



**The value of informal care in 2020**

Carers Australia

May 2020

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# Glossary

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ABS	Australian Bureau of Statistics
ADL	Activities of daily living
AIFS	Australian Institute of Family Studies
AIHW	Australian Institute of Health and Welfare
ANZSCO	Australia and New Zealand Standard Classification of Occupations
AWE	Average weekly earnings
CURF	Confidentialised Unit Record File
GDP	Gross Domestic Product
US	United States

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# Executive summary

## About this report

In this report, Deloitte Access Economics estimates the total value of informal care provided in Australia today and examines the implications of demographic trends and projections for informal care in the future. Informal unpaid carers provide care to others in need of assistance or support and are usually friends or family of the person in need. They make a significant contribution to the care and wellbeing of people with a disability, mental illness, chronic condition, terminal illness and the frail aged.

**Section 1** identifies who Australia's carers are and provides a demographic profile of carers and their characteristics.

**Section 2** provides an estimate of the replacement cost value of the total amount of informal care provided in Australia in 2020 and discusses this value in the context of existing literature on other domestic and international studies.

**Section 3** provides an estimate of the opportunity cost value of informal care provided in Australia in 2020.

**Section 4** forecasts the supply and demand for informal carers over the next ten years and includes qualitative analysis of the issues raised by this analysis, including changes in the propensity to care and policy implications.

The contribution of informal caring is not captured in economic measures such as Gross Domestic Product (GDP), unlike that of formal carers. Calculating the value of informal carers is a step towards recognising their contributions and opening a dialogue on how to best support these carers to enhance their utilisation in the Australian labour market and wellbeing outcomes.

## Demographics of informal carers in 2020

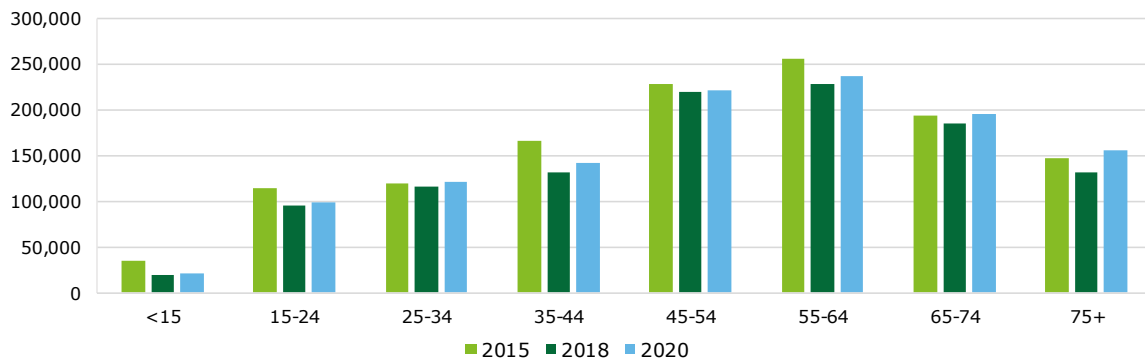
In 2015, it was estimated that there were around 2.7 million informal carers in Australia providing informal care to people requiring assistance due to age or disability.<sup>1</sup> The latest data from the SDAC 2018 showed that there were an estimated 2.65 million informal carers, equivalent to approximately 10.8% of all Australians. This represents a decrease of 0.8 percentage points from 11.6% in 2015.

Now in 2020, it is estimated that there are almost **2.8 million informal carers**, comprised of around **906,000 primary carers** in Australia and **1.9 million non-primary carers**. This represents a **5.5% increase** in the number of carers since 2018 due to population growth. Chart i presents the distribution of informal carers in Australia by age for years 2015, 2018 and 2020.

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<sup>1</sup> Australian Bureau of Statistics (ABS) 2016, Disability, Ageing and Carers, Australia: Summary of Findings, 2015, cat. no. 4430.0, ABS, Canberra.

Chart i: Distribution of informal carers in Australia by age, 2015 to 2020



Source: Deloitte Access Economics estimates.

Most hours of informal care are provided by primary carers. These individuals are estimated to spend an **average of 35.2 hours per week providing care** compared with an assumed 5 hours of weekly care for non-primary carers. For primary carers, 28% spend more than 60 hours per week, while 25% spend between 1 and 9 hours per week.

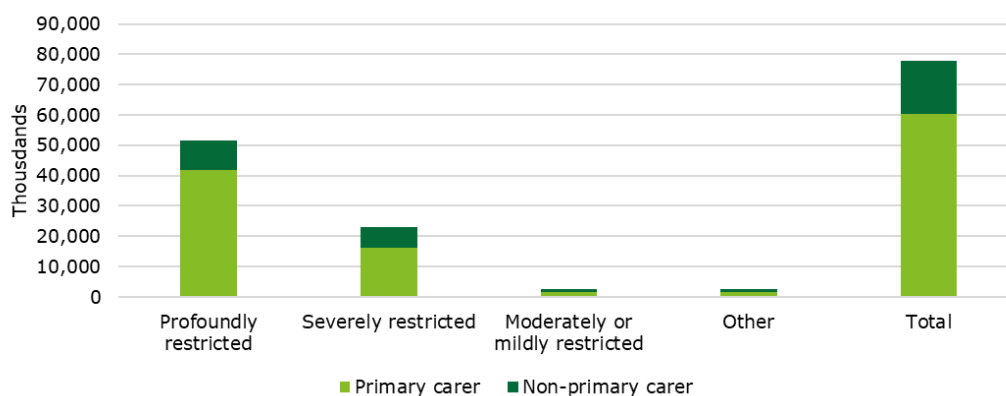
These caring requirements place a significant burden of carers, forcing many to either reduce their hours worked or withdraw from the labour force altogether. The estimated **age-standardised full-time employment rate for primary carers is 23.7%** in 2020, in comparison to the **population average of 43.1%**. In contrast, 23.6% of primary carers are employed part-time (age-standardised), compared with 21.9% for the general population.

### Replacement cost of informal care in 2020

The **replacement cost method** measures the cost of 'buying' an equivalent amount of care from the formal sector if the informal care were not supplied. Primary informal carers were estimated to provide an **average of 35.2 hours of care per week** in 2020, while non-primary carers are assumed to spend 5 hours per week. Based on the approximate 906,000 primary carers and 1.9 million non-primary carers, it is estimated that a total of nearly **2.2 billion hours of care** were provided in 2020. This is comprised of almost **1.7 billion hours from primary carers and 491 million from non-primary carers**.

Our analysis found that the average hourly cost of employing a formal carer to replace an informal carer, with all relevant loadings, was estimated to be \$36.12 in 2020. Based on this average hourly replacement cost, it was estimated that the **total cost to replace all informal care in 2020 is \$77.9 billion**.

Chart ii: Replacement cost of informal care in 2020 by level of disability



Source: Deloitte Access Economics analysis.

Recipients of care with a **profound disability account for \$51.6 billion** of the total replacement value, followed by **\$23.1 billion for those with a severe disability**. Moderate and mild disabilities account for \$2.6 billion (as shown in Chart ii).

### Opportunity cost of informal care in 2020

The **opportunity cost method** measures the formal sector productivity losses associated with caring, as time devoted to caring responsibilities is time which cannot be spent in the paid workforce.

Our analysis found that the **age-standardised rate of employment among primary carers is 47.3%**, compared to the average Australian rate of 65%. The rate for non-primary carers is also slightly lower than the average, at 62.1%. This means there are substantial differences in the employment outcomes for carers relative to non-caring Australians.

In total, an estimated **160,900 primary carers and 53,000 non-primary carers are assumed to not be in paid employment due to their caring role** (as shown in Table i). This is equivalent to approximately 1.51% of Australia's labour force (15 years and older) in 2020.

In 2020, the estimated earnings foregone for primary and non-primary carers was **\$11.4 billion** and **\$3.8 billion** respectively. Combined, the opportunity cost for all carers is **\$15.2 billion**. This is equivalent to 0.8% of GDP and 10.6% of the value of formal health care.

Table i: Opportunity cost of informal care, primary and non-primary, Australia 2020

Component	Primary carers	Non-primary carers	All carers
Difference in employment from Australian average (%)	17.7	2.9	7.5
No. persons not employed due to caring responsibilities (000s)	160.9	53.0	209.3
Average weekly earnings (\$)	1,361.5	1,361.5	1,361.5
<b>Lost earnings from lower workforce participation (\$ millions)</b>	<b>11,416.7</b>	<b>3,758.9</b>	<b>15,175.7</b>

Source: Deloitte Access Economics analysis with ABS SDAC (2018), ABS population projections (2018) and ABS Employee Earnings and Hours (2018) and Average Weekly Earnings (2019).

### Demand and supply of informal carers in the future

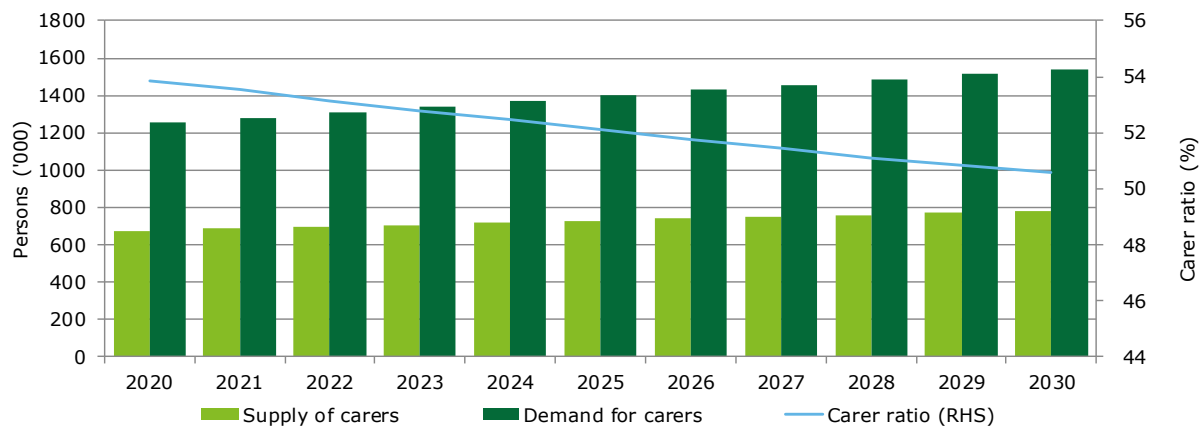
The future demand for informal care has been modelled separately for those aged 0-64 and those aged 65+.<sup>2</sup> In both cohorts, a need for care was assessed using the number of persons who have a profound or severe disability. For the younger cohort, care needs were assessed as being met through the formal sector if people received formal care daily, or if they lived in residential care accommodation.<sup>3</sup> For the older cohort, care needs were assessed as being met if the person lived in residential care accommodation. Age- and gender-specific disability rates, living arrangements and care arrangements from the SDAC were applied to Australian Series B population projections published by the ABS to determine the number of people requiring care in the coming decade.

The **demand for informal carers will grow from around 1.25 million in 2020 to 1.54 million in 2030**, representing a 23% total increase. In contrast, **the supply of informal carers will rise from 674,000 to 780,000**, a total growth of 16%. This will see the carer ratio fall by 3.2 percentage points from 53.8% in 2020 to 50.6% in 2030 (as shown in Chart iii).

<sup>2</sup> This represents a deviation from the approach taken in previous iterations of this report, where the supply and demand for informal carers was only modelled for those aged over 65 years. As such, the reported figures are not directly comparable to those previously reported.

<sup>3</sup> It should be noted that the residential care exclusion only applied to a small portion of the group, and that recent policy changes intends to phase out younger people living in residential aged care by 2025.

Chart iii: Demand and supply of informal carers, projected to 2030



Source: Deloitte Access Economics analysis.

Scenario analysis was conducted on the forecasts to determine how they change under a variety of potential supply-side impacts over 2020-2030. Under Scenario A, where propensity to care falls 20%, a **20.5% increase in the base case deficit of informal carers** was observed. A 20% decrease for females aged 25-64 (Scenario B) resulted in a **14.0% increase in the deficit** and a 20% increase in the propensity to care for those aged over 65 saw a **15.7% decrease in the deficit**.

Overall, the **male propensity to care has fallen 1.6 percentage points** from 10.9% in 2009 to 9.3% in 2018. Similarly, **female propensity to care declined by 1.2 percentage points**, from 13.4% to 12.3% observed over the same period. This may be attributed in part to differing life expectancies between men and women and higher rates of disability among older men.

Propensity to care is likely to be influenced by many factors in the future, such as:

- Current demographic trends in disproportionate population ageing
- Changes to Australia's societal structure such as smaller family sizes, higher divorce rates, rising childlessness and the increase of single-person households, which may reduce the pool of informal carers
- Rising rates of female participation in the labour force as well as older workers, resulting in lower propensity to care
- The increased availability of government-supported care in the home environment
- Changes in intergenerational attitudes and perceptions of caring

The widening carer gap has significant policy implications for Australia's future with the need to investigate possible solutions to help boost the propensity to supply care and to soften the demand for informal care where possible. There is a strong case to consider the following suggestions as part of a concerted policy effort to reduce the carer deficit:

- Greater flexibility in working arrangements to accommodate workers' caring responsibilities and employment preferences, such as improved carer leave
- Improvements in access to, and awareness of, carer support services such as respite care to encourage service utilisation and alleviate the impact of caring
- Further investigation of carer perceptions of the costs, and quality of formal care
- Adapting the formal care sector to meet the needs of older Australians from diverse backgrounds to improve the flexibility of care options.

This imperative was recently brought to broader public attention through the ongoing Royal Commission into Aged Care Quality and Safety. While focused on the aged care sector in Australia, many of the views and issues arising are also relevant to the broader care requirements of all Australians, including those living with a disability. Despite the complexity of the multitude of views



presented to the Commission, what is becoming clear is that a fundamental overhaul of the design, objectives, regulation and funding of aged care in Australia is required.

Carers are critical to the sustainability of the aged and disability care systems. They provide support and services that may otherwise be funded by the taxpayer, the estimated value of which is significant. Over the past 20 years, the role of carers has been recognised increasingly through various aged care and social policy reforms.

As demonstrated in this report, informal carers provide a significant contribution to the health and wellbeing of Australians in need of support and assistance, the magnitude of which only underscores the impending policy challenges faced by Australia. Greater recognition and awareness of carer demographics and preferences will ensure that approaches to social policy are responsive to the needs of carers and care recipients alike, resulting in improvements in welfare for Australia in the future.

**Deloitte Access Economics**

# 1 Carers in Australia

## Key findings

- It is estimated that there are almost **2.8 million informal carers**, comprised of around **906,000 primary carers** and **1.9 million non-primary carers** in Australia in 2020. This represents a **5.5% increase** in the number of carers since 2018 due to population growth.
- Approximately **60% of all carers are female**, which increases to **more than 70%** when considering **only primary caring**.
- Nearly **36% of primary carers** fall within lowest socioeconomic quintiles 1 and 2, compared to nearly **26% of non-primary carers** and **18% of non-carers**.
- Around **22% of carers** live in **inner regional** areas compared to 17% of non-carers.
- Primary carers spent an **average of 35.2 hours per week providing care**, with 28% spending more than 60 hours per week, while 25% only spend 1-9 hours per week.
- In 2020, it is estimated that **22% of primary carers were employed full-time** in comparison to the **population average of 43%**. In contrast, part-time employment for primary carers ranged between 29% and 34% for the age groups between 35 and 64 years old, compared with 22% and 23% for the general population.

