

Meeting 'hidden' household costs of care in the home:

Impacts of the presence of disability on expenditure patterns of older Australian households

June 2014

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About National Seniors Productive Ageing Centre

National Seniors Australia (National Seniors) is a not-for-profit organisation that gives voice to issues that affect Australians aged 50 years and over. It is the largest membership organisation of its type in Australia with more than 200,000 members and is the fourth largest in the world.

National Seniors Productive Ageing Centre (NSPAC) is an initiative of National Seniors and the Australian Government. NSPAC's aim is to improve quality of life for people aged 50 and over by advancing knowledge and understanding of all aspects of productive ageing.

NSPAC's key objectives are to:

- Support quality consumer-oriented research informed by the experience of people aged 50 and over
- Inform government, business and the community on productive ageing across the life course
- Raise awareness of research findings that are useful for older people
- Be a leading centre for research, education and information on productive ageing in Australia.

For more information visit productiveageing.com.au or call 03 9650 6144.

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Executive Summary

Background and purpose

The true cost-of-living pressures on Australian seniors (those aged 50 or more) are likely to be underestimated if the levels of household expenditure do not take into account that many older Australians have disabilities and chronic illnesses that require additional care and support in the home. In 2011, more than 560 000 seniors with severe or profound disability needed assistance with a core activity (defined as self-care, mobility or communication) to live in a private dwelling. The majority of these individuals lived in one family couples (either with or without children) or single-parent households and received care from a family co-resident.

This report addresses the key issue of the financial burden placed on older households through out-of-pocket expenditure on care needs in the home. The costs of care tend to be hidden in the day-to-day spending patterns of older households. In particular, the study focuses on how household expenditure on different goods and services is impacted by the presence within the household of a person who needs care because of a disability. This is known as consumption expenditure.

Data and methods

The data used in the analysis is drawn from the unit-record data from the *Household Expenditure Survey (2009–2010)* (HES) that was conducted by the Australian Bureau of Statistics (ABS). A descriptive analysis using cross-tabulation of the data was conducted. Using regression modelling techniques, the impacts of the presence of people with severe or profound disability on the consumption pattern of older Australian households was then investigated further. This enabled the impacts of disability to be disentangled from those of other factors such as family structure, life cycle, or regional geography. These issues were investigated by studying the relationship between the 'consumption shares' of various commodities/services and total consumption, where consumption shares are defined as the proportion (share) of the household budget spent on a particular good or service. The regression model used was a standard Engel Curve model which examines how expenditure on a given good or service varies with income.

Key findings

Approximately 21% of the households included in this study (where the survey reference person in the family was 50 years or over) had at least one family member (either an adult or child) with a severe or profound disability. In 2009–2010, the per capita budgets of couple households (\$536 per week) were larger than those of single-parent households (\$449 per week). The differences were much larger between households with and without a person with a severe or profound disability. Among couple and single-parent households, those with seniors who needed assistance with a core activity spent more than \$100 per person per week less than those households that did not have seniors who needed assistance.

The presence of a household member with severe or profound disability also affected the patterns of consumption. Households with a person who needed assistance with their core activities spent more on food and health (direct out-of-pocket costs) but less on recreation and other goods and services, including transport, household services, superannuation and life insurance, and miscellaneous goods and services. For example, couple families with a member with a disability spent approximately 26% of their total consumption on food. This

is approximately 3.5 percentage points more than families without members with a severe or profound disability. At the same time, couple families with a member with a disability spent approximately 11% of their consumption on recreational activities, which is approximately 2.5 percentage points less than that of households that did not have a person with a disability.

For older couple households, at any given per capita total expenditure level, the presence of a family member with severe or profound disability significantly increased the proportion (share) spent on food and health items and services (defined as necessities) by 1% for each category. On the other hand, the expenditure on recreational activities (recreation being a luxury good) decreased by 1%. This finding suggested that older families with members needing assistance had to allocate more of their household budget to meet their basic needs and sacrifice the consumption of luxury goods and services. In addition, the proportion of health expenditure increased immediately after retirement.

For older single-parent households where the parent or a child needed assistance with core activities, the disability only seemed to affect the share of health expenditure. These households spent an additional 2% of their consumption budget on health goods and services compared with single-parent households where a family member did not have a disability.

Conclusion

This study found that the household budget and the composition of the spending changed as people aged, with the level of expenditure related to family type. However, the differences were quite stark between families with or without family members with a disability and need for care in terms of the size of per capita household budgets and the patterns of consumption.

The results from the regression analysis revealed that for older Australian households, recreation, clothing, and other goods and services were seen, in economic terms, as luxury items. This meant that as income increased, households consumed relatively more of these items. Food and housing were found to be necessities, which meant that households consumed proportionally less as their income increased. Households with a member with a severe or profound disability spent relatively more on food and health and, at least for the couple households, less on recreational activities. These findings suggested that families with members with a severe or profound disability had to spend more on necessities at the expense of spending on luxury items such as recreation. Thus, when considering the standard of living of these households, the change of lifestyle as a result of the presence of disability should be taken into account.

Consistent with findings from the recent literature, this study also found that consumption patterns varied with the life stage. In particular, after retirement, the change in lifestyle and income led to a change in family consumption patterns. For example, couple households spent relatively: more on recreation after retirement (possibly because of more spare time); less on housing (possibly because of downsizing); and less on alcohol and tobacco products and other goods and services, many of which were likely to be associated with working. More importantly, couple households spent more on health, most probably reflecting the deterioration in health associated with ageing. The increased spending on health as the people in the household aged was again evidence that health exerts a significant impact on household consumption patterns and the living standards of Australian seniors.

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Introduction

Background

According to the 2007 Senate Inquiry into the cost-of-living pressures on older Australians, pressures on household expenditure on basic and essential goods and services were placing seniors under increasing financial stress.¹ The principal source of income of nearly 60% of older people living in private dwellings is the Age Pension, and seniors with a disability are more likely to rely on the Age Pension as their main source of income than those without a disability.² Single pensioners and older people with severe disabilities or chronic illnesses are particularly sensitive to cost-of-living pressures. In a recent survey of the financial wellbeing of older Australians, the NSPAC reported that the greatest concern, particularly among women, is that inflation may erode the value of savings and investments.³

The 'true' cost-of-living pressures on Australian seniors is likely to be underestimated if levels of household expenditures do not take into account that many older Australians have disabilities and chronic illnesses that require additional care and support. According to the Department of Health⁴, more than 94% of Australians who were 65 or older and more than 70% of seniors aged 85 or older, lived in private dwellings. The vast majority lived in their own homes. Nearly two million Australian households have at least one person who is aged 65 years or over. Importantly, three of every five of these households have at least one person aged 65 years or over who has a disability and in more than 20% of these households the older person (ie. someone aged 65 years or more) with a disability has a severe or profound disability.ⁱ

The former Labor Government, in its aged care reform package ('Living Longer, Living Better') and the Coalition in the 2013 election policy ('Healthy Life, Better Ageing'), announced initiatives to expand and improve the flexibility of formal support and care services for older Australians who want to stay in their own homes.^{4,5} However, research on the financing of aged care has largely focused on the funding and costs of formal care for both residential services and home-care packages. A key question remains to be answered: 'What is the financial burden being placed on older households through out-of-pocket expenditure on care needs in the home?' These costs of care remain hidden in the day-to-day spending patterns of older households.

Expenditure patterns of older households

A fairly large body of literature exists on the patterns of expenditure by older households. However, most of the studies focus on the transition to retirement, and in particular, the significant drop in the consumption of goods and services upon retirement (see for example, References 7–12). Some recent examples are given below. The common findings in these studies below show that the budget of households varies with life cycle and older households spend proportionally more on basic needs.

Hurst¹³ summarised the recent literature on consumption patterns during retirement. He concluded that the declines in spending during retirement are limited to food and work-related expenses and not on 'non-durable' expenditures, which are defined as personal expenditure on tangible goods that tend to last for less than a year (e.g. clothing, fuel, or personal items).

