# E Health sector overview

CONTENTS

E.1 Introduction E.1

E.2 Sector performance indicator framework E.6

E.3 Cross cutting and interface issues E.25

E.4 Definitions of key terms E.25

E.5 References E.26

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| Attachment tables |
| Attachment tables are identified in references throughout this sector overview by a ‘EA’ prefix (for example, table EA.1) and are available from the website www.pc.gov.au/rogs/2017. |
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## E.1 Introduction

Health services are concerned with promoting, restoring and maintaining a healthy society. They involve illness prevention, health promotion, the detection and treatment of illness and injury, and the rehabilitation and palliative care of individuals who experience illness and injury. The health system also includes a range of activities that raise awareness of health issues, thereby reducing the risk and onset of illness and injury.

Health services in Australia are delivered by a variety of government and non‑government providers in a range of service settings. This Report primarily concentrates on the performance of primary and community health services (chapter 10), ambulance   
(chapter 11), public hospitals (chapter 12) and mental health management (chapter 13). Other major areas of government involvement in health provision not covered in the health chapters, or elsewhere in the Report, include public health programs, other than those for mental health, and funding for specialist medical practitioners other than general practitioners (GPs).

### Profile of health sector

#### Expenditure

Total recurrent and capital expenditure on health care services in Australia was estimated to be $161.6 billion in 2014‑15 (figure E.1), equating to around 10.0 per cent of gross domestic product (GDP) in 2014‑15 (an increase from the 8.7 per cent of GDP in 2005‑06) (AIHW 2016a). Between 2005‑06 and 2014‑15, the average annual rate of growth in real expenditure was 4.4 per cent for the Australian Government, 4.6 per cent for State, Territory and local governments, and 5.8 per cent for non‑government sources   
(table EA.1).

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| Figure E.1 Total health expenditure, by source of funds (2014‑15 dollars)a |
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| a See table EA.1 for detailed footnotes and caveats. |
| *Source*: AIHW (Australian Institute of Health and Welfare) (2016) *Health Expenditure Australia 2014‑15*, Health and Welfare Expenditure Series no. 57, Cat. no. HWE 67; table EA.1. |
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In 2014‑15, the combined total health expenditure of the Australian, State and Territory and local governments was $108.2 billion, representing 66.9 per cent of total health expenditure within Australia (table EA.1). The Australian Government accounted for the largest proportion of health care expenditure — $66.2 billion or 41.0 per cent. State and Territory, and local governments contributed $42.0 billion or 26.0 per cent. The remainder was paid by individuals, health insurance funds, workers compensation and compulsory motor vehicle third party insurance providers (tables EA.1–3).

Nationally from 2005‑06 to 2014‑15:

* total real recurrent health expenditure per person increased from $4916 to $6440
* government real recurrent health expenditure per person increased from $3455 to $4398
* non‑government real recurrent expenditure per person increased from $1466 to $2043 (figure E.2 and tables EA.3).

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| Figure E.2 Recurrent health expenditure per person, by source of funds, 2014‑15a |
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| a See table EA.3 for detailed footnotes and caveats. |
| *Source*: AIHW (2016) *Health Expenditure Australia 2014‑15*, Health and Welfare Expenditure Series no. 57, Cat. no. HWE 67; table EA.3. |
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#### Roles and responsibilities

All levels of government in Australia fund, deliver and regulate health services, with most of the activity performed by the Australian, State and Territory governments. The Australian Government’s health services activities include:

* funding State and Territory governments to assist with the cost of providing public hospital and public health services in line with the National Health Reform Agreement and the National Healthcare Agreement (NHA)
* providing rebates to patients and regulating medical services provided by General Practitioners (GPs) and specialists, practice nurses, and some services provided by allied health professionals (such as Medicare), and delivering public health programs
* funding and regulating the Pharmaceutical Benefits Scheme (PBS)
* funding and regulating private health insurance rebates
* funding improved access to primary health care, including Aboriginal and Torres Strait Islander‑specific primary health guided by the National Aboriginal and Torres Strait Islander Health Plan and Implementation Plan 2013–2023, specialist services and infrastructure for rural and remote communities
* promulgating and coordinating health regulations
* undertaking health policy research and policy coordination across the Australian, State and Territory governments
* funding hospital services and the provision of other services through the Department of Veterans’ Affairs (DVA)
* funding hearing services for eligible Australians through the Australian Government Hearing Services Program
* funding the Medicare Safety Net.

State and Territory governments contribute funding for, and deliver, a range of health care services (including services for Aboriginal and Torres Strait Islander Australians), such as:

* community health services
* mental health services
* specialist palliative care
* public hospital services
* public dental services
* patient transport
* health policy research and policy development
* public health (such as health promotion programs and disease prevention)
* regulation, inspection, licensing and monitoring of premises, institutions and personnel.

Local governments are generally involved in environmental control and a range of community‑based and home care services, although the exact nature of their involvement varies across jurisdictions. The non‑government sector plays a significant role in the health system, delivering general practice and specialist medical and surgical services, dental services, a range of other allied health services (such as optometry and physiotherapy) and private hospitals.