Deloitte Access Economics was commissioned by Carers Australia to estimate the economic value of Australia's informal carers in 2020 and provide a forecast of the supply and demand of informal carers in Australia over the next ten years. This analysis updates previous work undertaken by Deloitte Access Economics for Carers Australia which estimated the economic value of informal carers in Australia in 2010 and 2015 published reports.

The contribution of informal caring is not captured in economic measures such as Gross Domestic Product (GDP), unlike that of formal carers. Calculating the value of informal carers is a step towards recognising their contributions and opening a dialogue on how to best support these carers to enhance utilisation in the Australian labour market and wellbeing outcomes.

### 1.1 Definition of informal caring

Informal care is generally defined as the unpaid care provided to older (65 years and over), dependent or disabled persons by a person with whom they have a social relationship, such as a spouse, parent, child, other relative, neighbour, friend or other non-kin connection. This may involve assistance with core activities such as mobility, self-care and communication or non-core activities such as help with household chores or other practical errands, transport to doctors or social visits, social companionship, emotional guidance or help with arranging professional care.<sup>4</sup> As such, many people receive informal care from more than one person.

Informal care can also include parenting and other forms of unpaid childcare. However, this report will focus on unpaid care provided to people with a disability, mental illness, chronic conditions, terminal illness and the elderly.

The most comprehensive profile of people receiving care and their carers in Australia is provided by the Australian Bureau of Statistics' (ABS) Survey of Disability, Ageing and Carers (SDAC). This national survey covers people living in private dwellings in urban and rural areas. People living in non-private dwellings – including care accommodation such as nursing homes, hostels and other facilities – are also within the scope of this survey. This report utilises data from the most recent

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<sup>4</sup> Triantafyllou, J. et al. 2010, *Informal care in the long-term care system*, European Centre for Social Welfare and Policy Research, available from: <https://www.euro.centre.org/downloads/detail/768>

SDAC in 2018, combined with ABS Population Projection data, to generate estimates for 2020.<sup>5,6</sup> Population projections are based on assumptions of future levels of fertility, life expectancy and migration, which are guided by recent population trends.

According to the SDAC, carers can be classified as primary or non-primary. A primary carer is a person aged 15 years and over who provides most of the informal care to a person with a disability or the core activities of mobility, self-care and communication. A non-primary carer is a person of any age who provides unpaid care with one or more of the core activity tasks but is not the main provider of informal care (i.e. not a primary carer), or a person who only provides assistance with non-core activities (such a transport and cognitive and emotional support).

## 1.2 Demographic profile of informal carers

The demographic profile of informal carers includes data on:

- number, age, gender, carer status and amount of care provided (Section 1.2.1)
- geographic location, income and employment status (Section 1.2.2)
- care needs of the care recipients (Section 1.2.3).

### 1.2.1 Number, age, gender, carer status and amount of care

This section draws on ABS data concerning the rate of informal care provision and population projections to estimate the number of informal carers in 2020. The rate of informal care provision is defined as the proportion of the population that provides some form of informal care. Data on the propensity to care has been most recently published for 2018 by the ABS, while population projections for 2020 are used to enable estimates for the number of carers in 2020.

In 2015, it was estimated that there were around 2.7 million informal carers in Australia providing informal care to people requiring assistance due to age or disability.<sup>7</sup> The latest data from the SDAC 2018 showed that there were an **estimated 2.65 million informal carers**, equivalent to approximately **10.8% of all Australians**. This represents a decrease of 0.8 percentage points from 11.6% in 2015.

This observed decrease in the number of informal carers is largely driven by a decreasing number of non-primary carers. This can be partially attributed to a decrease in the prevalence rate of disability, from 18.3% in 2015 to 17.7% in 2018.<sup>8,9</sup> Furthermore, the systematic roll out of the National Disability Insurance Scheme (NDIS) has helped to support people living with a disability and potentially alleviated the caring burden for informal carers to an extent.

Since the rollout of the NDIS, families and carers of participants in the scheme have experienced improved employment outcomes.<sup>10</sup> For participants who had been in the scheme for at least one year as at 30 June 2018, employment among carers of participants aged 0 to 14 had increased 3.1%, and for those aged 15 to 24, employment had risen 3.3%. Recognising the lower threshold to returning to work or working more hours for non-primary carers, it is likely that these improved employment outcomes at least partially explain the reduction in the total number of informal carers.

There has also been a gradual decrease in the propensity to provide care over the past 20 years, irrespective of age or gender. As detailed in the 2015 analysis, the primary reasons for this downward trend are demographic changes, social trends, changes in labour force participation among females and older Australians, and intergenerational attitude differences. Therefore, as

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<sup>5</sup> Australian Bureau of Statistics, Disability, Ageing and Carers, Australia, 2018, cat. No. 4430.0 (24 October 2019).

<sup>6</sup> Australian Bureau of Statistics, Population Projections, Australia, 2017 (base) - 2066, cat. No. 3222.0 (22 November 2018).

<sup>7</sup> Australian Bureau of Statistics (ABS) 2016, Disability, Ageing and Carers, Australia: Summary of Findings, 2015, cat. no. 4430.0, ABS, Canberra.

<sup>8</sup> Australian Bureau of Statistics (ABS) 2019, Disability, Ageing and Carers, Australia: Summary of Findings, 2018, cat. no. 4430.0, ABS, Canberra.

<sup>9</sup> While the total number of people with a disability has risen from around 4.3 million to 4.4 million between 2015 and 2018, the prevalence rate has decreased. Although the proportion of people with a disability aged 65 or above has increased from 41.9% to 44.5%, the ABS notes that this is largely due to an ageing population and increasing life expectancy, rather than an acceleration in the number of people obtaining a disability.

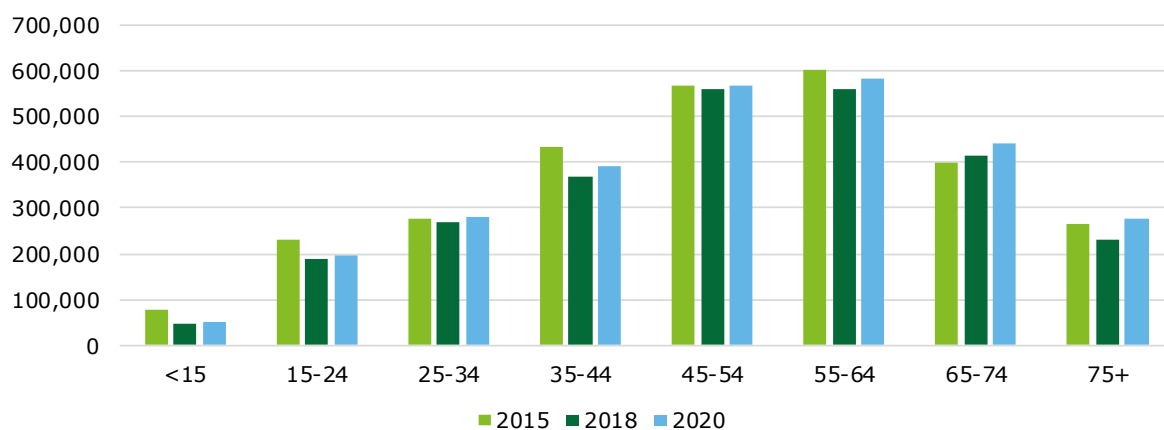
<sup>10</sup> National Disability Insurance Scheme (NDIS) 2019, Family and carer outcomes report, NDIA, Canberra.

Australia’s population continues to age, yet more females and older Australians enter the workforce or delay retirement, there are likely to be more elderly people and people living with a disability moving into the formal care sector. This coincides with greater investment in the formal care sector through the NDIS and community aged care programs, in recent years.

Nonetheless, there remains uncertainty around the propensity to care going forward, and the distribution of informal carers in 2020. As such, this report assumes that the prevalence of informal care in 2020 will remain the same as was reported in the SDAC 2018 and applies these prevalence rates to the 2020 Series B population projections published by ABS.

Chart 1.1 presents the estimated number of informal carers by age in 2015, 2018 and 2020, with the underlying data presented in Appendix A. The decrease in informal carers between 2015 and 2020 is more prevalent in the younger age categories, particularly those aged 15-24 (14.6% decrease), 35-44 (9.4%) and 55-64 years old (3.0%).

Chart 1.1: Informal carers in Australia by age, 2015 to 2020



Source: Deloitte Access Economics analysis using ABS (2018).

Table 1.1 below presents the estimated number of informal carers by age, gender and carer type in Australia in 2020 based on these inputs. It is estimated that there are almost **2.8 million informal carers**, comprised of around **906,000 primary carers** (nearly one in every three carers) and **1.9 million non-primary carers** in Australia. This represents a **5.5% increase** in the number of carers since 2018 due to population growth.

This data shows that the rate of informal care provision is not uniformly distributed among the population. Approximately 57% of all carers are female, which increases to almost 72% when considering only primary caring. This varies further by age, with 80% of primary carers aged 24-34 and 82% of those aged 35-44 being female. The likelihood of providing care gradually increases with age in men, particularly for primary care. From the age of 75 years and older, the propensity to care drops notably for females, below that of males.

Table 1.1: Number of informal carers by age, gender and type (000s), Australia (2020)

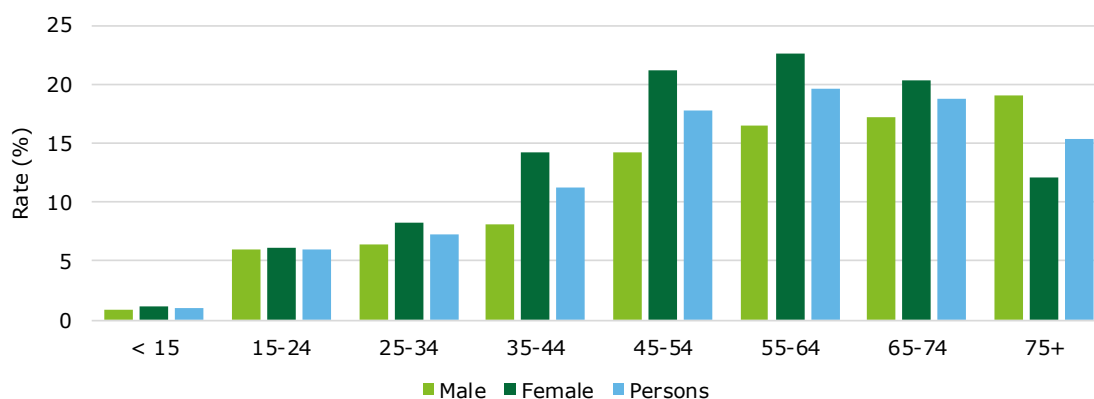
Age	Primary carers			Non-primary carers <sup>^</sup>			All carers		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
<15	-	-	-	21	29	50	21	29	50
15-24	7	14	22	92	83	174	99	97	196
24-34	15	63	79	106	94	200	121	158	279
35-44	24	111	135	117	140	257	141	251	392
45-54	52	151	203	170	196	365	222	347	569
55-64	59	154	213	178	193	370	237	347	584
65-75	49	107	157	146	138	284	195	245	440
75+	49	47	97	107	73	180	156	120	277
<b>Total</b>	<b>256</b>	<b>649</b>	<b>906</b>	<b>936</b>	<b>945</b>	<b>1,881</b>	<b>1,193</b>	<b>1,594</b>	<b>2,787</b>

Source: ABS (2018).

Note: Totals may not sum due to rounding. <sup>^</sup>Non-primary caring includes people younger than 15 years old which is not the case for primary caring.

Chart 1.2 presents the rates of informal care (or propensity to care) by age and gender as a proportion of the total population in Australia in 2020. As illustrated, the rate of care is higher in females than in males for all age groups other than for those aged 75 years or older (See Appendix A for details). This change in the relative propensity to care among males and females over the age of 75 may be attributed in part to lower male life expectancy. The earlier loss of male partners means that older females are more likely to be widowed while older males are more likely to still be partnered/married.<sup>11</sup> In older age groups, care is predominantly provided to a partner, with 76% of all primary carers aged 65 and over caring for a spouse or partner, which makes surviving older men more likely to be carers than older women.<sup>12</sup> The larger proportion of women that are informal carers between the ages of 25 and 54 can be attributed to the care of elderly parents and children with caring needs.

Chart 1.2: Rates of informal care provision by age and gender, Australia (2020)



Source: Deloitte Access Economics analysis using ABS (2018).

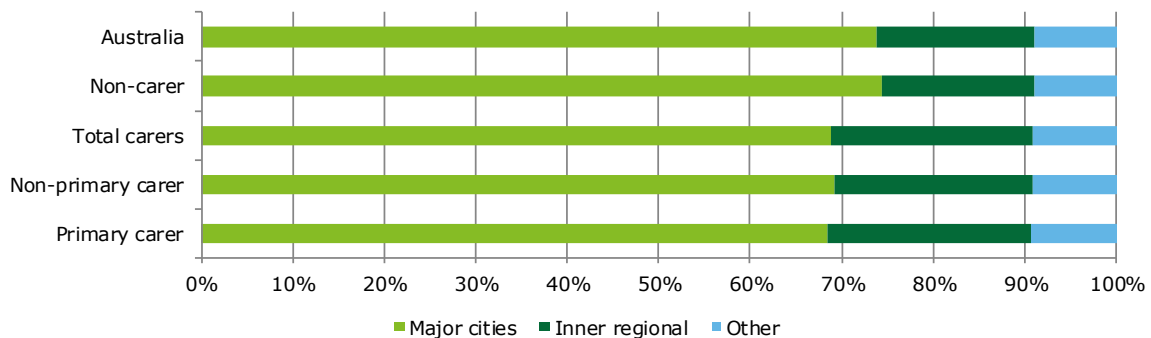
<sup>11</sup> Australian Institute of Health and Welfare, Australia's Welfare 2015, cat. no. AUS 189.

<sup>12</sup> Ibid

### 1.2.2 Location, income and employment status

This section compares the geographic location, income distribution and employment status of informal carers with the general population. Carers are more likely to live outside major cities as shown in Chart 1.3. Around 22% of carers live in inner regional areas compared to 17% of non-carers. The distribution of geographic location of primary and non-primary carers is similar.

Chart 1.3: Geographic location of carers, Australia, 2020



Source: ABS (2018).