ⁱ According to the Australian Bureau of Statistics^{2,6} a person is defined as having a disability if they report that they have a limitation, restriction or impairment, which has lasted, or is likely to last, for at least six months and restricts everyday activities. A person is identified as having a severe disability if the person sometimes needs help with a core-activity task (communication, mobility or self-care), has difficulty understanding or being understood by family or friends or can communicate more easily using sign language or other non-spoken forms of communication; and a profound disability if they are unable to do, or always needs help with, a core-activity task.

Hurst's findings suggested that changes in expenditure patterns relate more closely to a change of lifestyle in retirement. Although for some individuals retirement may be involuntarily because of deteriorating health, the change observed in the consumption of goods and services is often related to this change in circumstances.

Using several *Health and Retirement Surveys* (HRS) and the related *Consumption and Activities Mail Surveys* (CAMS) carried out in the early-mid 2000s, Butrica¹⁴ examined the impact of health problems in the United States at older ages (after 50 years of age) on out-of-pocket health care spending and other types of expenditures. As expected they found that the presence of medical conditions increased health spending, particularly for households with people who were aged 51 to 64, but the presence of these conditions did not generally reduce non-health spending by these households.

Using expenditure data dating back to the early 1990s, Karagiannaki¹⁵ studied the impact of health on the savings and consumption decisions (i.e. for goods and services) of persons aged 65 years and above in the United Kingdom. Her findings suggested that there were significant adjustments in the composition of consumption following the onset of an illness. These changes 'reflect mainly the combined effect of increased costs associated with illness onset' and those of 'constraints on opportunity to spend associated with illness onset'.

Lafrance and LaRochelle-Cote¹⁶ described consumption patterns dating back to the early 1980s among senior Canadians (those aged in their late 40s and over). After controlling for the decline in family size, the findings revealed consumption levels remained relatively stable as households aged. However, the composition of consumption changed. In particular, larger shares of overall expenditure by older people were devoted to housing and health, while they spent less on food, clothing and personal care.

Banerjee¹⁷ also documented the expenditure patterns of older Americans (persons aged 50 years and over) in the first decade after the year 2000, focusing on the transition around retirement. Results of this study showed that consumption: steadily declined with age; declining health limited consumption of different goods; and healthcare expenditures steadily increased with age. Banerjee¹⁷ concluded that low-income households struggle, especially as they age and/or when a catastrophic health shock (an unexpected health event where the cost of care is very high relative to household income or savings) impacts on household expenditure.

Purpose

Overall, the literature suggested a positive relationship between health costs and the age of households. Less is known about the spending patterns of older Australian households, in particular when a person in the household has a disability. This study investigated the expenditure (patterns of consumption of goods and services) of older Australian households, with a focus on the impact of the presence in the family of a person with severe or profound disability who needs care. The way households allocate their expenditure to buy different goods and services is known as consumption expenditure. The findings of this study should shed some light on the true cost-of-living pressures on older families who have at least one family member with a severe or profound disability.

Data and methods

The data used in the analysis is drawn from the unit-record data from the *Household Expenditure Survey (2009–2010)* (HES), conducted by the Australian Bureau of Statistics (ABS). The HES is a biannual national survey that collects information on the expenditure, income, net worth and other characteristics of households that live in private dwellings throughout Australia. The 2009–2010 HES covered 9,774 households, which was a sub-sample of the *Survey of Income and Housing (SIH)*. For detailed information about the HES and SIH surveys see Reference 18. The households included in the analysis is limited to one family households, where the survey reference person in the family was aged 50 years or over and the family consisted of either a couple (with or without children) or was headed by a single parent.ⁱⁱ As shown in Table 1, this embraces 73.1% of males and 67.3% of females aged 50 years or over living in private dwellings.

Of seniors (those aged 50 years and above) receiving care in the community, approximately 42% received only informal care and 57% received a mix of informal and formal care.² When a family member in a couple or single-parent household had a severe or profound disability, most often another household member provided this informal care. The ABS 2009 *Survey of Disability, Ageing and Carers* showed, for example, that for individuals living in a one family household it was most often a co-resident who was the primary carer of the person with severe or profound disability. For people aged 50 years or more, this was usually a partner followed by an adult daughter then son.² For children with a disability, the primary carer was most often a parent. The presence of disability and provision of informal care within the family was therefore likely to impact on the entire household consumption pattern.

Older people with a severe or profound disability and who live alone are a particularly vulnerable group. Approximately 60% required some assistance with the core activities of daily living (such as self-care, mobility or communication). However, while the presence of disability was likely to impact on the expenditure patterns of these older individuals, in households with only one person there also tended to be spill-over effects with the cost of care also being borne, at least in part, by a non-resident informal carer. There was insufficient data to explore this further and therefore households with only one person were not included in this study.

Overall, there were 3,284 households in the HES representing older couple and single-parent families. Fifty-two households were excluded because the information about the reference person in the household file could not be matched with the individual file.

The HES provided detailed information on household expenditures. The HES measured net or 'out of pocket' private expenditure on durable goods and non-durable goods and services used for private purposes. Any refund, such as received through Medicare, was deducted from the household's total outlay on a good or service. Thus, estimates only referred to the costs for which households were directly responsible.

Expenditures were separated into two broad categories, consumption and non-consumption items. Consumption expenditure is the value of consumption goods and services used or paid for by a household to directly meet its needs. Households also incur expenses not directly aimed at meeting these needs. Expenditure where a household does not acquire any goods or services, such as savings, investment, taxes, transfer payments, and so on, represents non-

ⁱⁱ Attributing one person within each household as the "reference person" is an approach used by the Australian Bureau of Statistics to designate one member of the household and assume that the characteristics of that person are descriptive of the household more generally. The reference person is the person most likely to be representative of the household which can then be classified according to the age of the reference person, occupation of the reference person, country of birth of the reference person etc.¹⁹

consumption expenditure by a household. In this study, total consumption expenditure was calculated as total expenditure minus spending on items such as furnishings and equipment (eg household appliances, glassware, tableware, cutlery, household utensils, tools, lawnmowers, phones etc.), mortgage repayments, capital housing costs and income tax. These excluded categories differed from the other items of consumption in that they represented either savings (including dissaving, that is, negative saving that occurs when household spending is greater than income) or were some form of household investment.

To analyse the consumption pattern, a number of shares of consumption expenditures on various categories of goods and services were constructed, including the share of expenditure on food, clothing and personal care, alcohol and tobacco, health, recreation, housing, and other goods and services (such as transport, household services, superannuation and life insurance and miscellaneous goods and services). Non-consumption expenditures included furniture and equipment (defined as durable items), principal components of mortgage repayments (savings) and other capital housing costs. Expenditures on income tax were excluded so that only disposable income was considered. While the analysis was mainly on consumption expenditures, non-consumption expenditures were also considered.

By examining the expenditure values in the HES, another 41 households were excluded because the types of expenditure appeared to be implausible: 11 of the households did not spend anything on food or housing, or all their expenditure was on housing; 26 had total weekly expenditure that was more than \$5,000; and two spent less than 1% of their total consumption on food. Thus, the final sample for the analysis consisted of 3,191 households.

In the survey, certain demographic information about individuals over the age of 15 years was provided. In particular, questions were asked about an individual's disability status, including whether the individual had a disability or long-term health condition and the level of severity. From this information, a new variable was constructed to indicate whether or not at least one person with a severe or profound disability was present in the households.

Methods of analysis

The regression approach

A descriptive analysis using cross-tabulation was conducted. Based on this preliminary analysis, the impacts of the presence of family members with severe or profound disability on the consumption pattern of older Australian households (ie. households where the reference person was aged 50 years or above) were investigated further using regression techniques. This enabled the impacts of disability to be disentangled from those of other factors such as family structure, life cycle (age of the reference person in the household) and regional geography. In the second part of this study, only 'non-durable' consumption was examined, rather than the total household budget. This was not only because goods that are consumed immediately or used over a relatively short period of time (e.g. those that last for less than a year such as food, clothing, fuel, health or personal items) account for more than 90% of the household budget, but also because the welfare of households was more directly related to this form of consumption.

