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Health and Wellbeing of Older Persons in the Australian Capital Territory

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Health and Wellbeing of Older Persons in the Australian Capital Territory

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1. LIST OF ABBREVIATIONS

ABS	Australian Bureau of Statistics
ACAT	Aged Care Assessment Team
ACT	Australian Capital Territory
ACTGHS	ACT General Health Survey
AHS	Australian Health Survey (ABS)
AIHW	Australian Institute of Health and Welfare
ALOS	Average length of stay (in hospital)
APC	Admitted Patient Care collection
BMI	Body Mass Index
CATI	Computer-assisted telephone interview
CHD	Coronary (Ischaemic) Heart Disease
COPD	Chronic Obstructive Pulmonary Disease
CVD	Cardiovascular Disease
DALY	Disability-adjusted life year
DoH	Department of Health
ED	Emergency Department
GP	General Practitioner
MBS	Medicare Benefits Schedule
na	not available
NHMRC	National Health and Medical Research Council
NMDS	National Minimum Data Set
OECD	Organisation for Economic Co-operation and Development
OPRSNA	Older Persons' Road Safety Needs Analysis for the ACT
ROGS	Report on Government Services (Australian Government Productivity Commission)

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Summary of results

For the purpose of this report, an older person is defined as a resident of the ACT aged 65 years or more unless otherwise indicated.

Demographic characteristics

- ❖ In 2013, there were estimated to be 43,327 persons aged 65 years or more living in the ACT, representing 11.3% of the total population. Slightly more than half (54.4%) of this group was female.
- ❖ By 2053, older persons are expected to comprise 21.0% of the ACT population.
- ❖ Belconnen and Tuggeranong are the regions of the ACT experiencing the greatest growth in the number of residents aged 65 years or more.

Social indicators relevant to health

- ❖ More than a third (37.5%) of older ACT residents reported attaining a tertiary degree. However, the figure for males (51.7%) was more than double the figure for females (25.3%).
- ❖ Of ACT residents aged 65 years or more, 76.7% indicated that they were able to save some money and 89.4% either owned or were paying off their home.
- ❖ Most ACT older persons (around 95%) felt they could ask small favours of, or get support in times of crisis from, people living outside their household.
- ❖ Those of more advanced age were more likely to live in residential aged care—81.2% of aged care residents were aged 80 years or more (those aged 65-69 years accounted for just 3.0%).
- ❖ The majority (80.0%) of ACT residents aged 100 or more needed assistance with core activities, compared with 5.4% of those aged 65-69 years. ACT rates were lower than the national average.

Mortality

- ❖ Death rates for all causes were generally lower for older persons in the ACT than their national counterparts.
- ❖ The leading cause of death in 2011 for the older persons in the ACT was ischaemic heart disease (22.7% of deaths), followed by cerebrovascular disease (13.5%) and cancers of the digestive organs (12.8%).

General health and quality of life

- ❖ Three-quarters (75.5%) of older persons in the ACT considered their health to be excellent, very good or good.
- ❖ More than half of older persons in the ACT reported themselves as being overweight (41.7%) or obese (19.3%).
- ❖ Almost half (45.6%) of older persons in the ACT were meeting the national guidelines for adequate physical activity.
- ❖ Almost half (49.4%) of older persons in the ACT ate at least three servings of vegetables per day, with only 17.2% meeting the dietary guidelines by eating five serves per day.
- ❖ Current ACT smoking rates in 2011–12 were substantially lower for older persons (4.7%) than in the total population overall (14.2%).

- ❖ One in eight (12.5%) older persons in the ACT consumed alcohol at levels that put them at lifetime risk of harm from alcohol-related disease or injury.
- ❖ Chronic conditions affect the majority of older persons in the ACT. Diseases of the eye and adnexa (attached structures) (95.8%), musculoskeletal and connective tissue (67.0%) and the circulatory system (62.1%) were the most commonly reported conditions.
- ❖ Cancer incidence increases dramatically with age. Between 2006 and 2010, more than half (53.9%) of all new cancer diagnoses among ACT men were for those aged 65 years or more; for women, this figure was 42.7%.
- ❖ It is estimated that in 2011, there were 3,600 people in the ACT living with dementia, most of whom were aged 65 years or more. This is likely to increase to approximately 5,200 by 2020.

Accidents and injuries

- ❖ More than one in five (21.8%) older persons in the ACT reported falling within the last 12 months. Of this group, almost half (49.3%) fell more than once, and 22.4% were hospitalised as a result.
- ❖ Falls-related hospitalisations for older persons have increased over time, and are higher for women than men. Between 2003–04 and 2012–13, fall-related injuries were the seventh most common reason for hospitalisation of older persons in the ACT, with an average length of stay of 6.8 days.
- ❖ The hospitalisation rate for falls occurring in ACT residential aged care facilities is markedly higher than the national average (5.7 per 10,000 bed days, compared with 3.4 per 10,000 respectively).

Health services

- ❖ The average annual number of GP visits for older persons in the ACT was 8.9 in 2013–14, which was below the national average of 13.3.
- ❖ Around two-thirds (66.3%) of GP visits by older persons in the ACT were bulk-billed over the period 2009–10 to in 2013–14, compared with almost 90% nationally.
- ❖ The age-specific hospitalisation rate for older ACT residents rose between 2003–04 and 2012–13, from 731.7 to 900.1 separations per 1,000 population.
- ❖ Renal dialysis, chemotherapy and care involving rehabilitation together comprised over one-third of hospital separations for ACT older persons between 2003–04 and 2012–13.
- ❖ ACT older people are increasingly opting for private hospital care, with decreases between 2003–04 and 2012–13 in both the proportion of separations in the ACT taking place in public hospitals and the proportion of separations for people electing to be public patients.
- ❖ In 2012–13, over one-quarter (28.0%) of ACT older public hospital patients had private cover and did not use it, and this figure has been increasing.
- ❖ In 2011–2012, more than two-thirds (68.9%) of older persons in the ACT reported they had visited a dentist in the last 12 months. Of those who had not attended, 7.3% stated it was because of the cost and 4.1% because of long waiting lists.
- ❖ Older persons in the ACT accessed community mental health care and hospital outpatient services (451.1 per 1,000 population) at more than double the rate of older Australians overall (216.9 per 1,000 population) in 2012–13.

1. INTRODUCTION

This report describes the health status of older persons in the ACT. For the purpose of this report, an older person is defined as one aged 65 years or more unless otherwise specified.

Australians are living longer than ever before and the ACT currently has the longest life expectancy in the nation.¹ Our relatively high income and education levels, as well as factors such as low smoking rates, may all contribute to this. Many older ACT residents continue to actively contribute to their community through voluntary and paid employment, extended family support, and participation in community, social, sporting and cultural activities.

However, with longer life expectancy also comes increased incidence and prevalence of many chronic diseases that affect quality of life and contribute to disability and the need for care. Population ageing and the health status of older persons will have an impact on the health systems of both the ACT and Australia as a whole. It is therefore important to monitor the health needs of our older residents to ensure that health services, programs and policies meet population needs.

The ACT Government is committed to ensuring that Canberra is equipped to meet these needs. Consequently, the *ACT Strategic Plan for Positive Ageing 2010–2014* (a five-year plan) was developed in partnership with the ACT Ministerial Advisory Council on Ageing. It focused on social inclusion, participation and fulfilment, support, independence and dignity, partnerships and consultation.²

Correctly planning, establishing and evaluating services requires reliable data. The purpose of this report is to contribute to this process by providing health policy makers and planners with information which can help to identify areas of need and existing or emerging health issues among the ACT's older people. The scope of the data in this report is deliberately broad and encompasses areas which are ostensibly not health related, such as education levels and income, as these factors can substantially influence and, to some degree, predict the health status of the ACT's older persons.

The data presented in this report have been obtained from a number of sources, including the ACT General Health Survey (ACTGHS) series, the Australian Bureau of Statistics' Australian Health Survey (AHS) and Census, and key ACT Government documents and datasets. More detail on these data sources can be found in the references.

2. DEMOGRAPHIC PROFILE OF ACT OLDER PERSONS

2.1. Population

Similar to the rest of Australia, the ACT has an ageing population. The cohort born during the “Baby Boomer” years after the Second World War began to reach age 65 around 2010 and this, along with increasing life expectancy, has accelerated the ageing of the ACT population. As a result, the proportion of older persons is expected to continue to increase over the next few decades.

In 2013, 11.3% of the ACT population was aged 65 years and over, compared with 6.6% in 1993. This figure is projected to reach 21.0% by 2053 (see Table 1). Females made up slightly more than half (54.4%) of ACT’s older persons.

Table 1: Estimated resident population by sex and age group, persons aged 65 years and over, number and per cent, ACT, 2013

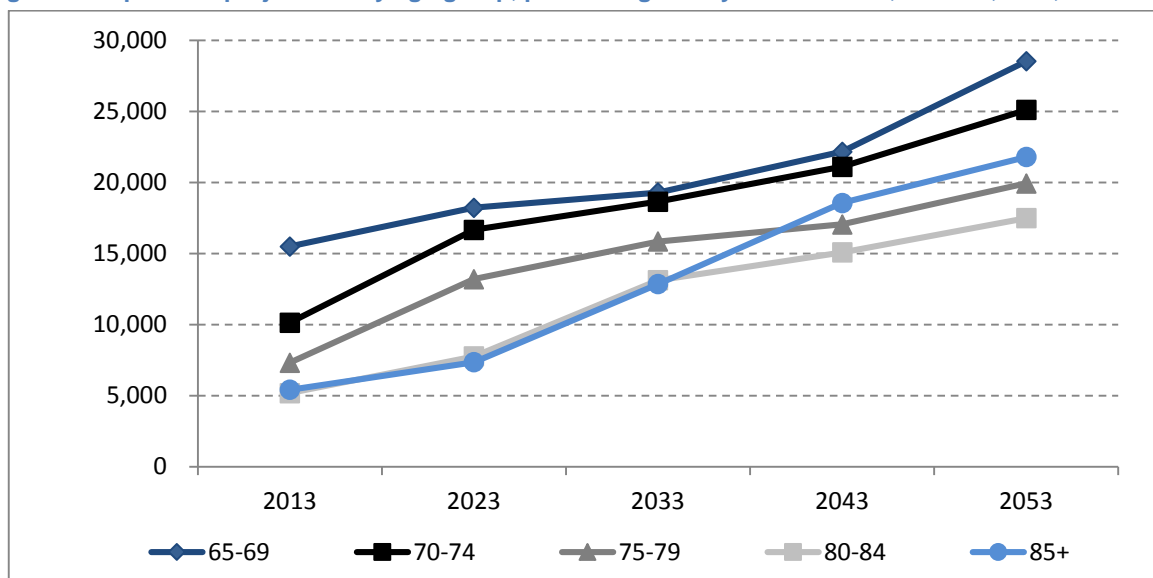
Age group	Males (no.)	Females (no.)	Persons (no.)	% of ACT pop. 2013	% Projected 2053
65–69	7,371	7,881	15,252	4.0	5.3
70–74	4,867	5,278	10,145	2.6	4.7
75–79	3,384	3,953	7,337	1.9	3.7
80–84	2,267	2,993	5,260	1.4	3.3
85 or more	1,885	3,448	5,333	1.4	4.1
65 & over	19,774	23,553	43,327	11.3	21.0
Total population	190,929	192,446	383,375	100.0	100.0

Source: ABS, Australian Demographic Statistics, cat. no. 3101.0, June 2013.
ACT Population Projections 2009–2059, ACT Chief Minister’s Department, 2011.

Although the ACT is the second youngest jurisdiction in the country, with a median age of 34.6 years (the Australian median age is 37.3 years), its population is ageing faster than the national average.^{3,4} Projections indicate the proportion of people aged 65 years and over will continue to increase: to 14.9% by 2023; 17.2% in 2033; and 21.0% in 2053.⁵

These increases mean the number of older persons in the ACT will almost triple by 2053, while the number of persons aged over 85 years is expected to quadruple— see Figure 1. The projected increase in the number of people aged 85 years or older in the ACT indicates that this age group will outnumber those aged 75-84 years by 2053. While the total ACT population is expected to increase by 43.5% by 2053, the number of people aged 65 years or more is likely to rise by over 150% and those aged 85 years or more by around 300% during this period.

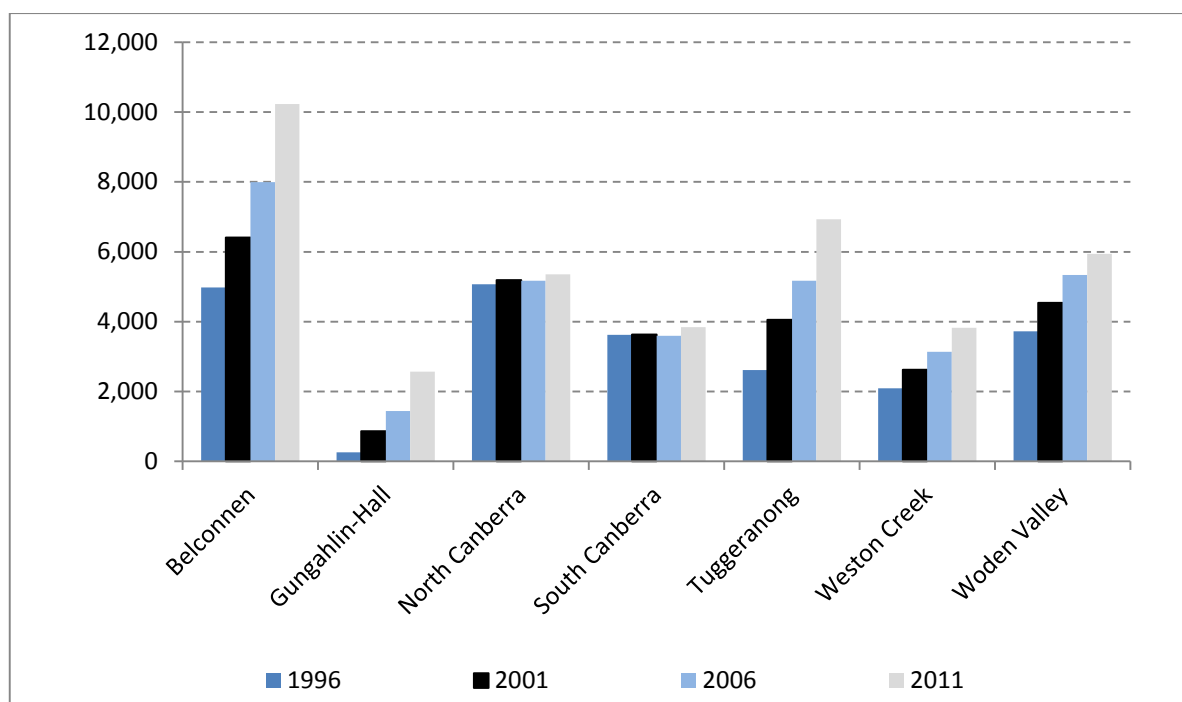
Figure 1: Population projections by age group, persons aged 65 years and over, number, ACT, 2013–53



Source: ACT Population Projections 2009–2059, ACT Chief Minister’s Department, 2011.

The growth in the numbers and proportions of older persons has varied across ACT subdivisions of the ACT. Figure 2 shows that, while the number of older people in North and South Canberra has remained relatively static, the number in most other regions has increased. Growth in Belconnen, Tuggeranong and Gungahlin-Hall is particularly noticeable. These increases are likely due to new suburbs and residential developments in these areas, including aged care facilities.