The disparity between carers and non-carers in their geographic location can be attributed to several factors. First, those that live in regional areas report higher rates of smoking, obesity and alcohol consumption — all associated with poorer health outcomes. The burden of disease is 1.4 times higher in remote and very remote areas compared to major cities and 1.5 times higher in the lowest socioeconomic group compared to the highest. As a result, there is a greater need for care within these population groups.<sup>13</sup> In addition, regional areas may lack formal care services associated with poor health, disability and old age. This may result in greater reliance on family and friends for care in these areas. Even if formal care services are available, they may not be affordable, as those living in regional areas reporting lower incomes than those in urban areas.<sup>14</sup> Indigenous Australians are also more likely to live in rural areas and report lower health outcomes and greater socioeconomic disadvantage, thus requiring more informal care.<sup>15</sup>

Chart 1.4 compares data by weekly cash income of carers and non-carers. Carers usually live in households with lower average gross incomes than non-carers. This trend is especially pronounced for primary carers. Nearly 36% of primary carers fall within quintiles 1 and 2, compared to nearly 26% of non-primary carers and 18% of non-carers. The disparity in income between carers and non-carers can be attributed to the extra time away from work needed to take care of someone as well as the poorer health outcomes in low socioeconomic households.<sup>16</sup> It should be noted that this data does not include those over 65, which tends to be low.

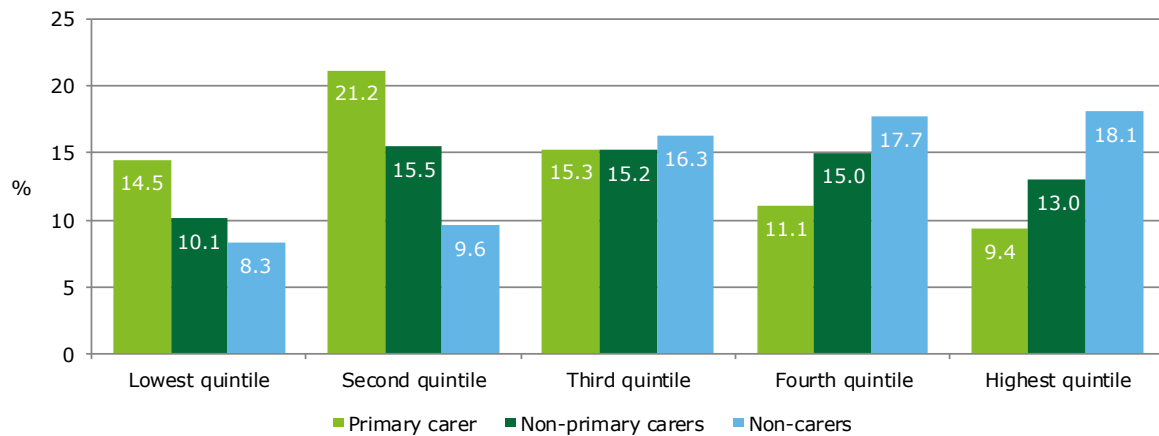
<sup>13</sup> Australian Institute of Health and Welfare, Australian Burden of Disease Study: impact and causes of illness and death in Australia 2015, 2015, cat. No. BOD 25 (2019)

<sup>14</sup> Commonwealth Financial Planning, The tyranny of distance? (report commissioned by Carers Australia, 2009) <[https://www.carersaustralia.com.au/storage/20091007\\_Tyranny%20of%20Distance.pdf](https://www.carersaustralia.com.au/storage/20091007_Tyranny%20of%20Distance.pdf)>

<sup>15</sup> Australian Institute of Health and Welfare, Rural & remote health, 2019, cat. No. PHE 255 (22 October 2019)

<sup>16</sup> Australian Institute of Health and Welfare, Australia's health 2016, 2016, cat. No. AUS 199

Chart 1.4: Carer status by weekly cash income quintiles (15 – 64 years), Australia



Source: ABS (2018).

Chart 1.5 and Chart 1.6 compare the full-time and part-time employment rates of carers to those of ‘average’ Australians. Employment rates are calculated as the ratio of the employed to the working age population. Employment rates were estimated for 2020 based on the 2020 population projections published by the ABS.<sup>17</sup> As expected, full-time employment rates are markedly lower for primary carers, compared to the average Australian, while the inverse is true for part-time employment.

In 2020, it is estimated that **22% of primary carers were employed full-time in comparison to the population average of 43%**. Most Australians enter full-time work at around age 20 and remain in full-time employment until they retire after the age of 64.<sup>18</sup>

Primary carer full-time employment rates are more varied throughout the age groups. The decrease in full-time employment rates from the age of 25 may be to care for elderly parents or children with special care needs. The markedly lower full-time employment rate among primary carers after age 55 can partially be attributed to difficulty re-entering the workforce at this age after spending time out caring, as well as to declining health of this cohort. Older primary carers tend to experience more health issues compared to the rest of the Australian population – limiting them further to engage in full-time work.<sup>19</sup>

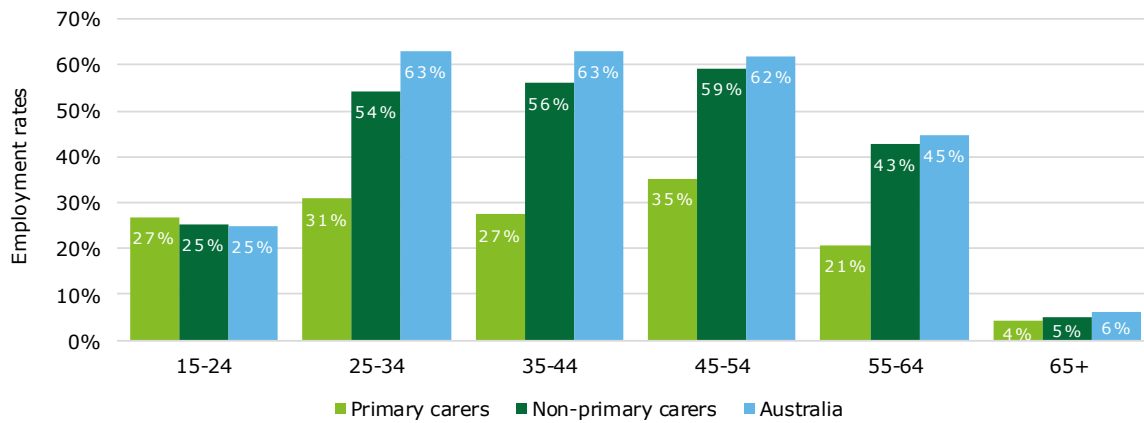
<sup>17</sup> Australian Bureau of Statistics, Population Projections, Australia, 2017 (base) - 2066, cat. No. 3222.0 (22 November 2018).

<sup>18</sup> Notes these rates are not age-standardised and differ from the rates used as part of the opportunity cost calculation

<sup>19</sup> The Australian National University, *Care to Work? Expanding Choice and Access to Workforce Participation for Mature Aged Women Carers* (2012)

<[https://devpolicy.crawford.anu.edu.au/public\\_policy\\_community/content/doc/Cass%20paper%2028-11.pdf](https://devpolicy.crawford.anu.edu.au/public_policy_community/content/doc/Cass%20paper%2028-11.pdf)>

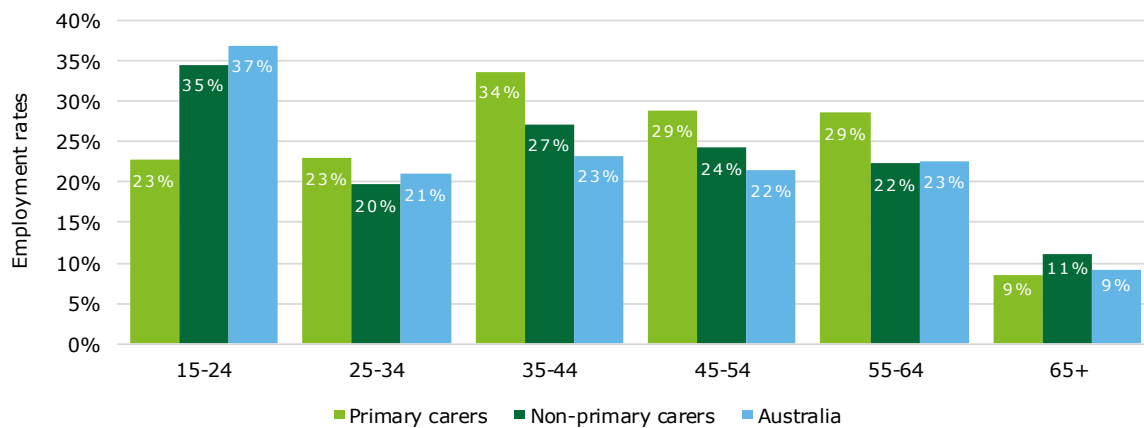
Chart 1.5: Full-time employment rates by age group, carer status, Australia (2020)



Source: Deloitte Access Economics analysis using ABS (2018).

Conversely, primary carers, with the exception of young people aged between 15 and 24, have higher rates of part-time employment in comparison to the average Australian as shown in Chart 1.6. Primary carer part-time employment rates range between 29% and 34% for the age groups between 35 and 64 years old, compared to 22% and 23% for the general population. This may be because part-time work allows carers to better manage their care responsibilities, or, as a result of their care responsibilities, only part-time work is available to them.

Chart 1.6: Part-time employment rate by age group, carer status, Australia (2020)



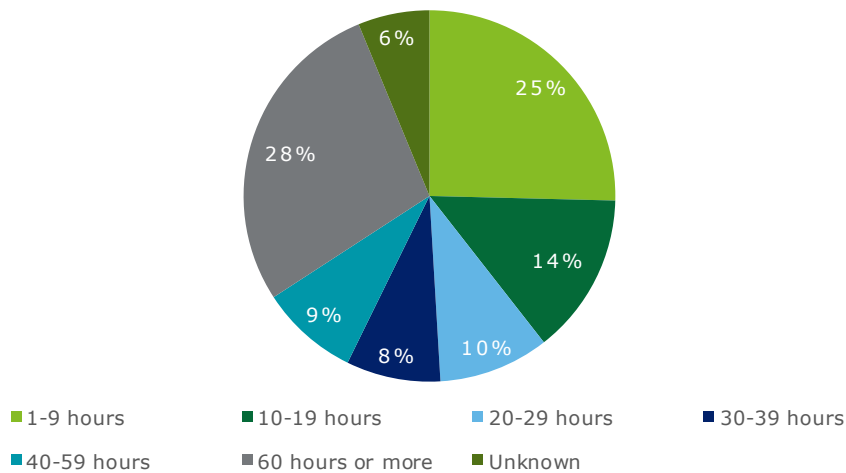
Source: Deloitte Access Economics analysis using ABS (2018).

### 1.2.3 Care needs

As shown in Chart 1.7, on average around 28% of primary carers spend more than 60 hours per week caring for the main recipient of care, while 25% only spend 1-9 hours per week. This discrepancy could be attributed to the different levels of care needed for those with different levels of disability.



Chart 1.7: Average number of hours spent caring each week by primary carers

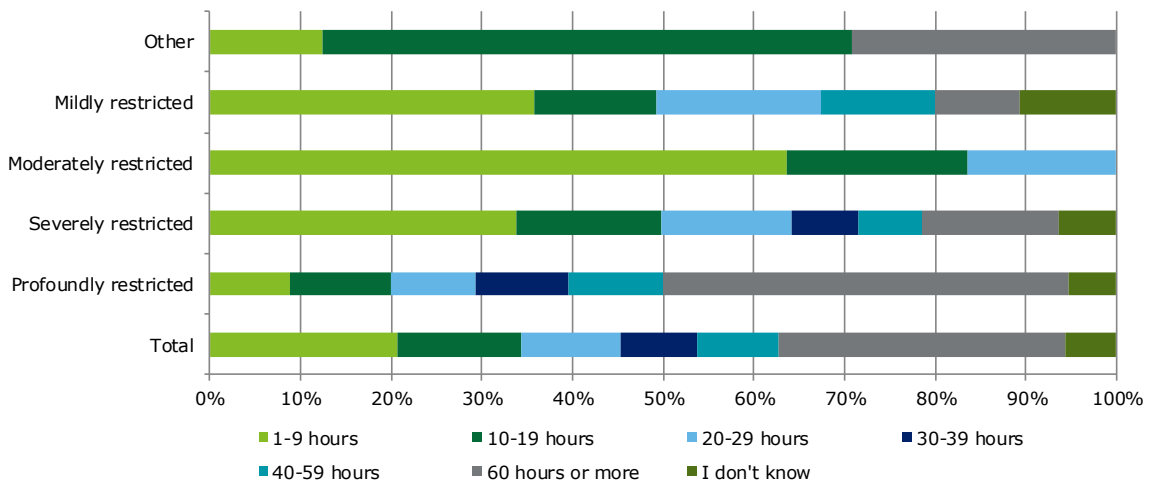


Source: ABS (2018).

Chart 1.8 illustrates the care needs by the different levels of disability. An estimated 44% of primary carers spend more than 60 hours per week caring for individuals that have profoundly restricted core activity, compared to 39% who spend less than 10 hours per week caring for someone with mildly restricted core activity. Only 10% of primary carers undertake 60 hours or more of care for this group. Core activities include self-care, body movement and communication.

The distribution of care hours for primary carers providing care to those with moderately restrictive conditions shows a deviation from the trend. This was similar in the previous analysis done in 2015.<sup>20</sup> The anomaly can be attributed to the relatively small sample size of respondents for this question (only 2% of respondents across the sample of 681,700 surveyed).

Chart 1.8: Weekly hours of care, primary carers, main care recipient's disability status

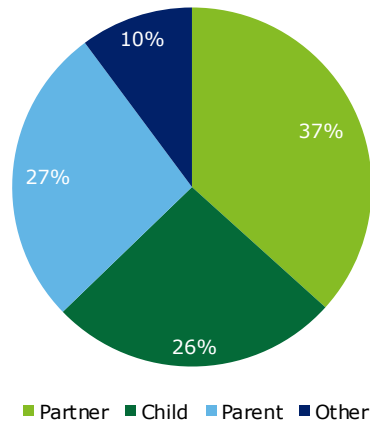


Source: ABS (2018).

<sup>20</sup> Deloitte Access Economics, *The economic value of informal care in Australia in 2015* (report commissioned by Carers Australia, 2015) <<https://www2.deloitte.com/au/en/pages/economics/articles/economic-value-informal-care-Australia-2015.html>>

As expected, informal care is most often provided by family members, as shown in Chart 1.9. More than a third of primary care is provided by partners. Other carers – who are relatives, neighbours or friends make up the remaining 10% of primary carers.

Chart 1.9: Primary carers – relation to main recipient of care



Source: ABS (2018).

## 2 Replacement cost valuation

### Key findings

- Primary informal carers provided an **average of 35.2 hours of care per week** in 2020, for a total of nearly **2.2 billion hours of care**. This is comprised of almost 1.7 billion hours from primary carers and 491 million from non-primary carers.
- Based on an average hourly replacement cost of \$36.1, our analysis found that the **total cost to replace all informal care in 2020 is \$77.9 billion**.
- Recipients of care with a **profound disability account for \$51.6 billion** of the total replacement value, followed by **\$23.1 billion** for those with a **severe disability**. **Moderate and mild disabilities** account for \$2.6 billion.