There were many factors associated with the differences between the consumption patterns of households with and without family members who had severe or profound disabilities. Furthermore, not all of the differences can be attributed to the presence of household members with a disability and need for care. Thus, a regression analysis can be used to separate the

effect of other factors from the presence of a household member having a disability and need for assistance. The model used was a standard Engel Curve model. In the literature, this is usually referred to as the Working-Leser model.ⁱⁱⁱ

The details of the model are provided in Appendix A. In this report, the model was more flexible when total consumption expenditure was also included as a squared term. The expenditure shares of seven categories of goods and services were studied. These were: food; health; clothing; recreation; housing; alcohol and tobacco products; and other goods and services. A range of household characteristics were included in the model, such as family structure (number of members and the proportion of adults in the households); life cycle indicators (dummy variables^{iv} for the reference person); dummy variables for regional geography (capital city versus balance of the state); and the key variable of interest and the presence of a household member(s) with severe or profound disability. The names of the variables are listed in Appendix B. In the HES, the age of the survey reference person was grouped in five-year intervals for those aged 50–54, 65–69, 70–74 and 75–79, in individual years between 55 and 64 years of age and with top coding at 80+ years. This coding was retained in the modelling of household expenditure partly because using the individual age breakdown for reference people aged between 55 and 64 may shed additional light on changes in household expenditure patterns as household members approach retirement.

The Engel Curve described the relationship between the share of commodity consumption and the total consumption expenditure.^v

As household income increases, the actual level of expenditure on a particular good or service such as food may also rise, but the proportion of the total household budget devoted to this commodity may fall in percentage terms as households spend a larger share of their additional budget on goods other than food products.

This is often called an Engel Curve relationship. The regression model coefficients provided estimates of the 'elasticity' of consumption of certain goods at each level of total consumption. 'Demand elasticity' is a measure of how responsive a household is in their consumption of a particular good or service to a change in their total level of household expenditure. Technically, this is defined as the percentage change in the consumption of the good or service associated with a 1% change in total expenditure. When the elasticity is greater than one, it implies that consumption of the good or service increased more than the increase in total expenditure (or income) and it is categorised in economic terms as a luxury good. Otherwise, if it is less than one, it implies that the good is a household necessity.

ⁱⁱⁱ It follows the original statistical analysis of budget shares by Leser²⁰ and Working.²¹ The model is also motivated by the Almost Ideal and Translog demand models of Deaton and Muellbauer²² and Jorgenson et al²³, so it is also called the 'Piglog' specification when the consumption shares are linear in log total outlay.

^{iv} In econometric and statistical analysis, a dummy variable takes a value of 0 or 1 to indicate whether something is true or false or a given attribute is present or absent, for example, a person is 55 years of age, or they live or do not live in a capital city.

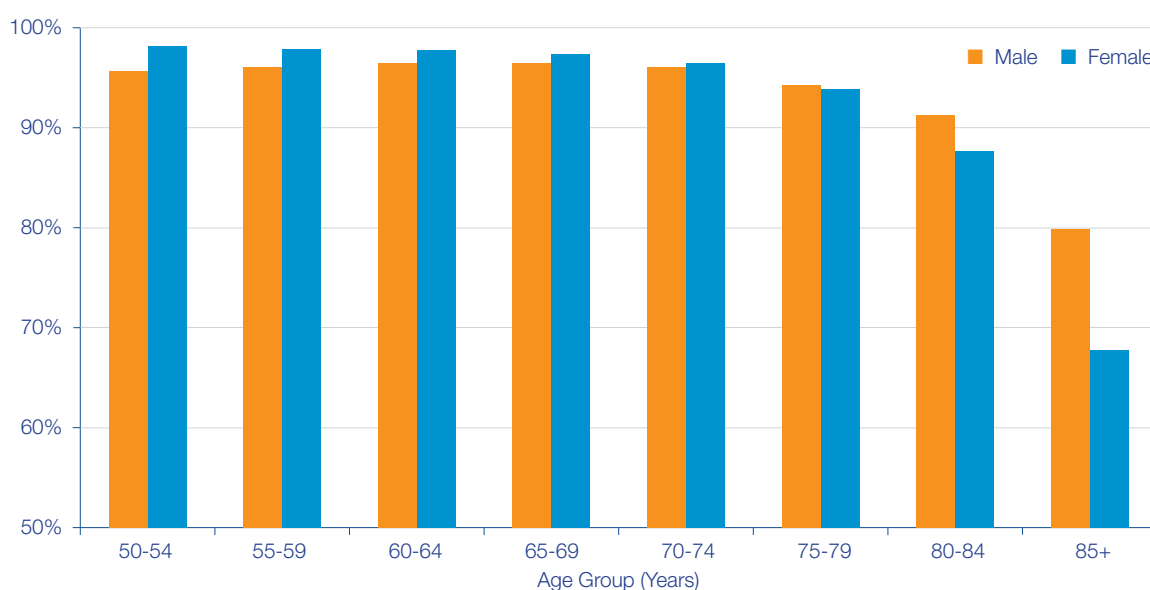
^v Traditionally, Engel Curve relationships, especially those considering food, are used in welfare analysis and comparing standards of living and to evaluate the welfare impacts of policy reforms. In particular, the share of consumption devoted to food is often used as an (inverse) indicator of welfare. It is also used to estimate impacts of demographic changes and equivalence scales for varying household size. Moreover, this relationship determines the effect of changes in the overall consumption budget on the relative demand for individual goods and services. The modern empirical literature on Engel Curve relationships dates back to the original analysis by Working²¹ and Leser.²⁰ Since then, numerous studies can be found. A few examples are Muellbauer²⁴; Deaton and Muellbauer²¹; Jorgenson, Lau, and Stoker²²; Gorman²⁵; Atkinson, Gomulka, and Stern²⁶; Hausman et al²⁷; Browning²⁸; Hausman and Newey²⁹; Lewbel³⁰; Banks et al³¹; Blundell, Duncan and Pendakur³²; Bhalotra and Attfield³³; and Gong et al³⁴

Findings

Consumption expenditure by Australian seniors

This report examined the consumption expenditure of Australian senior citizens who live in the community in private dwellings, including houses and flats, as well as motels, caravans or even for example, tents, humpies and houseboats. In this study, 'seniors' are defined as those individuals aged 50 years and over. In 2011, Australia had nearly seven million senior citizens, 1.38 million were aged 75 years and over and 403 000 were aged 85 years and over. As shown in Figure 1, the vast majority of these individuals lived in private dwellings. Even in the oldest age group, as many as 80% of males aged 85+ years and 68% of Australia's oldest females still lived in private residences in the community.