### Factors affecting demand for services

Demand for health services is affected by health status, which is in turn affected by a range of demographic and socioeconomic factors. Financial, educational, geographic and cultural barriers can reduce access to health services and contribute to poorer health outcomes.

People who experience social and economic disadvantage have a relatively high risk of negative health outcomes, and are more likely to report their health as fair or poor, to have high rates of health risk factors and to have shorter lives (AIHW 2016b).

Geographic location can affect health status and access to health services. People living in rural and remote areas tend to have higher levels of disease risk factors and poorer health status than those living in major cities (AIHW 2016b).

Aboriginal and Torres Strait Islander people are more likely than are other Australians to experience poor health and to die at younger ages (AIHW 2016b, tables EA.49 and EA.51). A recent study found socioeconomic disadvantage was the leading health risk for Aboriginal and Torres Strait Islander Australians in the NT, accounting for 42 to   
54 per cent of the life expectancy gap between Aboriginal and Torres Strait Islander and other Australians (Zhao et al. 2013).

Aboriginal and Torres Strait Islander people have low employment and income   
levels when compared to other Australians (see chapter 2, tables 2A.31–33 and 2A.38–45). Aboriginal and Torres Strait Islander Australians have relatively high rates for many health risk factors and are more likely to smoke, to consume alcohol at risky levels, more likely to live in overcrowded housing and in remote areas with more limited access to health services (SCRGSP 2016).

### Service‑sector objectives

Box E.1 presents nationally agreed objectives of the health system as outlined in the NHA.

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| Box E.1 Overall objectives of the health system |
| Government involvement in the health system is aimed at efficiently and effectively improving health outcomes for all Australians and ensuring the sustainability of the Australian health system, achieving the following outcomes:   * Australians are born and remain healthy * Australians receive appropriate high quality and affordable primary and community health services * Australians receive appropriate high quality and affordable hospital and hospital related care * Australians have positive health care experiences which take account of individual circumstances and care needs * Australians have a health system that promotes social inclusion and reduces disadvantage, especially for Aboriginal and Torres Strait Islander Australians * Australians have a sustainable health system. |
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## E.2 Sector performance indicator framework

This sector overview is based on a sector performance indicator framework (figure E.3) made up of the following elements:

* Sector objectives — three sector objectives reflect the key objectives of the health system (box E.1)
* Sector‑wide indicators — eight sector‑wide indicators relate to the overarching service sector objectives identified in the NHA.

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| Figure E.3 Health services sector performance indicator framework |
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#### Babies born of low birth weight

‘Babies born of low birth weight’ is an indicator of governments’ objective that Australians are born and remain healthy (box E.2).

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| Box E.2 Low birth weight of babies |
| ‘Low birth weight babies’ is defined as the proportion of live singleton babies of low birth weight. Babies’ birth weight is defined as low if they weigh less than 2500 grams, very low if they weigh less than 1500 grams and extremely low if they weigh less than 1000 grams (Li et al. 2013).  A low or decreasing number of low birth weight babies is desirable.  Factors external to the health system also have a strong influence on the birth weight of babies. Some factors contributing to low birth weight include socioeconomic status, size of parents, age of mother, number of babies previously born, mother’s nutritional status, smoking and alcohol intake, and illness during pregnancy (Li et al. 2013).  Data reported for this indicator are:   * comparable (subject to caveats) across jurisdictions and over time * complete (subject to caveats) for the current reporting period. All required 2014 data are available for all jurisdictions. |
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In 2014, 6.4 per cent of liveborn singleton babies in Australia were of low birth weight (table EA.7), with rates increasing as remoteness increased (table EA.9). Of all liveborn babies, 1.0 per cent were of very low birth weight (table EA.7). Among liveborn singleton babies born to Aboriginal and Torres Strait Islander mothers in 2014, the proportion with low birth weight was almost twice that for babies born to non‑Indigenous mothers (figure E.4).

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| Figure E.4 Low birthweight live births to Aboriginal and Torres Strait Islander and all mothers, 2014**a, b** |
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| a See box E.2 and table EA.7–8 for detailed definitions, footnotes and caveats. b Data for low birthweight of live births to Aboriginal and Torres Strait Islander mothers are not published for Tasmania or the ACT. |
| *Source*: AIHW (unpublished) National Perinatal Data Collection; tables EA.7–8. |
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#### Prevalence of risk factors to the health of Australians

‘Prevalence of risk factors to the health of Australians’ is an indicator of governments’ objective that Australians are born and remain healthy (box E.3).