Informal carers are not paid for providing care but their contribution is not 'free' in an economic sense. There are three potential methodologies which can be used to place a dollar value on informal care.

- The **replacement cost method** measures the cost of 'buying' an equivalent amount of care from the formal sector if the informal care were not supplied.
- The **opportunity cost method** measures the formal sector productivity losses associated with caring, as time devoted to caring responsibilities is time which cannot be spent in the paid workforce.
- The **self-valuation method** measures how much carers themselves feel they should be paid for undertaking their responsibilities.

The scope of this section of the report employs a **replacement cost method**. Section 3 applies the **opportunity cost method**.

### 2.1 Methodology and data

Section 1.2.3 examined the average hours of weekly care provided by primary carers depending on the level of disability of the main recipient of care. Data from this section were used as the basis for estimating the hours of informal care provided by Australians in 2020.

Data from SDAC on the weekly hours of care provided is reported in bands, making it necessary to impute the average number of hours of care provided per week. Due to sample size restrictions, weekly hours of care reported for recipients with moderate or mild restrictions were grouped to obtain a more accurate representation of the distribution of care.

The SDAC also only collects such information for those classified as primary carers, meaning that no data were available to impute the average weekly hours of care provided by non-primary carers. Therefore, non-primary carers were assumed to spend an average of five hours per week providing care irrespective of the level of disability of the recipient.<sup>21</sup> This follows the methodology of the 2015 analysis.<sup>22</sup> The imputed averages for primary carers are presented in Table 2.1 and are used for costing purposes throughout this section.

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<sup>21</sup> While this assumed average is conservative, the way caring hours are recorded in SDAC means that only those hours spent caring above that which would be regularly required are included. These hours are spent on assisting with either core activities (mobility, self-care or communication) or non-core activities (such as health care, household chores and meal preparation).

<sup>22</sup> Deloitte Access Economics, 2015. *The economic value of informal care in Australia in 2015*. Canberra: Australia. <<https://www.carersaustralia.com.au/storage/Access%20Economics%20Report.pdf>>

Table 2.1: Average hours of care provided per week for primary carers

SDAC band (hours)	Imputed average (hours)
1-9	5
10-19	15
20-29	25
30-39	35
40-59	50
60+	65

Source: Deloitte Access Economics estimates using ABS (2018)

Chart 1.9 of Section 1 provides detail on the proportion of primary carers caring for people categorised by their level of disability. These proportions were applied to the numbers of primary carers to derive current estimates of the number of primary carers by disability status of the main recipient of care. Applying these estimates and the number of non-primary carers to their respective imputed average hours of care provided (per Table 2.1) gave the average weekly hours of informal care provided in Australia in 2020 for each level of restriction.

Our analysis found that primary informal carers for people with profound restrictions provided an average of 44 hours of care per week, compared with 24.7 hours per week for those who are severely restricted, 20.2 hours per week for those who are moderately or mildly restricted. An average of 24.7 hours per week was required for those whose conditions do not restrict their core activities.

Table 2.2 presents the estimated annual hours of care provided in Australia in 2020 by primary and non-primary carers, disaggregated by the level of disability of the recipient of care. Overall, a total of nearly **2.2 billion hours of care** will be provided in 2020 by informal carers, comprised of almost 1.7 billion hours from primary carers and 491 million from non-primary carers.

Table 2.2: Care hours provided (millions) by carer type and level of disability (2020)

Carer type	Profound	Severe	Moderate or mild	Other <sup>^</sup>	Total
Primary	1,155.9	450.0	47.4	13.4	1,666.6
Non-primary	272.1	188.6	24.3	5.6	490.5
<b>Total</b>	<b>1,428.0</b>	<b>638.6</b>	<b>71.7</b>	<b>19.0</b>	<b>2,157.2</b>

Source: Deloitte Access Economics estimates using ABS (2018)

Note: <sup>^</sup>Refers to people with a disability that does not affect core activities. Totals may not sum due to rounding.

The replacement value of informal care provided by carers was then calculated by multiplying these hours spent caring by the estimated average wage rates for carers in the formal sector. For this analysis, the average hourly wage for formal sector carers was derived in accordance with the Australian and New Zealand Standard Classification of Occupations (ANZSCO). Within the ANZSCO classifications, our analysis looked at the average wage of full-time personal carers and assistants employed in the formal sector. As of May 2018, the average wage for these carers was \$30.70 per

hour, or \$1,151 for a 37.5-hour week.<sup>23</sup> This is inclusive of personal income tax and superannuation and includes payment of overtime for after-hours work.

However, there are substantial on-costs attributable to these carers such as the wage for supervisors, managers or administrative support staff and other capital overheads. To account for these additional costs, loadings for on-costs were calculated by estimating a yearly earnings figure for healthcare and social assistance workers based on weekly cash earnings data. A proportional estimate was then derived of labour cost estimates. Adjustments were also made for the wage growth expected between May 2019 and May 2020, which was taken as the average of the annual growth rates in average weekly earnings (AWE) between May 2010 and May 2019. Finally, loadings for capital and administrative overheads were based on the relative shares of capital expenditure and administrative costs to other areas of recurrent spending in Australia's formal health sector.<sup>24</sup>

Table 2.3 below presents the base wage rate for personal carers and assistants as well as the loadings applied to arrive at the final hourly wage rate used as the basis for estimating the cost of replacing informal care. When these loadings were added, the average hourly cost of employing a formal carer to replace an informal carer was estimated to be \$36.12, or \$1,354 for a 37.5-hour week in 2020. These loadings reflect the fact that formal sector community care involves more than just labour inputs.

Table 2.3: Replacement valuation of informal care, unit cost component

Component	Loading (%)	Hourly rate (\$)
Hourly rate including overheads – May 2019	-	33.12
Loading for growth in AWE – May 2019 to November 2019	1.21	0.40
Loading for on-costs	0.23	0.07
Loading for capital	5.25	1.74
Loading for supervision & administration	2.35	0.78
<b>Total hourly rate including overheads – May 2020</b>	<b>-</b>	<b>36.12</b>

Source: Deloitte Access Economics estimates using data from ABS average weekly earnings (2018).

## 2.2 Results

Table 2.4 below outlines the replacement cost of informal care, disaggregated by carer type and the level of disability of the main recipient of care.

<sup>23</sup> Australian Bureau of Statistics (ABS) 2019, *Average weekly earnings, Australia, May 2019*, cat. no. 6302.0, ABS, Canberra.

<sup>24</sup> Australian Institute of Health and Welfare (AIHW) 2014, *Health expenditure Australia 2012-13: analysis by sector*, cat. no. HWE 62, Australian Government, Canberra.

Table 2.4: Replacement cost of informal care, by level of disability, Australia 2020

Component	Profound	Severe	Moderate or mild	Other <sup>^</sup>	Total
<b>Primary carers</b>					
Average hours of care per week	44.0	24.7	20.2	24.7	35.2
Number of primary carers (000s)	505.2	350.2	45.1	10.4	910.9
Total hours per annum (millions)	1,155.9	450.0	47.4	13.4	1,666.6
Hourly replacement cost (\$)	36.1	36.1	36.1	36.1	36.1
<i>Replacement cost (\$, millions)</i>	<i>41,747.7</i>	<i>16,251.8</i>	<i>1,711.1</i>	<i>483.5</i>	<i>60,194.1</i>
<b>Non-primary carers</b>					
Average hours of care per week	5	5	5	5	5
Number of non-primary carers (000s)	1,046.4	725.3	93.4	21.6	1,886.7
Total hours per annum (millions)	272.1	188.6	24.3	5.6	490.5
Hourly replacement cost (\$)	36.1	36.1	36.1	36.1	36.1
<i>Replacement cost (\$, millions)</i>	<i>9,826.1</i>	<i>6,810.9</i>	<i>876.7</i>	<i>202.9</i>	<i>17,716.6</i>
<b>Total replacement cost (\$, millions)</b>	<b>51,573.8</b>	<b>23,062.7</b>	<b>2,587.8</b>	<b>686.4</b>	<b>77,910.7</b>

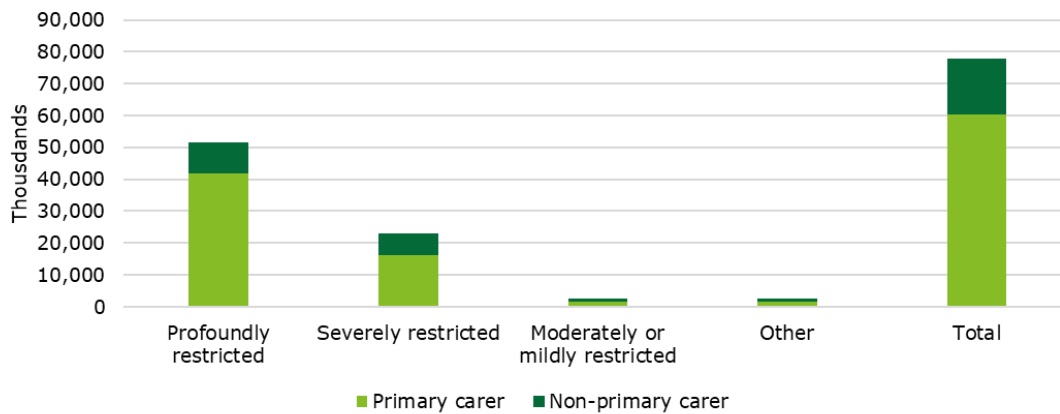
Source: Deloitte Access Economic estimates.

Note: <sup>^</sup>Refers to people with a disability that does not affect core activities. Totals may not sum due to rounding.

In total, it is estimated that approximately **2.8 million informal carers** spent nearly **2.2 billion hours providing care** in 2020. Based on these inputs, **the total cost of informal care in 2020 is estimated to be \$77.9 billion. Primary carers account for most of this cost, with a replacement value of nearly \$60.2 billion compared with \$17.7 billion for non-primary carers.**

As shown in Chart 2.1, recipients with a profound disability account for **\$51.6 billion** of the total replacement value, followed by **\$23.1 billion** for those with a severe disability. Moderate and mild disabilities account for approximately **\$2.6 billion**, while the remaining **\$0.7 billion** is attributable to people with a disability that does not affect core activities ('Other'), respectively.

Chart 2.1: Replacement cost of informal care in 2020 by level of disability



Source: Deloitte Access Economics analysis.

### 2.3 Discussion

One possible limitation of this approach is that the replacement cost does not consider any differences in efficiency of providing care between informal and formal carers. For example, many informal carers will only provide care to one recipient (typically a friend or family member), while formal sector carers will provide care to multiple people at the same time in community and residential settings.<sup>25</sup> This means that care in the formal sector may be more efficient than that provided by informal carers and, as such, the estimated replacement cost may be lower than estimated, depending on the level of such conjoint activity or other scale efficiencies.

However, there are also losses of efficiency associated with care in the formal sector that offset efficiencies achieved through lower carer ratios. In order to match the number of hours and intensity of care provided by informal carers in the residential or community setting, a formal carer may need to spend more hours overall. This may arise due to the need to attend paid training or to travel between locations of care. Accordingly, these upside and downside risks are considered to offset each other, so it is likely the estimated replacement cost represents an accurate valuation of the contribution of informal care.

Table 2.5 below shows the changes between the 2015 and 2020 results. Notably the average hours of care per week for primary carers has increased, average hourly earnings rates increased, and the number of primary carers increased, albeit the number of non-primary carers fell.

<sup>25</sup> For example, the National Aged Care Workforce Census and Survey 2016 found the national average ratio of direct care workers to operational places was 0.78, indicating that each carer was responsible for around 1.3 care recipients.

Table 2.5: Comparative analysis of 2015 to 2020 informal care data

Component	2015	2020	Change (%)
No. of primary carers (000s)	825	911	10.4
No. of non-primary carers (000s)	2,032	1,887	-7.1
Average hours per week (primary carers)	26.8	35.2	31.4
Average hours per week (non-primary carers)	5.0	5.0	0.0
Average hourly earnings rate (\$)	31.4	36.1	15.2
Population	23.9	25.9	8.5
<b>Total replacement cost (\$ millions)</b>	<b>60,272</b>	<b>77,911</b>	<b>29.4</b>

Source: Deloitte Access Economics estimates based on ABS data.

Note: ^Adjusted with 2020 earnings data.

### 2.3.2 Comparisons with previous estimates

As an additional measure of reliability, this report considers the 2020 estimates in the context of previous estimates of the value of informal care in Australia and the estimated size of other sectors in the Australian economy.

A review of the Australian-based literature on the value of informal care returned a limited number of previous studies, particularly when looking at all informal care in Australia. Since the 2015 analysis, the only studies that have placed a value on informal care have done so for specific conditions (e.g. mental health conditions, dementia and Alzheimer's disease).<sup>26,27</sup> These studies are summarised in Table 2.6 below.

Table 2.6: Domestic studies of value of informal care

Study	Type of informal care	Estimated value (\$, billions)
AIFS (1997)	Adults	6.8
AIHW (2005)	Unpaid welfare, caring and volunteer work	43.7
Access Economics (2010)	All	40.9
Deloitte Access Economics (2015)	All	60.3
Diminic et al. (2017)	Mental health	13.2
PwC (2017)	Adults	15.4
Schofield et al. (2019)	Chronic diseases	6.1
Deloitte Access Economics (2019)	Children, the ill, disabled and elderly	68.7
Deloitte Access Economics (2020)	All	78.0

<sup>26</sup> Peña-Longobardo, L.M. and Oliva-Moreno, J., 2015. Economic valuation and determinants of informal care to people with Alzheimer's disease. *The European Journal of Health Economics*, 16(5), pp.507-515.

<sup>27</sup> Friedman, E.M., Shih, R.A., Langa, K.M. and Hurd, M.D., 2015. US prevalence and predictors of informal caregiving for dementia. *Health Affairs*, 34(10), pp.1637-1641.



A notable Australian public report since the publication of the 2015 analysis was commissioned by Mind Australia, conducted by the University of Queensland.<sup>28</sup> This report used a replacement cost methodology to value informal care provided to recipients whose primary condition is a mental health condition. It was estimated that the cost of replacing informal mental healthcare was \$13.2 billion in 2017.

PwC also completed a study in 2017 which investigated the total value of unpaid work in Australia, including unpaid childcare, care for adults, domestic work and volunteer work.<sup>29</sup> Looking specifically at unpaid care for adults, the report found estimated a market replacement value of \$15.4 billion in 2016 dollars. This was equivalent to 0.9% of GDP at the time of publishing. This is significantly lower than the estimates in this report due to the use of a different survey to derive the number of hours spent caring (leading to a lower total) and not adding on-costs to the base hourly wage of formal carers.