Figure 2: Population aged 65 years and over by year and district, number, ACT, 1996–2011



Source: ABS, Population Estimates by Age and Sex by Geographical Classification, cat.no. 3235.0, 2011.

A slightly different picture emerges when we look at the proportion of people aged 65 years or more in each region. Woden Valley claims the highest proportion (17.5% in 2011), an increase of 55.7% since 2006 when 11.3% of the population were aged over 65 years. Tuggeranong experienced the largest increase (168.1%) in the proportion of older residents between 1996 and 2011, from 2.9% to 7.8%. While the number of older people in both North and South Canberra changed little between 1996 and 2011, these two regions experienced a decline in the proportion of older residents: from 13.1% to 10.7% in North Canberra; and from 15.9% to 14.5% in South Canberra.

ACT Government demographic projections indicate that, by 2021, almost half of the ACT's older people will be living in either Belconnen (23.6%, down from 25.8% in 2009) or Tuggeranong (25.6%, up from 18.6% in 2009). By 2021 Weston Creek is expected to have the largest proportion of older persons (22.7%, up from 14.8% in 2009). The smallest proportion is expected to reside in the new district of Molonglo, where only 7.0% of the total population will be aged 65 years or more.

Although the Belconnen and Tuggeranong are projected to have the highest number of older residents, Weston Creek is likely to be the region with the oldest population.

Cultural diversity

According to the 2011 Census, the majority of older persons in the ACT were born in Australia (57.0%) and Europe (29.0%). Aboriginal and Torres Strait Islander people made up 0.3% of older persons in the ACT, lower than the national proportion of 0.7%. The ACT also has a lower proportion of Aboriginal and Torres Strait Islander people overall (1.5% compared with 2.5% nationally),

Almost three-quarters (73.3%) of older persons in the ACT reported an affiliation with a Christian religion—primarily Catholic (28.7%) and Anglican (23.5%). Those who nominated other religions such as Buddhism, Hinduism, Islam and Judaism made up a further 3.5%. The rest were predominantly not religious (15.4%).⁶

Lack of proficiency in spoken English has the potential to restrict community involvement and access to services. Of the ACT's older persons who were born overseas, 86.6% indicated that they were proficient in English, however there were almost 1,900 who reported not being able to speak English well or at all. Of these, the most common languages spoken were: Italian (13.4%), Greek (9.7%), Spanish (9.1%), Croatian (8.8%), Mandarin (7.1%), Cantonese (7.1%), and Vietnamese (7.0%).

3. SOCIAL INDICATORS RELEVANT TO HEALTH

It has been well documented that a range of personal characteristics and circumstances can have a profound affect on an individuals' health and wellbeing.⁸ Socioeconomic factors such as a person's educational attainment and financial situation, social capital including interpersonal relationships and involvement in the community, living arrangements and housing, to mention just a few, all correlate with health outcomes including mental wellbeing, physical health and functioning, and life expectancy. Examining and reporting on these data for older persons in the ACT can help to assess the likelihood of poor health outcomes among this population.

3.1. Educational attainment

A complex interrelationship exists between education and health. A 2006 report published by the Organisation for Economic Co-operation and Development (OECD) found that there was "considerable international evidence that education is strongly linked to health and to determinants of health such as health behaviours, risky contexts and preventative service use. Moreover, we find that a substantial element of this effect is causal."⁷ Higher levels of education are associated with better health and well-being, healthier lifestyle choices and lower overall mortality.

According to the 2011–2012 ACTGHS, 37.5% of older persons in the ACT residents have a tertiary degree. More than double the proportion of older men have tertiary qualifications than women (51.7% and 25.3% respectively), with women also more likely to have completed year 10 or less (24.5% compared with 17.4% of males).

3.2. Socioeconomic status and financial security

Poverty and poor health are inexorably linked. A growing body of evidence, including a recent National Centre for Social and Economic Modelling report, indicates that the poorest Australians '... are twice as likely to suffer chronic illness and will die on average three years earlier than the most affluent'.⁸⁰

Based on the 2011–2012 ACTGHS, more than three-quarters (76.7%) of older persons in the ACT were able to save at least some money, and 89.4% either owned or were paying off their own home. Almost two-thirds (64.3%) reported having private health insurance, and just 1.1% reported running out of food in the last 12 months and not being able to afford to buy more.

3.3. Social interaction and community participation

Social interaction, such as connectedness to family and friends and the ability to get support in times of need, correlates strongly with a person's objective and subjective health and wellbeing.⁹ For example, the Australian Bureau of Statistics' General Social Survey of 2010 indicates that ACT residents (of all ages) whose self-reported health status was 'excellent' had markedly higher levels of contact with family and friends living outside the household than those who reported their health as 'poor'. The same pattern was seen for a range of other measures of social capital, including their capacity to ask for small favours from people living outside the household, their sense of safety within their neighbourhood, their acceptance of other cultures, and their access to transport and information technology.

Table 2 indicates that nearly all older persons in the ACT were able to get support in times of crisis and ask small favours from people living outside their household. The majority also had face-to-face contact with family or friends who lived outside their household in the last week (80.7% of 65-74 year olds and 71.8% of those aged 75 and over).

Table 2: Family and community support by age group, persons aged 65 years and over, per cent, ACT, 2010

Family and community support	65–74 years	75 years plus
	%	%
Had face to face contact with family or friends living outside the household		
Every day ^(a)	*12.8	9.2
In last week	80.7	71.8
Could ask for small favours from persons living outside the household	94.5	96.4
Able to get support in time of crisis from persons living outside the household	94.4	98.5
Person provides support to other relatives living outside the household ^(b)	46.9	33.8

Notes: *Estimate has a relative standard error of 25% to 50% and should be used with caution.

(a) Persons who have daily contact automatically have weekly contact.

(b) 'Other relatives' excludes own or partner's children aged 0–24 years.

Source: ABS, General Social Survey, States and Territories, 2010, cat.no. 4159.0.55.003, 2011.

Data from the 2011–2012 ACTGHS indicate that almost two-thirds (60.2%) of older persons in the ACT were an active member of a local organisation, church or club (such as a sport, craft, or social club), and 30.7% were very active members. Both men and women reported similar rates of participation.

The majority of older persons in the ACT agreed or strongly agreed that most people can be trusted (80.9%), and that their local area had a reputation for being a safe place (89.2%). Older males were almost twice as likely than older females to agree or strongly agree that they felt safe walking down their street after dark (83.8% compared with 49.0% respectively). However the majority of women still reported that they would feel sad if they had to leave their neighbourhood (85.2% of women and 76.7% of men).

3.4. Living arrangements

As outlined in the *ACT Strategic Plan for Positive Ageing 2010–2014*², several key policy areas need to be addressed to create a positive ageing experience for older persons in the ACT. These include ensuring adequate access to appropriate and affordable housing; that land releases, planning requirements and concession programs acknowledge the needs of older persons; and that private, public and community housing options all take into account the needs of this cohort.

The 2011–2012 ACTGHS indicated that 69.9% of older persons in the ACT lived with a family member or members, 29.9% lived alone, and 0.2% lived with someone who was not a partner or relative. Of those who lived with family, almost all (93.6%) lived with their partner and, of those, the vast majority (84.6%) lived with their partner only (Table 3). The ACTGHS does not include people living in residential aged care facilities (RACF).

Table 3: Living arrangements, persons aged 65 years and over, per cent, ACT, 2011–2012

Living arrangement	Per cent (%)
Lives with family members	69.9
<i>lives with family members but not partner</i>	6.4
<i>lives with partner</i>	93.6
<i>lives with partner only</i>	84.6
Lives alone	29.9
Lives with someone who is not family	0.2
Total	100.0

Source: ACT General Health Survey, 2011–2012.

Residents of aged care facilities

Data from the Australian Institute of Health and Welfare (AIHW) show that at June 2011, 4.5% of older persons in the ACT lived in RACFs (2.7% of men and 6.0% of women). As people aged, they were increasingly likely to reside in aged care facilities, with over four-fifths (81.2%) of those in RACF aged over 80 years. Women made up almost three-quarters (72.8%) of RACF residents overall, however this increased with age—from 49.1% of those aged 65–69 years to 83.2% of those aged over 95 years (Table 4).

Table 4: Residents of aged care facilities by age group, persons 65 years and over, number and per cent, ACT, June 2011

	65–69	70–74	75–79	80–84	85–89	90–94	95+	Total
Number								
Males	27	41	67	117	126	71	24	473
Females	26	58	108	263	422	272	119	1,268
Persons	53	99	175	380	548	343	143	1,741
Per cent (%)								
Males	50.9	41.4	38.3	30.8	23.0	20.7	16.8	27.2
Females	49.1	58.6	61.7	69.2	77.0	79.3	83.2	72.8
Proportion of residents	3.0	5.7	10.1	21.8	31.5	19.7	8.2	100.0

Source: AIHW, Residential aged care in Australia 2010–11: a statistical overview, online (data cube), Aged Care Funding Instrument data on permanent residents at 30 June 2011.

3.5. Need for assistance

As people age, the need for assistance with activities of daily living often impact their living arrangements. Most older persons are able to live independently in their own homes, however as their need for assistance increases they are likely to leave their home for some form of supported accommodation.

Table 5 presents the proportion of people aged 65 years and over who reported needing assistance with daily living activities in the 2011 Census. It shows that, across all age and sex categories, older persons in the ACT were less likely to need assistance with their core activities compared with their national counterparts. In all but the youngest age group (65–69 years), women were more likely than men to report requiring assistance with core activities.

Table 5: Need for assistance with core activities by selected age groups and sex, per cent, ACT and Australia, 2011

	ACT			Australia		
	Males	Females	Persons	Males	Females	Persons
Per cent (%)						
65–69 years	5.5	5.4	5.4	8.5	7.2	7.8
70–74 years	8.4	9.6	9.1	10.5	11.2	10.9
75–79 years	13.0	15.5	14.4	15.7	18.7	17.3
80–84 years	21.9	30.7	26.9	24.3	31.4	28.4
85–89 years	37.0	49.3	44.7	38.3	49.4	45.3
90–94 years	53.4	67.9	63.5	55.9	68.3	64.5
95–99 years	64.9	79.1	75.6	69.4	82.6	79.5
100 years and over	n/a	80.0	80.0	71.7	88.3	85.0
Total	12.9	18.9	16.2	15.9	21.6	19.0

Note: The 'core activity need for assistance' variable has been developed to measure the number of people with a profound or severe disability, defined as needing help or assistance in one or more of the three core activity areas of self-care, mobility and communication because of a disability, long-term health condition, or old age.

Source: ABS, Census of Population and Housing 2011, online (TableBuilder).

3.6. Mobility and transport

Mobility and transport are closely linked to health. The ability to attend medical appointments, as well as more generally to visit friends or access services and recreational facilities, is crucial to an individuals' sense of wellbeing and independence.

However, as people reach older age, they are likely to experience at least some decline in their cognitive and sensorimotor skills. This decline can be exacerbated by factors such as medication use. In some instances, it can significantly affect the ability of older people to safely drive a motor vehicle, as some medications impair reaction times and the ability to manage in busy or complex traffic situations. The ACT Chief Minister's Department *Population Ageing in the ACT: Issues and Analysis* report of 2010 reports that "older drivers are more at risk of serious injury and fatality in an accident."¹⁰

Data from the Bureau of Infrastructure, Transport and Regional Economics' Road Deaths Database indicate that in the 10-year period from 2003 to 2012, 17.8% of fatalities on ACT roads were among people aged 65 years and over.¹¹ Although this is slightly higher than the national average of 16.2%, these data need to be interpreted with caution due to the low number of fatal accidents in the ACT.

The Older Persons' Road Safety Needs Analysis for the ACT (OPRSNA) of 2007 surveyed almost 5% of ACT residents aged 65 years and over and found that 85.3% of them reported holding a driver's licence and more than 80% were driving at least once a week. Data from the survey indicate that older drivers tend to adapt their driving practices in response to any perceived decline in their driving ability. When asked whether they had modified their driving behaviour compared to when they were 40 years old, 58.7% reported driving less at night, while around half said they avoided peak hour traffic, kept a bigger gap between themselves and other vehicles, and were less likely to drink and drive.¹² The evidence on the effectiveness of these strategies in reducing crash risk is inconclusive, as the interrelationship between driving and age-related cognitive, physical and sensory decline, as well as the medical conditions associated with old age, is still not clearly understood.¹³

Of concern from a health and safety perspective was that 27.9% of the OPRSNA survey respondents reported driving small cars, and 18.1% owned cars more than 15 years old—both factors that potentially made them more vulnerable in an accident. More than 83% were taking medication (35.1% took more than three), and 80.0% expected their GP to advise them when it was no longer safe for them to keep driving.

The study also examined other transport options for people who are no longer able, or do not wish, to drive. The older Canberrans surveyed in the study collectively reported making around 7,000 walking trips per month, making it the second most popular means of getting around. However, a large proportion of respondents expressed concern about uneven, broken or slippery paths, or their level of health and fitness for walking. Buses posed challenges too: 40.7% avoided using ACTION buses due to the slow journey times.

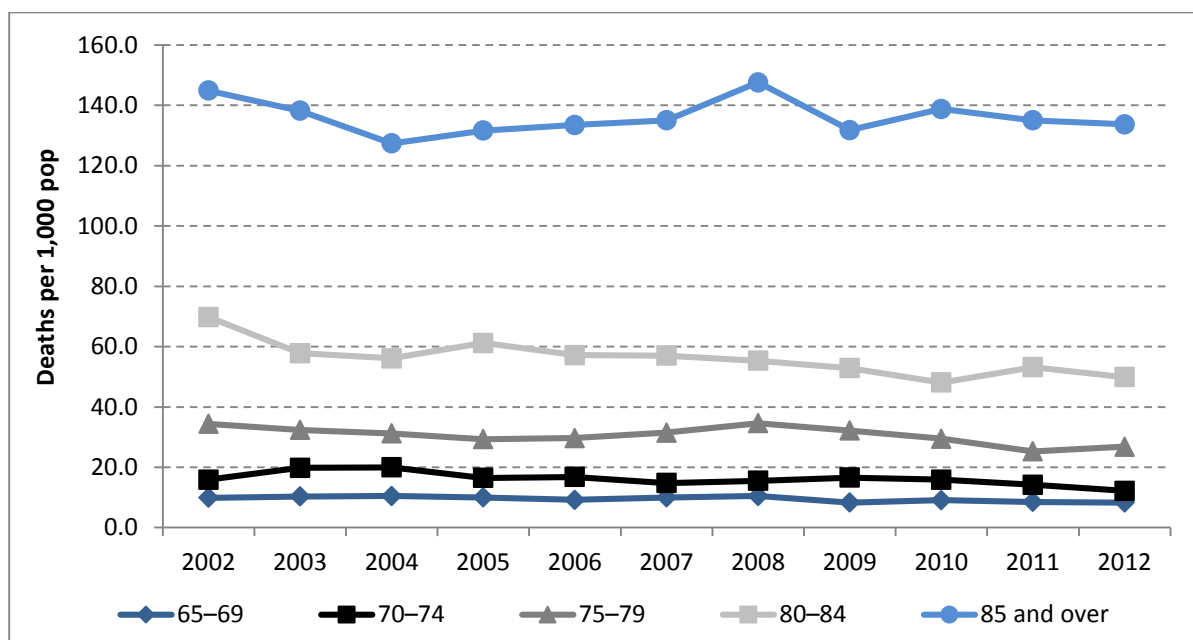
A number of key documents, including the OPRSNA and the *ACT Strategic Plan for Positive Ageing 2010–2014*,² highlight the need for an integrated approach to the road safety and transport needs of Canberra's seniors. Focusing on a range of recommendations—such as improving access to, and usage of, the public bus network by Canberra's older people, maintaining pathways, and ensuring there are adequate numbers of appropriately marked and equipped pedestrian crossings is essential to assist the older population remain mobile and independent in their community.