Figure 1: Proportion of Australia's population 50 years and over living in private dwellings, 2011



Source: ABS TableBuilder 2011 Census data³⁷

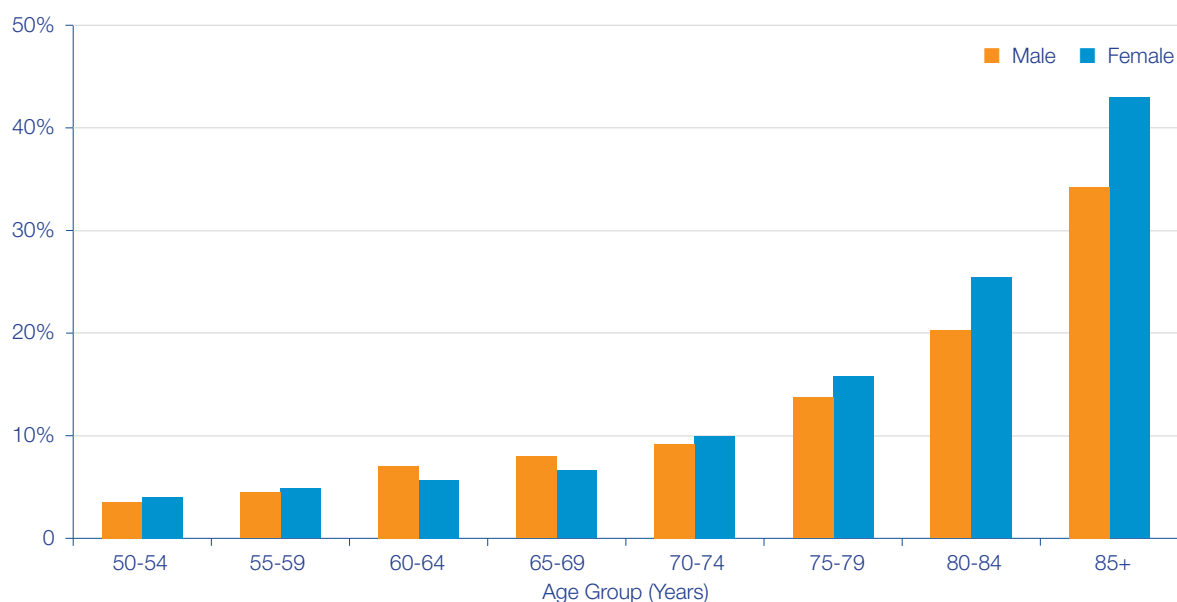
The majority of Australia's seniors living in the community are members of one family households and couple families, with or without dependent children (*Table 1*). This is especially the case for males. However, by 75 years of age, over one-third of women are living in single person households and this figure rises to nearly two-thirds for those aged 85 years or more. This is in stark contrast to their male counterparts, who even when they are very old still typically live with a partner.

Many of Australia's seniors who live at home need assistance with the core activities of daily living. That is, they have a severe or profound disability and need help or assistance with one or more of three areas of self-care, mobility or communication (*Figure 2*). In 2011, there were more than 560,000 seniors with severe or profound disability living in private dwellings who needed assistance with a core activity. This represents about one in ten seniors, although the rate rises sharply with age. Notably, it is the partner or children of older Australians who most often provided care in the home, with the costs of care being met from household budgets.^{35 36}

Table 1: Family household composition of Australia's population aged 50 years and over and living in private dwellings, 2011

Age (years)	Gender	Family Household Composition (% of individuals)				
		One family household: Couple family with no children	One family household: Couple family with children	One family household: One parent family	Lone person household	Other
50–54	male	20.3	48.8	6.9	13.0	11.0
	female	25.4	40.5	13.5	10.5	10.2
55–59	male	34.3	34.5	5.5	14.0	11.7
	female	39.8	24.9	9.8	14.3	11.2
60–64	male	48.3	21.3	3.7	14.4	12.3
	female	49.3	14.1	7.0	18.1	11.5
65–69	male	55.9	13.9	2.6	15.0	12.6
	female	50.8	9.9	5.9	22.2	11.1
70–74	male	59.4	10.8	2.2	15.8	11.8
	female	47.7	8.4	6.4	27.7	9.8
75–79	male	60.7	9.0	2.5	17.4	10.4
	female	40.6	7.3	7.8	36.0	8.4
80–84	male	58.7	7.7	3.0	21.6	8.9
	female	30.5	5.9	9.5	46.9	7.2
85+	male	50.0	6.7	4.9	30.3	8.1
	female	19.2	4.8	12.2	57.2	6.6
All	male	43.3	25.5	4.3	15.4	11.4
	female	39.1	19.0	9.2	22.6	10.2

Source: ABS TableBuilder 2011 Census data³⁷

Figure 2: Proportion of Australia's population aged 50 years and over living in private dwellings and who have a core activity need for assistance, 2011

Source: ABS TableBuilder 2011 Census data³⁷

Approximately 21% of the older households included in this study had at least one family member with a severe or profound disability. As shown in Figure 3, the proportion increases with the age of the households, from approximately 11% of households where the reference person is 50–54 years old to approximately 33% for those households where the reference person is 80 years or over.

Figure 3: Percentage of households with at least one member with severe or profound disability by age of the reference person in the household



Source: Authors' calculations from 2009-10 ABS HES data

Total household budget of families

The average overall household budgets of the different types of families in the study sample are shown in Table 2. On average, in 2009–2010, the per capita household budget (excluding income tax) of older households was approximately \$527 per week. The per capita budgets of couple households (\$536 per week) were larger than those of the single-parent households (\$449 per week). The differences between households with and without members with a severe or profound disability were much larger. Among both couple and single-parent households, those with people who needed assistance with a core activity spent over \$100 per person per week less than those households without a person who needed assistance.

The average older household spends 90% of their total budget on consumption. Single-parent households spent approximately two percentage points more of their total expenditure on consumption items than the couple families. In addition, within couple families, those with members with a severe or profound disability also spent a larger proportion of their budget on consumption items than families free of disability. The difference within single-parent families was not as great, although this may be because of the small sample sizes in the study.

Table 2: Average per capita household budgets by household type

Household type	Total budget (weekly \$)	Consumption (% of budget)	Non-consumption (% of budget)	No. of Observations
Couple	535.5 (505)	90.0 (15.4)	10.0 (15.4)	2,875
With disability ^a	398.2 (325)	91.2 (14.5)	8.8 (14.5)	575
No disability	569.8 (535)	89.7 (15.6)	10.3 (15.6)	2,300
Single parent	449.0 (307)	91.9 (13.2)	8.1 (13.2)	316
With disability	360.2 (199)	92.2 (12.6)	7.8 (12.6)	83
No disability	480.7 (332)	91.8 (13.4)	8.2 (13.4)	233
All	526.9 (489)	90.2 (15.2)	9.8 (15.2)	3,191