Another notable article released in 2019 from an academic setting was conducted by Macquarie University.<sup>30</sup> Here they estimated the economic cost of informal care for people with chronic disease in the community from 2015-2030 using microsimulation model Care&WorkMOD. The estimated national income lost was \$3.58 billion in 2015 increasing to \$5.33 billion in 2030 (49% increase). Lost tax payments approximated at \$0.99 billion in 2015 increasing to \$1.44 billion in 2030 (45% increase). Additional welfare payments were expected to rise from \$1.45 billion in 2015 to \$1.94 billion in 2030 (34% increase). It should be noted that this study was based on the opportunity cost approach and, as such, the estimated total cost is not directly comparable to those that are based on a replacement cost methodology.

Most recently, Deloitte Access Economics (2019) estimated the value of unpaid work and care in Victoria for the 2017-18 financial year. This report found that unpaid caring for children was valued at approximately \$55.0 billion, while caring for the ill, disabled and elderly was valued at a further \$13.7 billion. On a per person basis, the total cost was equivalent to \$39,662 per female and \$24,774 per male.

Overall, the figures represent a trend that the value of informal care is increasing in the Australian domestic economy, both for informal care as a whole and for specific conditions. The 2015 analysis estimated a replacement cost of \$60.3 billion, compared with \$78.0 billion in 2020. This represents nearly a 30% increase over the five years between the reports, or a compound annual growth rate of 5.3%.

Table 2.7 below considers this growth in the value of informal care relative to GDP and the health and social work industry. As can be seen, the estimated value of informal care has grown relative to GDP between 2015 and 2020. In the 2015 analysis, informal care was valued at just over 3.5% of GDP, while it is now estimated to be worth 4% of GDP (noting again that it does not form part of the formal calculation of GDP).

While the value of informal care has increased relative to GDP, it has decreased marginally from 55.0% to 54.4% of health and social work over the same time period. For context, other sectors of the economy expressed as a percentage of GDP are as follows: agriculture, forestry and fishing (2.1%), mining (8.8%), manufacturing (5.4%), accommodation and food services (2.3%) and information, media and telecommunications (2.4%).<sup>31</sup>

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<sup>28</sup> Diminic S, Hielscher E, Lee YY, Harris M, Schess J, Kealton J & Whiteford H. The economic value of informal mental health caring in Australia: technical report. Brisbane: The University of Queensland, 2017.

<sup>29</sup> PricewaterhouseCoopers (PwC) 2017, Understanding the unpaid economy, <<http://www.pwc.com.au/australia-in-transition/publications/understanding-the-unpaid-economy-mar17.pdf>>.

<sup>30</sup> Schofield, D., Shrestha, R.N., Zeppel, M.J., Cunich, M.M., Tanton, R., Veerman, J.L., Kelly, S.J. and Passey, M.E., 2019. Economic costs of informal care for people with chronic diseases in the community: Lost income, extra welfare payments, and reduced taxes in Australia in 2015–2030. *Health & social care in the community*, 27(2), pp.493-501

<sup>31</sup> Australian Bureau of Statistics (ABS) 2019, Australian national accounts: national income, expenditure and product, ABS Cat No 5206.0, Australian Government, Canberra.

Table 2.7: Relative value of informal care

Comparison	\$ millions	% GDP	% Health and social work
Replacement cost (2015)	60,272	3.53	54.97
Replacement cost (2020)	77,911	4.02	54.40
Health and social work industry (2015)	109,644	6.42	100.00
Health and social work industry (2020)	143,049	7.39	100.00
GDP (2015)	1,708,151	100.00	-
GDP (2020)	1,934,537	100.00	-

Source: Deloitte Access Economic estimates based on ABS national accounts data.

### 2.3.3 Comparisons with international estimates

The 2015 analysis reviewed international estimates of the value of informal care. While the literature is limited in this context, the demand for long term care services is increasing. This is a result of continuing ageing of populations and the elderly representing the largest percentage of dependent people. Four studies to date in an analysis by Olivia-Moreno aggregated the impact of the value of informal care. These studies were conducted in the US, Canada, France and Spain.<sup>32,33,34,35,36</sup>

Table 2.8 presents these international studies alongside the 2015 and 2020 Deloitte Access Economics analysis for comparative purposes. The variability between countries can be attributed to differing methodologies and study populations, as well as demographics, cultural attitudes to caring, health policy and GDP size in each country. Recognising the large variation between these countries, costs are presented as a % of GDP.

Table 2.8: International studies of the value of informal care

Study	Country	Method of valuation	Study population	% of GDP
Deloitte Access Economics (2020)	Australia	RC	All disabled	4.02
Deloitte Access Economics (2015)	Australia	RC	All disabled	3.53
Chari et al. (2015)	USA	OC	Elderly	1.4 - 4.0
Oliva-Moreno et al. (2015)	Spain	OC	All disabled	1.7 - 4.9
Hollander et al. (2009)	Canada	RC	Elderly	1.1
Paraponaris et al. (2011)	France	RC	Disabled elderly	0.5

Source: Deloitte Access Economics estimates and international studies.

Note: RC = Replacement Cost; OC = Opportunity Cost.

<sup>32</sup> Oliva-Moreno, J., Trapero-Bertran, M., Peña-Longobardo, L.M. and del Pozo-Rubio, R., 2017. 'The valuation of informal care in cost-of-illness studies: a systematic review'. 35(3) *Pharmacoeconomics* 331.

<sup>33</sup> Chari, A.V., Engberg, J., Ray, K.N. and Mehrotra, A., 2015. 'The opportunity costs of informal elder care in the United States: new estimates from the American time use survey'. 50(3) *Health services research* 871.

<sup>34</sup> Hollander, M.J., Liu, G. and Chappell, N.L., 2009. 'Who cares and how much? The imputed economic contribution to the Canadian healthcare system of middle-aged and older unpaid caregivers providing care to the elderly'. 12(2) *Healthcare Quarterly* 42.

<sup>35</sup> Paraponaris, A., Davin, B. and Verger, P., 2011. 'Formal and informal care for disabled elderly living in the community: an appraisal of French care composition and costs'. 13(3) *The European Journal of Health Economics* 327.

<sup>36</sup> Oliva-Moreno, J., Peña-Longobardo, L.M. and Vilaplana-Prieto, C., 2015. 'An estimation of the value of informal care provided to dependent people in Spain'. 13(2) *Applied Health Economics and Health Policy* 223.

## 2.4 Sensitivity analysis

As noted earlier in the report, there is insufficient data in SDAC to estimate the number of hours spent caring by non-primary informal carers. Accordingly, this report assumed that a non-primary informal carer spent an estimate of 5 hours per week caring as the basis of calculations to value informal care, in line with the methodology employed in the 2015 analysis.<sup>37</sup>

To estimate the potential impacts of inaccuracies in this assumed model parameter, two additional scenarios were considered. Specifically, sensitivity analysis modelled the effects on the replacement value of informal care in 2020 by increasing and decreasing the assumed 5 hours of care per week by 50%, or to 2.5 hours (Scenario B) and 7.5 hours (Scenario C) per week.

As seen in Table 2.9, a decrease or increase of 50% in the average hours of non-primary care per week results in a change of approximately 11.4% in the total replacement cost value of informal care. Given the uncertainty surrounding the total hours of non-primary care provided per annum, this value for the total replacement cost of informal care falls within range of \$69 billion to \$87 billion dollars.

Table 2.9: Sensitivity analysis for the average hours of non-primary care on the total replacement value

Scenario	Weekly hours of care	Annual hours of care (000s)	Replacement cost, non-primary carers (\$, millions)	Replacement cost, total (\$, millions)	% change
B	2.5	245,267	8,858	69,114	-11.4
A	5	490,535	17,717	77,973	-
C	7.5	735,802	26,575	86,831	11.4

Source: Deloitte Access Economics estimates.

<sup>37</sup> Australia, C. and Economics, D.A., 2015. The economic value of informal care in Australia in 2015. Canberra: Deloitte Access Economics.

# 3 Opportunity cost valuation

## Key findings

- The standardised rate of **full-time employment among primary carers is 23.7%**, half of that of the general population (47.3%). The rate for non-primary carers is also notably lower than the average, at 39.5%.
- An estimated **160,900 primary carers and 53,000 non-primary carers are assumed to not be in paid employment due to their caring role**. This is equivalent to approximately 1.51% of Australia's labour force (15 years and older) in 2020.
- In 2020, **the estimated earnings foregone for primary and non-primary carers was \$11.4 billion and \$3.8 billion respectively**. Combined, the opportunity cost for all carers is \$15.2 billion. This is equivalent to 0.8% of GDP and 10.6% of the value of formal health care.

### 3.1 Opportunity cost

Opportunity cost measures the productivity losses associated with time devoted to informal caring responsibilities. Accordingly, this is lost time that cannot be spent in the paid workforce. This section seeks to measure the amount of production carers would have contributed to the economy, but for their caring responsibilities.

### 3.2 Employment status of carers

Evidence shows that caregivers are less likely to be in paid employment, however the size of the effect can vary. However, not all carers who are unemployed or not in the labour force would work if they did not have care obligations. There is strong evidence, however, that caregivers are more likely to work fewer hours than non-carers, due to flexible working arrangements.<sup>38</sup>

In measuring differences in employment and participation rates between carers and the general community, differences must be standardised to account for demographic differences between the two groups. Carers are more likely to be female and of an older age than the general population. In addition, women and older people are less likely to be employed than the general population.

Chart 3.1 provides an age and gender standardised rate of employment for carers. The data in the chart shows the employment rates that would be observed if the age and gender profile of Australian carers was identical to that of the general population. Even when the demographic differences between the carer population and the overall Australian population have been accounted for, there remain differences in the level and type of employment. Carers are less likely to be working (57.5%) than the Australian average (65%).

However, it should be noted that unobserved characteristics such as personality traits and general labour market force attachment might affect employment rates, however this is not controlled for here.<sup>39</sup>

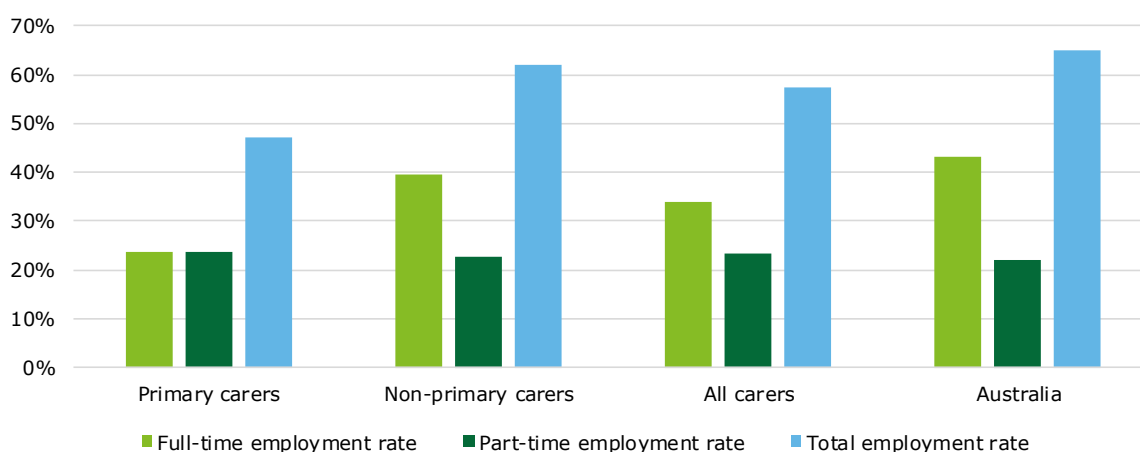
In particular, the rate of full-time employment among primary carers is 23.7%, half of that of the general population (47.3%). The rate for non-primary carers is also notably lower than the average, at 39.5%. Conversely, carers are more likely to be in part-time work. The standardised rate of part-time employment is 23.6% for primary carers and 22.6% for non-primary carers, compared to 21.9% for the general population.

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<sup>38</sup> Bauer, JM., & Sousa-Poza, A., 2015, *Impacts of Informal Caregiving on Caregiver Employment, Health, and Family*, IZA DP No. 8851

<sup>39</sup> Leigh, A., 2010, *Informal care and labour market participation*, *Labour Economics* 17(1): 140–149

Chart 3.1: Age and gender standardised employment rates by carer status, Australia (2020)



Source: Deloitte Access Economics analysis with ABS SDAC (2018) and ABS population projections (2018)

### 3.3 Opportunity cost valuation

The opportunity cost is calculated assuming that, in the absence of their caring responsibilities, carers would be employed at the same rate as members of the general population of the same age and gender, using the difference between the age and gender standardised employment rates for carers and those of the general population. Table 3.1 summarises the differences in standardised employment rates, showing total employment rates are 17.7% and 2.9% lower for primary and non-primary carers, respectively, compared to the Australian average.

Table 3.1: Age and gender standardised employment rates (%) and the Australian average, Australia (2020)

Rates (15+ years old)	Primary carer	Non-primary carer	All carers	Australian average
Standardised total employment rate (%)	47.3	62.1	57.5	65.0
Difference from the Australian average (%)	17.7	2.9	7.5	-

Source: Deloitte Access Economics analysis with ABS SDAC (2018) and ABS population projections (2018)

This method does not include the opportunity cost of forgone leisure time, as leisure (like informal care) is a non-market good (i.e. it is not formally traded or paid for in a market).

Table 3.2 below summarises the opportunity cost valuation. An estimated 160,900 primary carers and 53,000 non-primary carers are assumed to not be in paid employment due to their caring role. This is equivalent to approximately 1.51% of Australia’s labour force (15 years and older) in 2020.

If these carers were employed and received, on average, the same rate of pay as the average weekly earnings of all Australian workers (seasonally adjusted) they would earn \$1,361.5 per week, equivalent to \$70,935 per annum.<sup>40</sup> The average weekly earnings were inflated to 2020 figures with an average annual growth rate based on historic earnings between 2012 and 2019.

In 2020, the estimated earnings foregone for primary and non-primary carers was **\$11.4 billion** and **\$3.8 billion** respectively. Combined, the opportunity cost for all carers is **\$15.2 billion**. This is equivalent to 0.8% of GDP and 10.6% of the value of formal health care.

<sup>40</sup> ABS Employee Earnings and Hours (Series 6306 – Table 1) May 2018 and Average Weekly Earnings (Series 6302.0 – Table 2) May 2019

Table 3.2: Opportunity cost of informal care, by carer type, Australia 2020

Component	Primary	Non-primary	All
Difference in employment from the Australian average (%)	17.7	2.9	7.5
Persons not employed due to caring responsibilities (000s)	160.9	53.0	209.3
Average weekly earnings (\$)	1,361.5	1,361.5	1,361.5
<b>Lost earnings (\$ millions)</b>	<b>11,416.7</b>	<b>3,758.9</b>	<b>15,175.7</b>

Source: Deloitte Access Economics analysis with ABS SDAC (2018), ABS population projections (2018) and ABS Employee Earnings and Hours (2018) and Average Weekly Earnings (2019)

Disaggregation into full-time and part-time employees would generate higher estimates due to the compositional effects – up to \$20.4 billion for 2020. However, this estimate must be used with caution, as the relatively small sample size for part-time caring employees reduces its robustness.