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| Box E.3 Prevalence of risk factors to the health of Australians |
| ‘Prevalence of risk factors to the health of Australians’ is defined by the following measures:   * Prevalence of overweight and obesity — the proportion of the population with a Body Mass Index (BMI) in the categories of overweight or obese. BMI is calculated as weight (kg) divided by the square of height (m). BMI values are grouped according to World Health Organization (WHO) and National Health and Medical Research Council (NHMRC) guidelines. * Among adults (defined as people aged 18 years or over), a BMI of 25 to less than 30 is considered overweight and a BMI of 30 or over is considered to be obese (WHO 2000; NHMRC 2013). For children (defined as people aged 5‑17 years), obesity is defined as BMI (appropriate for age and sex) that is likely to be 30 or more at age 18 years. * Rates of current daily smokers — the proportion of people aged 18 years or over who smoke tobacco every day. * Risk of alcohol related harm over a lifetime — the proportion of people aged 18 years or over assessed as having an alcohol consumption pattern that puts them at risk of long‑term alcohol related harm. * ‘Lifetime risk of alcohol related harm’ is defined according to the 2009 NHMRC guidelines: for males and females, no more than two standard drinks on any day. This has been operationalised as: for both males and females, an average of more than 2 standard drinks per day in the last week (NHMRC 2009).   A low or decreasing rate is desirable for each health risk factor. Rates are age standardised.  Data reported for this indicator are:   * comparable (subject to caveats) across jurisdictions and over time * complete (subject to caveats) for the current reporting period. All required  2014‑15 data are available for all jurisdictions.   Data do not include people living in discrete Aboriginal and Torres Strait Islander communities and very remote areas, which affects the comparability of the NT results. |
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##### Prevalence of overweight and obesity

In 2014‑15, over a third of adults’ measured BMI was in the overweight range and over a quarter were obese (figure E.5, table EA.10), with proportions generally higher in remote and outer regional areas than in major cities in 2014‑15 (table EA.11). For children, these age standardised proportions were 20.3 per cent and 7.4 per cent respectively   
(table EA.10).

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| Figure E.5 Proportion of adults in BMI categories (age standardised) 2014‑15**a** |
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| a See box E.3 and table EA.10 for detailed definitions, footnotes and caveats. |
| *Source*: ABS (unpublished) *National Health Survey 2014‑15*, Cat. no. 4364.0; table EA.10. |
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The percentage of people who were overweight or obese tended to be higher in older age groups, peaking at age 55–64 for males and 65–69 for females in 2014‑15 (table EA.13).

Nationally in 2011–13, the rate of overweight and obesity was higher for Aboriginal and Torres Strait Islander adults than for other adults (table EA.14). Data for the rate of overweight and obesity for children by Indigenous status are reported in table EA.16.

##### Rates of current daily smokers

Nationally in 2014‑15, 14.8 per cent of adults were daily smokers (age standardised rate), with rates higher in areas outside of major cities and for people who were living in more disadvantaged areas (tables EA.17–18). The proportion of Aboriginal and Torres Strait Islander adults that were daily smokers was almost three times the proportion for non‑Indigenous adults in 2014‑15 (table EA.19).

##### Levels of risky alcohol consumption

Across Australia in 2014‑15, 17.4 per cent of adults were at risk of long‑term alcohol‑related harm (age standardised rate, table EA.20), with rates increasing as remoteness increased (figure E.6). Proportions were higher for people living with less disadvantage (table EA.21). Rates for Aboriginal and Torres Strait Islander Australians are presented in table EA.22 (comparable data for non‑Indigenous Australians are not available for 2014‑15).

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| Figure E.6 Adults at risk of alcohol‑related harm over a lifetime, by remoteness (age standardised) 2014‑15**a, b** |
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| aSee box E.3 and table EA.20 for detailed definitions, footnotes and caveats. bThere are no major cities in Tasmania, no outer regional or remote areas in the ACT and no major cities or inner regional areas in the NT. |
| *Source***:** ABS (unpublished) *National Health Survey 2014‑15*, Cat. no. 4364.0; table EA.20. |
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#### **Selected potentially preventable diseases**

‘Selected potentially preventable diseases’ is an indicator of governments’ objective that Australians are born and remain healthy (box E.4).

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| Box E.4 Selected potentially preventable diseases |
| ‘Selected potentially preventable diseases’ is defined by the following three measures:   * Incidence of selected cancers — incidence of selected cancers of public health importance, expressed as an age standardised rate. * For melanoma, lung and bowel cancer, the measure is defined as the number of new cases in the reported year. For breast and cervical cancer in females, the measure is defined as the number of new cases in women in the reported year * Data reported for this measure are: * comparable (subject to caveats) across jurisdictions and over time * incomplete for the current reporting period. Data for 2013 are not available for NSW. * Incidence of heart attacks (acute coronary events) — the number of deaths recorded as acute coronary heart disease deaths plus the number of non‑fatal hospitalisations for acute myocardial infarction or unstable angina not ending in a transfer to another acute hospital, expressed as an age standardised rate. * Data reported for this measure are: * comparable (subject to caveats) over time at the national level but are not comparable across jurisdictions * complete for the current reporting period. All required 2014 data are available for all jurisdictions. * Prevalence of type 2 diabetes — the proportion of people aged 18 years or over recorded as having Type 2 diabetes, expressed as an age standardised rate. * Data reported for this measure are: * comparable across jurisdictions (subject to caveats) but are not comparable over time * complete for the current reporting period (subject to caveats). All required 2011–13 data are reported for all jurisdictions.   A low or decreasing rate is desirable for each of the three measures.  Measures of both incidence and prevalence are reported for this indicator. Incidence is defined as the number of new cases in the reported year and is expressed as a rate of the relevant population. Prevalence is defined as the proportion of the population suffering from a disorder. |
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##### Incidence of selected cancers

Nationally, the age standardised rate of lung cancer was 41.8 new cases per 100 000 people in 2013. Bowel cancer occurred at a rate of 56.3 new cases per 100 000 people in 2013 (table EA.24). Other cancers such as melanoma are also largely preventable. The incidence of these cancers for 2013, along with breast and cervical cancer, is presented in figure E.7. Tables EA.25–27 report the incidence of the selected cancers by remoteness, SEIFA IRSD quintiles and Indigenous status.