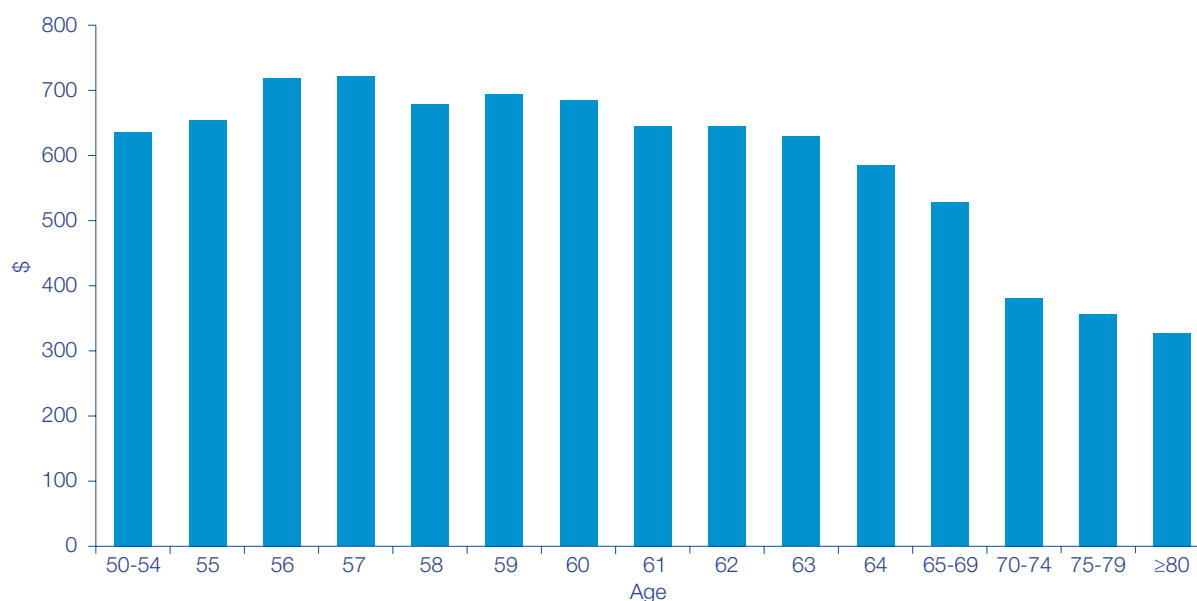
^a severe or profound disability

Standard deviations are in parentheses

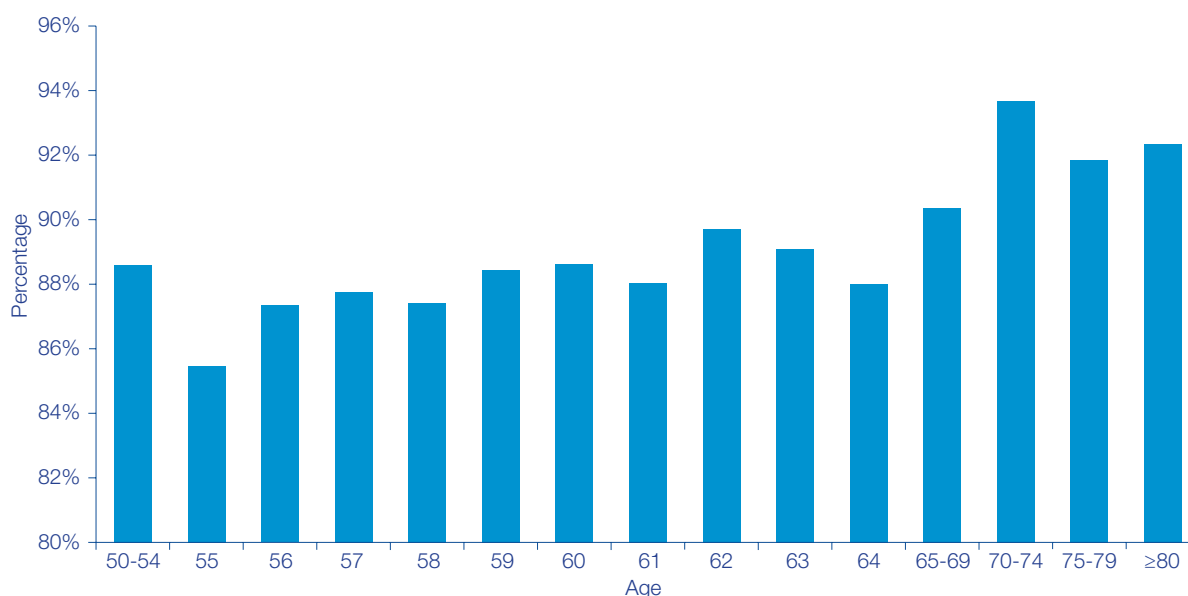
Source: Authors' calculations from 2009-10 ABS HES data

The budgets for households varied by the age of the reference person in the household (*Figure 4*). The per capita budget of households after the standard retirement age of 65 years was lower than the budgets of households where the reference person was younger than 65 years of age. However, the decrease became noticeable particularly after the reference person in the household entered their 70s. This was consistent with the current literature that reports spending after retirement decreases, although the decline is not so abrupt immediately after retirement (see for example Hurst, 2008, Banerjee 2012).

The share of consumption in the total budget increased with the age of the household and households where the reference person was retired (aged 65 years and over) had a significantly larger share of consumption than younger households (*Figure 5*). These findings suggested that the lifestyle of the households beyond retirement age was different from those in pre-retirement households.

Figure 4: Age pattern of household total weekly expenditures (\$, per capita)

Source: Authors' calculations from 2009-10 ABS HES data

Figure 5: Share of consumption in the total household budget by age

Source: Authors' calculations from 2009-10 ABS HES data

Pattern of consumption expenditures

Families with and without members with severe or profound disability also show different patterns of consumption. In Tables 3 and 4, the consumption expenditure and their patterns were summarised for the couple (with and without children) and one-parent families, respectively. Twenty per cent (575 of 2,875) of couple households had at least one member with severe or profound disability. This situation occurred in 26.3% (83 of 316) of one-parent households.

The overall per capita consumption expenditure of couple households was approximately \$444 per week. This figure was approximately \$39 more than single-parent households, but the composition of the consumption expenditure did not differ by much between these two groups.

The total consumption budget of families with members with severe or profound disability was much lower than those without a member with a disability. For couple families, the difference in the average household consumption was as much as \$350 per week. For one-parent families, it was approximately \$241 per week. The difference was smaller for one-parent households because the consumption level of these households was generally lower. This occurred because one-parent households had a lower combined income level.

Households with a person who needs assistance with the core activities of daily living spent more on food and health (direct out-of-pocket costs) but less on recreation and other goods and services (which includes spending on transport, household services, superannuation, life insurance and miscellaneous goods and services). For example, even though their actual spend on food was less at \$86 per week compared with \$104, couple families with a member with a disability spent approximately 26% of their total consumption on food. This was approximately 3.5 percentage points more than families without members with a severe or profound disability. At the same time, households with a person with a disability spent approximately 11% of their consumption on recreational activities. This was approximately 2.5 percentage points

less than the amount spent on consumption by households that did not have a person who needed assistance. This initial analysis shows that the households with members with severe or profound disability had to allocate more of their budget towards health services and basic needs (such as food) and sacrifice expenditures on more luxury goods (such as recreation services).

Consumption patterns also varied with the age of the household reference person. For example, compared with households where the reference person was in their 50s, households after retirement spent increasingly greater proportions of their consumption budget on food and health, but less on other commodities and services (*Figure 6*). In households where the reference person was aged between 50 and 54 years, expenditure on food and health items and services made up less than 20% and 6%, respectively, of the total consumption of the households. In contrast, this increased to approximately 27% and 11% for those 80 years of age and over, while the expenditures on other commodities and services dropped from approximately 34% to 24%. As noted previously, many components in the category of 'other expenditure' (such as transport and superannuation) were related to work. This pattern of consumption seen in households with retirees was consistent with their changed lifestyle and the fact that health generally declined with age.

Table 3: Weekly consumption expenditures (% of total consumption) of couple families

Variable	All	With members with disability ^a	No members with disability
Total consumption (\$/person)	444.4 (304.0)	338.1 (206.0)	470.9 (318.5)
Food	22.7 (10.0)	25.5 (10.5)	22.0 (9.8)
Recreation	13.4 (11.3)	11.4 (11.0)	13.9 (11.4)
Health	8.0 (7.2)	9.2 (8.8)	7.7 (6.6)
Clothing and personal	5.2 (5.5)	5.0 (5.3)	5.3 (5.6)
Housing	17.5 (12.0)	19.3 (12.1)	17.1 (11.9)
Alcohol and tobacco	3.6 (5.6)	3.7 (6.2)	3.6 (5.5)
Other goods and services	29.5 (15.2)	25.9 (13.7)	30.4 (15.4)
Number of observations	2,875	575	2,300