The conservative estimate of \$15.2 billion is therefore used in this report as the official estimate of the opportunity cost of informal care in 2020. The possibility of higher estimates when compositional effects are accounted for, as well as the inability to calculate the value of lost leisure time, underscores the need to treat the opportunity cost estimate as a lower bound estimate of the value of informal care.

# 4 Demand and supply forecasts for carers

## Key findings

- The **demand for informal carers will grow from around 1.25 million in 2020 to 1.54 million in 2030**, representing a **23% increase**. In contrast, **the supply of informal carers will rise from 674,000 to 780,000**, a total growth of 16%. This will see the **carer ratio fall by 3.2 percentage points from 53.8% in 2020 to 50.6% in 2030**.
- Overall, the **male propensity to care has fallen 1.6 percentage points** from 10.9% in 2009 to 9.3% in 2018. Similarly, **female propensity to care declined by 1.2 percentage points**, from 13.4% to 12.3% observed over the same period.
- Under Scenario A, where propensity to care falls 20%, a **20.5% increase in the base case deficit of informal carers** was observed. A 20% decrease for females aged 25-64 (Scenario B) resulted in a **14.0% increase in the deficit** and a 20% increase in the propensity to care for carers aged over 65 resulted in **15.7% decrease in the deficit**.

### 4.1 Methodology

This section of the report provides forecasts of the supply and demand for informal carers out to 2030. It also discusses a range of issues raised by the results of the forecasts, such as implications for working arrangements, carer support, and formal and informal care sector balance.

Accurately forecasting the demand and supply of informal carers is complicated due to uncertainty around a range of factors which may influence the analysis. As noted in the 2015 analysis, these include:

- the age and gender profile of Australia
- prevalence of chronic illness and disability
- care needs among the disabled population
- supply of care provided through the formal care sector
- adequacy of care quality provided through the formal care sector
- labour force participation rates
- rates of relationship breakdowns
- fertility rates
- family mobility and dispersion
- the proportion of the population living in single person households
- propensity to care.<sup>41</sup>

Due to the uncertainty raised by these variables, this analysis does not seek to provide forecasts that account for each of these factors. The demand and supply forecasts were disaggregated into two groups: 0-64 years old, and 65+ years. This approach was used given the available data in the SDAC, and the different ways that people in each of the age groups can have their care needs met through the formal sector.

Previous reports by Deloitte Access Economics for Carers Australia forecasted supply and demand for the 65+ years group, with a consistent methodology used in 2005, 2010 and 2015. For this report, the analysis was extended to include the 0-64 years group.

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<sup>41</sup> It should be noted that while the propensity to care is affected by the other factors listed, they also have independent effects on the forecasts.

#### 4.1.1 Demand for informal care

The demand for informal care has been modelled separately for those aged 0-64 and those aged 65+. In both cohorts, a need for care was assessed using the number of persons who have a profound or severe disability. For the younger cohort, care needs were assessed as being met through the formal sector if people received formal care daily, or if they lived in residential care accommodation.<sup>42</sup> For the older cohort, care needs were assessed as being met if the person lived in residential care accommodation. Age- and gender-specific disability rates, living arrangements and care arrangements from the SDAC were applied to Australian Series B population projections published by the ABS to determine the number of people requiring care in the coming decade.

The methodology for those aged 65+ remains consistent with the approach used in previous forecasts.<sup>43,44</sup> This is based on the condition that people with a severe disability require care sometimes, while people with a profound disability require care all the time.<sup>45</sup> Care for these people is typically provided by co-resident carers, either in a community-based setting (e.g. at a person’s home) or in a formal setting (e.g. a residential aged care facility).

#### 4.1.2 Supply of informal carers

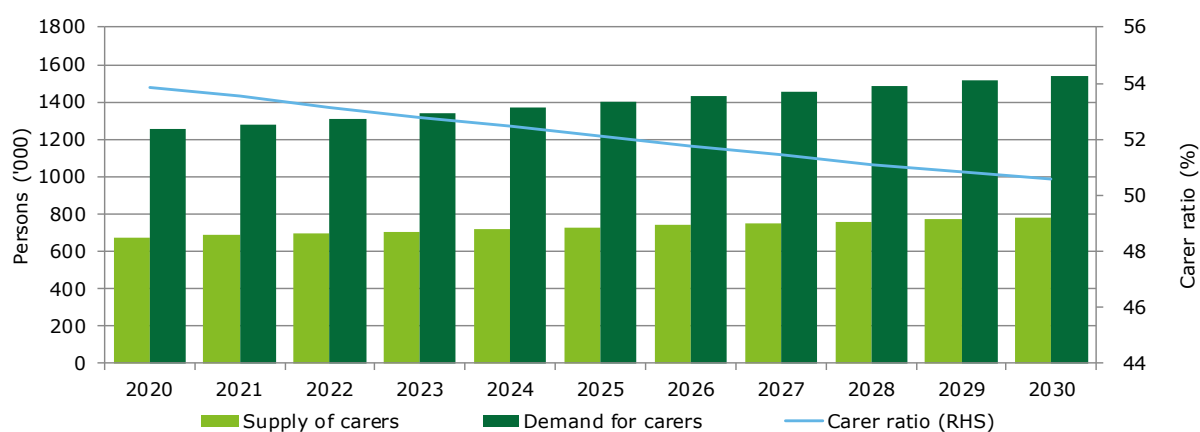
The supply of co-resident primary informal carers from 2021 to 2030 was forecast by applying the age- and gender-specific propensity to care in the Australian population in 2020 to the Series B population projections published by the ABS. The analysis drew on data regarding the number of people who were co-resident with a person with a severe or profound disability, and who were the primary carer for that person. As with the demand for informal care, the supply has been expanded to include those who provide care for a person with a profound or severe disability aged below 65 years.

In each year, a “carer gap” was calculated, based on the number of people of all ages for whom a carer is required and the forecast number of co-resident primary carers in that year. From this data, a “carer ratio” was also calculated as the supply of carers divided by the demand for carers. A larger carer gap (and a smaller carer ratio) indicates that demand is growing at a faster rate than supply.

### 4.2 Results

The results of the demand and supply analysis are presented in Chart 4.1.

Chart 4.1: Demand and supply of informal carers, projected to 2030



<sup>42</sup> It should be noted that the residential care exclusion only applied to a small portion of the group, and that recent policy changes intends to phase out younger people living in residential aged care by 2025.

<sup>43</sup> Deloitte Access Economics 2015, *The economic value of informal care in Australia in 2015*. A report commissioned by Carers Australia. Available at: <https://www.carersaustralia.com.au/storage/Access%20Economics%20Report.pdf>.

<sup>44</sup> Australian Institute of Health and Welfare (AIHW) 2003, *The future supply of informal care 2003 to 2013: alternative scenarios*, cat. no. AGE 32, AIHW, Canberra.

<sup>45</sup> Australian Bureau of Statistics (ABS) 2013, *Disability, ageing and carers, Australia: summary of findings, 2012*, cat. no. 4430.0, ABS, Canberra.



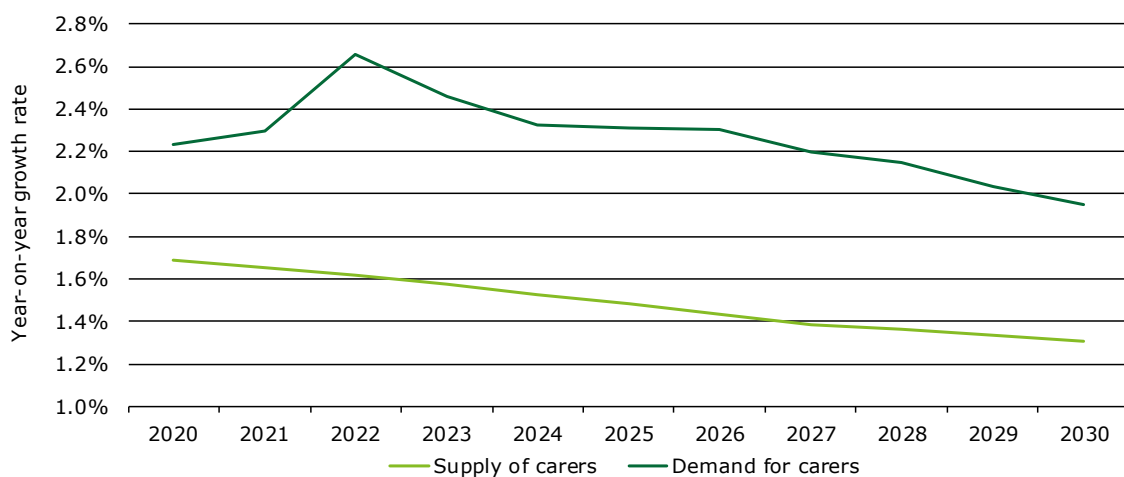
Source: Deloitte Access Economics estimates using ABS (2018).

Over the projection horizon, the carer gap (that is, the gap between the supply of informal carers and the need for informal carers) grows each year, and the carer ratio decreases each year. This occurs as the growth in the supply of carers is slower than the growth rate in the demand for carers.

Specifically, the **demand for informal carers will grow from around 1.25 million in 2020 to 1.54 million in 2030**, representing a 23% total increase. In contrast, **the supply of informal carers will rise from 674,000 to 780,000**, a total growth of 16%. This will see the **carer ratio fall by 3.2 percentage points from 53.8% in 2020 to 50.6% in 2030**.

The primary drivers of year-on-year changes is the shift in underlying age-gender proportions in the Australian population and the declining propensity to care, particularly in younger age groups. The proportion of people aged over 65 is increasing relative to the rest of the population, and so demand grows at a faster rate than supply. This is shown in Chart 4.2, which presents the year-on-year growth rate in the demand for and supply of carers in each year from 2020 to 2030.

Chart 4.2: Growth rates in the demand and supply of informal carers



Source: Deloitte Access Economics analysis using ABS (2018).

As can be seen, the year-on-year growth rate in the demand for carers exceeds that of the supply of carers in each year of the projection horizon. The misalignment of demand and supply growth rates is projected to spike in 2022 due to an acceleration in population growth in the 65+ age groups within the underlying ABS population projections, before tightening again and improving marginally later in the decade.

### 4.3 Scenario analysis

Scenario analysis was conducted on the forecasts to see how they change under a variety of potential supply-side impacts over 2020-2030. Due to the nature of the underlying data that was available for this analysis, the scenarios commence in 2018. This scenario analysis refines the economic modelling by introducing more of the variables presented in Section 4.1 into the analysis, which are represented by changes to the propensity to care. Assumptions have been derived from similar scenario analysis undertaken by the AIHW.<sup>46</sup>

#### Scenario A:

An overall decline in the propensity to care across the entire population, which was modelled as a reduction in carer rates across all age and gender groups. This reduction increases from 0% in 2018 through to 20% in 2030. This scenario may occur due to changing intergenerational attitudes

<sup>46</sup> Jenkins, A., Rowland, F., Angus, P., and Hales, C., (2003). 'The future supply of informal care 2003 to 2013', Australian Institute of Health and Welfare, Canberra.

towards providing informal care, changes in family mobility and dispersion, rates of relationship breakdown, and the proportion of the population living in single person households.

**Scenario B:**

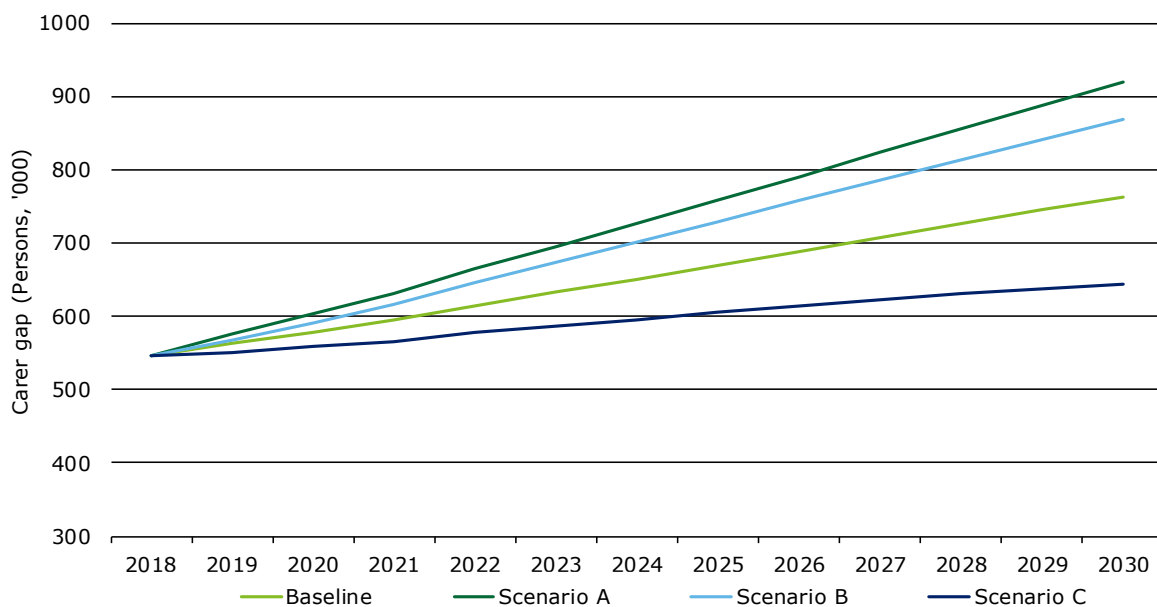
An increase in the number of working-age females who choose to increase their participation in the workforce at the expense of providing informal care. This is modelled as a 20% reduction in the propensity to care by females aged between 25 and 64 years. This scenario may occur through increased labour force participation rates by females, which could be accompanied by decreasing fertility rates.

**Scenario C:**

An increase in male and female life expectancy, which is modelled as a 20% increase in the propensity to care by informal carers aged over 65 years. Increased life expectancy will likely result from ongoing improvement in health care. The results of the modelling are expressed in terms of the carer gap that has been calculated for each scenario.

The results of the scenario analysis are shown in Chart 4.3. The two scenarios which represent a decrease in the propensity to care (Scenario A and Scenario B) result in a carer gap in 2030 that is higher than the carer gap that exists under the baseline scenario. Scenario A results in a 20.5% increase in the baseline deficit by 2030, compared with a 14.0% increase under Scenario B and a 15.7% decrease under Scenario C.

Chart 4.3: Growth in the carer gap under scenario analysis



Source: Deloitte Access Economics estimates using ABS (2018).