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| Figure E.7 Incidence of selected cancers, per 100 000 people, 2013**a, b** |
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| a See box E.4 and table EA.24 for detailed definitions, footnotes and caveats. b Data are not available for NSW. |
| *Source*: AIHW (unpublished) Australian Cancer Database 2013; ABS (2016) *Australian Demographic Statistics*, Cat. no. 3101.0; table EA.24. |
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Data for five‑year relative survival proportions for people diagnosed with cancer at the national level are presented in tables EA.43–45.

##### Incidence of heart attacks (acute coronary events)

Nationally, the rate of heart attacks (acute coronary events) was 359.5 new cases   
per 100 000 people in 2014 (table EA.28), with the incidence for Aboriginal and Torres Strait Islander people more than twice that for other Australians (table EA.29). Data for states and territories are reported in tables EA.30–37.

##### Prevalence of type 2 diabetes

Nationally, an estimated 4.3 per cent of adults had type 2 diabetes in 2011‑12   
(table EA.38). The prevalence among Aboriginal and Torres Strait Islander adults was around three times higher than for other Australian adults in 2011–13 (tables EA.39–40).

#### Potentially avoidable deaths

‘Potentially avoidable deaths’ is an indicator of governments’ objective that Australians are born and remain healthy (box E.5).

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| Box E.5 Potentially avoidable deaths |
| ‘Potentially avoidable deaths’ is defined as deaths that are potentially avoidable in the context of the present health system. These include deaths from conditions that are potentially preventable through individualised care and/or treatable through existing primary or hospital care.  A low or decreasing potentially avoidable death rate is desirable.  Most components of the health system can influence potentially avoidable death rates, although there can be decades between the action and the effect. Factors external to the health system also affect potentially avoidable death rates — the health system is in some cases not a factor. For example, while the response of the health system may prevent death following a traffic accident, it is not a factor when a traffic accident causes immediate death.  Data reported for this indicator are:   * comparable (subject to caveats) across jurisdictions and over time * complete (subject to caveats) for the current reporting period. All required 2015 data are available for all jurisdictions. |
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Nationally, there were 107.7 avoidable deaths per 100 000 people in 2015 (table EA.41). The rate of avoidable deaths for Aboriginal and Torres Strait Islander people was more than three times the rate for other Australians (figure E.8 and table EA.42).

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| Figure E.8 Age standardised mortality rates for potentially avoidable deaths, under 75 years, 2011–2015**a, b** |
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| a See box E.5 and table EA.42 for detailed definitions, footnotes and caveats. b Data are not available for Victoria, Tasmania or the ACT due to the small number of Aboriginal and Torres Strait Islander deaths. |
| *Source*: ABS (unpublished) *Causes of Deaths, Australia*, Cat. no. 3303.0; ABS (unpublished) *Australian Demographic* Statistics, Cat. no. 3101.0; ABS (2014) *Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 2001 to 2026*, Series B; Cat. no. 3238.0; table EA.42. |
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#### The mortality and life expectancy of Australians

‘The mortality and life expectancy of Australians’ is an indicator of governments’ objective that Australians are born and remain healthy (box E.6).

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| Box E.6 The mortality and life expectancy of Australians |
| ‘The mortality and life expectancy of Australians’ is defined by the following three measures:   * Life expectancy — the average number of additional years a person of a given age and sex might expect to live if the age‑specific death rates of the given period continued throughout his/her lifetime. * Median age at death — the age at which exactly half the deaths registered (or occurring) in a given time period were deaths of people above and below that age. * Mortality rates — the number of registered deaths compared to the total population. Rates are provided for: * Australian mortality rate — age standardised mortality per 1000 people * infant and child mortality rates — the number of deaths of children under one year of age registered in a calendar year per 1000 live births registered in the same year (infant mortality rate) and the number of deaths of children under five years in a calendar year per 100 000 children (child mortality rate) * mortality rates by major cause of death — age standardised mortality per 1000 people, by cause of death.   A high or increasing life expectancy and median age at death are desirable. A low or decreasing mortality rate is desirable.  Most components of the health system can influence the mortality and life expectancy of Australians, although there can be decades between the action and the effect. Factors external to the health system also have a strong influence.  Data reported for this indicator are:   * comparable (subject to caveats) across jurisdictions and over time, except for median age at death * complete (subject to caveats) for the current reporting period. All required 2013–2015 data for life expectancy, 2015 data for median age at death, 2015 data for mortality rates and 2015 data for cause of death are available for all jurisdictions. |
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##### Life expectancy

The average life expectancy at birth in the period 1901–1910 was 55.2 years for males and 58.8 years for females (ABS 2013). It has risen steadily in each decade since, reaching 80.4 years for males and 84.5 years for females in 2013–2015 (figure E.9).

