AECgroup

Paid care work is most prominent in the South Australian and Tasmania economies, contributing to 11.2% of GSP in 2009-10 in both states (see Figure 4.7). Women contributed 8.2% and 8.5% of these amounts in South Australia and Tasmania respectively. In South Australia, education and hospitals services are the key care sectors comprising 54.7% of paid care economic activity and 44.5% of paid care employment. In Tasmania, education contributes 30.2% of economic activity and 28.0% of employment.

Figure 4.7: Total Paid Care Work, Contribution to GSP/GDP 2009-10

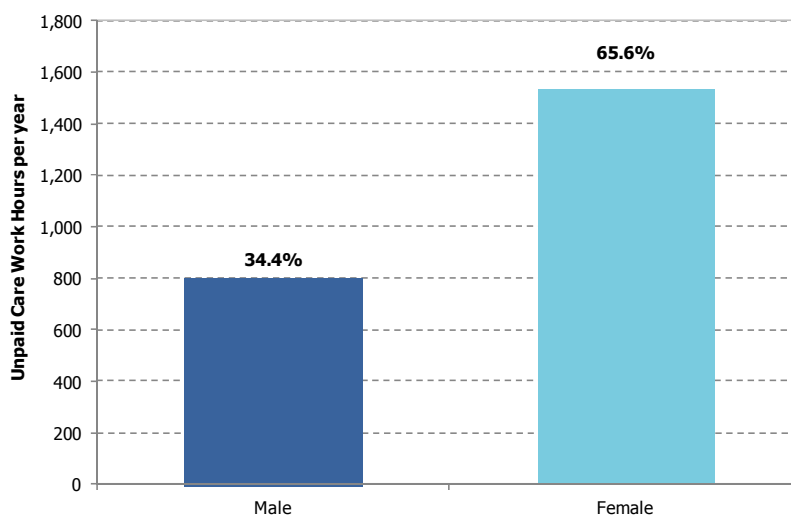


Source: ABS (2007, 2010a, 2010c, 2011a, 2011c, 2011d), AECgroup

4.2 Unpaid Care Work

Over 21.4 billion hours a year of unpaid care work were undertaken across Australia in 2009-10 (ABS, 2008a, 2011f), almost two thirds of which is attributable to women (see Figure 4.8). This equates to 11.1 million FTE workers (ABS, 2008a, 2011f). Female residents aged 15 years and over (hereafter referred to as females) spend 4.2 hours a day undertaking some form of unpaid care work, including domestic/ household chores, child care and voluntary adult care (ABS, 2008a). This is nearly double the average male contribution (2.2 hours a day) and reflects considerable gender inequity in unpaid care work in Australia.

Figure 4.8: Unpaid Care Work Hours per Adult in one Year, 2009-10

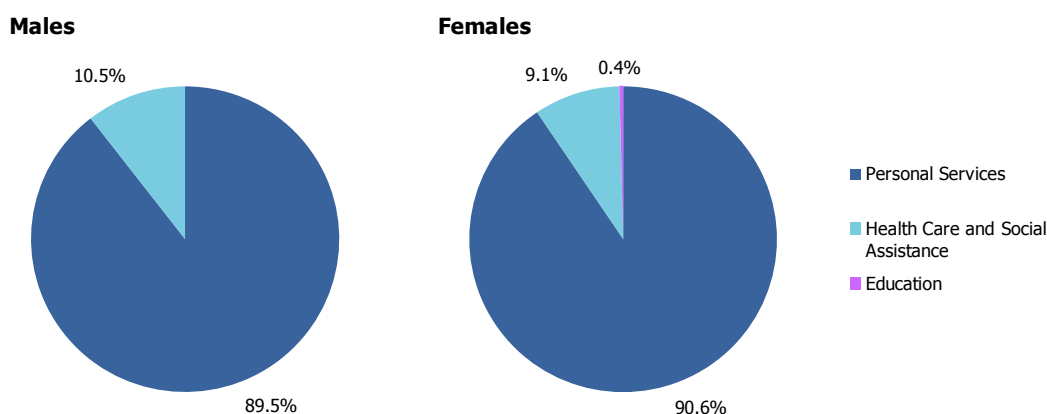


Source: ABS (2008a, 2011f), AECgroup

While females carry out the bulk of unpaid care work (see Figure 4.8), the industry profile is similar across both genders (see Figure 4.9). Approximately 90% of unpaid care work (expressed in FTE terms) is in personal services (i.e., domestic activities and child care activities, see Table 2.3). The remaining 10% (approximate) is in health care and

social assistance (i.e., adult support services, voluntary care). Education (i.e., teaching assistance) represents a very small amount of unpaid care work¹².

Figure 4.9: Unpaid Care Work in FTE Terms by Industry Sectors by Sex, 2009-10



Source: ABS (2008a, 2011a), AECgroup

4.2.1 Interactive Care Work

Less than a quarter of unpaid care work (equating to 2.5 million FTE workers) undertaken in Australia in 2009-10 was classified as interactive (ABS, 2008a, 2011f). This includes caring activities, which require face-to-face interaction between the carer and care recipient.

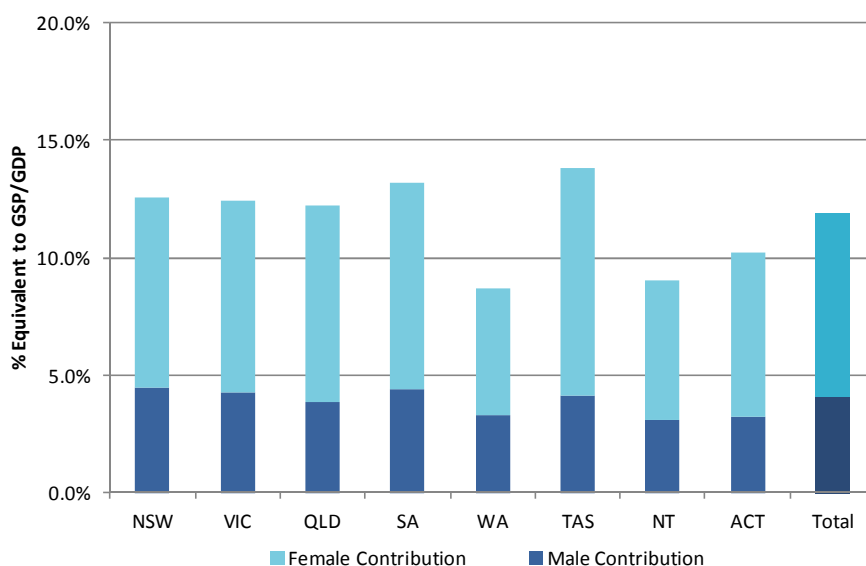
The imputed monetary value of unpaid interactive care work is estimated to range between \$145 billion (replacement cost method) and \$160 billion (opportunity cost method). At the mid-point (\$152 billion), the imputed economic value of the interactive unpaid care sector equates to approximately 12% of GDP and \$6,820 per capita.

Women provide 70% of all economic activity relating to unpaid interactive care work (ABS, 2008a, 2011f) and represented two thirds of the total value of unpaid interactive care work in 2009-10. Incomes in the paid care sector are used as proxy for the value of unpaid care. Lower paid care female incomes compared to males therefore explains the differential between the value and time contributions of unpaid care work.

The imputed economic value of unpaid interactive care work, when compared to GSP, was considerably higher for females compared to males. The largest differences are in Tasmania and South Australia (see Figure 4.10).

¹² Data for males is subject to rounding and may under or over estimate time spent undertaking activities.

Figure 4.10: Unpaid Interactive Care Work Imputed Value as a Percentage of GSP/GDP by Sex (Mid-Point), 2009-10



Source: ABS (2007, 2008a, 2010a, 2010c, 2011a, 2011b, 2011f), AECgroup

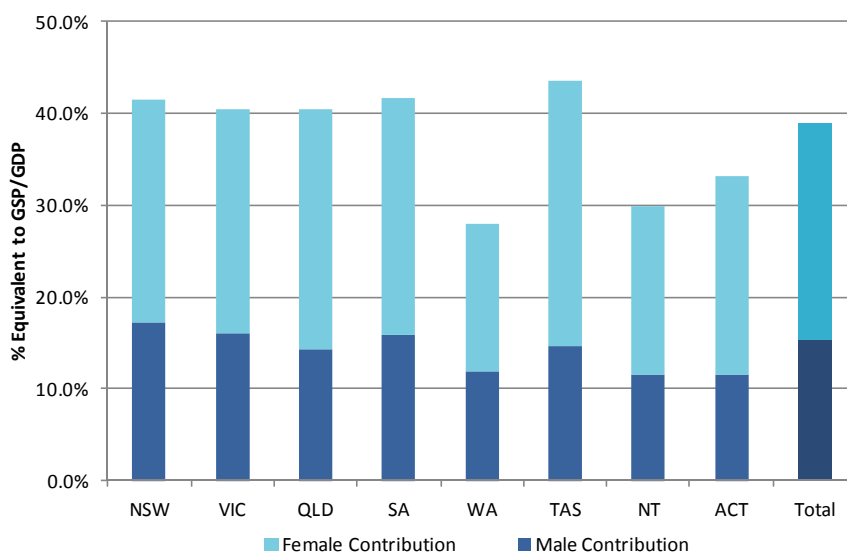
4.2.2 Support Care Work

More than three quarters of unpaid care work (equalling to 8.6 million FTE workers) undertaken in Australia in 2009-10 was support care work (ABS, 2008a, 2011f). Unpaid support care does not require face-to-face interactions between the carer and the care recipient, for example, undertaking household chores. Women undertake 65% of unpaid support care work in Australia (ABS, 2008a, 2011f).

The imputed monetary value of all Australian unpaid support care work in 2009-10 ranged between \$456 billion (replacement cost method) and \$540 billion (opportunity cost method). At the mid-point (\$498 billion), the imputed economic value of the support care sector equated to 39% of GDP and \$22,300 per capita.

Similar to unpaid interactive care work, unpaid support care work in imputed economic value, when compared to GSP, was considerably higher for females (see Figure 4.11). Tasmania and South Australia have the largest the unpaid care sectors.