4. MORTALITY

Older people are living longer, and the evidence suggests that they are reaching advanced age in better health than ever before.^{16,17} Data from the Global Burden of Disease Study indicates that, in 2010, a 50-year-old male in Australia had a healthy life expectancy of 23.2 years, up from 20.7 years in 1990. A 50-year-old Australian female's healthy life expectancy was 25 years, up from 23.5 years in 1990.¹⁴ In the ACT, overall life expectancy for persons aged 65 years has also increased. Between 2000 and 2010, it rose from 17.6 years to 19.3 years for males and from 20.5 years to 22.1 years for females.¹⁵

Between 1990 and 2010, the age-standardised death rate in Australia fell by more than one-third. In the ACT, death rates declined between 2002 and 2012 for all older age groups, with the greatest reduction in those aged 80–84 years (from 69.8 to 49.4 deaths per 1,000 population)—see Figure 3.

Figure 3: Deaths by age group, persons aged 65 years and over, age-standardised rates, ACT, 2002–12



Notes: Death rates for 2011 have been calculated using revised 30 June 2011 estimated resident population. Death rates for 2012 have been calculated using preliminary 30 June 2012 estimated resident population.

Source: ABS, Deaths, Australia, cat. no.3302.0, 2012.

The leading causes of death among older persons in the ACT in 2011 were ischaemic heart disease (22.7%: 95 male, 93 female), cerebrovascular disease (13.5%: 39 male, 70 female) and cancers of the digestive organs (12.8%: 60 male, 46 female).

Table 6 compares the age-specific death rates for older persons in the ACT with those of their national counterparts. In 2011, rates for deaths from all causes were generally lower in the ACT than those of Australian older persons overall. One exception was for women aged 85–94 years, where higher death rates in the ACT also resulted in the combined rate for this age category being slightly above the national rate.

Older persons in the ACT also had lower death rates for ischaemic heart disease, with the ACT rate for males aged 65–74 years less than half the national figure (102.1 and 233.5 per 100,000 population respectively). However, death rates were somewhat higher for cancers of the digestive organs, most notably between the ages of 75 and 94, as well as for other forms of heart disease (especially among those aged 85 years or more). Low numbers can affect the reliability of the data, and because of confidentiality concerns some disease-specific death rates are not published.

Table 6: Selected leading causes of death by age group and sex, age-specific rates per 100,000 population, ACT and Australia, 2011

	ACT			AUSTRALIA		
	Male	Female	Persons	Male	Female	Persons
All causes						
65–74 years	1,331.0	869.2	1,091.4	1,638.1	990.3	1,308.2
75–84 years	4,463.8	3,199.4	3,768.0	5,003.9	3,292.0	4,065.2
85–94 years	13,627.9	11,424.7	12,203.2	13,802.8	11,257.2	12,175.1
95 years and over	21,100.9	27,165.4	25,344.4	28,131.7	28,621.7	28,498.8
Ischaemic heart diseases						
65–74 years	103.1	78.2	90.2	233.5	81.2	155.9
75–84 years	718.7	324.6	501.8	766.7	411.2	571.7
85–94 years	2,551.3	1,836.1	2,088.8	2,634.3	2,015.6	2,238.7
95 years and over	4,587.2	3,543.3	3,856.7	5,902.5	5,789.6	5,817.9
Cerebrovascular diseases						
65–74 years	84.4	np	58.6	68.6	49.2	58.7
75–84 years	245.9	293.7	272.2	343.1	312.4	326.2
85–94 years	1,057.9	1,462.1	1,319.3	1,195.0	1,429.7	1,345.1
95 years and over	—	2,755.9	1,928.4	2,482.6	3,517.8	3,258.3
Malignant neoplasms (cancers) of digestive organs						
65–74 years	178.1	86.9	130.8	226.2	118.4	171.3
75–84 years	491.8	324.6	399.8	442.8	298.2	363.5
85–94 years	933.4	510.0	659.6	661.1	511.3	565.3
95 years and over	np	np	np	np	np	np
Other forms of heart disease						
65–74 years	np	np	36.1	55.1	32.0	43.3
75–84 years	189.1	154.6	170.1	231.7	179.1	202.9
85–94 years	1,057.9	952.1	989.4	908.9	895.1	900.1
95 years and over	np	3,543.3	3,581.3	2,457.3	2,704.1	2,642.2
Organic, including symptomatic, mental disorders*						
65–74 years	np	np	np	np	np	np
75–84 years	189.1	278.2	238.2	184.3	183.2	183.7
85–94 years	871.2	884.1	879.5	872.8	1,061.8	993.6
95 years and over	—	3,543.3	2,479.3	2,444.6	3,500.9	3,236.1
Chronic lower respiratory diseases						
65–74 years	46.9	60.8	54.1	82.8	66.2	74.4
75–84 years	227.0	247.3	238.2	294.4	192.7	238.6
85–94 years	746.7	476.0	571.7	737.0	403.8	523.9
95 years and over	np	np	np	1,064.0	580.7	701.8
Malignant neoplasms (cancers) of respiratory and intrathoracic organs						
65–74 years	159.3	113.0	135.3	189.1	107.3	147.4
75–84 years	264.8	108.2	178.6	366.7	169.3	258.4
85–94 years	311.1	170.0	219.9	468.2	184.6	286.8
95 years and over	np	np	np	np	np	np

Notes: — nil or rounded to zero (including null cells).
 np: not available for publication but included in totals where applicable, unless otherwise indicated.
 Causes of death data for 2011 are preliminary and subject to a revisions process.
 Cells with small values have been randomly assigned to protect the confidentiality of individuals.
 *A range of mental disorders covering dementias, cerebral disease, brain injury, or other insult leading to cerebral dysfunction (ICD-10 codes F00-F09).

Source: ABS, Causes of Death, cat. no. 3303.0, 2012.

5. QUALITY OF LIFE AND HEALTH STATUS

5.1. Self-assessed health

Older people's perception of their own health is a good predictor of their mental and physical condition and of mortality.¹⁶ According to the 2011–2012 ACTGHS, three-quarters (75.5%) of older persons in the ACT considered their health to be good, very good or excellent. This is only slightly less than the ACT population overall (84.3%), indicating the majority of older persons have a positive perception of their own health, despite the increasing levels of disability and illness associated with ageing.

5.2. Health behaviours and risks

There are known risk factors for a range of health conditions. Healthy lifestyle choices, such as getting adequate exercise, eating a healthy diet, limiting alcohol consumption and not smoking, can help to reduce a person's likelihood of developing a range of chronic diseases, such as type 2 diabetes, heart disease and some cancers.¹⁷

Overweight and obesity

The Body Mass Index (BMI) is used to estimate people's body fat on a population-wide scale using readily available measures of height and weight. The BMI is most commonly divided into four broad categories: 18.5 to 24.9 is considered to be a healthy weight, with measurements below 18.5 being underweight, 25.0 to 29.9 being overweight and greater than 30 considered obese. BMI can be used to approximate morbidity and mortality risks within specific populations – in other words, how much more (or less) likely population groups are to develop a range of medical conditions (such as diabetes or hypertension) or to die prematurely, based on their BMI category. Despite some evidence to suggest that these classifications may not be appropriate for older persons¹⁸, there are currently no existing evidence-based practice guidelines for classifying BMI for elderly populations.

Based on self-reported height and weight in the 2011–2012 ACTGHS, 61.1% of older persons were overweight (41.7%) or obese (19.3%), with men more likely to be overweight or obese (69.0%) than women (53.9%).

Interestingly, the ABS Australian Health Survey (AHS) 2011–12 collected information on BMI, with trained interviewers physically measuring the height and weight of survey respondents. Based on these measurements, 71.9% of older persons in the ACT were categorised as being either overweight or obese (males: 76.3%; females: 67.7%).

Due to the differing methodology, the two surveys are not directly comparable. However, the lower overweight and obesity rates reported in the 2011–12 ACTGHS most likely reflects an overall propensity for people to overestimate their height and underestimate their weight.¹⁹

Physical activity

Physical activity in older persons can improve their health and sense of wellbeing, and reduce the risk of cardiovascular disease, osteoporosis and diabetes, as well as falls.²⁰ The 2011–2012 ACTGHS indicate that almost half (45.6%) of older persons in the ACT satisfied the national guidelines for adequate physical activity.²¹ This is a slight decrease from the 2009–2010 ACTGHS (48.5%), but is not statistically significant. More males (50.9%) than females (41.0%) reported getting adequate physical activity.

Nutrition

Good nutrition is important for maintaining health and wellbeing. The National Health and Medical Research Council (NHMRC) recommends that adults eat at least two serves of fruit and five serves of vegetables a day.²² According to the 2011–2012 ACTGHS, 59.5% of older persons in the ACT consumed the recommended serves of fruit. A much lower proportion of older persons consumed the recommended serves of vegetables (17.2%), however almost half (49.4%) ate at least three servings. Older women in the ACT were more likely than their

male counterparts to consume adequate amounts of fruit (65.1% compared with 52.8%) and vegetables (21.7% compared with 11.9%).

Smoking

Tobacco smoking is a leading disease risk factor worldwide, with global death rates expected to reach 1 billion by the end of the 21st century if current trends continue.²³ Although smoking prevalence is declining, due to global population increases, the number of smokers is actually growing. In some countries and regions, particularly in the developing world, the prevalence of tobacco smoking is continuing to rise.²⁴

Smoking rates across Australia and much of the developed world have declined over recent decades, due to an increasing awareness of its negative health effects and government and public health authority strategies to reduce tobacco consumption.²⁵ In Australia, these have included higher tobacco taxes, sales restrictions, place-based bans (such as at cafes, clubs and eateries), advertising bans, better public awareness of the risks of tobacco smoke and, more recently, legislating the use of plain packaging for cigarettes.

Smoking increases a person's likelihood of developing a range of illnesses, including lung cancer, stroke and coronary heart disease. The Australian Burden of Disease study²⁶ identified tobacco smoking as the largest contributor to the nation's total burden of disease in 2003, at 7.8%.

The 2011–2012 ACTGHS indicate that 4.7% of older ACT residents were current smokers. This is a slight (though not statistically significant) decrease from 2009–2010 (5.4%), but significantly lower than the overall 2011–12 figure for the total ACT population (14.2%).

Alcohol

Excessive alcohol consumption can be harmful, contributing to conditions such as cirrhosis of the liver, coronary heart disease, stroke, hypertension and some cancers.²⁷ Current NHMRC guidelines recommend that healthy adults have no more than two standard drinks on any one day to reduce their lifetime risk of harm from alcohol-related disease or injury.²⁸

Based on these guidelines, the 2011–2012 ACTGHS found 12.5% of older persons in the ACT consumed alcohol at risky levels in the four weeks prior to the survey, with males more than twice as likely as females to drink at risky levels (70.4% compared with 29.6%).

5.3. Chronic diseases

Chronic diseases can take years to develop and tend to be progressive. There is strong evidence that some lifestyle behaviours can increase the risk of developing many diseases, some of which are a leading cause of hospitalisation and death.²⁹ Although the development of chronic disease is often a long process, the impact generally increases with ageing. Diabetes, cardiovascular disease, cancer, respiratory disease, musculoskeletal disease and dementia are significant contributors to the chronic disease burden in older people.

The AHS 2011–12 collected information on the current medical conditions of respondents that have lasted, or are expected to last, 6 months or more. Table 7 shows the proportion of older persons in the ACT who reported having selected long-term conditions. Almost all (95.8%) older persons in the ACT reported having a disease of the eye and adnexa (accessory visual structures, for example eyelids, eyebrows and tear ducts), with 83.8% being either short or long sighted. Other common conditions were diseases of the musculoskeletal system and connective tissue (67.0%), and diseases of the circulatory system (62.1%). More than half of older persons in the ACT (54.6%) reported having arthritis, while just under half (43.3%) reported having hypertension.

Table 7: Selected long-term conditions, persons aged 65 years and over, per cent, ACT, 2011–12

Condition	Proportion (%)
Diseases of the eye and adnexa	95.8
<i>Short sighted/myopia</i>	43.2
<i>Long sighted/hyperopia</i>	40.6
<i>Cataract</i>	8.1*
<i>Glaucoma</i>	2.3*
Diseases of the musculoskeletal system and connective tissue	67.0
<i>Arthritis</i>	54.6
<i>Rheumatism</i>	7.7
<i>Back problems</i>	22.3
<i>Osteoporosis</i>	17.4
Diseases of the circulatory system	62.1
<i>Ischaemic heart disease</i>	7.3
<i>Cerebrovascular diseases</i>	4.2*
<i>Total heart, stroke, vascular diseases</i>	28.4
<i>Hypertensive disease</i>	43.3
Endocrine, nutritional and metabolic diseases	40.5
<i>Diabetes</i>	16.2
<i>High cholesterol</i>	28.1
Diseases of the respiratory system	32.5
<i>Chronic obstructive pulmonary disorder (COPD)</i>	7.7
<i>Asthma</i>	9.4
<i>Hayfever and allergic rhinitis</i>	17.4
Diseases of the ear and mastoid	30.3
<i>Deafness (partial to full)</i>	30.0
Diseases of the digestive system	17.7
Mental and behavioural problems	16.5
<i>Mood affective problems</i>	14.9
Diseases of the genito-urinary system	14.0
Malignant neoplasms (cancer)	6.9*

Notes: Long-term refers to having a condition which has lasted, or is expected to last, for 6 months or more.

*Denotes that the estimate has a relative standard error of 25% to 50% and should be used with caution.

Source: ABS Australian Health Survey: First Results 2011–12, cat. no. 4364.0.55.001, 2012.