^a severe or profound disability

Standard deviations are in parentheses

Source: Authors' calculations from 2009-10 ABS HES data

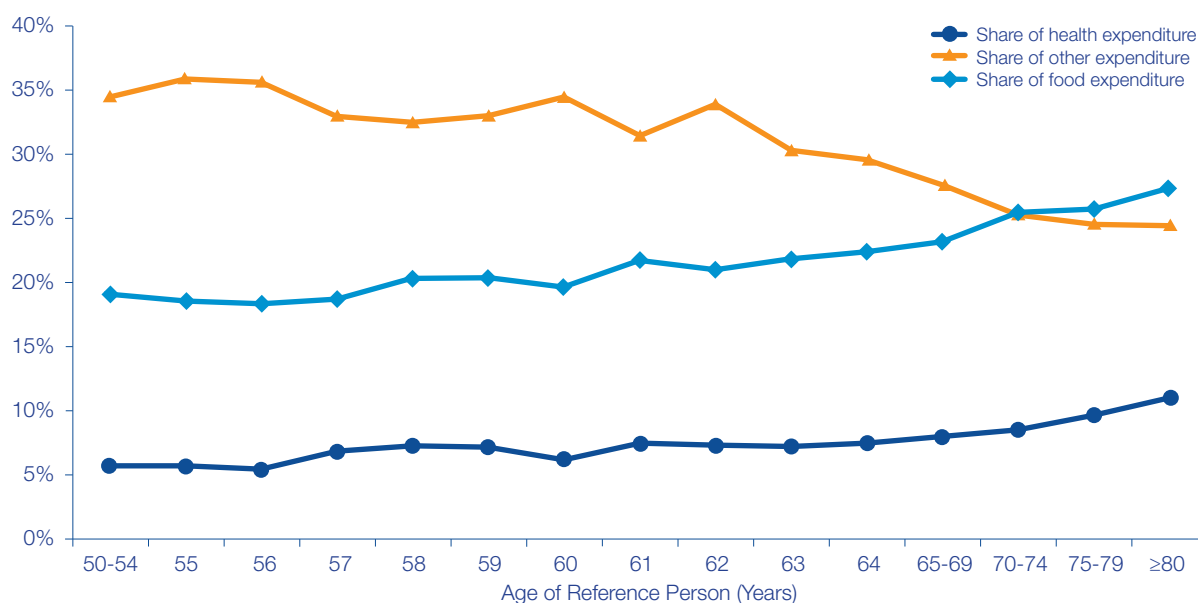
Table 4: Weekly consumption expenditures (% of total consumption) of one-parent families

Variable	All	With members with disability ^a	No members with disability
Total consumption (\$/person)	395.8 (248.3)	322.1 (163.9)	422.0 (267.5)
Food	22.1 (10.4)	24.7 (11.2)	21.2 (10.0)
Recreation	12.8 (10.7)	13.0 (11.5)	12.7 (10.4)
Health	5.3 (6.2)	7.0 (7.6)	4.8 (5.4)
Clothing and personal	5.0 (5.3)	4.4 (4.1)	5.2 (5.7)
Housing	21.7 (14.3)	22.4 (15.6)	21.5 (13.8)
Alcohol and tobacco	5.0 (7.3)	4.4 (7.2)	5.2 (7.3)
Other goods and services	28.1 (15.1)	24.2 (12.7)	29.5 (15.6)
Number of observations	316	83	233

^a severe or profound disability

Standard deviations are in parentheses

Source: Authors' calculations from 2009-10 ABS HES data

Figure 6: Age patterns of selected goods as shares of total consumption

Source: Authors' calculations from 2009-10 ABS HES data

Analysis of expenditure categories

A regression model was estimated for each of the seven expenditure categories. This model was applied separately for couple and for single-parent households. This relates to the Engel Curves previously discussed that show how consumption shares between different goods and services change with a change in income. The estimation results are shown in Tables 5 and 6. In the model, possible regional variations were also controlled for by including regional dummy variables for households living in capital cities versus balance of the states, but for the sake of conciseness, those coefficients were omitted from the tables. Demand elasticity (how responsive a household is in their consumption of a particular good or service to a change in their total level of household expenditure) was calculated based on the regression estimates (Table 6). The impact of demographic variables and total expenditures were very different for couple families and single-parent households (Tables 5 and 6).

Couple families and expenditure

For average couple families, the demand elasticity for each of the items of recreation, clothing and other goods and services was significantly larger than one (second column, Table 7). This suggested that the consumption of these goods increased more than the growth in household income and (in economic terms) represented luxury consumption items for these households. The share of health expenditure did not significantly change with total consumption. Food items and housing with demand elasticities of less than 1.0 were categorised as necessities.

The coefficients of the log total expenditure and its square term show that, except for food, the impacts of total consumption expenditure on consumption shares were not linear and the impacts varied with the consumption level (Table 5). In particular, the consumption share of recreation, health, alcohol and tobacco products, and clothing increased with total consumption expenditure when the level of total expenditure was low, but they started to decrease after the total consumption expenditure reached a certain level. On the other hand, the shares of housing and other goods and services initially decreased with the level of total consumption, but then started to increase after certain expenditure levels.

Given these overall patterns, how did disability impact on the consumption patterns of these households? These impacts were captured by the coefficients of the variable 'disab' (for definition, see Appendix B), which identifies the presence of at least one family member with a severe or profound disability (Table 5). They show that, for couple households, at any given per capita total consumption level, the presence of a family member with severe or profound disability significantly increased the share of expenditure on food and health items (which are necessities) by 1% each, but decreased the consumption of recreation (which is a luxury) by 1%. Disability did not have a significant impact on the consumption of the other categories of goods and services studied.

This finding suggested that older families (ie. those with the reference person aged 50 years and above) with members needing assistance with the core activities of daily living had to allocate more of their household budget to meet their basic needs and sacrifice consumption of luxury goods and services.

The coefficients of the age dummy variables in Table 5 reflect the change of consumption patterns at different stages of the life cycle. Around retirement, consumption on recreation significantly increased, but consumption on housing, alcohol and tobacco products, and other goods and services decreased. For example, for those households where the reference person is 63 years of age, the share of recreation was 3% more and the share of housing was 3%

less than for those aged 50–54 years. This was a sign of a change in lifestyles and possibly indicative of household dissaving (negative saving that occurs when household spending is greater than income).

Meanwhile, the share of health expenditure increased immediately after retirement (that of households where the reference person was 65–69 years old was about 1% greater than that of households where the reference person was 50–54 years old), although it was not clear if worsening health led to retirement or the other way around. However, expenditure on food and clothing seemed to be affected by retirement. These results supported findings in the recent literature that the drop of consumption at retirement relates to changes in lifestyle.

The consumption patterns were also affected by household size and structure. For example, the number of household members (represented by the variable *Lnum*) affected most of the categories. The results showed that larger households spent less on health and housing in per capita terms (*Table 5*). This was a sign of economies of scale and it was more obvious for housing. For health expenditures, it was probably the case that in larger households, family members can perform some domestic services (e.g. in-house care). Larger households spent more on recreation, clothing and other goods and services in per capita terms. Households with more adults also spent more on food and alcohol and tobacco products, but less on housing.

Single-parent families and expenditure

The estimates for single-parent households need to be interpreted with some caution because of the small sample size (*Table 6*). The demand elasticity for average single-parent families for each of the items is shown in the third column of *Table 7*. As the standard errors were larger than for couple families, it was difficult to distinguish necessities from luxury goods using these elasticities alone for all expenditure items. However, the point estimates were largely in line with those of couple families (second column, *Table 7*). Still, it was clear from the results presented in *Table 7* that food and housing were necessity goods while recreation and other goods and services were luxury items for these households.

The shares of health and alcohol and tobacco for single-parent households were not significantly affected by the level of total consumption expenditure, which was similar to couple households (*Table 7*).

For single-parent households where either the parent or a child had a severe or profound disability, their disability only seemed to affect the share of health expenditure, with these households spending an additional 2% of their consumption budget on health goods and services than those households where no family member had a disability (*Table 6*). Again, the insignificance of the coefficients for other share equations may be because of the small sample size of the families that participated in the HES.

For single-parent households, the impacts of age were similar to those observed for couple families. For example, after retirement, single-parent households spent more on food and health but less on housing. They did increase their spending on recreation, but this increase only became significant at later stages in their lives.

The family size and structure variables were not significant for the consumption shares of most commodities. The exceptions were that, in per capita terms, larger families spent less on housing for a given expenditure level; households with more adult children spent more on alcohol and tobacco products; and households with young people (more students) spent more on clothing.