Figure 4.11: Unpaid Support Care Work Imputed Value as a Percentage of GSP/GDP by Sex (Mid-Point) 2009-10



Source: ABS (2007, 2008a, 2010a, 2010c, 2011a, 2011b, 2011f), AECgroup

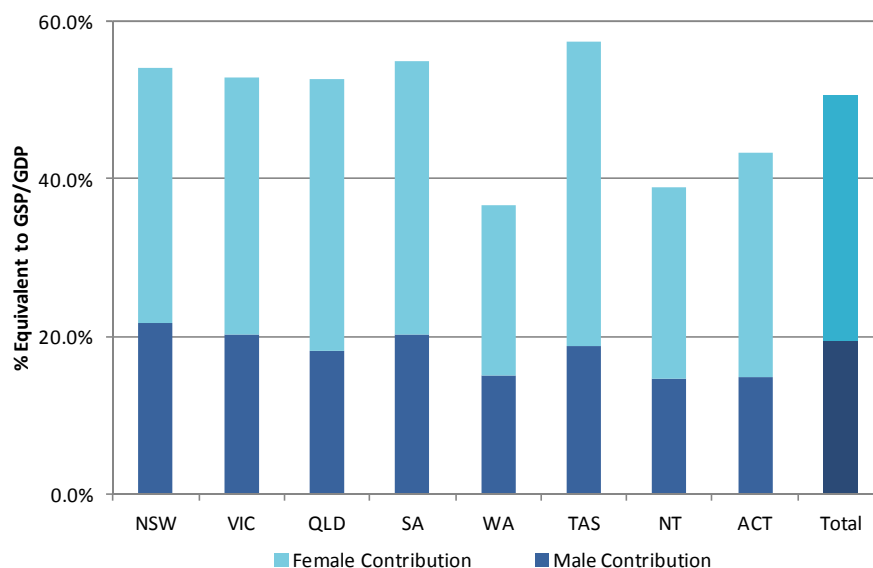
4.2.3 Total Unpaid Care Work

Total unpaid care work incorporating both unpaid interactive and support care work was estimated at 21.4 billion hours (equating to 11.1 million FTE workers) in Australia in 2009-10 (ABS, 2008a, 2011f).

The imputed value of unpaid care work in Australia is relatively high, estimated at between \$601 billion (replacement cost method) and \$699 billion (opportunity cost method). At the mid-point (\$650 billion), the care sector equated to 51% of GDP in 2009-10 and \$29,120 per capita.

Females account for more than 60% of the total estimated value of the unpaid care sector, equivalent to nearly a third of Australian GDP. This is reflected in their respective unpaid care work contributions to GSP and GDP in 2009-10 (see Figure 4.12).

Figure 4.12: Total Unpaid Care Work Imputed Value, as a Percentage of GSP/GDP 2009-10 by Sex (Mid-Point) 2009-10



Source: ABS (2007, 2008a, 2010a, 2010c, 2011a, 2011b, 2011f), AECgroup

4.3 Government Investment in the Care Sector

4.3.1 State/Territory & Local Government Investment

Table 4.2 shows that State/Territory and local governments spent approximately \$57 billion in 2009-10, amounting to 40% of total government spending in care sectors. The States/Territories with the largest populations spent the most on care. New South Wales contributed the largest proportion, followed by Victoria and Queensland. However, the Northern Territory had the highest spending per capita, which was more than double New South Wales' and Western Australia's per capita spend.

Table 4.2: State/Territory and Local Government Spending on Care Sectors and Proportion of Total Spending, 2009-10

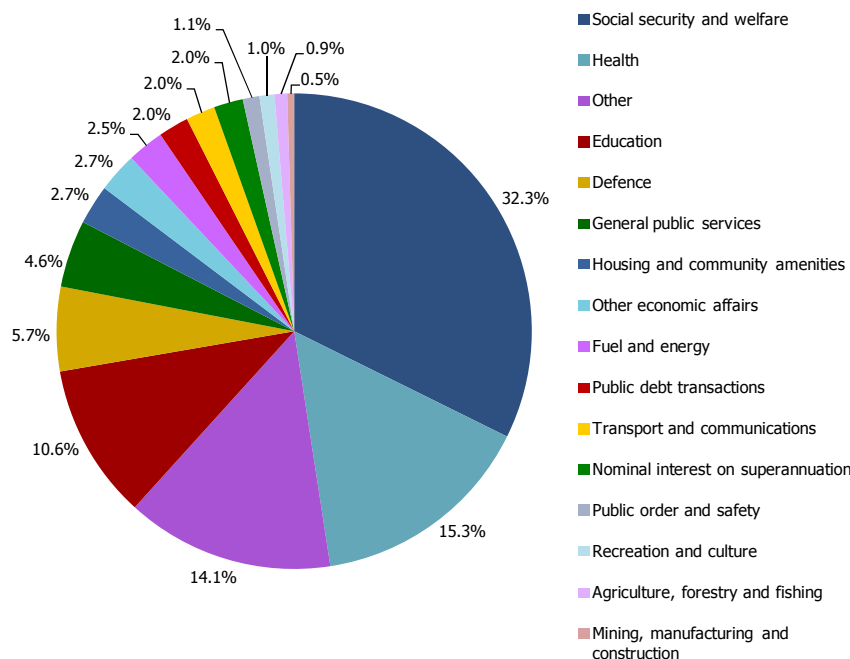
Government Area	Government Spending in Care Sectors (\$M)	Percentage (%)	Population (Number) 2010	Government Spending per Capita (\$)
New South Wales	\$16,804	29.6%	7,232,589	\$2,323
Victoria	\$14,575	25.7%	5,545,932	\$2,628
Queensland	\$10,857	19.1%	4,513,850	\$2,405
Western Australia	\$5,004	8.8%	2,293,510	\$2,182
South Australia	\$6,103	10.7%	1,644,582	\$3,711
Tasmania	\$1,265	2.2%	507,643	\$2,492
Northern Territory	\$1,100	1.9%	229,711	\$4,789
Australian Capital Territory	\$1,090	1.9%	358,571	\$3,039
Total (state investment)	\$56,799	100.0%	22,326,388	\$2,544

Note: Population is a preliminary figure for June 2010. Does not include wages and salaries or social security payments.
Source: ABS (2010d, 2011d, 2011f)

4.3.2 Commonwealth Investment

Commonwealth spending on care amounted to approximately \$79 billion in 2009-10 (excluding incomes) representing 23.5% of total spending (ABS, 2010d, 2011d). Within the care sector, health care and primary and secondary education services receive the most Commonwealth funding (see Figure 4.13). Estimates suggest a per capita spend of \$3,540 in 2009-10, which is \$996 per person above the average state amount.

Figure 4.13: Commonwealth Government Expenditure by Sector

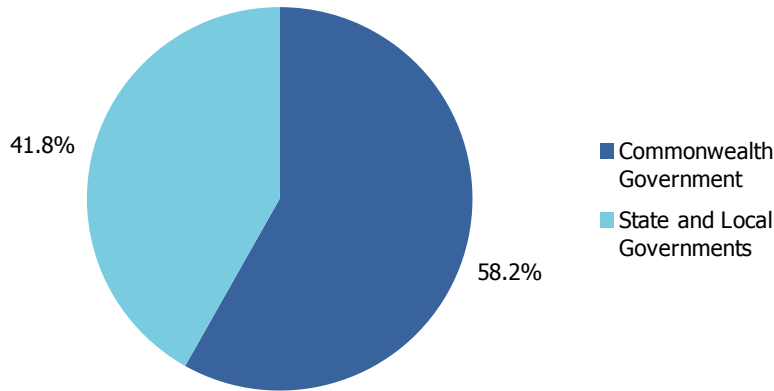


Note: Includes all wages and salaries and social security payments.
Source: ABS (2011d)

4.3.3 Total Government Investment

The Commonwealth, State/Territory and local governments spent \$136 billion on care (excluding wages and salaries and social security payments), equating to \$6,085 per capita in 2009-10 (ABS, 2010d, 2011d, 2011f). Figure 4.14 indicates that 58.2% (\$79 billion) was Commonwealth spending.

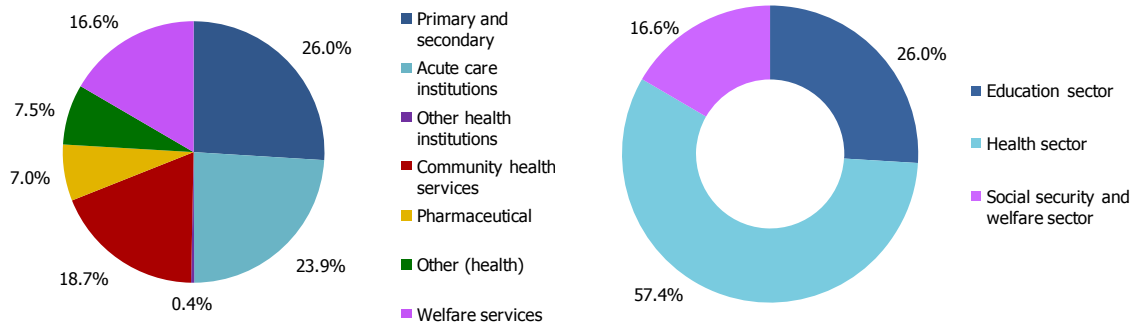
Figure 4.14: Proportion of Government Spending in Care Sectors by Level of Government



Source: ABS (2011d)

Figure 4.15 shows that health receives 57.4% of care sector spending, education 26.0% and social security and welfare 16.6%. Almost three quarters of the health services funding (74.2%) flows to acute care institutions and community health services.

Figure 4.15: Government Expenses by Purpose, Commonwealth and State/Territory (Total), 2009-10



Note: Wages and salaries included. Does not include social security payments.
Source: ABS (2011d)

Table 4.3 compares Government Expenditure on the main components of Australia’s care sector investment with other OECD nations. Australia ranks 24th and 22nd in terms of government investment as a percentage of total investment in health, and primary and secondary school education spending, so is lagging behind many other OECD nations. (OECD, 2011b).

Table 4.3: International Comparison of Government Investment

OECD Rank	Government Investment as a % of Total Spending on:	
	Health (2008)	Primary and Secondary Education (2007)
1	Denmark	Norway
2	Norway	Sweden
3	Luxembourg	Ireland
4	Iceland	Luxembourg
5	Czech Republic	Finland
6	United Kingdom	Estonia
7	Sweden	Portugal
8	Japan	Austria
9	New Zealand	Denmark
10	Estonia	Poland
11	France	Iceland
12	Italy	United Kingdom
13	Austria	Belgium
14	Ireland	Spain
15	Germany	Slovenia
16	Belgium	Czech Republic
17	Finland	Germany
18	Slovenia	New Zealand
19	Turkey	France
20	Spain	United States
21	Poland	Netherlands
22	Hungary	Australia
23	Canada	Switzerland
24	Australia	Canada
25	Slovak Republic	Israel
26	Portugal	Italy
27	Switzerland	Mexico
28	Israel	Slovak Republic
29	Korea	Korea
30	Mexico	Chile
31	United States	Japan
32	Chile	Greece
33	Greece	Turkey

Source: OECD (2011b), AECgroup

5. Key Findings & Considerations

This chapter summarises the key findings and considerations of the study. It focuses on the implications for future research and data collection, and future requirements for the care sector. Limitations are also discussed.