**4.4 Propensity to care**

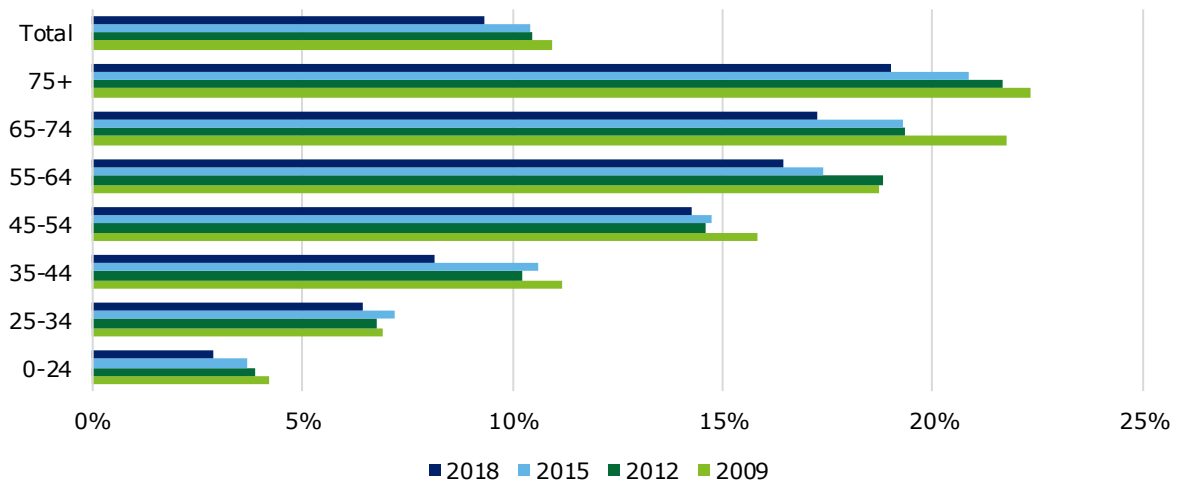
**4.4.1 Historical changes in the propensity to care**

As noted in Section 1.2.1, there are notable changes in the propensity to care for both males and females over the life course. For example, males are observed to gradually increase their propensity to care with age and become the predominant carers in the over 75 age group.

However, there have also been structural changes in the propensity to care over the last decade. An analysis of the four most recent releases of the SDAC (2009, 2012, 2015 and 2018) shows an overall decrease in the propensity to care across the entire Australian population. The average propensity to care rate was calculated for each year and then weighted by the historical population to adjust for population growth.

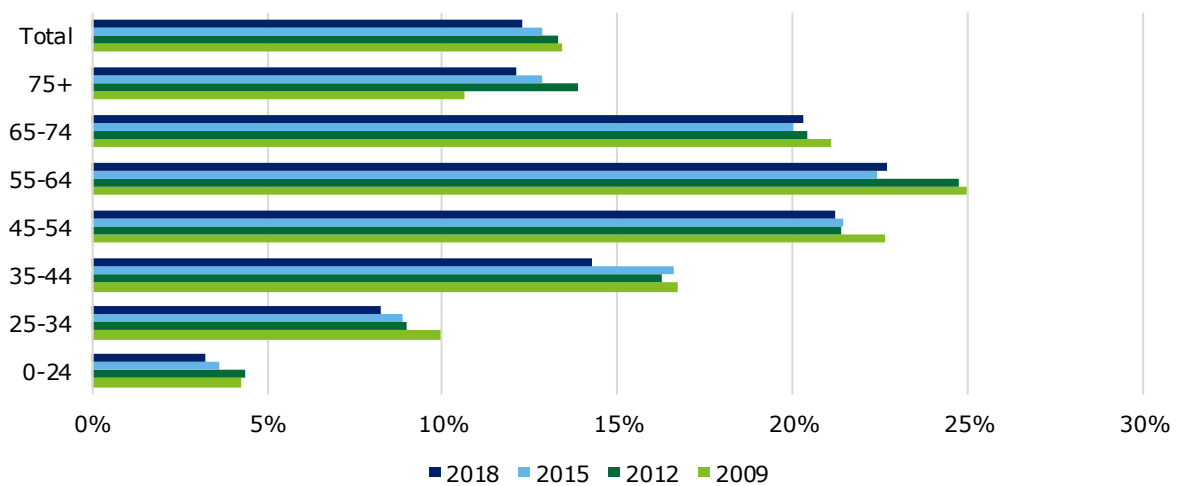
Chart 4.4 and Chart 4.5 below depict the average propensity to care rates by age against the population weighted average for males and females, respectively, over the years 2009, 2012, 2015 and 2018.

Chart 4.4: Average propensity to care by age group, males



Source: Deloitte Access Economics estimates.

Chart 4.5: Average propensity to care by age group, females



Source: Deloitte Access Economics estimates using ABS (2012, 2013, 2016, 2019)

As demonstrated in the above charts, there has been a general downward trend in the propensity to care between 2009 and 2018, irrespective of gender. Overall, **the male propensity to care has fallen 1.6 percentage points** from 10.9% in 2009 to 9.3% in 2018. This is consistent for **females**, with a decline in the propensity to care from 13.4% to 12.3% observed over the same period, **representing a 1.2 percentage point fall.**<sup>47</sup>

For males, the largest decline in the propensity to care has occurred in the ages of 65-74, with a 4.5 percentage point fall observed. In contrast, the largest decreases for females have occurred during younger ages, with a 2.4 percentage point fall observed for those aged 35-44. The only age-gender

<sup>47</sup> Note, this does not sum due to rounding.

group that has seen an increase in the propensity to care is for females aged 75 and above, with a 1.5 percentage point increase observed.

As previously discussed, the main reason for these observations may be the differing rates of disabilities and life expectancies between genders, with male fathers, spouses or partners in the oldest groups now accessing more at-home formal care than previously. The largest increases in labour force participation between 2009 and 2019 is observed for females aged 55-59 and 60-64 years old, increasing from 62.5% to 69.6% and 39.5% to 51.8% respectively.<sup>48</sup> This can partially explain the large decrease in caring for this cohort. More broadly, however, other social and demographic factors may also be at play, which have been identified in recent literature, and which are explored further in the sections to follow.

#### 4.4.2 Demographic trends

Australia is facing an ageing population which will place pressure on the provision of informal care. The latest projections from the AIHW indicate that there were 3.8 million Australians aged 65 and over in 2017 (15% of the population), with this projected to increase to 8.8 million older Australians by 2057 (22% of the population). The growth in Australia's ageing population is driven by sustained low fertility and increasing life expectancy. Meanwhile half of Australia's 'baby boomer' population (those born between 1946 and 1964) are now aged 65 or older with the remainder to reach this age over the next 10 years.<sup>49</sup>

Though the elderly population still maintain a high rate of informal care provision (see Chart 1.2), there will also be an increasing number of people who require informal care provision. As these people continue to age, the total number of carers will fall (see the trend in Chart 1.1 for people aged over 55), and some will then require carer assistance themselves – representing a downwards shift in supply and an upwards shift in demand. It is noted that there are significantly higher rates of frailty in the elderly, which limits the ability for many elderly people to continue caring.<sup>50</sup>

Furthermore, increases in life expectancy do not correspond with the same increases to quality of life. Consequently, the elderly population is likely to experience greater disability or increased risk of disease as they age,<sup>51</sup> which will further limit the supply of carers while simultaneously placing pressure through increased demand.

#### 4.4.3 Social trends

The provision of informal care is dependent upon changes to societal structure. Estimating whether a person provides informal care to another relies on the social context; and in particular the family situation.<sup>52</sup> It is clear that family plays an important role in the provision of informal care, Chart 1.9 shows that 89.8% of informal carers are a family member of the recipient. In 2016 there were 2.3 million Australians living alone. It is estimated that by 2041 the number of people living alone will increase to 3.0-3.5 million.<sup>53</sup> This increase is largely due to the ageing population, with women aged over 65 representing a significant proportion of the population. This is partly explained by the difference in male and female life expectancy, with the average female born in 2015-17 now expected to live 4.1 years longer than a male born at the same time (84.6 years compared to 80.5 years).<sup>54</sup>

Family structures are also shifting due to decreasing marriage rates and increasing divorce rates, which have been experienced over the past 20 years.<sup>55</sup> Combined with lower fertility rates, families

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<sup>48</sup> Australian Bureau of Statistics (ABS), Gender Indicators, November 2019, cat. No. 41250

<sup>49</sup> Australian Bureau of Statistics (ABS), Australian Demographic Statistics (19 December 2019) cat. No. 3101.0.

<sup>50</sup> Thompson, M. Q., Theou, O., Karnon, J., Adams, R. J., & Visvanathan, R. (2018). Frailty prevalence in Australia: findings from four pooled Australian cohort studies. *Australasian journal on ageing*, 37(2), 155-158.

<sup>51</sup> Brown, G. C. (2015). Living too long. *EMBO reports*, 16(2), 137-141.

<sup>52</sup> van Groenou, M. I. B., & De Boer, A. (2016). Providing informal care in a changing society. *European Journal of Ageing*, 13(3), 271-279.

<sup>53</sup> Australian Bureau of Statistics, *Household and Family Projections, Australia, 2016 to 2041* (14 March 2019) Cat. No. 3236.0.

<sup>54</sup> AIHW, Deaths in Australia (2019) <<https://www.aihw.gov.au/reports/life-expectancy-death/deaths/contents/life-expectancy>>.

<sup>55</sup> Australian Bureau of Statistics, *Australian Social Trends Indicators* (18 March 2014) Cat. No. 4102.0.

are getting smaller. Smaller families are likely to reduce the overall number of informal carers in Australia and may place pressure on supply of informal and formal care where people living alone require care.

#### **4.4.4 Female participation in the labour force**

More females are participating in the labour force, placing pressure on the supply of informal care. Since 1978, the participation rate of females has increased from 43.3% (February 1978) to 61.4% (January 2020). This shift reflects the push for gender equality within the workforce, with the Australian government prioritising reducing the gender gap in workforce participation.<sup>56</sup> It is highly likely that the female participation rate will continue to improve.

Though undoubtedly a positive initiative, this may reduce the number of carers in Australia. Chart 1.2 highlights that females aged 45-64 represent a significant proportion of all informal carers. Increased employment opportunities for females of working age will likely lead to more women choosing to work and thereby reduce the number of hours that they provide care.

However, this relationship is influenced by other determinants of female labour force status. Barriers to women attaining employment include full-time care responsibilities or caring for a child with disability where there are no other people available to provide support.<sup>57</sup> This research suggests that women who have caring responsibilities are less likely to join employment, which may mean that improvements to female participation rates are explained by non-carer females joining the workforce – and thus not increase pressure on the supply of informal care. It should also be noted that growth in the female participation rate is also explained by increased participation in part-time employment. Part-time employment is likely to have a smaller impact on the number of carer hours provided as compared to full-time employment.

#### **4.4.5 Participation of older workers in the labour force**

The participation rate of people aged 65 years and over is increasing. Since 2000, the participation rate increased from 5.7% (January 2000), to 9.9% (January 2010) and is currently 13.7% (January 2020).<sup>58</sup> People aged 65 years and over are now working later in their lives, in part driven by changes to pension eligibility and the age at which superannuation can be accessed.<sup>59</sup> This trend is likely to continue, with elderly people encouraged to work longer to bolster the size of the workforce in light of the ageing population.<sup>60</sup> Encouraging this cohort to work will reduce their available time, which may result in people choosing to reduce their caring hours or responsibilities. As more elderly people choose to stay in employment, the number of carers will fall. A fall in the number of elderly carers is expected to have a significant impact on the total supply of carer hours given the comparatively large number of hours of care that this age group typically provides.

#### **4.4.6 Government-supported care in the home environment**

Overall, the aged care policy changes over the last 15 years have shaped the informal care industry to be more community based, with a tendency toward informal care, supporting the desires of the elderly to remain living in their homes for as long as possible. A consequence of this has been an increasing reliance on family and friends to provide care at home, as well as supplement formal government-supported home support services.<sup>61</sup> The Commonwealth Home Support Programme provides entry-level care services in the home while the Home Care Packages Program provides more complex care services in the home. Different types of respite, to support both carers and care recipients, are also offered through these programs. Although the demand for informal care may be

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<sup>56</sup> Australian Government, *Women's workforce participation – an economic priority* <<https://womensworkforceparticipation.pmc.gov.au/womens-workforce-participation-economic-priority.html>>.

<sup>57</sup> Gray, M., & Edwards, B. (2009). Determinants of the labour force status of female carers. *Australian Journal of Labour Economics*, 12(1), 5.

<sup>58</sup> Australian Bureau of Statistics, *Labour Force, Australia, Detailed -Electronic Delivery* (27 February 2020) Series 6291.0.55.001.

<sup>59</sup> AMP, 'what is the retirement age in Australia' <[https://www.amp.com.au/retirement/prepare-to-  
retire/retirement-age-australia](https://www.amp.com.au/retirement/prepare-to-retire/retirement-age-australia)>.

<sup>60</sup> Chomik, R., & Piggott, J. (2012). Mature-age labour force participation: Trends, barriers, incentives, and future potential < [http://cepar.edu.au/sites/default/files/Mature-age\\_labour\\_force\\_participation.pdf](http://cepar.edu.au/sites/default/files/Mature-age_labour_force_participation.pdf)>.

<sup>61</sup> Background Paper 6: Carers of Older Australians. Royal Commission, 26 July 2019, [agedcare.royalcommission.gov.au/publications/Documents/background-paper-9.pdf](http://agedcare.royalcommission.gov.au/publications/Documents/background-paper-9.pdf).

alleviated by government support to an extent, home-caring will continue to rely heavily on informal caring.

#### **4.4.7 Intergenerational attitudes**

There is strong support across generations for a continuing role in governmental provision of aged care-related services, including compensation for those who leave paid employment to provide care.<sup>62</sup> However, despite these attitudes, carers appear to be largely motivated by a strong sense of responsibility and obligation and attitudes. As informal care is primarily provided by family, the attitude toward caring will strongly influence the supply of informal care.<sup>63</sup> As in previous years, carers continue to be strongly motivated by a sense of obligation towards the care recipient, with 70.1% of all primary carers in 2018 stating it as their foremost reason for providing care. Preferences of the recipients also remain largely unchanged, with only 5% of Australians aged 65 years and over living in care-accommodation.<sup>64</sup>

The persistent attitude of a carer feeling obligated to provide care might be partially driven by the kinship of the carer and the recipient. However, Ranmuthugala (2009) suggests that carers face emotional burdens from caring and report the lowest level of collective wellbeing of any group, with higher levels of depression and social isolation.<sup>65</sup> Data from SDAC 2018 also indicates that 21.1% of all primary carers felt their spousal relationship strain due to caring responsibilities. Given the shift from acute fatalities to lengthened life expectancies, demand for informal care is likely to increase in the coming years.<sup>66</sup> Changes in the level of monetary and emotional support for carers, and the flexibility in work will be integral to sustaining willingness to care in the future.

Younger generations are also seeing shifts in their cultural composition with increases in migration over the last decade. The language and cultural barriers faced by some communities may hinder access to the formal care sector and demand more informal caregiving as a substitute.<sup>67</sup> Furthermore, the cultural shifts in Australia due to immigration might impact the prevailing views about the role of a carer in the home. For example, older people from culturally and linguistically diverse backgrounds are shown to prefer family carers.<sup>68</sup> Such differing cultural norms often mean that informal carers are seen as performing a 'duty' rather than a 'service', which could reduce the demand for formal care.