Table 5: Estimated coefficients of the Engel Curves for couple households

Variable ^a	Food	Health	Recreation	Housing	Alcohol & Tobacco	Clothing	Other
Disab	0.01* (1.68)	0.01** (2.33)	-0.01** (-2.80)	0.01 (1.42)	0.00 (0.52)	0.00 (-0.24)	-0.01 (-1.33)
Lcon	-0.10** (-2.48)	0.17** (5.35)	0.32** (6.32)	-0.24** (-4.53)	0.12** (4.77)	0.14** (5.49)	-0.42** (-6.78)
lcon2	0.00 (0.14)	-0.01** (-5.46)	-0.02** (-5.32)	0.01** (3.35)	-0.01** (-4.97)	-0.01** (-5.18)	0.04** (8.45)
Lnum	-0.01 (-0.91)	-0.03** (-2.99)	0.03** (2.51)	-0.09** (-6.40)	0.00 (0.37)	0.02** (2.95)	0.07** (4.22)
Pstud	0.04 (1.53)	0.00 (0.14)	0.01 (0.35)	-0.10** (-2.70)	0.01 (0.84)	0.01 (0.78)	0.01 (0.34)
Padu	0.05** (1.98)	-0.01 (-0.66)	0.03 (1.13)	-0.11** (-3.44)	0.06** (3.82)	0.02 (1.32)	-0.04 (-0.99)
55yr	-0.01 (-1.19)	-0.01 (-0.67)	0.00 (0.15)	-0.01 (-0.45)	-0.01 (-0.99)	0.00 (0.57)	0.02 (1.53)
56yr	-0.01 (-1.14)	0.00 (-0.16)	0.00 (-0.08)	0.01 (1.02)	-0.01** (-2.01)	-0.01 (-0.89)	0.02 (1.20)
57yr	0.00 (-0.47)	0.01 (1.03)	0.01 (0.71)	-0.01 (-0.39)	0.00 (0.25)	0.00 (-0.42)	-0.01 (-0.42)
58yr	0.00 (-0.16)	0.01 (1.32)	0.02 (1.40)	-0.02 (-1.52)	0.00 (-0.39)	0.00 (0.23)	-0.01 (-0.36)
59yr	0.00 (0.05)	0.01 (1.32)	0.01 (0.58)	-0.01 (-0.42)	-0.01 (-1.12)	0.00 (-0.13)	-0.01 (-0.32)
60yr	0.01 (0.69)	0.00 (-0.14)	0.02 (1.38)	-0.05** (-3.35)	0.00 (-0.37)	0.01** (2.01)	0.01 (0.73)
61yr	0.02 (1.88)	0.01 (1.49)	0.02 (1.32)	-0.03** (-2.42)	-0.01 (-0.93)	0.00 (0.78)	-0.01 (-0.88)
62yr	0.01 (1.20)	0.01 (1.14)	0.02 (1.60)	-0.04** (-2.59)	-0.01 (-1.58)	-0.01 (-1.48)	0.01 (0.85)
63yr	0.01 (1.48)	0.01 (0.68)	0.03** (2.56)	-0.03** (-2.44)	-0.01* (-1.64)	0.00 (0.70)	-0.01 (-0.87)
64yr	0.01 (0.97)	0.01 (1.42)	0.04** (3.20)	-0.03** (-2.21)	-0.01** (-2.21)	0.00 (0.31)	-0.02 (-1.26)
65-69yr	0.01 (1.29)	0.01** (2.22)	0.05** (6.42)	-0.05** (-5.40)	-0.01** (-2.67)	0.00 (0.59)	-0.02* (-1.68)
70-74yr	0.01** (2.18)	0.02** (3.09)	0.04** (4.77)	-0.04** (-4.80)	-0.01** (-3.29)	0.01 (1.56)	-0.02** (-2.01)
75-79yr	0.01 (1.04)	0.03** (4.95)	0.05** (5.78)	-0.05** (-4.94)	-0.02** (-4.99)	0.00 (0.64)	-0.02* (-1.88)
≥80yr	0.01* (1.88)	0.04** (7.17)	0.02** (2.44)	-0.05** (-4.97)	-0.03** (-5.66)	0.01 (1.71)	-0.01 (-0.99)
Cons.	0.74** (6.22)	-0.41** (-4.13)	-1.07** (-6.85)	1.30** (7.92)	-0.37** (-4.56)	-0.43** (-5.39)	1.23** (6.42)

Regional dummy variables are controlled for. *t*-values are in parentheses

* and ** indicate significance at the 90% and 95% level, respectively.

^a definitions of variables are provided in Appendix B

Source: Authors' calculations from 2009-10 ABS HES data

Table 6: Estimated coefficients of the Engel Curves for single-parent households

Variable ^a	Food	Health	Recreation	Housing	Alcohol & Tobacco	Clothing	Other
Disab	0.01 (0.72)	0.02** (2.25)	0.00 (0.11)	0.01 (0.33)	-0.02 (-1.63)	0.00 (-0.38)	-0.02 (-0.89)
Lcon	0.17 (1.11)	-0.07 (-0.71)	0.24 (1.44)	-0.43** (-2.04)	0.19* (1.66)	0.14* (1.65)	-0.24 (-1.07)
lcon2	-0.02* (-1.69)	0.01 (0.83)	-0.02 (-1.08)	0.03 (1.49)	-0.02* (-1.73)	-0.01 (-1.48)	0.03 (1.63)
Lnum	0.00 (-0.11)	0.00 (0.25)	0.03 (1.09)	-0.13** (-3.39)	0.02 (0.93)	0.01 (0.96)	0.06 (1.54)
Pstud	0.03 (0.77)	-0.01 (-0.31)	0.02 (0.38)	-0.09 (-1.50)	0.01 (0.35)	0.05** (1.97)	-0.01 (-0.18)
Padu	0.00 (0.03)	0.01 (0.44)	0.00 (-0.12)	-0.02 (-0.34)	0.07** (2.64)	0.01 (0.43)	-0.07 (-1.34)
55yr	-0.02 (-0.68)	0.02 (0.80)	-0.01 (-0.36)	0.05 (1.22)	-0.02 (-1.04)	-0.01 (-0.39)	0.00 (-0.10)
56yr	0.02 (0.87)	-0.03* (-1.94)	-0.01 (-0.54)	-0.01 (-0.16)	0.01 (0.78)	0.03** (2.20)	-0.02 (-0.43)
57yr	0.01 (0.45)	0.00 (0.04)	0.01 (0.35)	0.00 (-0.09)	-0.01 (-0.37)	0.01 (0.86)	-0.03 (-0.64)
58yr	0.06* (1.85)	0.01 (0.43)	-0.03 (-0.81)	-0.07 (-1.52)	0.03 (1.36)	0.00 (0.11)	-0.01 (-0.12)
59yr	0.00 (0.14)	0.00 (0.10)	-0.01 (-0.29)	-0.05 (-1.12)	-0.02 (-0.63)	0.00 (0.20)	0.07 (1.41)
60yr	-0.03 (-0.89)	0.00 (0.17)	0.02 (0.50)	0.01 (0.34)	-0.03 (-1.18)	0.01 (0.43)	0.01 (0.27)
61yr	0.01 (0.37)	-0.01 (-0.33)	0.01 (0.16)	-0.06 (-1.18)	0.00 (0.05)	-0.01 (-0.54)	0.06 (1.09)
62yr	-0.01 (-0.37)	0.00 (-0.13)	-0.01 (-0.30)	-0.03 (-0.55)	0.00 (0.04)	0.01 (0.31)	0.05 (0.92)
63yr	0.00 (-0.11)	0.00 (0.07)	0.02 (0.60)	-0.08 (-1.54)	0.05* (1.75)	-0.03 (-1.26)	0.04 (0.65)
64yr	0.04 (1.13)	-0.03 (-1.25)	0.01 (0.34)	-0.06 (-1.12)	-0.05* (-1.77)	0.01 (0.63)	0.07 (1.29)
65-69yr	0.06** (2.64)	0.04** (2.52)	-0.01 (-0.28)	-0.06* (-1.76)	0.01 (0.30)	0.00 (-0.21)	-0.04 (-1.09)
70-74yr	0.02 (1.19)	0.01 (0.96)	0.01 (0.32)	-0.06* (-1.92)	-0.01 (-0.57)	-0.01 (-0.64)	0.03 (0.92)
75-79yr	0.01 (0.50)	0.02 (1.28)	0.07** (2.54)	-0.15** (-3.97)	-0.01 (-0.44)	0.00 (-0.16)	0.05 (1.28)
≥80yr	0.04** (2.23)	0.04** (2.85)	0.04* (1.77)	-0.13** (-4.57)	-0.02 (-1.01)	0.01 (1.18)	0.01 (0.36)
Cons.	-0.02 (-0.05)	0.20 (0.69)	-0.80* (-1.64)	2.00** (3.20)	-0.56* (-1.66)	-0.43* (-1.72)	0.62 (0.96)

Regional dummy variables are controlled for. *t*-values are in parentheses

* and ** indicate significance at the 90% and 95% level, respectively.