5.1 Key Findings

The care sector is important to the Australian economy.

The key data findings from this report are presented in Table 5.1. Whilst public policy is reflective of the physical infrastructure needs in the community, less energy and understanding has been directed towards comprehensive recognition of the importance of both paid and unpaid care within Australia. In view of its significant role within the Australian economy, the care sector would benefit from being considered as a discrete part of the economy.

Quality care provides a solid foundation for human infrastructure. Care creates positive flow-on effects for the broader Australian community by assisting in the maintenance of social capital and promoting connectivity between individuals in the community. Further, the ageing population creates an additional imperative to address the needs of both paid and unpaid care workers.

The sector provides nearly 20% of all paid employment in Australia (ABS, 2011b). Paid and unpaid care work provides care, support and assistance to all Australians regardless of age or health status.

Women are of critical importance in the care sector yet this is not reflected in their earnings. The gender wage gap reflects increased numbers of males in higher-level and higher earning roles than females, rather than a disparity in wages between male and female workers in the same role. Whilst forming half of the Australian population (ABS, 2011f), they carry the lion's share of the paid and unpaid care responsibility. Women make up 77% of care sector employees (ABS, 2011c) and perform 66% of total household care sector hours (ABS, 2008a).

A recent study found that women performed the majority of unpaid work in every OECD country (OECD, 2011), which is consistent with the findings of this research. Men and women in Scandinavian countries performed the most equitable share of unpaid work. India, Mexico and Turkey were the least equitable. Of the 29 countries studied, Australia ranked 14th (with the first being the least equitable). The OECD also found that the Australian unpaid care sector (calculated using the replacement cost method) expressed as a percentage of national GDP was the second highest of the 25 OECD countries in 2006 (following Portugal). Using the opportunity cost method, Australia ranked fifth.

Table 5.1: Summary of Key Findings

Indicator	Care Economy Statistic
Paid Care	
Number of Australian workers (in FTE) employed by the care sector in 2009-10	1.8 million (providing nearly 20% of all paid employment in Australia)
Total value of wage and salaries earned in the paid care industry in 2009-10	\$112.4 billion (equates to 8.8% of GDP and \$5,033 per capita)
Earning of the average care sector worker compared to the average Australian worker	96 cents for every dollar
Earning of the average female care sector worker compared to the average male care sector worker	84 cents for every dollar ¹³

¹³ This is influenced by the higher number of males in higher-level roles.

Indicator	Care Economy Statistic
Unpaid Care	
Total number of hours on unpaid care work undertaken in 2009-10	21.4 billion
Equivalent number of FTE positions in 2009-10	11.1 million (1.2 times the total Australian FTE workforce)
Imputed value of the unpaid care sector in 2009-10	\$650.1 billion ^(a) (equivalent to 50.6% of GDP and \$29,120 per capita)
Contribution of women aged between 25 and 64 years to unpaid care provision	60%
Percentage of female carers who are primary carers	36%
Percentage of male carers who are primary carers	21%
Government Investment in the Care Sector	
Total investment in 2009-10 ¹⁴	\$135.9 billion (10.6% of GDP)
Federal Government Investment in 2009-10 per capita	\$3,540
Total Government Investment in 2009-10 per capita	\$6,084

Note: (a) Estimates of the imputed value of unpaid care work range between \$601 billion (replacement cost valuation method) and \$699 billion (opportunity cost valuation method). This is not a transacted value and examines the imputed value against GDP for comparison purposes only.

Source: ABS (2008a, 2010a, 2010c, 2011c, 2010d, 2011a, 2011c, 2011d, 2011f), Albelda et al. (2009)

The results of Albelda *et al.* (2009) provided a key impetus for this report. Whilst the findings are not directly comparable, due to differences in available data, Table 5.2 reveals similar results between Australia and Massachusetts. In particular, the percentages of women employed in paid care and those who perform unpaid care are consistent across the two studies.

Table 5.2: Australian and Massachusetts Care Sector Comparisons

Indicator	Australia (2009-10) ¹	Massachusetts (2007)
Value of the paid care sector as a % of GDP (Australia) and GRP (Massachusetts)	9%	13%
Imputed value of the unpaid care sector as a % of GDP (Australia, mid-point) and GRP (Massachusetts)	51%	42%
Government investment in the care sectors as a % of GDP (Australia) and GRP (Massachusetts)	11%	7%
% of women employed by the paid care sectors	77%	75%
% of unpaid care work performed by women	66%	64%

Note: Percentages for Australia have been rounded to the nearest percent.

Source: ABS (2008a, 2011c), Albelda *et al.* (2009),

5.2 Considerations

In the future, social, political and economic factors are likely to significantly impact on the care sector. According to the Department of Education, Employment and Workplace Relations (2010) skills shortages already exist across several occupations, suggesting there is already excess demand for paid care services. This demand is expected to grow over the coming decades, particularly in healthcare services, as a result of an ageing population. According to ABS projections, a quarter of the Australian population will be aged over 65 years by 2101 (ABS, 2008b).

The economic value of the unpaid care sector suggests that, to some extent, excess demand for formal care is compensated for by the unpaid care sector. However, sustaining the existing provision of unpaid care from the household sector risks becoming problematic due to changing economic circumstances, as fewer Australians may be able to provide unpaid care. Such economic circumstances include:

- **The rising cost of living in Australia:** The cost of home ownership in particular has resulted in a greater need for two-income households. Rising living costs are likely to

¹⁴ Excludes wages and salaries and social security payments.

be at least partially responsible for increasing female labour force participation rates. In Australia, this rate has steadily increased from 43.7% in February 1979 to 58.9% in July 2011 (ABS, 2010b). The OECD (2011a) found a negative correlation between a nation's female employment rate and the average time a woman spends participating in unpaid care work. Only a portion of this time is taken over by men, leaving a gap in the provision of unpaid care.

- **Delaying retirement:** Australia's total participation rate has increased from 62.4% in January 2000 to 65.4% in July 2011 (ABS, 2010b). Some of this increase is likely to be the result of older people delaying retirement. Better health care means people are living longer, and staying in the workforce longer. Additionally, the Global Financial Crisis has impacted self-funded retirees, who have suffered lower superannuation balances and lower interest rates. A number of these people have returned to the workforce as a result of their financial situation. As Australians spend more time in the workforce, their ability and propensity to contribute to the unpaid care sector is compromised.

As social, political and economic factors change the way in which society operates, the sustainability of the care sector is questionable. Further government investment in paid and unpaid care is likely to be required to ensure adequate future provision. Steps already in place include:

- Formal training incentives for care sector occupations. The General Skilled Migration Program supports training of skilled migrants in areas demonstrating skills shortages. For example, child care centre managers, medical administrators, nursing clinical directors, primary health organisation managers, and early childhood teachers (Department of Immigration and Citizenship, 2011).
- Unpaid care provision is increasingly recognised by employers and the government. The Paid Parental Leave Scheme began in January 2011, providing 18 weeks of paid parental leave to eligible parents (Department of Families, Housing, Community Services and Indigenous Affairs, 2011). Many employers also provide programs to assist employees perform their care duties.

More needs to be done to attract workers into the care sectors and to assist Australians in their unpaid care responsibilities. Australia continues to hold low rankings on an international comparison of government investment as a percentage of total investment in formal care (i.e., primary and secondary education, and health). The nations with higher government investment in the formal care sectors (notably Norway, Sweden and Ireland) tended (though not uniformly) to rank lower in terms of value of the unpaid care sector (particularly using the replacement cost method). Economies that spent more on formal care are less reliant on the unpaid care sector. These nations also tend to have greater equity in terms of performance of unpaid work, which is reflected in this report's findings. Men and women perform similar proportions of unpaid domestic work, in the less than 15 hours of per week category, but contributions from women rise significantly above 15 hours per week. This suggests that nations requiring lower levels of unpaid care are likely to reduce the care responsibility for women.

Due to the broad nature of the care sector, it belongs to several Federal and State ministers. This presents a limitation as policy reforms in one sector of the care sector are lost and not carried through the whole of the care sector. Creating a care sector minister, or regular meetings between all ministers associated with the care sector is likely to assist in consistent policy changes across the sector as a whole.

5.3 Limitations of this Research

The analysis in this report presents a range of multi-faceted issues with financial and social implications. Factors that have not been adequately captured or reflected within the available datasets cannot be adequately captured or reflected in the economic value of the Australian care sector. When interpreting the economic values presented in this report, consideration should be given to the following:

- **Career Progression and Income Opportunity Costs:** Considerable opportunity costs are associated with undertaking unpaid care work impacting on a carer's working life. For example, significant caring responsibilities are likely to restrict a carer's ability to change jobs, accept job promotions or take on new job opportunities

(Gray and Hughes, 2005). Unpaid care providers may also exit the labour force early or reduce their working hours because of care responsibilities. A prime example of this is women taking unpaid maternity leave and the impact this may have on a female's career progression. These costs are not factored in the economic value of the care sector. The data in this report therefore represents a minimum value of the unpaid care sector.

- **Emotional Labour and Stress:** The economic value of the care sector does not reflect the emotional labour and stress experienced by both paid and unpaid workers. According to the Melbourne Institute (2011), 8.6% of parents indicate feeling tired, worn out or exhausted from meeting their children's needs. A 2003 survey of primary carers (ABS, 2007) found that:
 - 32.9% felt they were losing touch with friends;
 - 25% felt weary or lacking in energy; and
 - 26.7% were frequently worried or depressed.

A loss of emotional wellbeing is difficult to quantify, therefore, it is not reflected in the value of care.

- **Financial Stress:** existing research documents higher rates of poverty in carers. This is likely to encourage unpaid carers to seek formal employment and reduce the total availability of unpaid care in the future.
- **Cultural Diversity:** The economic value of the care sector is significant in monetary terms. However, it fails to reflect cultural diversity, particularly in unpaid care work. Cultural factors may play a role in determining who provides care, and the extent of care in the home and community. The exclusion of Indigenous communities from the Time Use Survey (ABS, 2008a) may limit the extent to which these factors are captured in the value of the unpaid care sector.

5.4 Recommendations for Further Work

Additional research is required to further develop this study's findings. In particular, a more comprehensive suite of data of Australian's use of time is needed, such as:

- Inclusion of remote Australian and Indigenous communities;
- Inclusion of cultural background information;
- Inclusion of narrower categories of care in the Time Use Survey, particularly for 'support for adults' and 'unpaid voluntary work'; and
- Development of data on an annual basis.