#### **4.5 Policy implications**

As was the case in the 2015 analysis, the demand for informal care is increasing at a faster rate than the supply of informal carers. As such, the "carer gap" is expected to widen over the decade to 2030. While there remains uncertainty around the projections presented in Sections 4.2 and 4.3, the qualitative analysis presented in Section 4.4 suggests that the propensity to care is likely to continue falling. This will further exacerbate the already substantial carer gap over the coming years.

This deficit of informal carers will present some significant challenges for the management of Australia's health and welfare over the next decade, particularly as the elderly population continues to grow. If left unaddressed, the misalignment of demand for and supply of care is likely to place strain on the formal health sector and poorer health outcomes for those who are unable to access care in the formal sector.

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<sup>62</sup> Hodgkin S 2014, 'Intergenerational solidarity: an investigation of attitudes towards the responsibility for formal and informal elder care in Australia', *Health Sociology Review*, 23(1): 53-64.

<sup>63</sup> Federation of Ethnic Communities' Councils of Australia, *Review of Australian research on older people from culturally and linguistically diverse backgrounds*

<sup>64</sup> Australian Institute of Health and Welfare 2017. *Australia's welfare 2017: in brief*. Cat. no. AUS 215. Canberra: AIHW.

<sup>65</sup> Ranmuthugala G 2009, 'Impact of home-based long-term care on informal carers', *Australian Family Physician*, 38(8): 618-620.

<sup>66</sup> Fine MD 2012, 'Employment and informal care: sustaining paid work and caregiving in community and home-based care', *Ageing International*, 37(1): 57-68.

<sup>67</sup> Knight BG, Sayegh P. Cultural values and caregiving: the updated sociocultural stress and coping model. *Journal of Gerontology. Psychological Sciences*. 2010; 65B(1):5-13.

<sup>68</sup> Federation of Ethnic Communities' Councils of Australia, *Review of Australian research on older people from culturally and linguistically diverse backgrounds*, 2015, p 24

This imperative was recently brought to broader public attention through the ongoing Royal Commission into Aged Care Quality and Safety. While focused on the aged care sector in Australia, many of the views and issues arising are also relevant to the broader care requirements of all Australians, including those living with a disability. Despite the complexity of the multitude of views presented in the Interim Report, what is becoming clear is that a fundamental overhaul of the design, objectives, regulation and funding of aged care in Australia is required.<sup>69</sup>

#### **4.5.1 Working arrangements**

While the demand for informal care is expected to continue exceeding the supply of informal carers into the future, current rates of informal care provision suggest it may be possible to increase the propensity to care in the future.

One such mechanism that may support such an uplift in informal care provision is greater flexibility in working arrangements, including improvements to carer leave through the Fair Work Act. Carer leave through Australia's industrial relations system has historically compared unfavourably with many comparable countries.<sup>70</sup> Greater flexibility for employees in their working hours and arrangements can help to accommodate the provision of informal care in cases where the carer was previously unable or reluctant to due to rigidities in workplace policy. Such a proposal is particularly salient for female carers who currently assume most of the informal care alongside a greater tendency to undertake other forms of unpaid caring (e.g. childcare). In fact, a previous study found that access to flexitime and the ability to reduce working hours was associated with a 13% increase in the hours of informal care provided.<sup>71</sup>

While greater flexibility in working arrangements will support more people to provide informal care, it is also likely that this would benefit the existing informal carers who wish to enter or return to the workforce following a prior departure. In the 2012 SDAC, an estimated 22.9% of primary carers who were not in the labour force expressed a desire to work.<sup>72</sup> Given the growing rate of female participation in the labour force and the extended age of workforce participation, it is likely that increasing numbers of people will combine work and informal care in the future.<sup>73</sup> As such, flexible working arrangements will be key to allowing carers to remain in, or return to, employment while responding to the specific needs of their recipients of care.

#### **4.5.2 Carer support**

Improvements in approaches to support services available for informal carers represent another opportunity to alleviate the costs of caring, which may have previously deterred friends and family from providing informal care.

As discussed, caring incurs significant financial, health and emotional costs to the informal carer. While not all carers suffer adverse health impacts as a result of caring, carers are at a greater risk of negative physical and mental health effects,<sup>74</sup> with working carers who provide high levels of informal care particularly vulnerable.<sup>75</sup> The Commonwealth Government currently provides a range of support services to alleviate carer burdens, including respite and counselling programs, as well as selected payments such as the Carer Payment, Carer Allowance and Carer Supplement.<sup>76</sup> In

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<sup>69</sup> Commonwealth of Australia 2019, 'Royal Commission into Aged Care Quality and Safety: Interim Report', available at: <https://agedcare.royalcommission.gov.au/publications/Pages/interim-report.aspx>

<sup>70</sup> Commonwealth of Australia 2019, Royal Commission into Aged Care Quality and Safety: Research Paper 2 - Review of International Systems of Long-term Care for Older People, available at: <https://agedcare.royalcommission.gov.au/publications/Pages/default.aspx>

<sup>71</sup> Bryan, ML. 'Access to flexible working and informal care' (2012), 59(4) *Scottish Journal of Political Economy* 361.

<sup>72</sup> Australian Bureau of Statistics (ABS) 2014, *Caring in the community, Australia, 2012: summary of findings*, cat. no. 4436.0, ABS, Canberra.

<sup>73</sup> Kenny, P., King, M., and Hall, J. 'The physical functioning and mental health of informal carers: evidence of care-giving impacts from an Australian population-based cohort' (2014), 22(6) *Health and Social Care in the Community* 646.

<sup>74</sup> Hussain, R., Wark, S., Dillon, G., and Ryan, P. 'Self-reported physical and mental health of Australian carers: a cross-sectional study' (2016), 6(9) *BMJ Open*.

<sup>75</sup> Ibid.

<sup>76</sup> Australian Institute of Health and Welfare (AIHW) 2019, *Australia's welfare 2019*, cat. no. AUS 226, AIHW, Canberra.

2017–18, the Australian government spent approximately \$8.5 billion in direct government payments to carers.<sup>77</sup>

A range of organisations and programs providing such support to carers as information and advice; counselling; education and coaching; respite and peer support; and consumer directed financial support are also nationally funded across Australia.

Despite the availability of these services, an estimated 62.1% of primary carers surveyed in the SDAC 2018 did not receive assistance from organised services.<sup>78</sup> Of those surveyed, 34.2% were not satisfied or were unsure about the range of organised services available to assist with their caring role, while 25.9% were unaware of the range of services available. A significant proportion of primary carers (89%) had never used respite care.

Limited awareness among carers of available support suggest more work can be done to improve accessibility to services and promote awareness of their existence. Furthermore, additional efforts may need to be undertaken to promote greater awareness of the health risks and effects of caring among carers themselves. A stronger prioritisation of the health and wellbeing of informal carers may encourage greater access to and use of respite services, resulting in better health outcomes and quality of care for carers and recipients alike.

It should be noted that carers may not have been accessing respite services due to acute shortages of suitable respite services, particularly in recent years.<sup>79</sup> Respite services funded by the Commonwealth include the Commonwealth Home Support Programme, respite supported by home care packages and residential respite. However, a number of pressing issues and barriers to entry have been identified amid the Royal Commission into Aged Care Quality and Safety, such as the assessment process, lack of alignment with carer needs and consumer fees.

#### **4.5.3 Formal and informal care sector balance**

While the policy initiatives discussed in Section 4.5.1 and 4.5.2 pertain to the supply of informal carers, there are also demand-side determinants of informal care that warrant investigation. For instance, despite having more limited control over the demand for informal care than the supply, policymakers may investigate the potential benefits of compensating for the shortage of informal carers through a greater reliance on the formal care sector.

The Australian Government provides a range of subsidised formal community aged care programs including the Commonwealth Home Support Programme and the Home Care Packages Program. In addition to community care, residential aged care has become an increasingly common option for older people whose care needs require individualised attention.<sup>80</sup>

While user contributions account for low percentages of the cost of community care packages and Australian Government funding subsidises 71% of the cost of residential care, there may be further scope to consider recipients of care for whom formal care remains unaffordable.<sup>81</sup> An estimated 24.6% of primary carers for those aged under 65 years stated that they took on the caring role because alternative care was too costly.<sup>82</sup>

Those who do seek to engage formal care services frequently face substantial waiting lists and times to obtain home care packages and residential care they require. The expected waiting times for home care packages varies by level, while level 1 has an expected waiting time of 3 to 6 months, levels 2 to 4 (packages for increasingly complex needs) has a waiting time of more than 12 months.<sup>83</sup>

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<sup>77</sup> Background Paper 6: Carers of Older Australians. Royal Commission, 26 July 2019, [agedcare.royalcommission.gov.au/publications/Documents/background-paper-9.pdf](https://agedcare.royalcommission.gov.au/publications/Documents/background-paper-9.pdf).

<sup>78</sup> Australian Bureau of Statistics (ABS) 2014, *Caring in the community, Australia, 2012: summary of findings*, cat. no. 4436.0, ABS, Canberra.

<sup>79</sup> Aged Care Financing Authority (ACFA) 2018, *ACFA Report on Respite for Aged Care Recipients*, available at: <https://www.health.gov.au/resources/publications/acfa-report-on-respite-for-aged-care-recipients>

<sup>80</sup> Productivity Commission 2011, *Caring for older Australians*, Australian Government, Canberra.

<sup>81</sup> National Commission of Audit 2014, *The Report of the National Commission of Audit: Appendix to Volume 1*, Australian Government, Canberra.

<sup>82</sup> Australian Bureau of Statistics (ABS) 2019, *Disability, Ageing and Carers, Australia: Summary of Findings, 2018*, cat. no. 4430.0, ABS, Canberra.

<sup>83</sup> Myagedcare, available from: <https://www.myagedcare.gov.au/assessment-decision-home-care-packages>



According to Home Care Packages Program Data Report, in 2019, there were 112,237 people waiting for a package at their approved level.<sup>84</sup> The median waiting time for older people entering residential aged care was 152 days from their assessment and approval.<sup>85</sup> These lags between inquiry, assessment and approval can also place additional pressure on informal care and must be addressed to achieve an efficient balance within the formal and informal care sector.

An additional consideration may be the quality of formal care that is currently being provided. A detailed examination of the state of the formal care sector is beyond the scope of this report but is currently being investigated through the Royal Commission into Aged Care Quality and Safety. These concerns around the quality of care provided are also highlighted in the SDAC 2018, where 46.4% of respondents stated that they opted to provide care because they can provide better care than anybody else.<sup>86</sup>

Policymakers may also wish to consider the implications of Australia's increasingly diverse population for achieving an optimal mix of informal and formal care in the future. Increasing levels of migration are likely to add to Australia's existing elderly migrant population whose cultural and linguistic needs may not be currently met in formal care services. Indeed, studies have shown that older people from culturally and linguistically diverse backgrounds exhibit a significantly lower use of residential age care, suggesting a preference for care that is sensitive to their cultural needs and preferences.<sup>87</sup> Further research into how the formal care sector can adapt to groups with different aged care needs may help soften demand for informal care where informal care is deemed the only viable option and identify a better balance of reliance on both formal and informal sectors.

As demonstrated in this report, informal carers provide a significant contribution to the health and wellbeing of Australians in need of support and assistance, the magnitude of which only underscores the impending policy challenges faced by Australia. Greater recognition and awareness of carer demographics and preferences will ensure that approaches to health, disability and ageing policies are responsive to the needs of carers and care recipients alike, resulting in improvements in welfare for Australia in the future.

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<sup>84</sup> Australian Government Department of Health, 2019, Home Care Packages Program Data Report 1<sup>st</sup> Quarter 2019-20, available from: [https://gen-agedcaredata.gov.au/www\\_aihngen/media/Home\\_care\\_report/Home-Care-Data-Report-1st-qtr-2019-20.PDF](https://gen-agedcaredata.gov.au/www_aihngen/media/Home_care_report/Home-Care-Data-Report-1st-qtr-2019-20.PDF)

<sup>85</sup> Productivity Commission, Report on Government Services 2020, available from: <https://www.pc.gov.au/research/ongoing/report-on-government-services/2020/community-services/aged-care-services/rogs-2020-partf-section14.pdf>

<sup>86</sup> Australian Bureau of Statistics (ABS) 2019, *Disability, Ageing and Carers, Australia: Summary of Findings, 2018*, cat. no. 4430.0, ABS, Canberra.

<sup>87</sup> Productivity Commission 2011, *Caring for older Australians*, Australian Government, Canberra.

# Appendix A: Supplementary data and analysis

## Informal carers, by age and gender, 2015 to 2020

Table A1 provides a detailed breakdown of the number of informal carers, both male and female, by age. This data is provided for the years 2015, 2018 and 2020 to demonstrate how informal caring is changing over time.

Table A1: Informal carers in Australia by age and gender, 2015 to 2020

Age/gender	2015	2018	2020
<b>Males</b>			
<15	35,787	20,200	21,141
15-24	114,314	95,400	98,960
25-34	120,273	116,500	121,236
35-44	166,572	132,200	141,100
45-54	227,725	218,900	221,582
55-64	254,915	228,500	237,119
65-74	193,869	185,400	195,277
75+	147,049	132,400	156,299
<i>Male total</i>	<i>1,260,503</i>	<i>1,128,600</i>	<i>1,192,713</i>
<b>Females</b>			
<15	42,154	27,300	28,607
15-24	115,511	94,400	97,214
25-34	156,719	152,800	157,986
35-44	266,565	236,500	251,251
45-54	340,316	342,500	347,013
55-64	346,954	332,700	346,797
65-74	207,623	229,600	245,178
75+	120,309	100,400	120,260
<i>Female total</i>	<i>1,596,151</i>	<i>1,513,000</i>	<i>1,594,307</i>
<b>Persons total</b>	<b>2,856,653</b>	<b>2,641,600</b>	<b>2,787,020</b>

Source: Deloitte Access Economics estimates based on ABS data.

Table A2 provides an age and gender breakdown of the prevalence rates of informal care in Australia in 2020. This is also disaggregated by carer type and shows that informal caring is most common for women and people aged 55 years and older.

Table A2: Rates of informal care provision as share of population, by age and gender, Australia (2020)

Age	Male (%)			Female (%)		
	Primary	Non-Primary	All Carers	Primary	Non-Primary	All Carers
< 15	0.0	0.8	0.8	0.0	1.2	1.2
15-24	0.4	5.4	5.9	0.9	5.2	6.2
24-34	0.8	5.5	6.4	3.3	4.9	8.2
35-44	1.4	6.8	8.2	6.4	8.0	14.3
45-54	3.3	10.7	14.2	9.2	11.9	21.2
55-64	4.1	12.3	16.4	10.2	12.7	22.7
65-75	4.3	12.8	17.3	8.9	11.5	20.3
75+	6.1	13.3	19.4	4.7	7.3	12.1

Source: ABS (2018).

Note: Totals may not sum due to rounding.

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