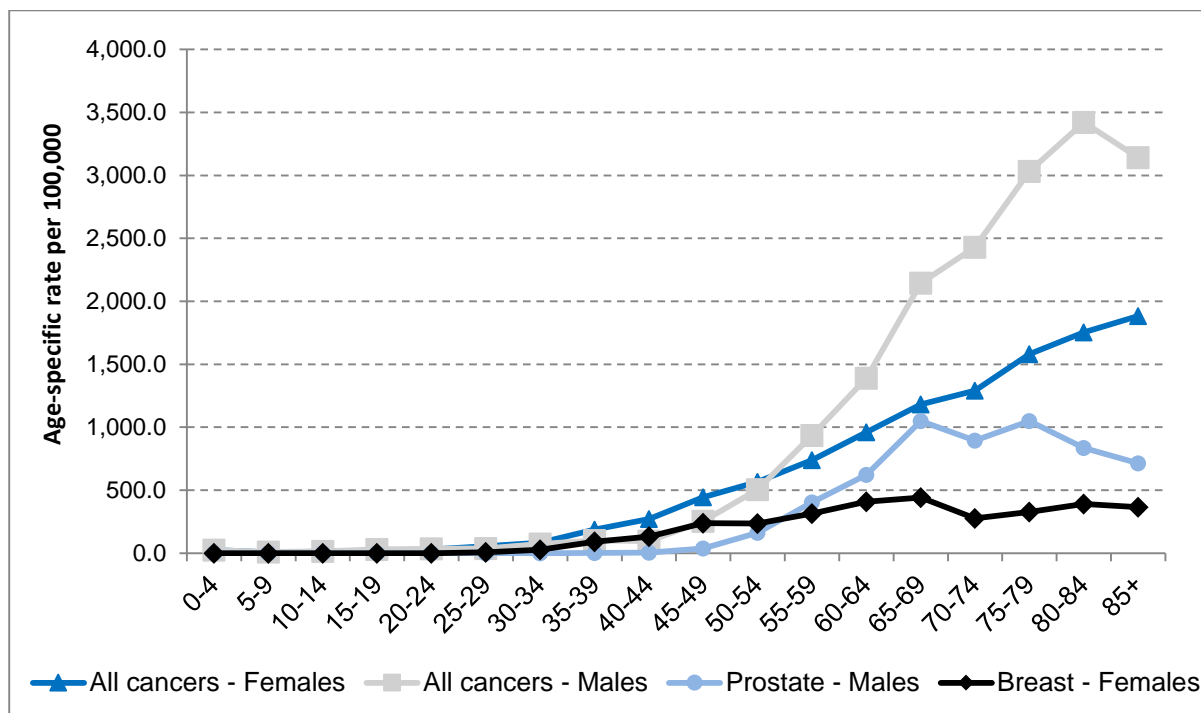
5.4. Cancer

Cancer incidence generally increases with age, and a greater proportion of cases occur in older people. Data from the ACT Cancer Registry show that, between 2006 and 2010, there were 2,049 new cancers in older ACT men and 1,389 new cancers in older ACT women. Over this period, 53.9% of all new cancer diagnoses among men were for those aged 65 years and over; for women, this figure was 42.7%.

The age-specific incidence rate for cancers also increases with age (Figure 4). Over the period 2006–2010, the rate among older males rose steeply—from 2,145 per 100,000 population for those aged 65-69 years to 3,143 per 100,000 population for those aged over 85 years. While age-specific cancer incidence rates were higher for females among the younger age groups, males had considerably higher incidence rates among the older age group. Over the period 2006–2010 the incidence rate of all cancers combined for older women increased from 1,181 per 100,000 population for those aged 65-69 years to 1,883 per 100,000 population for those aged over 85 years.

Between 2006 and 2010, the most frequently diagnosed cancers in older ACT men were prostate cancer (743 cases), colorectal cancer (275 cases), lung cancer (179 cases) and melanoma of the skin (177 cases). Breast cancer (347 cases), colorectal cancer (289 cases), lung cancer (157 cases) and melanoma (76 cases) were the most frequently diagnosed cancers among older ACT women.

Figure 4: Prostate, breast and all cancers by age group, age-specific incidence rates, ACT, 2006–10



Note: Age-specific incidence rate was an annualised average per 100,000 population for the period 2006–10.
Source: ACT Cancer Registry, 2006–2010.

For males, the age-specific prostate cancer incidence rate (per 100,000 population) between 2006–2010 was highest for those aged 65–69 years (1050.5) and those aged 75–79 years (1049.5). These were both substantially higher than the rate for the preceding 5-year age group of 60–64 years (623.6).

Incidence rates for breast cancer during the same period were highest among women aged 65–69 years (441.6 per 100,000 population). The second-highest breast cancer incidence rate was for the preceding 5-year age group (those aged 60–64 years), at 407.7, followed by those aged 80–84 years (390.2) and those aged 85 years or more (366.0). The lowest breast cancer incidence rate for older ACT women was for those aged 70–74 years (277.5).

The number of new cancers diagnosed in the ACT in future years is expected to increase as the population ages and grows.

5.5. Mental health

Life events such as illness, disability, bereavement and loss of income or purpose, all more common among older people, can put this population at increased risk for developing depression, anxiety and stress.^{27 28} However, population health data generally indicate that older people are less likely to be diagnosed with a mental illness than younger populations.³⁰ Generational differences and the potential masking of mental illness by other health conditions, such as dementia, can prevent recognition of the signs of mental illness.³⁰ It should also be noted that most community measures of mental health in older people do not include people in residential aged care facilities.

Results from the 2011–2012 ACTGHS indicate that 6.9% of older persons in the ACT experienced high to very high levels of psychological distress within the last 12 months,

compared with 8.9% of ACT residents aged over 18. Additionally, 6.5% of older persons reported being diagnosed with anxiety in the previous 12 months (all residents, 7.3%) and 9.1% reported depression (all residents, 8.8%).

5.6. Dementia

Dementia is a major age-related chronic disease, and was the third leading cause of death in Australia in 2011 (up from the sixth leading cause of death in 2002). It is the leading cause of disability in older Australians, and is more prevalent among women than men.

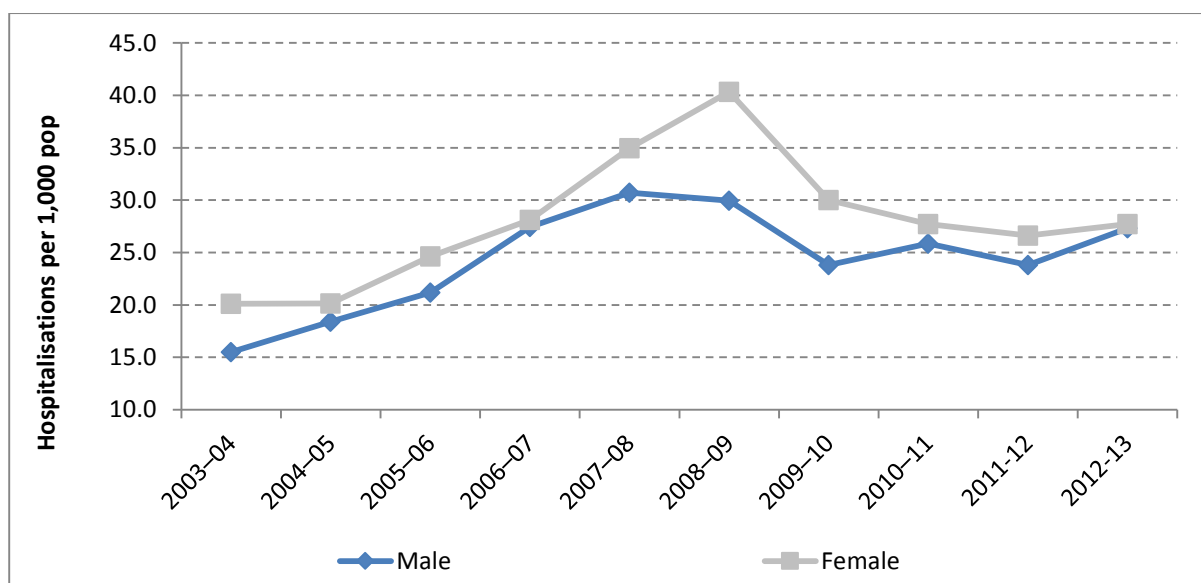
The exact prevalence of dementia in the community is difficult to determine, but recent AIHW data suggests that, in 2011, around 298,000 people were living with dementia in Australia—around one in 11 persons aged over 65 years, increasing to one in three persons aged over 85 years. The number of Australians with dementia is expected to reach around 900,000 by 2050³¹, with some studies indicating that this figure could be well over one million.³²

People with dementia suffer high rates of severe disability, and approximately 45% are classified as having either moderate (30%) or severe (15%) disease. In the decade to 2011, the number of deaths from dementia increased by 174%, although some of this increase can be attributed to changes in data-coding practices and the ageing population. Women made up two-thirds (66.1%) of these deaths in 2011.

It is estimated that, in 2011, there were 3,600 people in the ACT living with dementia (1,400 males and 2,200 females), most of whom were aged 65 years or more. This number is likely to increase to approximately 5,200 by 2020. More than half (53.9%) of the 2,299 ACT people living in residential aged care facilities in 2009–10 had dementia. Overall in Australia, the majority of people with moderate to severe dementia (93.9%) live in residential care.³¹

Reflecting the ageing of the population, the number of hospital separations for ACT residents with dementia more than doubled during the ten years from 2003-04 to 2012-13 (from 543 in 2003-04 to 1,194 in 2012-13). Although the overall length of hospital stay decreased during the above period, this decrease was considerably greater for those diagnosed with dementia (from 18.8 days to 11.7 days – a 61% drop) than for those without a dementia diagnosis (from 4.1 days to 3.5 days – a 17% drop). Women were more likely to be hospitalised with dementia than men (Figure 5).

Figure 5: Hospital separations for dementia by sex, persons aged 65 years and over, age-specific rates, ACT, 2003-04 to 2012-13



Note: Age-specific rates are per 1,000 population.

Source: ACT Health Admitted Patient Care Collection, confidentialised unit record file, 2003-04 to 2012-13.

5.7. Diabetes or high blood glucose

Diabetes and high blood glucose levels are metabolic conditions that can lead to considerable morbidity if poorly managed or left untreated. This can include cardiovascular disease, as well as kidney, eye and nerve damage, the last of which can result in foot or leg amputations.³³ Type 2 diabetes is the predominant form of the disease and its incidence is increasing. Risk factors for developing type 2 diabetes include unhealthy lifestyle (such as lack of physical activity, excess bodyweight, poor diet and smoking) as well as older age, having a genetic predisposition, particular pre-existing health conditions or taking certain types of medication.³⁴

Results from the AHS 2011–12 indicate that 16.2% of older persons in the ACT had diabetes mellitus, with the majority (13.8%) having type 2.³³ Overall, 3.5% of the ACT population reported having diabetes mellitus.

The AHS 2011–12 also took biomedical samples from participants which showed that around 5.0% of ACT residents had diabetes, and a further 3.3% had impaired fasting plasma glucose. This indicates there may be a small proportion of the ACT population with undiagnosed diabetes.

Nationally, 13.8% of Australians aged over 65 years reported having diabetes, and 14.3% were found to have diabetes following biomedical testing.

The 2009–10 ACTGHS included a module on diabetes, which indicated that 59.1% of older persons in the ACT with diabetes were taking medication to manage their condition, 56.1% had made changes to their diet, and 34.8% reported exercising most days. More than two-thirds (70.0%) of older persons with diabetes reported being overweight or obese based on their BMI, however only 4.9% reported losing weight as a way of managing their diabetes.

There were 125 hospital separations in 2012–13 where diabetes-related illnesses were the principal diagnosis (67 males and 58 females). Diabetes is much more likely to be recorded as an additional diagnosis so there are likely to be many more hospitalisations where diabetes contributed to the need for care.

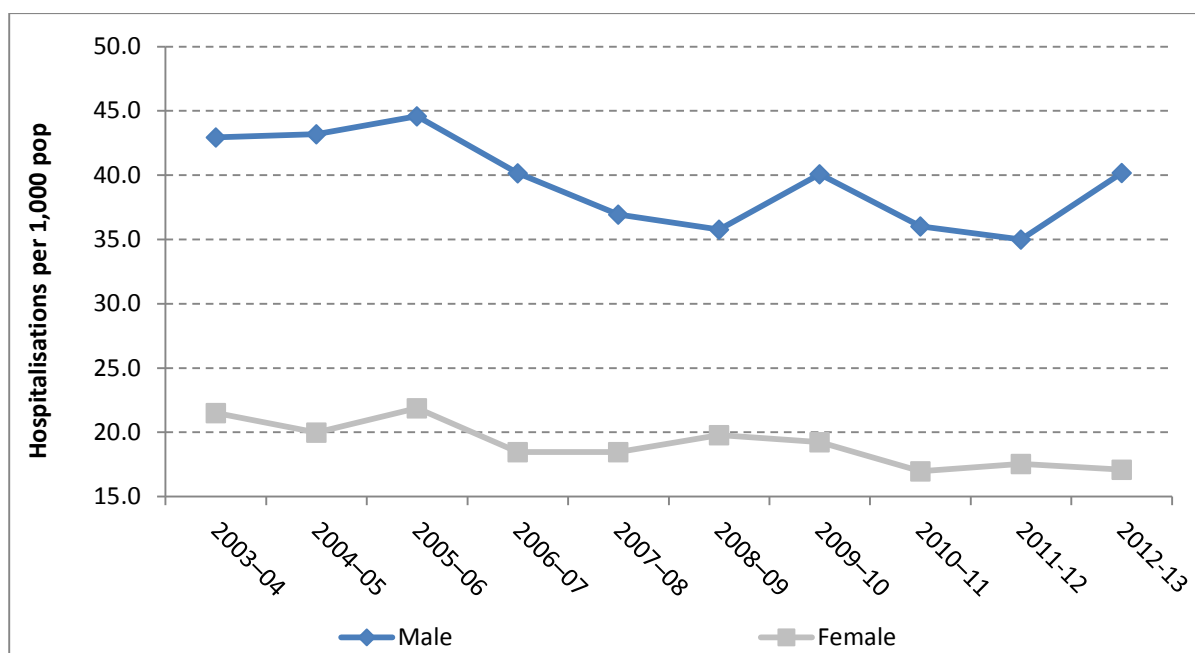
5.8. Cardiovascular disease

There are a number of modifiable risk factors for cardiovascular disease (CVD), such as hypertension, smoking, diabetes, physical inactivity and excess bodyweight.³⁵ However the main non-modifiable risk factor for CVD is increasing age. Results from the AHS 2011–12 indicate that 28.4% of older persons in the ACT reported having heart, stroke or vascular disease, with angina (9.5%) the most commonly reported condition.

Although CVD death rates in Australia have declined by more than 30% since 2002, this cluster of chronic conditions remains a major contributor to the disease burden in older people.³⁶ World Health Organization figures indicate that in 2012, 14.9% of disability-adjusted life years (DALYs) among Australians aged 60–69 years were attributable to CVD, rising to 25.5% for those aged 70 years and over.³⁷

The number of hospital admissions for coronary heart disease (CHD) increased over the period 2003–04 to 2012–13 for older persons in the ACT, however the increase was markedly sharper for males than for females. However the hospitalisation rate decreased slightly over the same period—from 42.9 to 40.2 per 1,000 for males and from 21.5 to 17.1 per 1,000 for females (Figure 10). The hospitalisation rate for males remained approximately double the female rate over this ten-year period.

Figure 6: Hospital separations for coronary heart disease by sex, persons aged 65 years and over, ACT, 2003-04 to 2012-13



Note: Age-specific rates are per 1,000 population.

Source: ACT Health Admitted Patient Care Collection, confidentialised unit record file, 2003-04 to 2012-13.

5.9. Chronic Obstructive Pulmonary Disease

Chronic Obstructive Pulmonary Disease (COPD) describes progressive diseases that block the airways, making it difficult to breathe. The leading cause of COPD is cigarette smoking. The two main conditions that characterise COPD are chronic bronchitis and emphysema.³⁸ Data from the AHS 2011–12 indicate that 7.7% of older persons in the ACT are living with COPD. This compares to 2.1% of the overall ACT population.

5.10. High blood pressure

High blood pressure (hypertension) is a significant risk factor for the development of conditions such as stroke, heart disease and chronic kidney failure. The risk of developing high blood pressure increases with age, and with lifestyle factors such as smoking, high salt intake, obesity and low physical activity. In the AHS 2011-12, 43.3% of older persons in the ACT reported having hypertensive disease. Measured results (as part of the same survey) indicated that 40.8% had high blood pressure (defined as 140/90 mmHg or higher). The measured results do not include people who might otherwise have high blood pressure but are managing their condition through the use of blood pressure medications or other actions.