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| Figure E.9 All Australians average life expectancy at birth, 2013–2015**a** |
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| a See box E.6 and table EA.46 for detailed definitions, footnotes and caveats. |
| *Source*: ABS (2016) *Life tables, Australia, States and Territories, 2013­2015*,Cat. no. 3302.0.55.001; table EA.46. |
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The life expectancies of Aboriginal and Torres Strait Islander Australians are considerably lower than those of other Australians. ABS estimates are available every 5 years. These indicate a life expectancy at birth of 69.1 years for Aboriginal and Torres Strait Islander males and 73.7 years for Aboriginal and Torres Strait Islander females born from 2010 to 2012. In the same time period, life expectancy at birth for non‑Indigenous males was   
79.7 years and for non‑Indigenous females was 83.1 years (table EA.47).

##### Median age at death

The median age at death in 2015 was 78.8 years for Australian males and 85.1 years for Australian females (table EA.48).

Nationally, counting only the jurisdictions for which data were available for Aboriginal and Torres Strait Islander Australians, the median age at death for Aboriginal and Torres Strait Islander Australians in 2015 was 54.9 years for males and 61.5 years for females (figure E.10 and table EA.49).

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| Figure E.10 Median age at death, by sex and Indigenous status, 2015**a, b** |
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| a See box E.6 and table EA.49 for detailed definitions, footnotes and caveats. b Data are not available for Victoria, Tasmania or the ACT due to the small number of Aboriginal and Torres Strait Islander deaths. |
| *Source*: ABS (2016) *Deaths, Australia, 2015*, Cat. no. 3302.0; table EA.49. |
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##### Mortalityrates

The national age standardised mortality rate, measured in deaths per 100 000 people, was 549.3 in 2015 — an increase from 545.0 in 2014 but a decrease from 570.0 in 2011   
(figure E.11).

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| Figure E.11 Mortality rates, age standardiseda |
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| a See box E.6 and table EA.50 for detailed definitions, footnotes and caveats. |
| *Source*: ABS (2016) *Deaths, Australia, 2015*, Cat. no. 3302.0; table EA.50. |
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###### Mortality rates — Infant and child

The annual infant mortality rate in Australia declined from an average of 4.7 deaths   
per 1000 live births in 2006 to 3.2 deaths per 1000 live births in 2015 (table EA.53).

The Australian infant and child combined mortality rate was 80.7 deaths per 100 000 population in 2013–2015 (children aged 0–4 years). There were 3.4 infant deaths per 1000 live births (table EA.55).

###### Mortality rates — Aboriginal and Torres Strait Islander Australians

For the period 2011–2015, NSW, Queensland, WA, SA and the NT have been assessed as having adequate identification and number of Aboriginal and Torres Strait Islander deaths for mortality analysis. For these five jurisdictions combined, the overall age standardised mortality rate for Aboriginal and Torres Strait Islander people was 991.7 per 100 000 people, significantly higher than for other Australians (580.0 per 100 000 people)   
(table EA.51). Due to identification completeness issues, mortality rates presented here are likely to be underestimates of the true mortality of Aboriginal and Torres Strait Islander Australians (ABS and AIHW 2008).

For the period 2011–2015, the average mortality rate for Aboriginal and Torres Strait Islander infants (less than one year) was higher than for other infants in the jurisdictions for which there were data available (NSW, Queensland, WA, SA and the NT)   
(table EA.56). For the same period and the same jurisdictions, the average mortality rate for infants and children combined per 100 000 children aged 0–4 years was 164.9 for Aboriginal and Torres Strait Islander children and 80.1 for other Australian children   
(table EA.56).

###### Mortality rates — by major cause of death

The most common causes of death among Australians in 2015 were cancers, diseases of the circulatory system (including heart disease, heart attack and stroke), and diseases of the respiratory system (including influenza, pneumonia and chronic lower respiratory diseases) (tables E.1 and EA.57).

In the jurisdictions for which age standardised death rates are available by Indigenous status (NSW, Queensland, WA, SA and the NT), the leading age‑standardised causes of death for Aboriginal and Torres Strait Islander people in the period 2011–2015 were diseases of the circulatory system, cancers, endocrine and other disorders, and diseases of the respiratory system (table EA.58).

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| Table E.1 Age standardised mortality rates by selected major causes of death (deaths per 100 000 people), 2015**a** |
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| a See box E.6 and table EA.57 for detailed definitions, footnotes and caveats. |
| *Source*: ABS (unpublished) *Causes of Death Australia, 2015*; table EA.57. |
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#### Perinatal death rate

‘Perinatal death rate’ is an indicator of governments’ objective that Australians are born and remain healthy (box E.7).