Research projects stemming from this study are likely to address the long-term economic and social requirements for care. Suggested topics include:

- Further research into the ageing Australian population and its ramifications for the health care and social assistance sectors. Australia needs to begin planning for this social change as soon as possible;
- Further research into the career choices of young women is essential. Increased education or career planning in high schools, vocational training and tertiary education institutions would assist all women, not just those in the care sector, in attaining higher-paid roles in the future; and
- Research into the long-term impacts of career breaks for women, mainly for caring purposes, is essential and should be undertaken to uncover methods for reducing these impacts. In particular, research into policies which will allow women to prepare for their retirement and financial security through/ahead of their career break is required.

5.5 Policy Direction

In light of the above findings and recommendations, policy changes are required to assist in equalising the gender share of care provision. Along with gender share is the key issue of gender and industry wage penalties. Key policy recommendations stemming from the findings of this report include:

- **Meeting data limitations head-on:** Increased funding for the collation of care-sector data (including paid and unpaid care) to be directed towards the Australian Bureau of Statistics;
- **Planning for future demand:** Increased incentives for students studying in the fields of care including education and health care. Policy directions should consider addressing gender and industry wage differentials and access to education and training for direct care sector workers; and
- **Improving carers' quality of life:** Removal of the assets and income test associated with the carer payments and reassessment of the level of funding provided to assist people in the unpaid care sector.

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Appendix A: Literature Review

Overview

AECgroup undertook a scholarly literature review to inform the context surrounding the care economy and identify some of the key issues associated with care work. This section summarises our observations and highlights key issues including, albeit not limited to:

- Complexities around defining the term care work;
- Diversity of care work and unpaid care workers;
- Role and importance of both paid and unpaid care work;
- Issues with regards to measuring unpaid care work;
- Broader implications of care work on adult (particularly female) and young carers; and
- Methods of measuring the impacts of care work on carers.

What is Care Work?

Care work is a complex human activity. There is no general consensus amongst scholars regarding a single definition of care work. Generally speaking, care work includes both paid and unpaid care services usually involving an element of personal connection and relationship between the deliverer and the recipient of care.

According to the renowned American feminist economist Nancy Folbre (2009, cited in Adams, 2010, p.3), direct care services refer to:

“Paid and/or unpaid efforts (undertaken) to meet the needs of dependents, including direct care work that involves personal connection and emotional attachment to care recipients”.

On the other hand, Himmelweit (1995) defines caring as an economic activity encompassing physical care (which may not require a relationship between the carer and the care recipient) and emotional care in which carer is inseparable from the care given. Himmelweit further identifies the following three distinguished characteristics which make caring a unique economic activity (Himmelweit, 2005, p.3):

- “Care is the development of relationship, not the production of a product that is separable from the person delivering it;
- Care needs, responsibilities for fulfilling them and the resources required are unequally distributed; and
- Social and personal norms influence allocation of care and caring responsibilities”.

Another definition of care work (England *et al.*, 2002) is:

“The work that provides a face-to-face service that develops the capabilities (such as mental and physical health, and cognitive and emotional skills) of the recipient”.

One of the most comprehensive definitions of care work has been provided in a study undertaken by the University of Massachusetts in 2009 (Albelda *et al.*, 2009, p.4) to measure the role of care work in the state of Massachusetts in the US. The study defines care work as:

“The total (paid and unpaid) labour required to meet the needs of children to be cared for and educated, everybody’s physical and mental health that requires attention, and the needs of individuals who require assistance with the activities of daily living because of illness, age or disability”.

Albelda *et al.* (2009) further categorises care work into interactive and care support work. Interactive care work refers to activities involving personal interaction between both the carer and the recipient of care to meet the needs of the care recipient. Examples include caring for a child or a sick patient. Care support work, on the other hand, refers

to work that ensures smooth functioning of the institutions of care and usually does not require direct interaction between the care provider and the care recipient. Examples include administrative assistants working in hospitals and schools.

For the purposes of the project, the following definition (see below) of care work provided by Albelda *et al.* (2009, p.4) will form the basis for developing a comprehensive measure of the role of care work in Australia.

“the total (paid and unpaid) labour required to meet the needs of children to be cared for and educated, everybody’s physical and mental health that requires attention, and the needs of individuals who require assistance with the activities of daily living because of illness, age or disability”.

The above definition however, has certain limitations. It is broad and creates difficulties in measuring the full range and forms of care work that is required to meet ‘everybody’s physical and mental health that requires attention’. For instance, the element of emotional labour (in addition to physical labour and the time spent caring) required to support those with mental illness is largely undocumented and hence difficult to measure. The difficulties are further accentuated by the limited availability of relevant data sets (for details on required and available data sets refer to **Appendix B**) which fail to adequately capture:

- Diversity in care work and unpaid care workers;
- Associated opportunity costs such as loss of income/promotion opportunities; and
- Stress, anxiety, and other mental health related costs that are perhaps difficult to quantify.

Historical Context

Welfare to Work (WTW) and Work Choices legislations were enacted under the Howard Government in 2006 with the aim of improving employment levels and national economic performance. It is believed that these legislations pressured women in Australia to participate in the labour market. As a result, considerable concerns have been raised in recent years regarding the gendered allocation of time and division of labour in the households (Baird & Whitehouse, 2007). While WTW reforms are still in place, the Fair Workers Australia legislation replaced Work Choices legislation in January 2010.

The aforementioned legislations have implications on the unpaid care work sector, in particular, women’s capacity to successfully undertake household and childcare activities. It is in this context that the legislations are discussed below.

Welfare to Work Reforms

WTW reforms introduced in 2006 placed new eligibility requirements on recipients of the Disability Support Pension (DSP), and the Parenting Payment (PP). The aim was to reduce welfare recipient numbers. DSP is an income support payment for those unable to support themselves due to a physical or mental disability. PP provides income support payments to sole parents and parents whose partners are unemployed or on a low income. The key rationale behind the WTW reforms (particularly PP) was to increase workforce participation of sole parents, the majority of which are women. Its aims were to save families from welfare dependency (Mc Innes, 2006), to provide a more prosperous economic outlook, and ensure flexible/work life balance (Gray and Collins, 2007).

The number of parenting payments has declined considerably under the WTW reforms, translating into government monetary savings. However, the stricter eligibility requirements have had serious implications on the provision of care work, in particular unpaid care work. Low income families are subjected to ‘forced commodification’ of care, as parents (particularly sole mothers) are compelled to join the paid workforce. Failure to do so can result in non-payment of income support for eight weeks (Mc Innes, 2006). To meet their obligations under the WTW reforms, payment recipients have no choice other than placing their children in child care. Mc Innes (2006, p.1) summarised the issues associated with WTW reforms as follows:

“In place of social recognition and support for the valuable and necessary work of child-rearing and nurturing, single parents face increased poverty, coercion, stigma and punishment”.

Work Choices

The 2006 Work Choices reforms primarily aimed at individualising employment relations, and in turn marginalised both unions and industrial tribunals in the country. The reforms were largely employer-friendly and included, though were not limited to (Federation Press, 2006):

- Offering employers greater flexibility in the employment terms and conditions;
- Making it difficult for unions to enter workplaces or organise industrial action; and
- Reducing the exposure of employers to unfair dismissal claims.

The Work Choices legislation resulted in greater manager/employer prerogative, greater unfairness at work, less control over working time, and reduced capacity of employees to negotiate employment terms. This considerably undermined the capacity of working women to sustain families and contribute to community life. Elton *et al.* (2007) interviewed 120 women in low paying jobs (such as childcare, aged care and cleaning) about the impacts of Work Choices. They indicated that employment insecurity, increased working hours, and uncertainty in earnings resulted in family life instability. The predictability of the care of children declined substantially and relationships between family members were negatively affected.

Work Choices legislation is believed to have widened gender pay gaps. The median wages of women declined from 87 cents for every dollar earned by men in 2004, to 84 cents in 2007 (Martin, 2009). Although the Work Choices legislation has been replaced by the Fair Workers Australia legislation, almost 70% of the policy structure was retained. It continues to create similar challenges and concerns.

As noted by Commonwealth of Australia (2011), care work “demographic and policy changes have increased the demand for informal care over recent decades and projections suggest that the need for informal care is likely to increase with an ageing population.”

Is Care Work Important?

According to the World Bank, the fulfilment of care responsibilities is an indispensable component in the maintenance of social capital, and an important economic development asset (Folbre, 2006). The United Nations Development Report (1999) acknowledges the fundamental role of care in the formation of human development and enhancement of human capability.

Care work provides a foundation for human infrastructure, while having profound implications on the social, economic and personal wellbeing of a nation. Provision of health care, education, child care, and other types of care work ensure that a society functions effectively. These services contribute to a well educated workforce and healthy and productive adults. People are more likely to participate in the political process and are active in family household units and the wider community (Albelda *et al.*, 2009).

Provision of care creates positive externalities and spill-over effects for the wider community. For example, children nurtured in stable, high-quality day-care centres are more likely to become better students, employees/employers and community workers, compared to those denied access to similar facilities. However, spill-over effects mean market mechanisms are not well-equipped to determine the quantity or quality of care required within an economy. Public sector funding and regulatory support is therefore required to ensure the effective provision of care services (Albelda *et al.*, 2009).

Who Cares & Diversity in Care Work

Care work, particularly unpaid care work, is performed by a range of people including biological and foster/adoptive parents, young adults, grandparents, and cultural communities. In addition, there are considerable differences (including cultural, economic

capacities and care needs) associated with the nature of and reason for undertaking care work. Some of these differences are briefly discussed:

- **Cultural:** In some cultures, particularly patriarchal and rural settings in developing countries, women perform significantly higher amounts of unpaid care work compared to men. According to the United Nations Human Development Report (UNDP, 1999), women in Nepal work 21 hours a week more than men. The figures are also high for Indian women, who perform 12 more hours of unpaid household work a week compared to men.
Anecdotal evidence suggests that in some Asian cultures and India (where it is the law¹⁵), caring for elderly parents is the obligation of the children. This responsibility primarily falls on women.
- **Economic Capacity:** Household economic capacity and access to economic resources are primary factors in the level of unpaid care performed by families, particularly mothers with young children. For example, women whose partners can ensure that household financial needs are comfortably met, are perhaps more likely to stay at home mothers. However, women from relatively lower socio-economic backgrounds may have no choice but to join the workforce.
- **Care Needs:** The needs of care recipients differ across cultural groups (Higgins, 2007). For example, the historic experiences of abuse, discrimination, injustice and neglect witnessed by Indigenous children, means their needs are likely to be higher than those of non-Indigenous children. These youths may need specialist services including mental health, counselling, remedial education and cultural mentoring, as many experience emotional and behavioural difficulties. Similar patterns are likely to be observed in case of new migrants, particularly refugees/asylum seekers (Higgins, *et al.*, 2005).