5.11. High cholesterol

High levels of cholesterol are associated with an increased risk of developing heart disease and arteriosclerosis. Both diet and hereditary factors are implicated in the development of high cholesterol levels. In the AHS 2011-12, 28.1% of older persons in the ACT reported having high cholesterol. This was higher than the overall ACT population (7.8%), and also higher than the proportion who reported having high cholesterol in the ABS National Health Survey 2007-08 (19.1%).

Measured results from the AHS 2011–12 indicate that almost one-third (31.6%) of all ACT residents aged over 18 years had high cholesterol. This suggests there is a significant proportion of the ACT population who are either unaware that they have high cholesterol or who do not consider it to be a long-term or current condition.

5.12. Immunisation

Immunisation, especially for influenza and pneumonia, may help to reduce the risk of serious illness and death among the elderly, who can be more vulnerable due to age-related changes in their immune systems.³⁹ Influenza and/or pneumonia are the underlying causes of around 1.6% of deaths among older ACT residents⁴⁰, and between 2003-04 and 2012-13, were a primary or additional diagnosis in approximately 3.2% of ACT hospitalisations for those aged 65 years or more.⁴¹

Data from the AIHW's nationwide Adult Vaccination Survey 2009 show that an estimated 78.0% (28,000) of the target population of 36,000 (those aged 65 years or more) received the seasonal influenza vaccination. This was slightly higher than the national figure of 74.6%.

Just over half (19,000, 52.8%) of the target population were currently vaccinated against pneumococcal disease, and around 15,000 (41.7%) had never been vaccinated. Nationally, 41.4% reported never having been vaccinated against pneumococcal disease.

Almost half (49.8%) of the target population in the ACT were estimated to have received both the influenza and pneumococcal vaccines, with around 18.4% had received neither vaccine. The corresponding national figures were 51.1% (for both) and 22.1% (neither).⁴²

5.13. Oral health

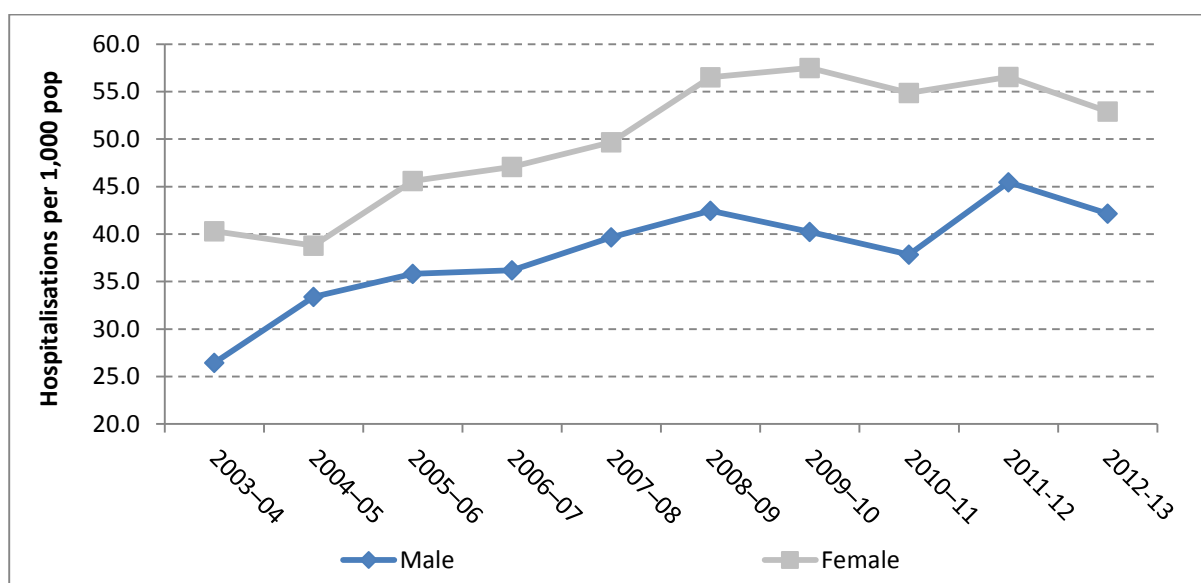
The latest available data, from ACTGHS 2009–10, indicate that the majority of older persons in the ACT were missing some (82.0%) or all (12.5%) of their natural teeth, and over half (55.1%) had dentures or false teeth.

6. ACCIDENTS AND INJURIES

Accidents and injuries are a significant health issue for older people, representing one of the most common causes of longstanding pain, functional impairment, and disability in elderly populations.^{43 44}

Injuries are the primary diagnosis in around 5% of hospital admissions each year for older persons in the ACT. Hospitalisations rates for injury for older males and females increased significantly between 2003-04 and 2012-13—from 26.5 to 42.2 per 1,000 population for males, and from 40.3 to 52.9 per 1,000 population for females (Figure 7). This equated to an increase in the injury hospitalisation rate of around 4% per year for males and females over this period. Older females are more likely to be hospitalised for an accident or injury than older males; and while older women made up less than half (47.0%) of hospital admissions between 2003-04 and 2012-13, they made up 61.5% of injury-related hospitalisations.

Figure 7: Hospital separations for injuries, by sex, persons aged 65 years and over, age-specific rates, ACT, 2003-04 to 2012-13



Source: ACT Health Admitted Patient Care Collection, confidentialised unit record file, 2003-04 to 2012-13.

In 2012–13, injury-related hospitalisations for ACT older persons increased with age—from 21.6 per 1,000 among those aged 65–69 years, to 139.9 per 1,000 for those aged over 85.

Accident and injury hospitalisations tend to be associated with a longer length of stay. The average length of stay (ALOS) for these hospitalisations over the ten-year period was 6.4 days, compared with 3.8 days for all other hospitalisations for this age group. Correspondingly, while these admissions made up just 5.1% of total hospitalisations, they represented 8.3% of all bed days during this period.

The majority of injury-related hospitalisations for the ACT's older persons in the ACT were for falls (59.8%), followed by complications of medical and surgical care (24.4%). The remaining 15.8% were made up of: transport and mechanical forces injuries (7.7%); forces of nature, overexertion, travel and privation, and other accidental exposure (5.3%); and all other/unspecified injuries (2.8%).

6.1. Falls

Falls among older Australians are a major public health problem, with those aged 65 years and over at greatest risk of sustaining an injury from a fall. According to the National Falls Prevention for Older People Initiative, 'Australian and overseas studies of community-dwelling older people have identified that approximately one in three people aged 65 years and over fall each year, with 10% having multiple falls and over 30% experiencing injuries requiring medical attention'.⁴⁵ The rate of falls and associated injuries is even higher for those in residential aged care and acute care settings.

Falls-related injuries and attitudes to falling

Data from the 2011–2012 ACTGHS indicates that more than one in five (21.8%) older persons in the ACT had suffered a fall within the last 12 months. Of those who fell, 15.2% had fallen within the last four weeks, almost half (49.3%) had fallen more than once, and 29.4% had required medical attention for a fall in the last 12 months (including 22.4% who required admission to hospital).

The 2011–2012 ACTGHS showed that more than a quarter (26.5%) of older persons in the ACT had a fear of falling, and 28.2% had taken some action to prevent falls. The most common action they took to prevent falls was the installation of handrails at home (72.2%). Although exercise can increase strength and stability among older persons^{46 47}, only 6.1% reported getting more exercise as a way to prevent falls.

Women were more likely to have experienced a fall within the last 12 months (24.7%, compared with 18.3% of men), and to have fallen more than once (52.6%, compared with 44.1% of men). More older women than men also reported having a fear of falling (33.4% compared with 18.4%) , and having taken some action to prevent falls (34.6% compared with 20.8% respectively).

Questions regarding calcium and vitamin D supplementation were most recently asked in the 2009–2010 ACTGHS. Data from this period indicates that around one-third of older respondents were taking calcium (35.2%) or vitamin D (31.9%) and one-quarter were taking both supplements. Women were three to four times more likely than men to take either calcium or vitamin D individually, or together.

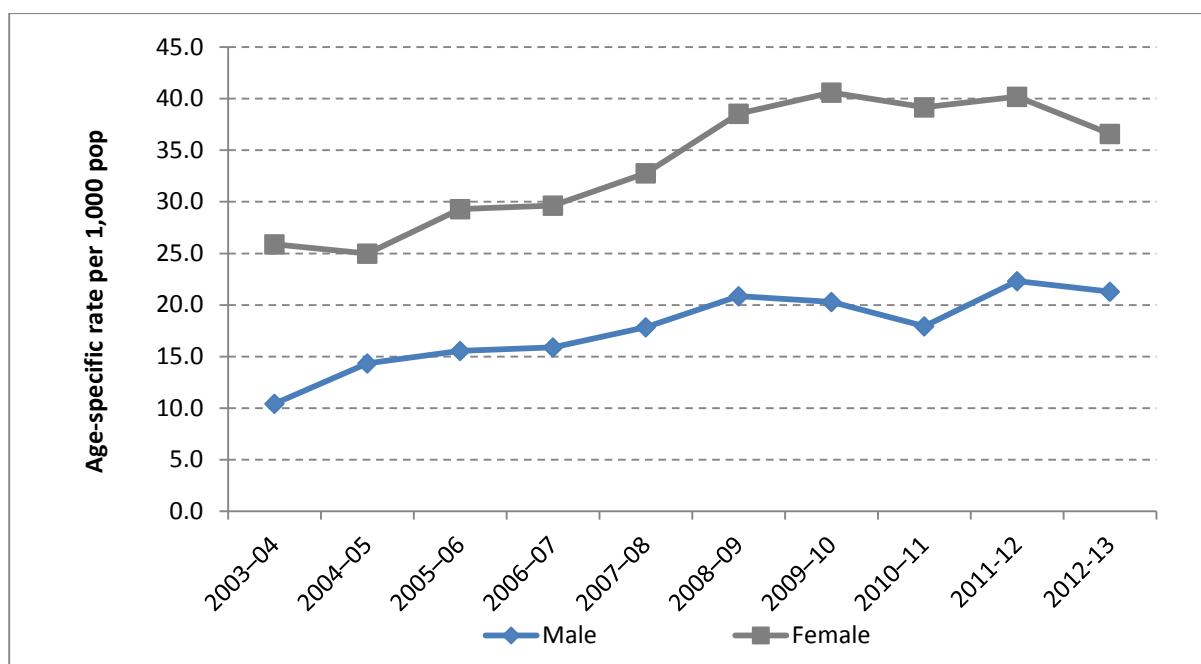
Although some experts support calcium and vitamin D supplements for older adults, claiming that 'there is good evidence that vitamin D plus calcium supplementation effectively reduces fractures and falls in older men and women'⁴⁸, this position is not universally accepted. For example, a Cochrane review of 2014 concluded that giving older adults vitamin D alone showed no benefit in reducing fractures, and combined vitamin D and calcium supplementation showed only a modest, though statistically significant, reduction in fractures among the elderly. Balanced against this was the small risk that, for susceptible individuals, such supplementation may have harmful effects on their gastrointestinal tract or kidneys.⁴⁹

Hospitalisations for falls

In 2012-13, hospital admissions involving a fall made up 61.7% of injury-related hospitalisations, and 3.0% of total hospitalisations for older persons in the ACT, making them the seventh most common reason for hospitalisation among this age group. Reflecting broader injury and falls trends, women were more likely than men to be hospitalised for a fall, making up 69.8% of admissions.

Between 2003-04 and 2012-13, there were 8,683 fall-related hospitalisations. Over this period, the age-specific rate for falls increased significantly—from 10.4 to 21.3 per 1,000 for males and from 25.9 to 36.6 per 1,000 for females (Figure 8). This equates to a 6.6% increase in fall related hospitalisations per year for males and a 5.6% increase per year for females over this period. Hospitalisation rates for falls increased with age, from were 7.3 per 1,000 for those aged 65–69 years to 99.7 per 1,000 for those aged over 85.

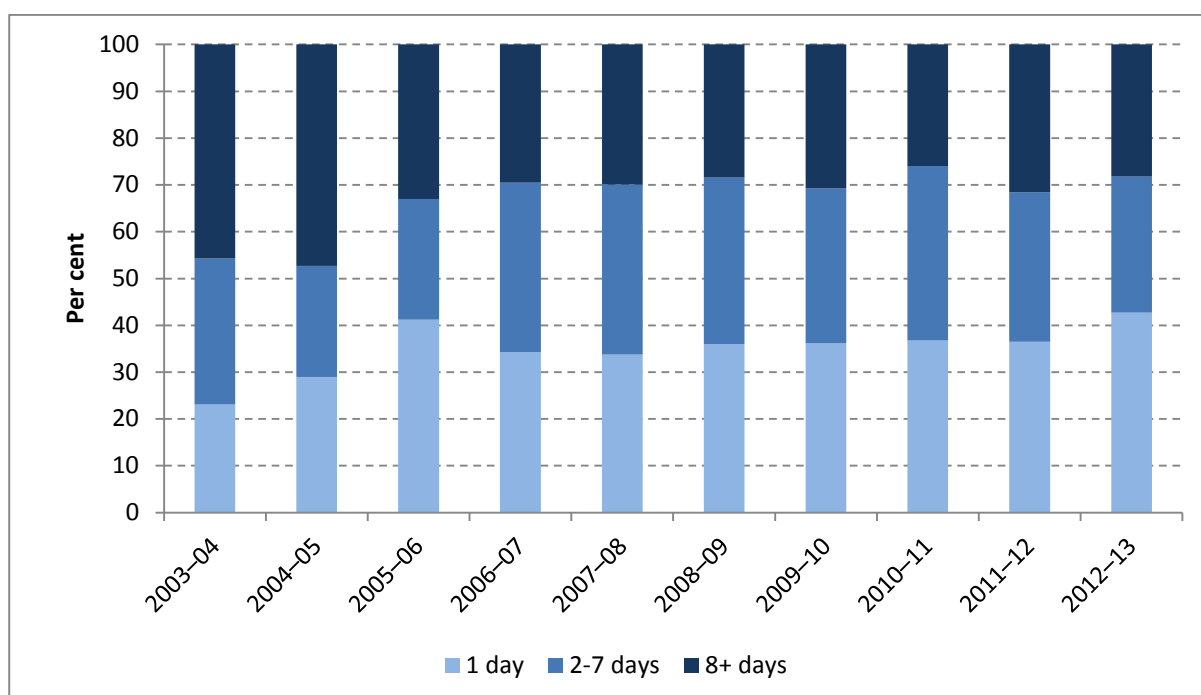
Figure 8: Hospital separations for falls by sex, persons aged 65 years and over, age-specific rates, ACT, 2003-2004 to 2012-13



Source: ACT Health Admitted Patient Care Collection, confidentialised unit record file, 2003-04 to 2012-13.

Fall related injuries were responsible for 3.0% of separations between 2003-04 and 2012-13. The ALOS for these episodes was 6.8 days. Over that period, the proportion of same-day episodes increased from 23.1% to 42.7%, while episodes of eight days or more dropped from 45.7% to 28.2% (Figure 9).

Figure 9: Fall-related hospitalisations, persons aged 65 years and over, length of hospital stay category by proportion, ACT, 2003-04 to 2012-13



Source: ACT Health Admitted Patient Care Collection, confidentialised unit record file, 2003-04 to 2012-13.