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| Box E.7 Perinatal death rate |
| ‘Perinatal death rate’ is defined by the following three measures:   * Fetal death (stillbirth) is the birth of a child who did not at any time after delivery breathe or show any other evidence of life, such as a heartbeat. Fetal deaths by definition include only infants weighing at least 400 grams or of a gestational age of at least 20 weeks. The fetal death rate is calculated as the number of fetal deaths divided by the total number of births (live births and fetal deaths combined). The rate of fetal deaths is expressed per 1000 total births, by State or Territory of usual residence of the mother. * Neonatal death is the death of a live born infant within 28 days of birth (see section E.5 for a definition of a live birth). The neonatal death rate is calculated as the number of neonatal deaths divided by the number of live births registered. The rate of neonatal deaths is expressed per 1000 live births, by State or Territory of usual residence of the mother. * A perinatal death is a fetal or neonatal death. The perinatal death rate is calculated as the number of perinatal deaths divided by the total number of births (live births and fetal deaths combined). It is expressed per 1000 total births, by State or Territory of usual residence of the mother.   Low or decreasing death rates are desirable and can indicate high quality maternity services. The neonatal death rate tends to be higher among premature babies, so a lower neonatal death rate can also indicate a lower percentage of pre‑term births.  Differences in the fetal death rate across jurisdictions are likely to be due to factors outside the control of admitted patient maternity services (such as the health of mothers and the progress of pregnancy before hospital admission). To the extent that the health system influences fetal death rates, the health services that can have an influence include outpatient services, general practice services and maternity services. In jurisdictions where the number of fetal deaths is low, small annual fluctuations in the number affect the annual rate of fetal deaths.  As for fetal deaths, a range of factors contribute to neonatal deaths. However, the influence of maternity services for admitted patients is greater for neonatal deaths than for fetal deaths, through the management of labour and the care of sick and premature babies.  Data reported for this indicator are:   * comparable (subject to caveats) across jurisdictions and over time * complete (subject to caveats) for the current reporting period. All required 2015 data are available for all jurisdictions. |
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Fetal, neonatal and perinatal death rates for 2015 are reported in figure E.12. Fetal, neonatal and perinatal deaths data by the Indigenous status of the mother for 2010–2014 are available in table EA.62 for NSW, Queensland, WA, SA and the NT only. These five states and territories are considered to have adequate levels of identification of Aboriginal and Torres Strait Islander people in mortality data.

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| Figure E.12 Fetal, neonatal and perinatal death rates**a** |
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| See box E.7 and table EA.59–61 for detailed definitions, footnotes and caveats. |
| *Source*: ABS (2016) *Causes of deaths, Australia, 2015*, Cat. no. 3302.0; table EA.59–61. |
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#### Employed health practitioners

‘Employed health practitioners’ is an indicator of governments’ objective that Australians have a sustainable health system (box E.8).

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| Box E.8 Employed health practitioners |
| ‘Employed health practitioners’ is defined by three measures:   * full time equivalent employed health practitioners divided by the population * the proportion of full time equivalent employed health practitioners under the age of 45 years * the average annual growth in full time equivalent employed health practitioners.   Health practitioner data in this Report are for employed medical practitioners and nurses/midwives, with some limited data available for employed allied health professionals.  High or increasing rates for measures of employed health practitioners can give an indication of the sustainability of the health system and its ability to respond and adapt to future needs.  Data reported for this indicator are:   * comparable (subject to caveats) across jurisdictions and over time * complete (subject to caveats) for the current reporting period. All required 2015 data are available for all jurisdictions. |
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In 2015, there were 392.3 full time equivalent (FTE) employed medical practitioners   
per 100 000 people (figure E.13). The majority of employed medical practitioners (commonly referred to as doctors) that were employed in medicine were clinicians   
(95.6 per cent) and the majority of clinicians were either GPs (28.5 per cent) or specialists (34.2 per cent) (AIHW 2016d).

In 2015, the number of nurses and midwives registered in Australia was 360 008, of whom 307 104 were employed (equating to 1291 per 100 000 population). The majority of employed nurses and midwives were clinicians (90.4 per cent) (AIHW 2016c). The number of FTE employed nurses and midwives per 100 000 people by jurisdiction is illustrated for 2011 to 2015 in figure E.14 and table EA.64.

Nationally there were 435.9 FTE employed allied health practitioners per 100 000 people in 2014 (table EA.65). No data were available for 2015.

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| Figure E.13 Full time equivalent employed medical practitioners**a** |
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| a See box E.8 and table EA.63 for detailed definitions, footnotes and caveats. |
| *Source*: AIHW (unpublished); table EA.63. |
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| Figure E.14 Full time equivalent employed nurses and midwives**a** |
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| a See box E.8 and table EA.64 for detailed definitions, footnotes and caveats. |
| *Source*: AIHW (unpublished); table EA.64. |
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At the national level, 52.2 per cent of FTE employed medical practitioners were under 45 years of age in 2015 (table EA.63). The employed medical practitioner workforce grew at an average annual rate of 0.8 per cent from 2010 to 2015 (table EA.66). The employed nursing and midwifery workforce grew at an average annual rate of 5.6 per cent from 2010 to 2015 (table EA.66), and 48.7 per cent of FTE employed nurses were under 45 years of age in 2015 (table EA.64).