Key Issues Associated with Care Work

Need to Measure Unpaid Care Work

A substantial portion of unpaid care work (e.g. household work, care of children and other family members, and community volunteering) is performed daily. A recent study conducted by the Organisation for Economic Co-operation and Development (OECD, 2011) suggests that people across 29 countries¹⁶ spent an average of three hours a day on unpaid care work. However, the value of this work is not captured in national accounts. The United Nations System of National Accounts 1993 (SNA93) provides the following reasons for exclusion of such activities (ABS, 2000a):

- Household services, (e.g. meal preparation) and caring for children, the sick and the elderly, are not marketed making it difficult to assign an accurate market value to such services;
- It is difficult to quantify the expenditure and incomes associated with the provision of such activities and adding them meaningfully to the various monetary transactions included in the national accounts; and
- The economic significance of imputed values differs from that of monetary values. For example, if a person could choose between producing services for their own household or producing the same services for payment, the latter would perhaps be preferred given the range of consumption possibilities it affords.

Methods of Measuring Unpaid Care Work

Despite the issues discussed previously, attempts have been made to quantify and develop value estimates of unpaid care work. According to a recent study commissioned by Carers Australia, the economic value of 'informal care' (*i.e.* "care provided by unpaid family carers for people with disability, mental illness, chronic conditions, terminal illness or due to being frail aged"), in Australia in 2010 was between \$6.6 to \$40.9 billion (Access Economics, 2010, p.21).

¹⁵ Under the 2007 Maintenance and Welfare of Parents and Senior Citizens Act (Times of India, 2011).

¹⁶ These include China, India, South Africa and 26 OECD nations.

Similar international studies have also been conducted. The University of Massachusetts estimated the value of unpaid care work in Massachusetts at \$151.6 billion in 2007 (Albelda *et al.*, 2009).

Time-use surveys are perhaps the only comprehensive data source available for measuring unpaid care work across many countries (e.g. China, India, Australia, US, Canada and Denmark) (OECD, 2011). Time-Use surveys record how people allocate their time typically using a '24 hour diary'. Such surveys are usually conducted once every few years. The ABS has undertaken three surveys in Australia since 1992.

Most time-use surveys are activity based, which means the time devoted by individuals to various unpaid care activities can be understated. For example, evidence suggests that time reported by American adults in 'caring for their children' was over three times higher than time reported engaging in an 'activity' with children (Folbre & Yoon, 2005 cited in Folbre, 2006, p.194).

Various methodologies maybe employed to assign a monetary value to the unpaid care activities. Some of the most commonly used methods are briefly discussed:

- **Opportunity Cost Method:** Measures the productivity losses associated with unpaid caring responsibilities. The time devoted to performing these activities is time that could have alternatively been spent in the paid workforce (Access Economics, 2010). This method attempts to measure the amount of production carers would have contributed to the economy, in the absence of their unpaid caring responsibilities.
- **Replacement Cost Method:** Measures the cost of hiring a worker to perform the equivalent amount of unpaid caring activities (OECD, 2011). For example applying a cook's or domestic cleaner's wage rate to value time spent on domestic activities.

Neither of these methodologies is foolproof. The estimated value of unpaid care is highly sensitive to the type of method used to compute it. As previously mentioned, the value of 'informal care' in Australia in 2010 was almost eight times higher using the replacement cost method than the opportunity cost method (Access Economics, 2010). Similar disparities were observed by the OECD, who attempted to measure the value of unpaid care work across 29 countries (OECD, 2011). Other limitations of measuring unpaid care work include:

- Differences in efficiency of care provision are not considered, particularly when using the replacement cost approach. For example, many informal carers provide care to one person. However, a formal carer might provide care to numerous people simultaneously, if the care recipients are co-located. (Access Economics, 2010);
- Lack of perfect wage substitutes; and
- Difficulty in assigning a monetary value to unpaid care work given the element of personal relationships attached.

Wage Disparity & Gender Inequity in Care Work

Paid care work including teaching, counselling, provision of health care services, and supervising children attracts a wage penalty. It often pays less than other occupations, after controlling for education, employment experience and other characteristics (England *et al.*, 2002). For example, the median earnings of care workers in Massachusetts were amongst the state's lowest in 2007 (Albelda *et al.*, 2009).

The provision of care is a highly gendered activity, with females performing more paid and unpaid care work than men. In 2007, more than 90% of direct care workers employed in Australian residential homes were women (Martin and King, 2008). This gender inequity in care work (in particular unpaid care work) is international. The largest gender gaps occur in India, Mexico, Turkey, Portugal, Italy and Japan (OECD, 2011).

Besides wage disparity and gender inequity, age also shapes care work inequality. The Australian care sector workforce in education, health and community services is typically characterised by aging workers. In 2001, approximately 40% of Australia's education and health workforce were aged 45 years and over. This represents an increase of eight percentage points since 1996. This was relatively higher than property and business services (33.8%) which tends to attract relatively younger workers (Meagher and Healy, 2005).

Australia is an ethnically and culturally diverse society. Over one quarter of Australians are born overseas and more than a tenth of Australians speaking a non-English language at home (hereafter referred to as people from non-English speaking background). According to Meagher and Healy (2005), in 1996 and 2001, people from non-English speaking backgrounds were under-represented in caring occupations in community services industries. In 2001, they represented approximately 12% of care workers in community services, compared to 14.1% of from English-speaking backgrounds. This under-representation is reflective of the relatively fewer care sector job opportunities available to ethnically diverse Australians.

Using HILDA survey data, Commonwealth of Australia (2011) "identifies carers who are poor with respect to different dimensions of economic disadvantage: low income, high housing costs, perceiving oneself to be poor, and having difficulties managing financially." Key findings from the analysis include:

- Overall, at the aggregate level, carers had higher rates of poverty than non-carers on all measures;
- Carers who had been caring for two years had higher poverty rates than non-carers and were more likely to be in persistent poverty; and
- Overall, caring increased the risk of financial stress, even when controlling for income and wealth. It is suggested that this may indicate higher costs for carers than non-carers.

Impact of Care Work on Carers

Care work can have negative repercussions on the people engaged in such activities. This section discusses some of the financial, physical and emotional impacts on carers.

Underemployment & Other Opportunity Costs

Balancing paid and unpaid care work is not just a matter of labour force participation. There are significant opportunity costs associated with shifting the balance from paid work to unpaid care work. This can lead to underemployment and other promotional/income opportunity costs. Caring responsibilities are more likely to have an impact on a carer's working life by restricting their ability to change jobs, accept job promotions or take on new job opportunities (Gray and Hughes, 2005). A survey conducted by the ABS (2000b) shows that approximately one fifth of the employed female respondents with adult and childcare responsibilities did not look for new job opportunities because their caring responsibilities. The figure was lower for males (less than one tenth).

Increasingly more women, the main providers of care, are entering the labour force due to demographic and policy shifts (Commonwealth of Australia, 2011). It is therefore likely that many will be faced with negotiating "the competing demands of caring and paid employment." Commonwealth of Australia (2011) contends that due to a lack of alternative care arrangements, many carers will respond by reducing or leaving employment, detrimentally affecting their financial security (both short-term and long-term) as well as retirement outcomes.

Lower Super Accruals & Increased Retirement Age

Informal carers are less likely to be employed or working full-time than non-carers. Gendered patterns of care work also mean that women are more likely to leave the workforce, resulting in reduced workforce participation rates. This responsibility is relatively more pronounced amongst 'sandwich generation'¹⁷ and grandparent (primarily women) child carers. These carers withdraw from the workforce before the retirement age, or have limited labour force participation throughout their lives due to overlapping, inter-generational responsibilities.

Over 40% of females in Australia, Germany, Japan and the UK engaged in part-time work (OECD, 2011). A key reason is caring responsibilities. Reduced workforce participation

¹⁷ It refers to the generation of people who provide care to their young children as well aging parents at the same time.

means that many women are likely to have lower super accruals and are less financially prepared for retirement. For example the 2007 Australian median superannuation balance for carers between 35-54 years was approximately \$9,000 lower than non-carers of the same age (ABS, 2009).

Lack of Confidence & Self Worth

People involved in caring activities usually experience low face-to-face social contact with people outside their household (Albelda *et al.*, 2009). Life-long caring in particular has resulted in many females abandoning their careers or limiting their work hours, resulting in lower self worth, lack of confidence, and adverse financial impacts (discussed in the previous point).

Health & Wellbeing Impact

Caring responsibilities can have negative impacts on the health and overall wellbeing of the carer. The ABS (2004) found that almost three quarters of Australia's primary carers experienced some form of emotional and/or physical effect from providing care. According to the 2007 Household, Income and Labour Dynamics in Australia (HILDA) Survey, nearly one tenth of the respondents with parenting responsibilities 'strongly agreed' that being a parent was harder than they imagined. Just over 2% 'strongly agreeing' that they felt trapped by their parenting responsibilities. Women who were mothers experienced a greater amount of parenting stress compared to men who were fathers (Wilkins, *et al.*, 2010, p.9). Commonwealth of Australia (2011) cited an Australian study that determined that "carers had the lowest collective wellbeing of any population group examined by researchers."

Adverse Impact on Young Carers

Young carers refer to children under the age of 18 years with significant caring tasks, such as caring for a parent, sibling, grandparent or a relative. Usually the person is disabled, or has a chronic illness or another condition that requires care (Dearden and Becker, 2002). Engaging in unpaid care work from a relatively young age can be stressful. Research suggests that young carers often experience some form of education difficulty. This can lead to lower academic achievement and leaving school early. Dearden and Becker (2002) identified that at least a quarter of the young carers in the UK experienced educational difficulties including (but not limited to):

- Bullying due to lack of confidence and lower self-esteem;
- Difficulty in joining extra co-curricular activities at school;
- Feeling anxious and concerned about the ill/disabled family member; and
- Tiredness, fatigue, lack of concentration, and low attention span.

Measuring the Impacts

The impact of caring may be seen as a direct or indirect cost. Commonwealth of Australia (2011) defines these as follows:

- **Indirect Cost:** Opportunity costs of reducing employment, leisure and other activities to provide care, the time devoted to caring, and the impact caring has on the informal carer's physical and mental health.
- **Direct Cost:** Additional monetary expenses incurred by carers as a result of taking on the caring role, which may include home modifications or transport, or health costs for carers to mitigate the stresses associated with caring.¹⁸

¹⁸ The size of these direct costs depends on the type of needs of the person being cared for and the support provided by formal services and other sources: Commonwealth of Australia (2011).

Summary

Care work is a complex human activity which includes paid and unpaid care services, usually involving an element of personal connection and relationship between the deliverer and the recipient of care. Unpaid care work in particular, is performed by a range of people, including parents, young adults, grandparents, and Indigenous communities. It is categorised by considerable difference, including cultural, economic capacities and care needs.