Falls in residential aged care

National-level data from 2011-12 indicates that 22.5% of hospitalised fall injuries in people aged 65 years or more occurred in a residential institution, with the rate higher for women (24.1%) than men (18.9%).⁵⁰ The 2010-11 age-standardised hospitalised falls rate for older Australians residing in aged care was almost six times as high as for those experiencing a fall in their home⁵¹. Trends data from 2002-03 to 2008-09 shows that this rate is increasing faster for those living in an aged care facility (6.1% per year for males and 5.5% per year for females) than for those falling in their home (3.3% per year for males and 2.0% per year for females)⁵².

Report on Government Services (ROGS) 2012 data show that over three reporting periods (2007–08, 2008–09 and 2009–10), the ACT hospitalisations rate for falls in residential aged care facilities requiring treatment in hospital was substantially higher than the national average (Table 8). This data includes all persons living in residential aged care facilities; however, under 5% of residents in the ACT and nationally were less than 65 years old.

Table 8: Falls resulting in patient harm in residential aged care and treated in hospital, ACT and Australia, 2007–10

	2007–08		2008–09		2009–10	
	Number ^(a)	Rate ^(b)	Number ^(a)	Rate ^(b)	Number ^(a)	Rate ^(b)
ACT	305	5.3	386	6.7	346	5.7
Australia	18,355	3.1	19,177	3.3	20,179	3.4

Notes: (a) Refers to the number of hospital separations involving one or more falls in an aged care facility, not the number of falls.
(b) Rate is expressed as falls per 10,000 resident occupied days.

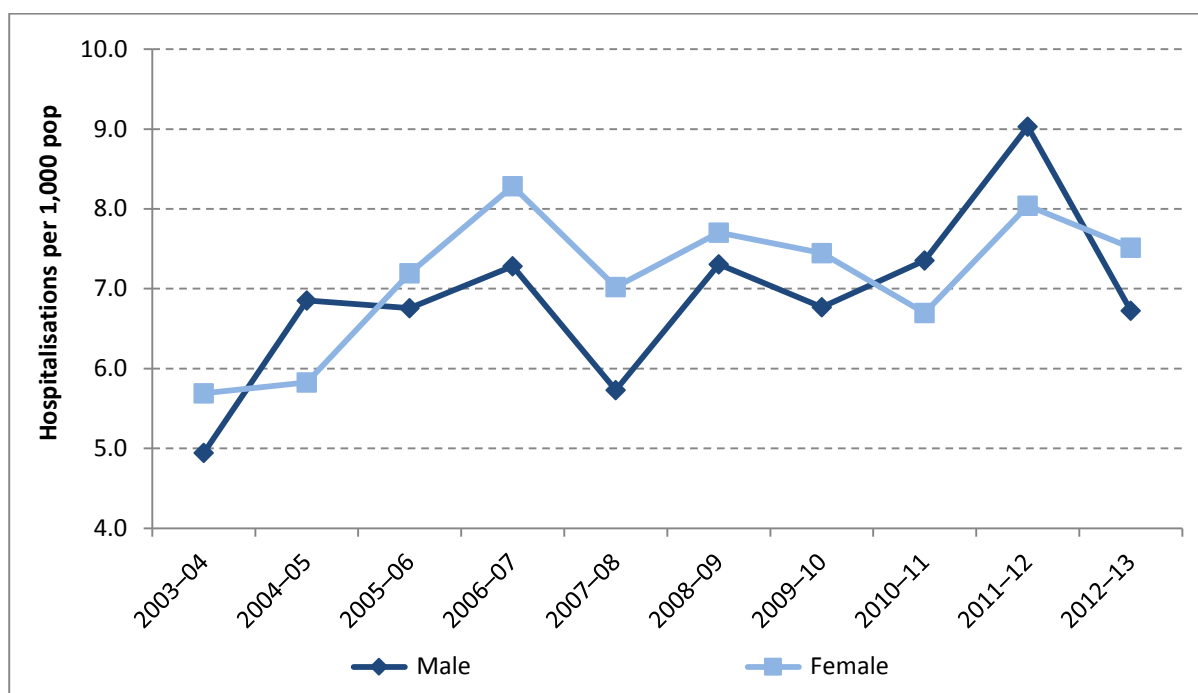
Source: AIHW unpublished, Admitted Patient Care National Minimum Data Set and DoHA unpublished, Aged Care Data Warehouse, in ROGS 2012, Table 13A.72.

6.2. Other accidents and injuries

Community injury

Although falls were the most common type of injury experienced by older persons in the ACT, other types of injuries also led to a substantial number of hospitalisations for this age group. There were a total of 2,530 hospital separations for injuries which occurred out in the wider community, rather than in a clinical setting between 2003-04 and 2012-13. These resulted in over twelve thousand occupied beddays, with an ALOS of 4.8 days. The rate for these types of injuries among older persons in the ACT increased over the period 2003–04 to 2012–13: from 4.9 and 5.7 per 1,000 in 2003-04, to 6.7 and 7.5 per 1,000 in 2012-13 for males and females respectively (Figure 10).

Figure 10: Community injuries (excluding falls) by sex, persons aged 65 years and over, age-specific rates, ACT, 2003-04 to 2012-13



Source: ACT Health Admitted Patient Care Collection, confidentialised unit record file, 2003-04 to 2012-13.

The most common cause of community injury hospitalisations (excluding falls) between 2003-04 and 2012-13 were transport accidents (593 separations), followed by ‘exposure to inanimate mechanical forces’ (548 separations) and ‘accidental exposure to other and unspecified factors’ (518 separations). Although the exact reason for the ‘accidental exposure’ hospitalisations is often not clear, the majority of these injuries (89.6%) were due to some type of physical trauma to the body.

Complications of surgical and medical care

The category ‘complications of surgical and medical care, not elsewhere classified (NEC)’ encompasses adverse events or injuries related to: infusion, transfusion or therapeutic injection; prosthetic devices, implants or grafts; transplanted organs and tissues; reattachment and amputation of body parts; and other complications of surgical and medical care. Between 2003-04 and 2012-13, there were 3,939 hospitalisations for this category for older persons in the ACT, with an ALOS of 6.5 days. Males made up more than half of these hospitalisations (55.2%), however they’re ALOS was slightly shorter (6.1 days) than females (7.0 days). Between 2003-04 and 2012-13, the ALOS decreased from 7.8 days to 6.5 days, however the rate increased, from 9.7 to 11.2 per 1,000 population.

7. HEALTH SERVICES

Good quality health services play a role in preventing disease, detecting and treating illness, maintaining people’s physical and psychological wellbeing and quality of life, and maximising life expectancy.^{53,54}

There are many potential barriers to health service access. Services may be unaffordable, or not exist in some areas; they may be culturally inappropriate; waiting times may be too long; or people may have mobility or language difficulties affecting their ability to attend appointments or communicate with health care practitioners. These factors, as well as other access issues, can have profound repercussions for an individuals’ health, and for the wellbeing of the community as a whole.^{55,56}

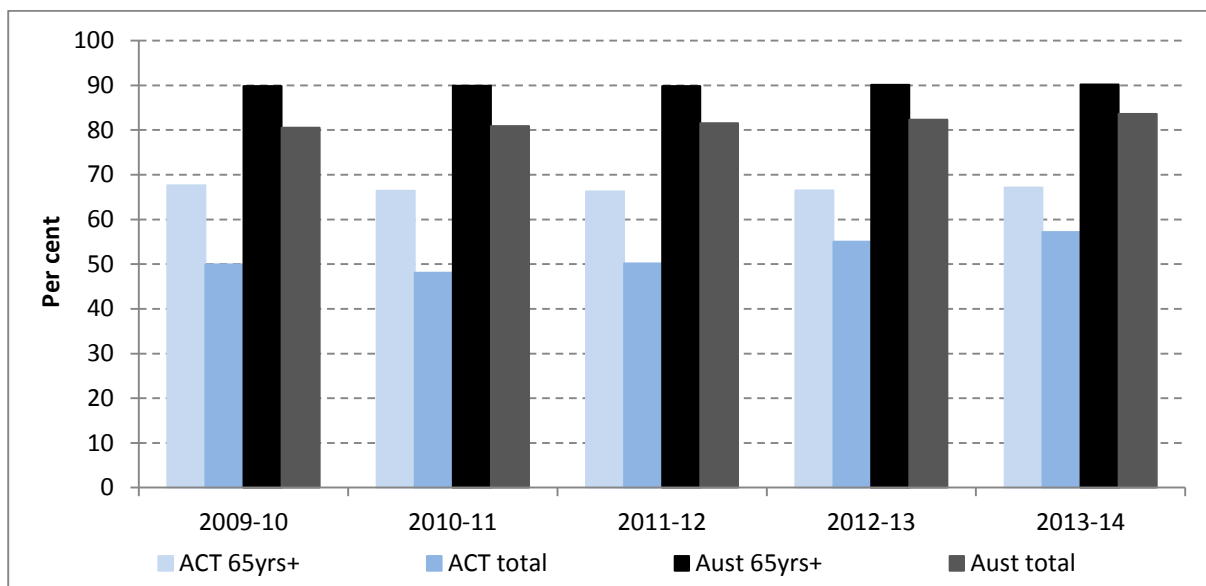
7.1. General practitioner services

The most recent ACTGHS data on general practice visits, from 2009-10, shows that almost all ACT residents aged 65 years and over who took part in the survey reported visiting a general practitioner (GP) in the last 12 months (94.9% of men and 96.5% of women). It is important to note that the survey did not cover residents of aged care facilities. The proportion of people visiting the GP increased with age: 99.1% of those aged 85 years and over had visited a GP in the last 12 months, compared with 93.1% of those aged 65–69 years. No individual aged 65 years or more reported *not* being able to afford to visit a GP, and less than 1% reported not being able to get to a GP appointment or having other access issues.

Medicare Australia data indicate that in the 2013–14 financial year, there were 386,873 unreferred GP attendances by older persons in the ACT. This equates to approximately 8.9 visits per person, which is below the national average of 13.3 visits.

Figure 10 shows that while the proportion of bulk-billed GP visits was substantially higher for older persons in the ACT than for ACT residents overall, both rates were well below the national average (Figure 10). Over the five-year period between 2009-10 and 2013-14, around two-thirds of ACT residents aged 65 years or more were bulk-billed on their GP visits. The national average over this period remained consistent at around 90%.⁵⁷

Figure 10: Bulk-billed non-referred attendances by financial year, persons aged 65 years and over and total, per cent, ACT and Australia, 2009-10 to 2013-14



Notes: (a) Data include non-referred attendances undertaken by general practice nurses.
 (b) Patient age is at date of service.
 (c) Patient allocation to state/territory based on patients' Medicare enrolment postcode.

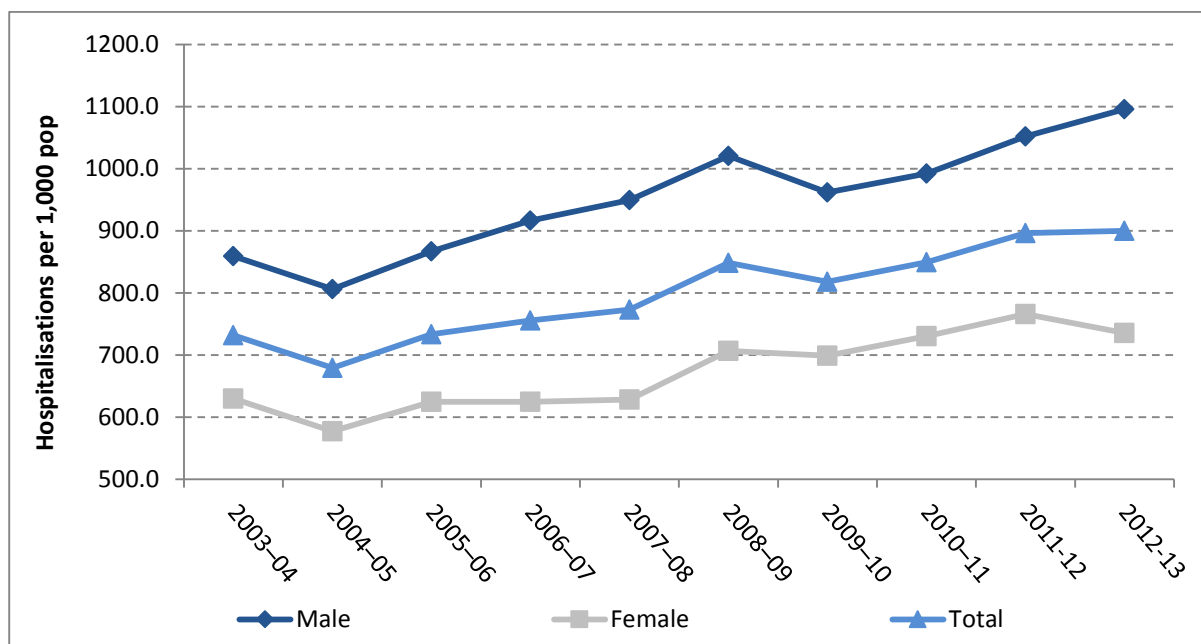
Source: DoHA MBS Statistics (unpublished), in ROGS 2015, Table 10A.36.

7.2. Hospital services

Hospital separations

Figures from ACT Health's admitted patient datasets show that, over the ten years between 2003–04 and 2012–13, the proportion of hospital separations for older persons in the ACT rose from 28.3% to 36.6%. The hospitalisation rate also increased over this period by 23%, from 731.7 to 900.1 per 1,000 population, with the increase driven primarily by those aged over 85 years. Rates were higher for males than for females (Figure 11).

Figure 11: Hospital separations, persons aged 65 years and over, age-specific rates, ACT, 2003-04 to 2012-13

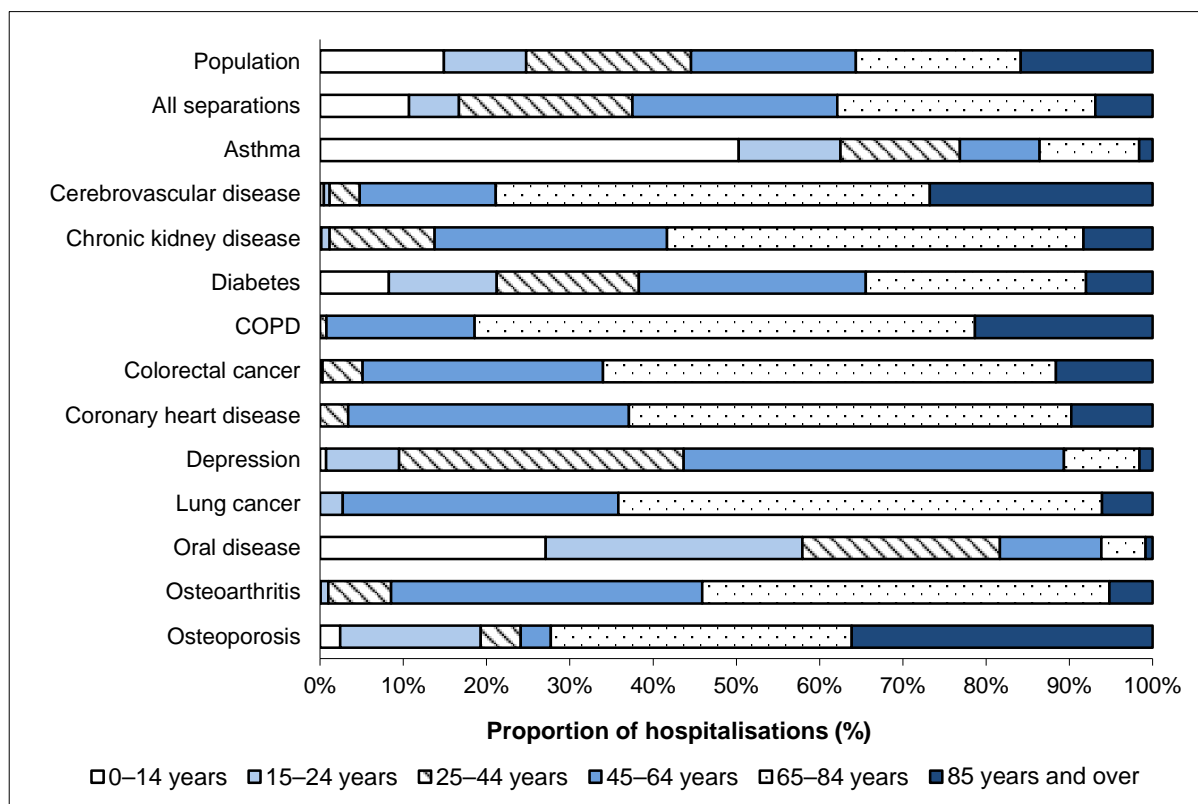


Source: ACT Health Admitted Patient Care data, 2003-04 to 2012-13 (includes public and private hospital separations). ABS Estimated Resident Population data, cat. no. 3101.0, 2004–13.