Nationally, 1.1 per cent of the employed nursing and midwifery workforce and   
0.5 per cent of the employed medical workforce were Aboriginal and Torres Strait Islander in 2015 (table EA.67). Of people employed in health‑related occupations in 2011,   
1.6 per cent were Aboriginal and Torres Strait Islander (tables EA.68–70).

#### Access to services compared to need by type of service

‘Access to services compared to need by type of service’ is an indicator of governments’ objective that Australians have a health system that reduces disadvantage, especially for Aboriginal and Torres Strait Islander Australians (box E.9).

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| Box E.9 Access to services compared to need by type of service |
| ‘Access to services compared to need by type of service’ is defined as the proportion of the population aged 15 years or over who accessed a particular health service in the past  12 months (for hospital admissions), 3 months (for dental services) or 2 weeks (for other health services). Rates are age standardised and calculated separately for each type of service and by categories of self‑assessed health status.  Service types are: admitted hospitalisations, casualty/outpatients, GP and/or specialist doctor consultations, consultations with other health professional and dental consultation. Self‑assessed health status is categorised as excellent/very good/good and fair/poor. Data are reported for all Australians by remoteness and by SEIFA and for Aboriginal and Torres Strait Islander Australians.  High or increasing rates of ‘access to services compared to need by type of service’ are desirable, as are rates for those in disadvantaged groups being close to the rates for those who are not disadvantaged.  Data for this measure include 95 per cent confidence intervals (in the form of error bars in figures and percentages in tables).  Data reported for this indicator are:   * comparable (subject to caveats) across jurisdictions but not over time * complete (subject to caveats) for the current reporting period. All required data are available for all jurisdictions for all Australians (2014‑15) and Aboriginal and Torres Strait Islander Australians (2012‑13).   The total and non‑Indigenous components of the AHS 2011–2013 did not include people living in discrete Aboriginal and Torres Strait Islander communities or very remote areas, which affects the comparability of the NT results. |
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Nationally in 2014‑15, the majority of Australians (87.6 per cent) aged 15 years or over reported their health as either good, very good or excellent (figure E.15 and table EA.72). Aboriginal and Torres Strait Islander people were less likely to report good, very good or excellent health in 2012‑13 (35.8 per cent) (table EA.73).

Data for 2011‑12 including by remoteness and SEIFA are in tables EA.71 and EA.74–75.

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| Figure E.15 Proportion of people who accessed health services by health status, 2014‑15**a** |
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| a See box E.9 and table EA.72 for detailed definitions, footnotes and caveats. |
| *Source*: ABS (unpublished) Australian Aboriginal and Torres Strait Islander Health Survey, 2014‑15 (National Aboriginal and Torres Strait Islander Health Surveycomponent), Cat. no. 4727.0; table EA.72. |
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## E.3 Cross cutting and interface issues

The range of determinants affecting Australia’s health means that major improvements in health and other life outcomes depend not only on strong partnerships between components of the health system but also on strong relationships between the health sector and other government service sectors. For example:

* Child care, education and training impacts on developmental outcomes and has consequences for overall health and wellbeing throughout life, while poor health has adverse effects on a child’s educational development (AIHW 2011)
* Justice services role in providing a safe and secure society and enforcing legislation reduces the risk of injury, while individuals with poor health, including mental illness and illicit drug use, are overrepresented in the justice system (AIHW 2012)
* Housing and homelessness services impact on environmental risk factors for poor health, while individuals with poor health, including mental illness and illicit drug use, are overrepresented in the homeless population (Garner 2006)
* Community services,such as disability, aged care and child protection services, impact on environmental and social risk factors for poor health, while referrals to such services are often made by health professionals.