^a definitions of variables are provided in Appendix B

Source: Authors' calculations from 2009-10 ABS HES data

Table 7: Income demand elasticity at the sample mean

Commodity	Couple families	Single-parent families
Food	0.60 (0.01)	0.62 (0.05)
Health	1.00 (0.03)	1.21 (0.13)
Recreation	1.41 (0.03)	1.49 (0.09)
Housing	0.62 (0.02)	0.45 (0.07)
Alcohol and tobacco	0.92 (0.06)	0.87 (0.16)
Clothing	1.20 (0.04)	1.33 (0.12)
Other	1.32 (0.02)	1.42 (0.06)

Standard errors are in parentheses

Source: Authors' calculations from 2009-10 ABS HES data

Conclusion

The simple cross-tabulation investigation of expenditure patterns of older Australian households (ie. those where the reference person was aged 50 years and above) revealed some interesting details. First, the budget of households and the composition of spending changed as people aged. For example, the per capita budget declined and the proportion of consumption expenditure increased for non-durable goods such as food, clothing, fuel, health or personal items. Although the proportion of total expenditure on food and health increased with age, expenditure declined for other items, some of which were work related. These results may suggest that the change in consumption patterns was likely to reflect changes in lifestyle.

Second, the level of expenditure was related to family type. Older couple households had larger per capita budgets than older single-parent families, but the patterns of consumption did not differ much.

Third, in terms of the size of per capita household budget and patterns of consumption, the differences were quite stark between older families with and without family members with a severe or profound disability and who need care. In particular, households with family members with a severe or profound disability had smaller per capita household budgets. These households spent more on non-durable consumption, health and food, but less on recreation. These results may imply that poorer health could force older households to spend more on basic needs and correspondingly, reduce part of the expenditure on luxury items such as recreation.

However, without controlling for the many factors that influence families' expenditure behaviour, it is difficult to isolate the impact of health on consumption patterns. Thus, consumption patterns of older households and the impacts of having a member(s) with a severe or profound disability in the household on the consumption of goods and services were further investigated by analysing the Engel Curve relationships of these households. The analysis was conducted separately for couple and single-parent households.

The results revealed that for older Australian households, recreation, clothing, and other goods and services were seen in economic terms as luxury items. This meant that, as income increased, households consumed relatively more of these items. Food and housing were found to be necessities, which meant that households consumed proportionally less on this as their income increased.

The main purpose of this report was to investigate the impact on consumption patterns in households that had a member with a disability and needed assistance with their core activities of daily living. The findings in this report suggested that families with members with severe or profound disability had to spend more on necessities at the expense of having more luxury items such as recreation. Thus, when considering the standard of living of these households, the change of lifestyle that occurs when there is a person with a disability has to be taken into account. However, having a member in the household with severe or profound disability did not seem to significantly affect spending on other consumption categories such as clothing.

This study also found that consumption patterns varied with life stage, which was consistent with findings from the recent literature. In particular, after retirement, the change in lifestyle and income lead to a change in family consumption patterns. For example, couple households spent relatively more on recreation after retirement (possibly because of more spare time); less on housing (possibly because of down-sizing); less on alcohol and tobacco products, and other goods and services, many of which were likely to be associated with working. More importantly, couple households spent more on health, most probably reflecting the deterioration in health with ageing. The increased spending on health as the people in the household age was again evidence that health exerts a significant impact on household consumption patterns and associated living standards.

In addition, consumption patterns were influenced by household size and structure. Larger (couple) families spent less in per capita terms on health, possibly because some of these families were able to meet some needs domestically.

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Appendices

Appendix A – The Engel Curve model

The model used in this study is a standard Engel Curve model that in the literature is usually called the Working-Leser model.

To be specific, γ_i , the share of expenditure on certain good and services (food for example) out of the total consumption of household i , is a function of $lcon_i$, the log total consumption expenditure, x_i , the household characteristics, and ε_i , the error terms:

$$\gamma_i = \alpha + \beta_1 lcon_i + \beta_2 lcon_i^2 + x_i' \gamma + \varepsilon_i \quad (1)$$

where α , β , and γ are parameters. In this report, the model was made more flexible by including the square term of the log total consumption expenditure.

In this report, the expenditure share of seven categories of commodities/services was studied: food; health; clothing; recreation; housing; alcohol and tobacco products; and other goods and services.

Included in x_i are household characteristics such as family structure (number of members and the proportion of adults in the households); life cycle indicators (age dummies of the reference person); regional dummies; and the key variable of interest, the presence of a severely disabled household member(s). The names of the variables are listed in Appendix B.

β 's describe the Engel Curve relationship between the share of commodity consumption and the total consumption expenditure. From β 's, the elasticity of consumption of certain goods at each level of total consumption (η), which is defined as the percentage change in consumption of the goods associated with a one % change in the total expenditure, can be obtained as:

$$\eta_i = (\beta_1 + 2\beta_2 lcon_i) / \gamma_i \quad (2)$$

When it is greater than one, it implies that consumption of the good increased more than the increase in total expenditure (or income) and is categorised in economic terms as a luxury good. Otherwise, if it is less than one, it implies the good is a necessity.

Appendix B – Variable definitions and sample statistics

Variable	Definition	Mean (standard deviation)	
		Coupled families	Single-parent families
Disab	Dummy, 1 if at least one family member has a severe or profound disability	0.20 (0.40)	0.26 (0.44)
Lcon	Log per capita weekly total consumption expenditure	50.92 (0.58)	50.83 (0.54)
Icon2	Icon2	350.36 (70.01)	340.26 (60.40)
Lnum	Log number of household members	0.81 (0.25)	0.82 (0.23)
Pstud	Proportion of students between 15 and 24	0.03 (0.09)	0.10 (0.20)
Padu	Proportion of adults	0.96 (0.13)	0.84 (0.25)
55yr	Age dummy	0.03	0.03
56yr	“ “	0.03	0.05
57yr	“ “	0.03	0.04
58yr	“ “	0.02	0.03
59yr	“ “	0.03	0.03
60yr	“ “	0.03	0.03
61yr	“ “	0.04	0.03
62yr	“ “	0.03	0.03
63yr	“ “	0.03	0.03
64yr	“ “	0.04	0.02
65-69yr	“ “	0.17	0.08
70-74yr	“ “	0.15	0.09
75-79yr	“ “	0.12	0.05
≥80yr	“ “	0.10	0.12
Food	Share of expenditure on food	0.23 (0.10)	0.22 (0.10)
Recreation	Share of expenditure on recreation	0.13 (0.11)	0.13 (0.11)
Health	Share of expenditure on health	0.08 (0.07)	0.05 (0.06)
Housing	Share of expenditure on housing	0.18 (0.12)	0.22 (0.14)
Clothing	Share of expenditure on clothing	0.05 (0.06)	0.05 (0.05)
Alc & tobac	Share of expenditure on alcohol and tobacco products	0.04 (0.06)	0.05 (0.07)
Other	Share of expenditure on other goods and services	0.30 (0.15)	0.28 (0.15)
Number of observations		2 875	316



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