Chronic disease hospitalisation and average lengths of stay

Older persons are more likely than younger persons to be hospitalised for chronic diseases. Hospital separations can give an indication of the disease burden within a population, given that people are generally hospitalised for more serious or acute forms of illness. Figure 12 shows the the age break down of the population and selected hospitalisations in the ACT in 2012–13. Older persons were responsible for the majority of hospitalisations relating to chronic obstructive pulmonary disease (COPD, 81.5%), cerebrovascular disease (78.9%), osteoporosis (72.3%), colorectal cancer (66.0%), lung cancer (64.2%), coronary heart disease (62.9%) and chronic kidney disease (58.3%). In contrast, those aged under 65 years made up the majority of hospitalisations for oral disease (93.8%), depression (89.4%) and asthma (86.4%).

Figure 12: Hospital separations for selected chronic diseases by age group, per cent, ACT, 2012–13



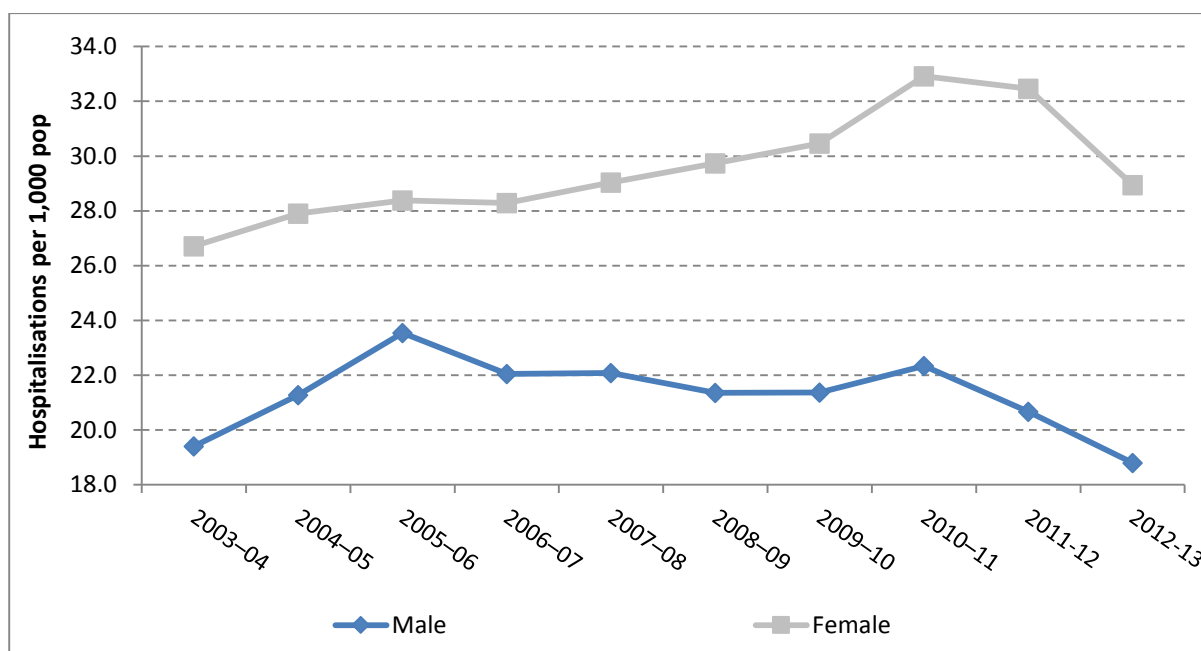
Source: ACT Health Admitted Patient Care Collection, confidentialised unit record file, 2012–13.

Musculoskeletal diseases

Musculoskeletal conditions were nominated as a National Health Priority Area in 2002 in recognition of the burden they place on individuals and society. Musculoskeletal conditions such as arthritis and osteoporosis are some of the most common chronic conditions in Australia, especially in older people. They affect approximately one-third of the population and, in 2003, accounted for 5.1% of the burden of disease in people aged 65–74 years.

Figure 13 shows that, in the ten-year period 2012–13, hospital separation rates for arthropathies (joint disorders) increased slightly for older women in the ACT and decreased slightly for older men; however, rates for both sexes declined from 2010–11.

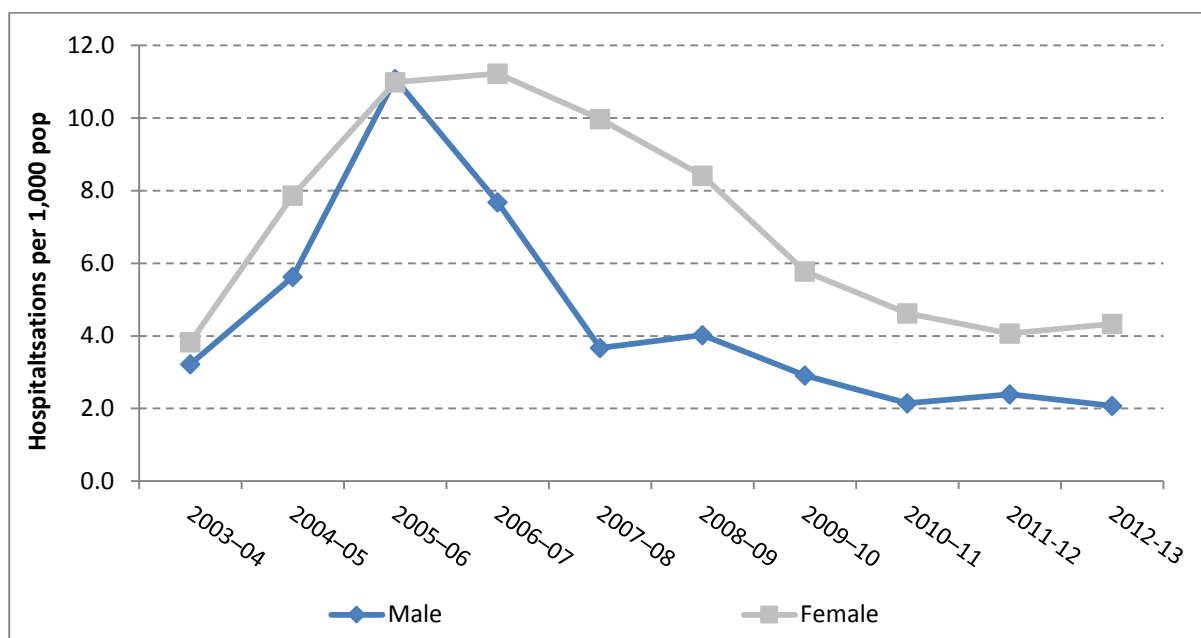
Figure 13: Hospital separations for arthropathies by sex, persons aged 65 years and over, age-specific rates, ACT, 2003-04 to 2012-13



Source: ACT Health Admitted Patient Care Collection, confidentialised unit record file, 2003-04 to 2012-13.

Figure 14 shows hospitalisations for osteopathies and chondropathies (bone and cartilage disorders) over the ten-year period to 2012–13. Rates for these conditions for older persons of both sexes showed a steep increase between 2003–04 and 2005–06 for males and 2006–07 for females, before trending downward to 2012–13.

Figure 14: Hospital separations for osteopathies and chondropathies by sex, persons aged 65 years and over, age-specific rates, ACT, 2003-04 to 2012-13



Source: ACT Health Admitted Patient Care Collection, confidentialised unit record file, 2003-04 to 2012-13.

Top 10 reasons for hospitalisation and average lengths of stay

The top ten reasons for hospitalisation among older persons in the ACT together comprised over half (57.1%) of all hospital separations between 2003–04 and 2012–13. Renal dialysis (over 83,000 episodes of care) accounted for the largest proportion of separations, increasing from 20.6% in 2003–04 to 27.8% in 2012–13. Rehabilitation was second, increasing from 1.7% to 13.3% of total separations over the same ten-year period. This was followed by chemotherapy, which, unlike dialysis and rehabilitation, decreased as a proportion of total separations over the same period, from 7.7% in 2003–04 to 3.0% in 2012–13.

Dialysis and chemotherapy were primarily same-day separations, whereas care involving rehabilitation had an ALOS of 7.6 days for the ten-year period. This reduced substantially over that time however, from 17.1 days in 2003–04 to 5.0 days in 2012–13.

The broad disease categories for which older persons in the ACT were most frequently hospitalised over the period 2003–04 to 2012–13 were diseases of the circulatory system (primarily heart conditions), which accounted for almost one in ten separations (9.4%). Next were neoplasms (cancers), at 7.6% (the largest component being non-melanoma skin cancers and prostate cancers), and diseases of the digestive system at 6.1%.

The largest proportion of separations for specific health conditions were for cataracts (3.4%; ALOS 1 day), pneumonia (1.3%; ALOS 7.5 days), atrial fibrillation and flutter (1.1%; ALOS 3.1 days) and congestive heart failure (1.1%; ALOS 8.5 days).

The longest ALOS during this period was for mental and behavioural disorders (13.3 days), followed by infectious diseases (7.9 days) and diseases of the respiratory system (7.1 days). Table 9 shows selected hospitalisations with an ALOS of seven days or more for older persons in ACT over the period 2003–04 and 2012–13. The longest ALOS was for 'person awaiting admission to residential aged care service', at 32.3 days, followed by 'mood (affective) disorders' (chiefly depression and bipolar affective disorders), at 18.6 days.

Table 9: Average length of stay (ALOS) for selected hospitalisations, persons aged 65 years and over, ACT, 2003–04 to 2012–13

Reason for hospitalisation	ALOS	Separations	Beddays
Person awaiting admission to residential aged care service (Z75.11)	32.3	1,362	43,989
Mood (affective) disorders (F30-F39)	18.6	967	17,971
Need for assistance at home and no other household member able to render care (Z74.2)	10.9	1,455	15,900
Sepsis (A40-A41)	10.4	1,414	14,693
Malignant neoplasm (cancer) of unspecified, other or ill-defined sites (C26,C39,C48,C76-C80)	9.9	2,107	20,865
Colorectal cancer (C18-C21)	9.0	1,882	17,002
Heart failure (I50)	8.0	4,209	33,774
Care involving use of rehabilitation procedures (Z50)	7.6	23,837	182,076
Influenza and pneumonia (J10-J18)	7.6	4,935	37,631
Chronic obstructive pulmonary disease (J41-J44)	7.3	4,006	29,274
Infection of the skin & subcutaneous tissue (L00-L08)	7.1	1,813	12,883
Cerebrovascular disease (I60-I69)	7.0	3,388	23,829

Source: ACT Health Admitted Patient Care data, 2003-04 to 2012-13 (includes public and private hospital separations).

Public/private patients and insurance

ACT has the highest proportion of the population with private health insurance for hospital cover of all the states and territories. In December 2013, 57.5% of the total ACT population and 66.2% of those aged over 65 years had hospital cover. Nationally in December 2013, 47.0% of the total population and 54.6% of older persons had hospital cover.

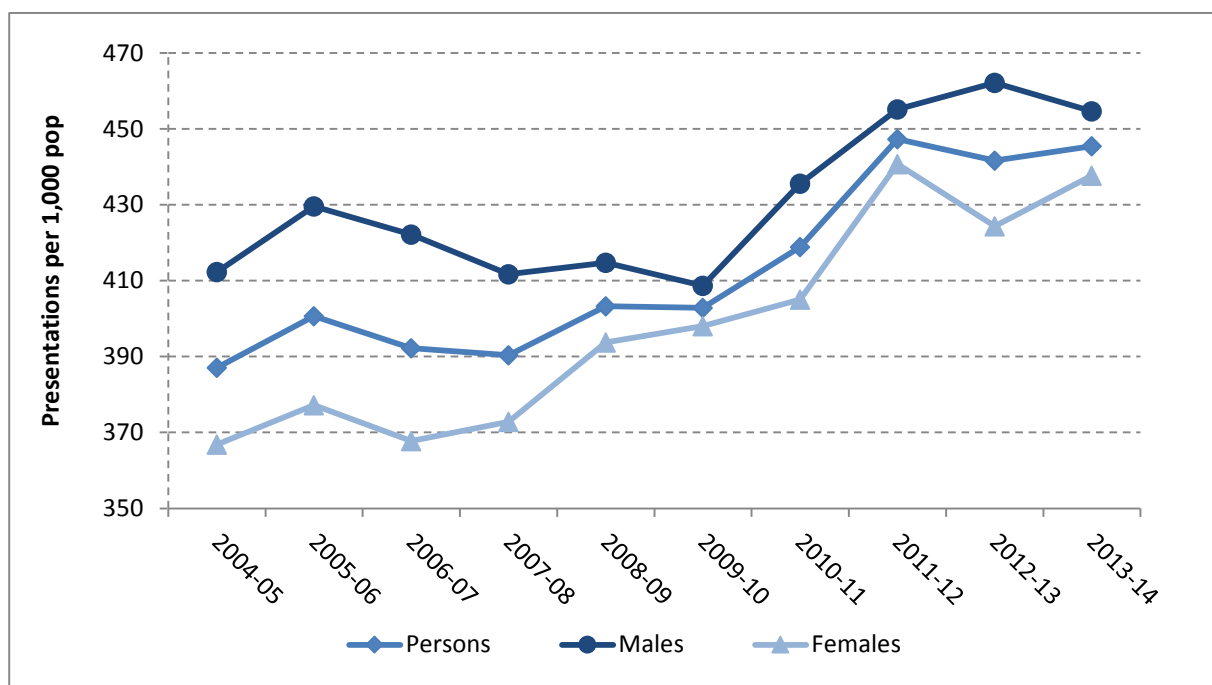
ACT Health Admitted Patient Care data indicate that the ACT's older people are increasingly seeking private hospital care, both in private hospitals and as private patients in public hospitals. This is reflected in a gradual decline between 2003–04 and 2012–13 in the proportion of older persons in the ACT hospitalised in public hospitals overall (from 71.9% to 69.7%) and in those electing to be public patients in public hospitals (from 87.8% to 78.7%).

In 2012–13, 53.4% of the ACT's total hospital separations for older ACT residents were for hospital insurance holders, and 84.5% of private patients (in both private and public hospitals) had private cover. However, more than one-quarter (28.0%) of older persons in the ACT held private health insurance but elected to be a public patient, and this proportion appears to be increasing.