There is no general consensus amongst scholars on what care work entails. However, the 2009 University of Massachusetts Study provides a comprehensive definition describing care work as:

“The total labour required to meet the needs of children to be cared for and educated, everybody’s physical and mental health that requires attention, and the needs of individuals who require assistance with the activities of daily living because of illness, age or disability”.

Care provides a foundation for human infrastructure, and has profound implications on the overall wellbeing of a nation. It creates positive externalities for the wider community. Health care, education, child care and other types of care work ensure society’s function effectively. Given that a substantial portion of care work is unpaid, several international studies have attempted to impute a monetary value of such activities.

Care work can have negative financial, emotional and physical repercussions on carers. Paid care work often attracts a ‘wage penalty’, providing lower wages than many other occupations. Women experience the brunt of this, since they make up the majority of care sector employees. Lower incomes coupled with lower female workforce participation rates result in lower superannuation accruals, compelling them to delay their retirement. Other impacts include low self esteem, lack of confidence, anxiety and stress. Since care work is important for society (at the micro level) and the nation (at the macro level), it is important that efforts are undertaken by the private and public sectors to address these issues.

Key Implications for the Project

Key implications arising from the literature review include:

- The documents reviewed consistently highlight the lack of consent among scholars regarding a single comprehensive definition of ‘care work’. To estimate the value of care work in Australia, this study uses the definition provided by the 2009 University of Massachusetts study, also adopted by Adams (2010) in the eS4W *Scoping* report.
- The various domestic and international studies examined used the replacement and opportunity cost methodologies to estimate the value of unpaid care work. It is observed that the estimated value of unpaid care work is highly sensitive to the methodology used. To ensure consistency and comparability of the project outcomes to other studies, the value of Australia’s unpaid care work is estimated using both methods, with the model assumptions clearly stated.
- It is further observed that time-use surveys are perhaps the only comprehensive data source available for measuring unpaid care work across many countries. For the purposes of the project, the 2006 ABS Time-use Survey is the primary data source for determining the time spent by Australians on unpaid care activities.
- Most documents reviewed emphasise gender inequity issues associated with care work. Women typically perform more paid and unpaid care work than men. As part of this project, gender inequity and wage disparity issues are considered, referencing female and male contributions to Australia’s total value of care work.

Appendix B: Methodology

Overview

This chapter provides a detailed description of the methodology used to estimate the value of the Australian care economy in 2009-10. The Australian care economy includes the value of both paid and unpaid care sectors, and government investment in the care sector.

The required and available data sets are outlined, highlighting information gaps and data deficiencies wherever applicable. Key data sources used for modelling, and profiling demographic and labour force characteristics of paid and unpaid care workers include:

- The Australian Bureau of Statistics (ABS);
- Commonwealth and state governments' Annual Budget Statements; and
- The Housing Income and Labour Dynamics in Australia (HILDA) Survey.

Data Sources

To estimate the value of the Australian care economy and profiling the demographic and labour force characteristics of both paid and unpaid care workers, the following data sets were sourced from the ABS including:

- 2006 Census of Population and Housing;
- 2006 Time Use Survey;
- 2009 Survey of Disability Aging and Care;
- 2009-10 Labour Force Survey;
- 2010 Persons Not in Labour Force, Australia;
- 2009-10 National Accounts;
- 2010 Employee Earnings by Industry (ANZSIC), Occupation (ANZSCO)¹⁹ and by Sex;
- 2009-10 Federal and State Governments' Finance Statistics; and
- 2009-10 Employment and Earnings, Public Sector.

Other data sources used include:

- 2010 Report on Wave 1 to 7 of the Housing Income and Labour Dynamics in Australia (HILDA) Survey.

A detailed framework outlining how each of the data sets was used is provided below.

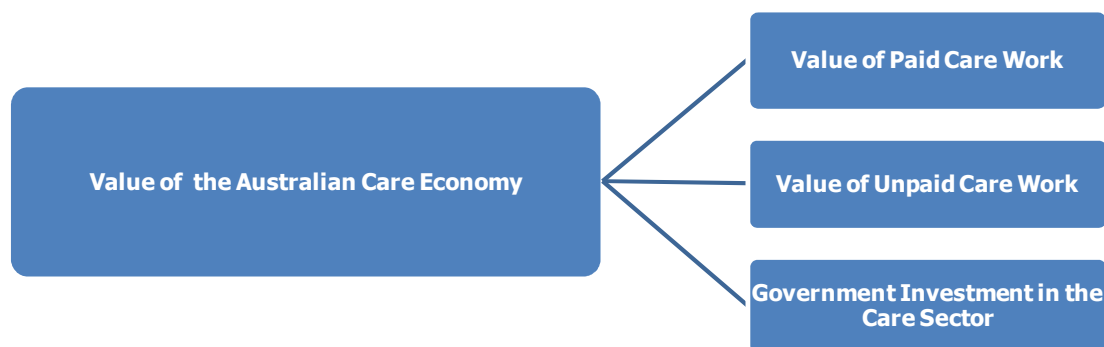
Value of Australian Care Economy

The value of the Australian care economy comprises the total value of paid and unpaid care sectors, and public sector investment (including Commonwealth and state government investment) in care sector industries (e.g., education, health, and social security and welfare).

Our project approach is compatible with methodology used in the *Counting Care Work - Human Infrastructure in Massachusetts* study undertaken by University of Massachusetts in 2009. The next three subsections provide a detailed description of the methodology used to estimate the three key components of the Australian care economy outlined in Figure B.1.

¹⁹ ANZSIC refers to Australian and New Zealand Standard Industry Classification while ANZSCO stands Australia and New Zealand Standard Classification of Occupations.

Figure B.1: Key Components of the Australian Care Economy



Note: Unpaid care work includes the voluntary sector
Source: AECgroup

Value of Paid Care Work

The total value of paid care work in Australia in 2009-10 was computed using the total employment figures and average sub-industry wages (in each state) across various paid care industries outlined in Table B.1.

Table B.1: Australian Care Industries

Industry Sector	Description
Preschool and school education	<ul style="list-style-type: none"> • Preschool Education • Primary Education • Secondary Education • Combined Primary and Secondary Education • Special School Education
Hospitals	<ul style="list-style-type: none"> • Hospitals • Psychiatric Hospitals
Medical and other health care services	<ul style="list-style-type: none"> • General Practice Medical Services • Specialist Medical Services • Pathology and Diagnostic Imaging Services • Dental Services • Optometry and Optical Dispensing • Physiotherapy Services • Chiropractic and Osteopathic Services • Ambulance Services • Other Health Care Services
Residential care services	<ul style="list-style-type: none"> • Aged Care Residential Services • Other Residential Care Services
Social assistance services	<ul style="list-style-type: none"> • Child Care Services • Other Social Assistance Services
Personal and other services	<ul style="list-style-type: none"> • Personal Care Services • Funeral, Crematorium and Cemetery Services • Other Personal Services • Religious Services • Civic, Professional and Other Interest Group Services • Private Households Employing Staff and Undifferentiated Goods

Source: ABS (2007)

The gender split of employment numbers and wages earned in each of the paid care industries were determined for each work type i.e. *Support Care Work* and *Interactive Care Work* (see Table B.2) based on:

- The 2006 ABS Census data on Employment by Industry, Occupation and Sex; and
- 2010 ABS data on Employee Earnings by Industry (ANZSIC), Occupation (ANZSCO) and Sex.

Table B.2: Interactive and Support Care Categories

Occupation Group	Type of Care Work
Managers	Support
Professionals	Interactive
Technicians and Trades Workers	Support
Community and Personal Service Workers	Interactive
Clerical and Administrative Workers	Support
Sales Workers	Support
Machinery Operators and Drivers	Support
Labourers	Support

Source: ABS (2007), AECgroup

The paid care sector contribution (\$ and % terms) to the 2009-10 national gross domestic product (GDP) was computed using 2009-10 ABS National Accounts. Key demographic and labour force characteristics of paid care workers were identified employing various ABS data sets and the 2010 HILDA Survey report.

$$\text{Value of Paid Care Work in Australia} = \sum_{i=1}^{n=8} \text{Emp}(i) \times \text{Avg Wage}(i)$$

Where:

Emp = Total Employment in Paid Care Industries;

Avg Wage = Average Annual Wage for each Paid Care Industry; and

i refers to each of the eight Australian states and territories, with:

- 1 = Australian Capital Territory
- 2 = New South Wales
- 3 = Northern Territory
- 4 = Queensland
- 5 = South Australia
- 6 = Tasmania
- 7 = Victoria
- 8 = Western Australia

Value of Unpaid Care Work

The 2006 ABS Time-Use Survey was the primary data source used to compute the total quantum of labour (in FTE terms). Activities counted as care work are provided in Table B.3. Care should be taken in interpreting the results as there is a propensity for survey participants to overestimate their time spent on various activities. In addition, the detailed breakdown of 'child care' provides greater scope for estimation than the broad categories of 'support for adults' and 'unpaid voluntary work', which could reduce the accuracy of estimates in these latter categories. Households in very remote areas or Indigenous Communities are excluded from this survey.

Table B.3: Unpaid Care Activities

Main Activity	Description
Domestic Activities	<ul style="list-style-type: none"> • Food and drink preparation/cleanup • Laundry and clothes care • Other housework • Grounds and animal care • Household management • Associated travel

Main Activity	Description
Child Care	<ul style="list-style-type: none"> • Care of children • Teaching, helping, reprimanding children • Playing, reading, talking with child • Minding child • Visiting child care establishment/school • Associated travel • Other
Voluntary Work and Care	<ul style="list-style-type: none"> • Support for adults²⁰ • Unpaid voluntary work²¹ • Associated travel • Other

Source: ABS (2008a)

Wages accrued by the unpaid care sector had this been performed by private sector employees were calculated using two distinct methodologies:

- **Replacement Cost:** The average wage for each of the paid care industries (**Avg Wge**) was used as a proxy to measure the value of unpaid care work. This was calculated on the premise that the value of unpaid care work is best measured based on what the unpaid care service would cost if provided by the paid care sector.
- **Opportunity Cost:** This method used the weighted average wage for all industries (**Ind Avg Wge**) to measure the value of total labour engaged in unpaid care work. It is based on the rationale that unpaid care work leads to productivity losses and thus in the absence of caring responsibilities, the same time could be spent in the paid workforce.