## E.4 Definitions of key terms

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| **Admitted patient** | A patient who has undergone a formal admission process in a public hospital to begin an episode of care. Admitted patients can receive acute, subacute or non‑acute care services. |
| **Allied health (non‑admitted)** | Occasions of service to non‑admitted patients at units/clinics providing treatment/counselling to patients. These include units providing physiotherapy, speech therapy, family planning, dietary advice, optometry and occupational therapy. |
| **Community health services** | Health services for individuals and groups delivered in a community setting, rather than via hospitals or private facilities. |
| **Comparability** | Data are considered comparable if (subject to caveats) they can be used to inform an assessment of comparative performance. Typically, data are considered comparable when they are collected in the same way and in accordance with the same definitions. For comparable indicators or measures, significant differences in reported results allow an assessment of differences in performance, rather than being the result of anomalies in the data. |
| **Completeness** | Data are considered complete if all required data are available for all jurisdictions that provide the service. |
| **Fetal death** | Delivery of a child who did not at any time after delivery breathe or show any other evidence of life, such as a heartbeat. Excludes infants that weigh less than 400 grams or that are of a gestational age of less than 20 weeks. |
| **Fetal death rate** | The number of fetal deaths divided by the total number of births (that is, by live births registered and fetal deaths combined). |
| **General practice** | The organisational structure with one or more GPs and other staff. A general practice provides and supervises healthcare for a ‘population’ of patients and can include services for specific populations, such as women’s health or Aboriginal and Torres Strait Islander people’s health. |
| **Live birth** | Birth of a child who, after delivery, breathes or shows any other evidence of life, such as a heartbeat. Includes all registered live births regardless of birthweight. |
| **Medicare** | Australian Government funding of private medical and optometrical services (under the Medicare Benefits Schedule). Sometimes defined to include other forms of Australian Government funding such as subsidisation of selected pharmaceuticals (under the Pharmaceutical Benefits Scheme) and public hospital funding (under the Australian Health Care Agreements), which provides public hospital services free of charge to public patients. |
| **Mortality rate** | The number of deaths per 100 000 people. |
| **Neonatal death** | Death of a live born infant within 28 days of birth. Defined in Australia as the death of an infant that weighs at least 400 grams or that is of a gestational age of at least 20 weeks. |
| **Neonatal death rate** | Neonatal deaths divided by the number of live births registered. |
| **Nursing workforce** | Registered and enrolled nurses who are employed in nursing, on extended leave or looking for work in nursing. |
| **Medical practitioner workforce** | Registered medical practitioners who are employed as medical practitioners, on extended leave or looking for work as a medical practitioner. |
| **Perinatal death** | Fetal death or neonatal death of an infant that weighs at least 400 grams or that is of a gestational age of at least 20 weeks. |
| **Perinatal death rate** | Perinatal deaths divided by the total number of births (that is, live births registered and fetal deaths combined). |
| **Public hospital** | A hospital that provides free treatment and accommodation to eligible admitted persons who elect to be treated as public patients. It also provides free services to eligible non‑admitted patients and can provide (and charge for) treatment and accommodation services to private patients. Charges to non‑admitted patients and admitted patients on discharge can be levied in accordance with the Australian Health Care Agreements. |
| **Real expenditure** | Actual expenditure adjusted for changes in prices. |

## E.5 References

ABS (Australian Bureau of Statistics) 2013, *Deaths Australia 2012*, Cat. no. 3302.0, Canberra.

—— 2014, *Australian Aboriginal and Torres Strait Islander Health Survey: Updated Results, 2012‑13, Self‑assessed health status*, Cat. no. 4727.0.55.006, Canberra, www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4727.0.55.006~2012‑13~  
Main%20Features~Self‑assessed%20health%20status~6 (accessed 29 October 2015).

—— and AIHW (Australian Institute of Health and Welfare) 2008, *The Health and Welfare of Australia’s Aboriginal and Torres Strait Islander Peoples, 2008*, ABS Cat. no. 4704.0, Canberra.

AIHW (Australian Institute of Health and Welfare) 2011, *National outcome measures for early childhood development — development of an indicator based reporting framework*, Cat. no. PHE 134, Canberra.

—— 2012, *Australia’s Health 2012*, Australia’s health series no. 13, Cat. no. AUS 156, Canberra.

—— 2016a, *Health Expenditure Australia 2014‑15*, Health and Welfare Expenditure Series no. 57, Cat. no. HWE 67, Canberra.

—— 2016b, *Australia’s health 2016*, Australia’s health series no. 15, Cat. no. AUS 199, Canberra.

—— 2016c, *Nursing and Midwifery Workforce 2015, Supplementary tables*, www.aihw.gov.au/workforce/nursing‑and‑midwifery/additional/ (accessed   
2 November 2016).

—— 2016d, *Medical Workforce 2015, Supplementary tables*, www.aihw.gov.au/  
workforce/medical/additional (accessed 2 November 2016).

Garner, G. 2006, *The ecology and inter‑relationship between housing and health outcomes*, paper delivered to the International Conference on Infrastructure Development and the Environment, eprints.qut.edu.au/7216/ (accessed 1 October 2011).

Li Z., Zeki R., Hilder L. and Sullivan E.A. 2013, *Australia’s mothers and babies 2011*, Perinatal statistics series no. 28, Cat. no. PER 59, Canberra: AIHW National Perinatal Epidemiology and Statistics Unit.

NHMRC (National Health and Medical Research Council) 2009, *Australian Guidelines to Reduce Health Risks from Drinking Alcohol*, Commonwealth of Australia, Canberra.

—— 2013, *Clinical Practice Guidelines for the Management of Overweight and Obesity in Adults, Adolescents and Children in Australia (2013)*, Canberra.

SCRGSP (Steering Committee for the Review of Government Service Provision) 2016, *Overcoming Indigenous Disadvantage: Key Indicators 2016*, Productivity Commission, Canberra.

WHO (World Health Organization) 2000, *Obesity: Preventing and Managing the Global Epidemic*, WHO Technical Report Series No. 894, Geneva.

Zhao, Y. Wright, J. Begg, S. and Guthridge, S. 2013, *Decomposing Indigenous life expectancy gap by risk factors: a life table analysis. Population Health Metrics 2013*, vol. 11, no. 1 (www.pophealthmetrics.com/content/11/1/1, accessed 22 November 2013).