Emergency Department presentations

Figures from ACT Health's Emergency Department Information Solution (EDIS) show that, over the 10-year period from 2004–05 to 2013–14, the proportion of Emergency Department (ED) presentations for older persons in the ACT increased from 14.2% to 17.5% (Figure 15). Over this period the rate of ED presentation for older persons also increased, from 387.1 to 445.4 presentations per 1,000 population (an increase of 15.1%). This increase was driven by those aged 85 years and over. Rates were generally higher for older males than for older females (Figure 15). Almost half (47%) of older persons in the ACT presenting to EDs arrived by ambulance, and this was consistent over the time period 2004–05 to 2013–14.

Figure 15: Emergency Department presentations, persons aged 65 years and over, age-specific rates, ACT, 2004-05 to 2013-14



Source: ACT Health, Emergency Department Information System data.
ABS Estimated Resident Population data, cat. no. 3101.0, 2001–14.

ED presentations by older ACT residents rose for a number of conditions, with the largest number of presentations during this 11-year period being for pain in throat and chest. The largest annual increase in the age-specific rate was for pneumonia (organism unspecified), which rose by 12.8% per year (Table 10).

Table 10: Selected top reasons for Emergency Department presentations, persons aged 65 years and over, number and annual age-specific rate increase, ACT, 2004-05 to 2014-15

Diagnosis	Number	% annual increase in rate
Pain in throat and chest	13,926	2.2%
Abdominal and pelvic pain	5,426	3.2%
Other disorders of urinary system	4,315	5.3%
Syncope (fainting) and collapse	3,980	2.0%
Atrial fibrillation and flutter	3,853	1.3% *
Pneumonia (organism unspecified)	3,850	12.8%

Source: ACT Health, Emergency Department Information System data.
ABS Estimated Resident Population data, cat. no. 3101.0, 2001–14.

Notes: Includes Emergency presentations only; excludes patients who did not wait to be seen or who were dead on arrival.

* Just below threshold of statistical significance ($p=0.051$)

Satisfaction with hospital care

According to the most recent available hospital satisfaction data from the ACTGHS 2009–2010, 19.5% of older persons had spent at least one night in hospital and 17.6% had presented at an ED within the last 12 months. Of those who had an overnight stay, 94.0% rated the care they received as excellent, very good or good. This figure was 86.4% for those who had attended an ED.

Hospital in the Home

Hospital in the Home (HITH) is an inpatient service of both the Canberra Hospital and Calvary Public Hospital, and provides an acute hospital substitute for patients in the ACT. A quarter (25.6%) of all HITH separations for the period 2007–08 to 2013–14 were for older persons in the ACT.

7.3. Dental services

In the ACTGHS 2011–2012, 68.9% of older persons in the ACT reported that they had attended a dentist within the last 12 months, 22.3% had attended a dentist one to five years ago, and 4.0% reported not having been to a dentist in 10 years or more. Those who had not visited a dentist within the last 12 months gave a range of reasons for their non-attendance, the most common being that they felt they did not need to go (57.4%), or due to having dentures (28.2%). Just under 7% said they were either afraid of, or did not like going to the dentist, and 4.5% cited difficulty finding the time. A small proportion of older persons reported not attending because it was too expensive (7.3%), and 4.1% gave long waiting lists as a reason.

In 2011–12, 383 older persons in the ACT attended the ACT Government’s Dental Health Program. The majority of these were aged less than 75 years (67.9%).

7.4. Mental health services

Data from ROGS 2015 indicate that in 2012–13, 7.1% of community mental health care service contacts in the ACT were for people aged 65 years and over, slightly lower than the national average of 8.1%. In the ACT, both the proportion and rate of community mental health care service contacts provided to older persons showed a steady decrease between 2009–10 and 2012–13, from 12.2% and 861.6 per 1,000 to 7.1% and 451.1 per 1,000 in 2012–13. Nevertheless, the ACT rate remained consistently higher than the national average over this period (Table 11).

In 2012-13, 2.2% of older persons in the ACT received clinical public mental health services, which was the highest rate of any jurisdiction. Nationally, 1.4% of older persons had received clinical public mental health services (ROGS 2015).

Older persons also accounted for 4.1% of focussed psychological strategies services partially or fully rebated through Medicare in the ACT. In 2013–14 there were over 2,567 such services for older persons in the ACT. There were also 1,836 mental health specific GP presentations for older persons in the ACT, making up 5.4% of all such presentations.

Table 11: Community mental health services by sex, persons aged 65 years and over, per cent of all services and rate, ACT and Australia, 2009–10 to 2012-13

	ACT			Aust		
	Males	Females	Persons	Males	Females	Persons
2009-10						
Per cent	9.6%	14.5%	12.2%	6.9%	13.2%	9.6%
Services per 1,000 population	683.5	1008.8	861.6	178.9	242.1	213.3
2010-11						
Per cent	7.2%	9.1%	8.2%	6.7%	12.5%	9.0%
Services per 1,000 population	474.7	567.1	525.3	179.3	240.8	212.8
2011-12						
Per cent (b)	5.7%	9.5%	7.6%	5.9%	11.2%	8.1%
Services per 1,000 population	394.8	574.0	492.3	161.2	212.5	189.0
2012-13						
Per cent (b)	5.9%	8.3%	7.1%	6.3%	11.4%	8.5%
Services per 1,000 population	384.9	506.7	451.1	182.1	245.8	216.9

Source: AIHW Mental Health Services in Australia (various years), as published in ROGS 2015 (Table 12A.24)

7.5. Community services

The most recently-available ACTGHS data (2009–2010) indicate that 13.0% of ACT residents aged 65 years or more had attended a community health centre within the previous 12 months. Of those who attended, 91.4% considered the care they received to be excellent, very good or good.

The ACT Government Community Care Program received over 14,000 referrals per year between 2010 and 2012 across its service specialties (nursing, nutrition, occupational therapy, physiotherapy, podiatry and social work). Data from the program indicates that older persons made up over half of these referrals, and more than three-quarters of referrals for occupational therapy (75.1%) and podiatry (74.8%).

The average waiting time for an aged care assessment team (ACAT) for 2011–12 was 1.7 days, down from 2.3 days in 2010–11.⁵⁸

7.6. Medicare services

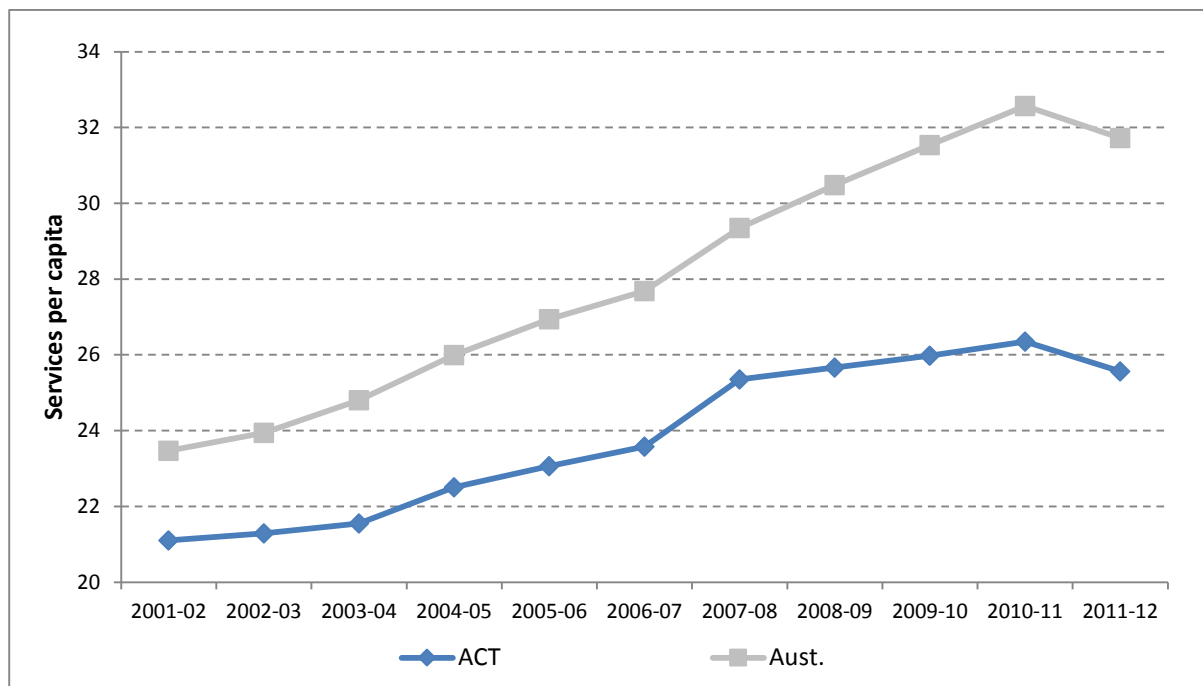
Medicare data provide an insight into people's access and usage patterns for a whole range of health services which are fully or partially reimbursed by the government. These include, but are not limited to, public hospital care, GP attendances, optometrists' eye tests, as well as some private hospital care, allied health, dental, pathology and imaging services.⁵⁹

The Australian Department of Health's Medicare Benefits Schedule (MBS) data indicate that, over the last 10 years, the ACT's older persons in the ACT have consistently had lower rates of Medicare services per capita than the national average (Figure 16). Over time, this gap

has widened. In 2011–12, there were an average of 31.7 services per older person in Australia, compared with 25.6 services per older person in the ACT.

A number of factors may contribute to this trend including the ACT’s lower than average bulk-billing rates (Figure 10), which may dissuade some from utilising GP care. ACT’s relatively healthy population may require fewer health services, and the higher proportion of people in the ACT with private health insurance may also contribute. It is important to note that because MBS data is drawn from a claims payment system, it cannot be used to determine the overall level of usage for health services and the degree to which these factors play a part in any disparities.

Figure 16: Medicare services per capita, persons aged 65 years and over, ACT and Australia, 2001–02 to 2011-12



Source: Australian Government Department of Health and Ageing, Medicare Statistics, June Quarter 2012, Table D1 – Services and Services per Capita (online).
 ABS, Estimated Resident Population, cat. no. 3101.0, 2002–2011 and Population Projections, cat. no. 3222.0, 2012.

8. GLOSSARY AND STATISTICAL METHODOLOGY

AGE-SPECIFIC RATES

Age-specific rates are calculated by dividing the number of cases occurring in each specified age group (and sex) by the corresponding population in the same age group (and sex), and are expressed as number per 100,000 population.

AGE-STANDARDISED RATES

The age-standardised rates presented in this report are based on the direct method of standardisation. This method adjusts for effects of differences in the age composition of different populations. The direct age-standardised rates are based on the weighted sum of age-specific (five-year age group) rates in the population. The weights used in the calculation of these rates (the 'standard' population) are population ratios for five-year age groups derived from the mid-year 2001 Australian population.

INCIDENCE

Incidence is defined as the number of new cases in a population during a specified period.

LIFE EXPECTANCY AT BIRTH

Life expectancy at birth is an estimate of the average length of time a person can expect to live, assuming that current rates of death for each age group in the population will remain the same for the lifetime of that person.

Life expectancy data provided have been obtained from ABS reports and referenced accordingly.

MORTALITY

Mortality refers to deaths in a given population occurring in a specified period.

PREVALENCE

Prevalence refers to the number of people at a point in time who have a diagnosis of a chronic disease or who currently have the disease or condition in the case of other diagnoses.

RELATIVE STANDARD ERRORS (RSE)

Relative standard errors (RSE) provide an indication of the reliability of an estimate. Estimates with RSEs of less than 25% are generally regarded as 'reliable'. All estimates presented in tables in this report have RSEs of less than 25% unless otherwise stated. Estimates presented in tables with an RSE of between 25-50% have been marked with an asterisk (*) and should be interpreted with caution. For the purposes of this report, estimates for the ACT with RSEs of over 50% were not considered reliable and have not been presented.

9. DATA SOURCES

ACT population health information

Quality information is vital for monitoring the health status of the population to inform planning and policy activities. ACT Health invests resources in developing surveillance for health conditions and associated risk factors. With emerging health issues associated with an ageing population and the increasing incidence of chronic diseases, the need for information that can monitor and inform public health planning and policy is critical.

ACT Health has established a survey program to collect information on the health of the ACT population and associated risk factors.

In the ACT, comprehensive and reliable information on the health status of Aboriginal and Torres Strait Islander people has been difficult to obtain, due to the small population size, a high degree of population mobility and issues concerning the recording of Aboriginal and Torres Strait Islander status in existing health data collections. The ACT has low numbers of Aboriginal and Torres Strait Islander people compared to other jurisdictions and they represent only about 1% of the total Australian Aboriginal and Torres Strait Islander population. It has not been possible to report on the health of older ACT Aboriginal or Torres Strait Islander people due to the small numbers and the possibility of endangering confidentiality.

The Epidemiology Section utilises data from ACT and national surveys and administrative datasets to monitor and report on the health of the ACT community. Major data sources used in this report are summarised below.

ABS National Health Surveys (NHS) and the Australian Health Survey

The NHS is conducted three-yearly, and collects data to produce national benchmark information on a range of health issues and to enable trends to be monitored over time. This includes information on the health status of the population, health-related behaviours, and use of health services. Information is collected from individuals who were residents of private dwellings only. The 2007–08 survey included 1,831 fully responding households. In 2011, the NHS was replaced by the Australian Health Survey. The Australian Health Survey (AHS) is the largest, most comprehensive health survey ever conducted in Australia. It combines the existing ABS National Health Survey (NHS) and the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) together with two new elements - a National Nutrition and Physical Activity Survey (NNPAS) and a National Health Measures Survey (NHMS).

ACT Admitted Patient Care Collection (ACT APC)

The datasets in this collection contain details of all ACT hospital inpatient records. It details patient records from each of the public and private hospitals in the ACT, for ACT and non-ACT residents. The information reported includes patient demographics, diagnoses, procedures, source of referral etc. The data do not include details of ACT residents admitted to hospitals outside of the ACT. It is episode based, and it is not possible to count patients individually.

ACT Cancer Registry data

The ACT Cancer Registry was established in 1994, when cancer reporting became mandatory in the ACT. Its purpose is to monitor the incidence and trends of cancer in the ACT. Data are collected from hospital records, pathology laboratories, day surgeries, hospices and nursing homes. About 1,000-2,000 new cases are reported each year. The registry does not cover non-melanocytic skin cancer.

ACT Emergency Department Information System (EDIS)

The EDIS contains records of patient presentations to the Canberra Hospital and Calvary Hospital Emergency Departments. The EDIS data contain details of patient demographics and diagnoses, triage categories and sources of referral.

ACT General Health Survey (ACTGHS)

The ACT commissioned NSW Health to undertake a computer-assisted telephone interview (CATI) continuous general health survey in the ACT commencing in 2007. There is an average of 1,300 respondents each year. Sample pooling over the years (where appropriate) will allow more specific analysis than has been previously possible. This report utilises the most recent available data from the ACTGHS – mostly this is from 2011 and 2012, although some data was only available from the 2009 and 2010 surveys.

AIHW National Hospital Morbidity Database

This database contains demographic, diagnostic, procedural and duration-of-stay information on episodes of care for patients admitted to hospital. The data collection is maintained by the AIHW using data supplied by state and territory health authorities. It is episode based, and it is not possible to count patients individually.

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