Based on these methodologies, the value of the Australian unpaid care sector is estimated using the following formulae:

$$\text{Value of Unpaid Care Work in Australia (Replacement Cost)} = \text{FTE} \times \text{Avg Wage}$$

$$\text{Value of Unpaid Care Work in Australia (Opportunity Cost)} = \text{FTE} \times \text{Ind Avg Wage}$$

Where:

$$\text{FTE} = \frac{\text{Unpd Time} \times \text{Pop}}{\text{Ann Wrk Hrs}}$$

with:

Unpd Time = number of daily hours spent per person on unpaid care work

Pop = Total Australian Population

Ann Work Hrs = Number of working hours in a year

Avg Wge = Average Annual Wage for Paid Care Industries

Ind Avg Wge = Weighted Average Annual Wage for All Industries

Having computed the value of unpaid care work, the total employment and wages in unpaid care sector is broken down by work type and gender (based on 2006 ABS-Time Use Survey). Distinctions between *Support* and *Interactive Care Work* were estimated using the categories outlined in Table B.4.

Table B.4: Unpaid Care Activities

Activity	Type of Work
Domestic Activities	
Food and drink preparation/cleanup	Support
Laundry and clothes care	Support
Other housework	Support

²⁰ Included physical care and emotional support as well as helping or doing favours.

²¹ Activities which are performed for a community organisation without pay.

Activity	Type of Work
Grounds and animal care	Support
Home maintenance	Support
Household management	Support
Associated travel	Support
Child Care	
Care of children	Interactive
Teaching, helping, reprimanding children	Interactive
Playing, reading, talking with child	Interactive
Minding child	Interactive
Visiting child care establishment/school	Interactive
Associated travel	Support
Other	Support
Voluntary Work and Care	
Support for adults	Interactive
Unpaid voluntary work	Interactive
Associated travel	Support
Other	Support

Source: ABS (2008a), AECgroup

Contribution to 2009-10 national GDP (in \$ and % terms) by the unpaid care sector was determined using 2009-10 ABS National Accounts. The key demographic and labour characteristics of workers engaged in unpaid care work were identified from ABS data sources and the HILDA Survey report.

Government Investment in the Care Sector

The total value of government investment in the relevant care sector industries within the health, education and, social security and welfare sectors was estimated using the 2009-10 Commonwealth and state Financial Accounts. Wages, salaries and social security payments were excluded. The share of GDP (\$ and % terms) attributable to Commonwealth and state investment in the Australian care sector industries was computed using the 2009-10 ABS National Accounts.

$$\text{Government Investment in the Care Sector} = \sum_{i=1}^{n=8} SI(i) + FI$$

Where:

SI = State government investment in care sector industries (less wages paid),

i refers to each of the eight Australian states and territories, with:

- 1 = Australian Capital Territory
- 2 = New South Wales
- 3 = Northern Territory
- 4 = Queensland
- 5 = South Australia
- 6 = Tasmania
- 7 = Victoria
- 8 = Western Australia

FI = Investment by the Commonwealth Government in care sector industries.

Appendix C: Detailed Findings

Paid Care

Table C.1: Employment by Care Sector by State, 2009-10

Sector	New South Wales			Victoria			Queensland			South Australia			Australia		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
Preschool and school education	35,919	111,664	147,583	29,540	89,060	118,600	22,463	73,954	96,417	9,315	25,981	35,296	115,492	359,494	474,986
Health care and social assistance, nfd	3,012	8,251	11,263	2,062	6,291	8,353	1,486	4,546	6,032	745	2,449	3,193	8,508	25,423	33,931
Hospitals	25,032	87,820	112,853	17,468	76,639	94,108	15,641	53,470	69,112	5,385	22,726	28,111	72,754	275,666	348,420
Medical and other health care services	28,787	73,187	101,975	21,276	55,076	76,353	16,698	45,118	61,816	6,802	19,543	26,344	84,190	224,306	308,496
Residential care services	8,005	45,491	53,496	4,645	31,040	35,684	4,143	28,098	32,241	2,440	14,654	17,094	22,617	139,651	162,267
Social assistance services	13,433	58,000	71,433	9,277	44,240	53,516	8,668	42,471	51,139	4,046	14,586	18,632	42,991	185,452	228,443
Personal and other services	22,258	42,709	64,967	16,746	34,152	50,899	11,125	26,946	38,071	4,316	9,248	13,564	65,488	138,174	203,662
Private HH staff and other	19	753	772	6	292	298	17	296	313	6	99	105	55	1,661	1,717

Source: ABS (2007, 2011a)

Table C.2: Employment by Care Sector by State, 2009-10

Sector	Western Australia			Tasmania			Northern Territory			Australian Capital Territory			Australia		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
Preschool and school education	12,258	41,050	53,308	3,124	8,682	11,806	1,145	3,649	4,794	1,728	5,454	7,182	115,492	359,494	474,986
Health care and social assistance, nfd	747	2,607	3,354	192	610	802	135	329	465	128	340	468	8,508	25,423	33,931
Hospitals	6,431	24,694	31,125	1,336	5,046	6,382	594	1,890	2,484	866	3,380	4,246	72,754	275,666	348,420
Medical and other health care services	7,175	21,549	28,723	1,701	5,039	6,740	768	1,921	2,689	983	2,873	3,856	84,190	224,306	308,496
Residential care services	2,335	14,215	16,550	730	4,569	5,300	105	494	600	214	1,089	1,303	22,617	139,651	162,267
Social assistance services	4,212	15,625	19,837	1,194	4,818	6,012	1,278	2,473	3,751	884	3,238	4,122	42,991	185,452	228,443
Personal and other services	7,403	17,244	24,647	1,529	3,646	5,175	782	1,521	2,303	1,327	2,708	4,035	65,488	138,174	203,662
Private HH staff and other	0	172	172	0	16	16	4	4	9	3	29	32	55	1,661	1,717

Source: ABS (2007, 2011a)



Interactive Paid Care

Table C.3: Paid Care Work, Interactive, Total (\$M)

State	Male	Female	Total	%
New South Wales	\$2,765	\$13,358	\$16,123	34.1%
Victoria	\$1,860	\$9,969	\$11,829	25.0%
Queensland	\$1,023	\$7,529	\$8,553	18.1%
South Australia	\$552	\$3,026	\$3,578	7.6%
Western Australia	\$735	\$4,136	\$4,871	10.3%
Tasmania	\$135	\$875	\$1,010	2.1%
Northern Territory	\$65	\$356	\$421	0.9%
Australian Capital Territory	\$191	\$683	\$875	1.9%
Australia (Total)	\$7,326	\$39,934	\$47,260	100.0%

Source: Australian Bureau of Statistics (2007, 2010a, 2010b, 2011a, 2011b, 2011c), AECgroup

Table C.4: Paid Care Work, Interactive, Contribution to GSP/GDP 2009-10

State	Male	Female	Total
New South Wales	0.7%	3.3%	4.0%
Victoria	0.6%	3.3%	3.9%
Queensland	0.4%	3.1%	3.5%
South Australia	0.7%	3.8%	4.5%
Western Australia	0.4%	2.2%	2.6%
Tasmania	0.6%	3.8%	4.3%
Northern Territory	0.4%	2.2%	2.6%
Australian Capital Territory	0.7%	2.6%	3.4%
Australia (Total)	0.6%	3.1%	3.7%

Source: Australian Bureau of Statistics (2007, 2010a, 2010b, 2011a, 2011b, 2011c), AECgroup

Support Paid Care

Table C.5: Paid Care Work, Support, Total (\$M)

State	Male	Female	Total	%
New South Wales	\$7,906	\$13,052	\$20,958	32.2%
Victoria	\$5,459	\$10,376	\$15,836	24.3%
Queensland	\$3,889	\$8,826	\$12,715	19.5%
South Australia	\$1,903	\$3,541	\$5,444	8.4%
Western Australia	\$2,543	\$4,629	\$7,171	11.0%
Tasmania	\$502	\$1,104	\$1,606	2.5%
Northern Territory	\$246	\$374	\$620	1.0%
Australian Capital Territory	\$284	\$489	\$773	1.2%
Australia (Total)	\$22,732	\$42,391	\$65,123	100.0%

Source: Australian Bureau of Statistics (2007, 2010a, 2010b, 2011a, 2011b, 2011c), AECgroup

Table C.6: Paid Care Work, Support, Contribution to GSP/GDP 2009-10

State	Male	Female	Total
New South Wales	1.9%	3.2%	5.2%
Victoria	1.8%	3.4%	5.3%
Queensland	1.6%	3.6%	5.2%
South Australia	2.4%	4.4%	6.8%
Western Australia	1.4%	2.5%	3.9%
Tasmania	2.2%	4.7%	6.9%
Northern Territory	1.5%	2.3%	3.8%
Australian Capital Territory	1.1%	1.9%	3.0%
Australia (Total)	1.8%	3.3%	5.1%

Source: Australian Bureau of Statistics (2007, 2010a, 2010b, 2011a, 2011b, 2011c), AECgroup

Total Paid Care

Table C.7: Total Paid Care Work, Total (\$M)

State	Male	Female	Total	%	Interactive (%)	Support (%)
New South Wales	\$10,671	\$26,410	\$37,081	33.0%	43.5%	56.5%
Victoria	\$7,319	\$20,346	\$27,665	24.6%	42.8%	57.2%
Queensland	\$4,912	\$16,356	\$21,268	18.9%	40.2%	59.8%
South Australia	\$2,455	\$6,567	\$9,022	8.0%	39.7%	60.3%
Western Australia	\$3,277	\$8,765	\$12,042	10.7%	40.5%	59.5%
Tasmania	\$637	\$1,979	\$2,616	2.3%	38.6%	61.4%
Northern Territory	\$311	\$730	\$1,041	0.9%	40.4%	59.6%
Australian Capital Territory	\$476	\$1,173	\$1,648	1.5%	53.1%	46.9%
Australia (Total)	\$30,059	\$82,325	\$112,383	100.0%	42.1%	57.9%

Source: Australian Bureau of Statistics (2007, 2010a, 2010b, 2011a, 2011b, 2011c), AECgroup

Table C.8: Total Paid Care Work, Contribution to GSP/GDP 2009-10²²

State	Male	Female	Total
New South Wales	2.6%	6.5%	9.1%
Victoria	2.4%	6.7%	9.2%
Queensland	2.0%	6.7%	8.7%
South Australia	3.1%	8.2%	11.2%
Western Australia	1.8%	4.8%	6.5%
Tasmania	2.7%	8.5%	11.2%
Northern Territory	1.9%	4.5%	6.4%
Australian Capital Territory	1.8%	4.5%	6.3%
Australia (Total)	2.3%	6.4%	8.8%

Source: Australian Bureau of Statistics (2007, 2010a, 2010b, 2011a, 2011b, 2011c), AECgroup

²² Most time-use surveys are activity based and can, therefore, understate the time devoted by individuals to do various unpaid care activities. For instance, evidence suggests that time reported by US adults in 'caring for their children' was over three times higher than time reported engaging in an 'activity' with children.

Unpaid Care

Table C.9: Time Use by Primary Activity

Household Activity	Minutes per Day		Proportion of Time per Day	
	Males	Females	Males	Females
Domestic activities	97	172	36.1%	63.9%
<i>Total housework</i>	<i>44</i>	<i>131</i>	<i>25.1%</i>	<i>74.9%</i>
Food and drink preparation/cleanup	29	69	29.6%	70.4%
Laundry and clothes care	5	29	14.7%	85.3%
Other housework	10	33	23.3%	76.7%
<i>Total other household work</i>	<i>44</i>	<i>34</i>	<i>56.4%</i>	<i>43.6%</i>
Grounds and animal care	23	21	52.3%	47.7%
Home maintenance	14	3	82.4%	17.6%
Household management	7	10	41.2%	58.8%
<i>Other domestic activities</i>	<i>9</i>	<i>6</i>	<i>60.0%</i>	<i>40.0%</i>
Associated travel	4	3	57.1%	42.9%
Other	5	3	62.5%	37.5%
Child care	22	60	26.8%	73.2%
Care of children	6	24	20.0%	80.0%
Teaching, helping, reprimanding children	0	1	0.0%	100.0%
Playing, reading, talking with child	9	16	36.0%	64.0%
Minding child	2	4	33.3%	66.7%
Visiting child care establishment/school	0	1	0.0%	100.0%
Associated travel	3	9	25.0%	75.0%
Other	2	5	28.6%	71.4%
Voluntary work and care	14	23	37.8%	62.2%
Support for adults	7	11	38.9%	61.1%
Unpaid voluntary work	3	6	33.3%	66.7%
Associated travel	2	3	40.0%	60.0%
Other	2	3	40.0%	60.0%
Total Care Sector Hours	133	255	34.3%	65.7%

Source: ABS (2008a)

Replacement Cost Method

Table C.10: Unpaid Interactive Care Work as a percentage of GSP/GDP (Replacement Cost), 2009-10

States	Unpaid Interactive Care (\$M)			GSP / GDP Contribution (%)		
	Male	Female	Total	Male	Female	Total
New South Wales	\$18,517	\$30,242	\$48,758	4.6%	7.4%	12.0%
Victoria	\$12,830	\$22,886	\$35,715	4.3%	7.6%	11.8%
Queensland	\$8,211	\$20,578	\$28,789	3.4%	8.4%	11.8%
South Australia	\$3,514	\$6,477	\$9,991	4.4%	8.1%	12.4%
Western Australia	\$5,602	\$9,013	\$14,616	3.0%	4.9%	7.9%
Tasmania	\$882	\$2,072	\$2,955	3.8%	8.9%	12.7%
Northern Territory	\$429	\$919	\$1,348	2.6%	5.7%	8.3%
Australian Capital Territory	\$809	\$1,723	\$2,532	3.1%	6.6%	9.7%
Australia (Total)	\$50,793	\$93,910	\$144,704	4.0%	7.3%	11.3%

Source: ABS (2007, 2008a, 2010a, 2010c, 2011a, 2011b, 2011f), AECgroup



Table C.11: Unpaid Support Care Work as a percentage of GSP/GDP (Replacement Cost), 2009-10

States	Unpaid Support Care (\$M)			GSP /GDP Contribution (%)		
	Male	Female	Total	Male	Female	Total
New South Wales	\$70,078	\$86,881	\$156,959	17.2%	21.4%	38.6%
Victoria	\$46,325	\$66,247	\$112,572	15.4%	22.0%	37.3%
Queensland	\$28,778	\$63,997	\$92,775	11.8%	26.2%	38.0%
South Australia	\$11,376	\$18,074	\$29,450	14.2%	22.5%	36.7%
Western Australia	\$18,319	\$25,238	\$43,557	9.9%	13.7%	23.6%
Tasmania	\$2,737	\$5,896	\$8,633	11.7%	25.3%	37.0%
Northern Territory	\$1,495	\$2,833	\$4,328	9.2%	17.4%	26.6%
Australian Capital Territory	\$2,542	\$5,371	\$7,912	9.8%	20.7%	30.4%
Australia (Total)	\$181,649	\$274,537	\$456,186	14.1%	21.4%	35.5%

Source: ABS (2007, 2008a, 2010a, 2010c, 2011a, 2011b, 2011f), AECgroup

Table C.12: Total Value Unpaid Support Care Work (Replacement Cost), 2009-10

States	Male (\$M)	Female (\$M)	Total (\$M)	Share (%)*
New South Wales	\$88,595	\$117,123	\$205,717	34.2%
Victoria	\$59,155	\$89,132	\$148,287	24.7%
Queensland	\$36,988	\$84,576	\$121,564	20.2%
South Australia	\$14,890	\$24,551	\$39,441	6.6%
Western Australia	\$23,921	\$34,252	\$58,173	9.7%
Tasmania	\$3,619	\$7,968	\$11,588	1.9%
Northern Territory	\$1,924	\$3,752	\$5,676	0.9%
Australian Capital Territory	\$3,351	\$7,094	\$10,444	1.7%
Australia (Total)	\$232,442	\$368,448	\$600,890	100.0%

Note:* It refers to the contribution of each state in the national total value of unpaid care work in 2009-10

Source: ABS (2007, 2008, 2010a, 2010c, 2011a, 2011b, 2011f), AECgroup

Table C.13: Total Unpaid Care Work Contribution as a percentage of GSP/GDP (Replacement Cost), 2009-10

States	Male (%)	Female (%)	Total (%)
New South Wales	21.8%	28.8%	50.6%
Victoria	19.6%	29.6%	49.2%
Queensland	15.1%	34.6%	49.8%
South Australia	18.5%	30.6%	49.1%
Western Australia	13.0%	18.6%	31.5%
Tasmania	15.5%	34.1%	49.6%
Northern Territory	11.8%	23.1%	34.9%
Australian Capital Territory	12.9%	27.3%	40.2%
Australia (Total)	18.1%	28.7%	46.8%

Note: Total unpaid care work contribution to GSP/GDP may not equal to sum of interactive and support unpaid care contributions owing to rounding.

Source: ABS (2007, 2008, 2010a, 2010c, 2011a, 2011b, 2011f), AECgroup

Opportunity Cost Method

Table C.14: Unpaid Interactive Care Work as a percentage of GSP/GDP (Opportunity Cost), 2009-10

States	Unpaid Interactive Care (\$M)			GSP /GDP Contribution (%)		
	Male	Female	Total	Male	Female	Total
New South Wales	\$17,845	\$35,614	\$53,459	4.4%	8.8%	13.1%
Victoria	\$12,871	\$26,151	\$39,022	4.3%	8.7%	12.9%
Queensland	\$10,510	\$20,340	\$30,850	4.3%	8.3%	12.6%
South Australia	\$3,590	\$7,572	\$11,162	4.5%	9.4%	13.9%
Western Australia	\$6,446	\$11,055	\$17,501	3.5%	6.0%	9.5%
Tasmania	\$1,045	\$2,447	\$3,492	4.5%	10.5%	15.0%
Northern Territory	\$571	\$1,012	\$1,584	3.5%	6.2%	9.7%
Australian Capital Territory	\$883	\$1,887	\$2,770	3.4%	7.3%	10.7%
Australia (Total)	\$53,761	\$106,078	\$159,840	4.2%	8.3%	12.4%

Source: ABS (2007, 2008, 2010a, 2010c, 2011a, 2011b, 2011f), AECgroup

Table C.15: Unpaid Support Care Work as a percentage of GSP/GDP (Opportunity Cost), 2009-10

States	Unpaid Support Care (\$M)			GSP /GDP Contribution (%)		
	Male	Female	Total	Male	Female	Total
New South Wales	\$70,059	\$110,289	\$180,348	17.2%	27.1%	44.3%
Victoria	\$50,531	\$80,985	\$131,516	16.8%	26.9%	43.6%
Queensland	\$41,261	\$62,990	\$104,251	16.9%	25.8%	42.7%
South Australia	\$14,093	\$23,448	\$37,541	17.5%	29.2%	46.7%
Western Australia	\$25,306	\$34,234	\$59,540	13.7%	18.6%	32.3%
Tasmania	\$4,103	\$7,577	\$11,680	17.6%	32.5%	50.0%
Northern Territory	\$2,243	\$3,135	\$5,378	13.8%	19.3%	33.1%
Australian Capital Territory	\$3,468	\$5,844	\$9,311	13.3%	22.5%	35.8%
Australia (Total)	\$211,063	\$328,501	\$539,564	16.4%	25.6%	42.0%

Source: ABS (2007, 2008, 2010a, 2010c, 2011a, 2011b, 2011f), AECgroup

Table C.16: Total Unpaid Care Work, (Opportunity Cost), 2009-10

States	Male (\$M)	Female (\$M)	Total (\$M)	Share (%)*
New South Wales	\$87,904	\$145,903	\$233,807	33.4%
Victoria	\$63,402	\$107,136	\$170,538	24.4%
Queensland	\$51,770	\$83,330	\$135,101	19.3%
South Australia	\$17,683	\$31,019	\$48,703	7.0%
Western Australia	\$31,752	\$45,289	\$77,041	11.0%
Tasmania	\$5,148	\$10,024	\$15,171	2.2%
Northern Territory	\$2,814	\$4,147	\$6,961	1.0%
Australian Capital Territory	\$4,351	\$7,730	\$12,082	1.7%
Australia (Total)	\$264,825	\$434,579	\$699,404	100.0%

Note:* It refers to the contribution of each state in the national total value of unpaid care work in 2009-10

Source: ABS (2007, 2008, 2010a, 2010c, 2011a, 2011b, 2011f), AECgroup

Table C.17: Total Unpaid Care Work as a percentage of GSP/GDP, (Opportunity Cost), 2009-10

States	Male (%)	Female (%)	Total (%)
New South Wales	21.6%	35.9%	57.5%
Victoria	21.0%	35.5%	56.6%
Queensland	21.2%	34.1%	55.3%
South Australia	22.0%	38.6%	60.6%
Western Australia	17.2%	24.6%	41.8%
Tasmania	22.1%	42.9%	65.0%
Northern Territory	17.3%	25.5%	42.8%
Australian Capital Territory	16.7%	29.7%	46.5%
Australia (Total)	20.6%	33.8%	54.5%

Note: Total unpaid care work contribution to GSP/GDP may not equal to sum of interactive and support unpaid care contributions owing to rounding issues.

Source: ABS (2007, 2008, 2010a, 2010c, 2011a, 2011b, 2011f), AECgroup



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