1.4 Indicators of Australia's health

Health indicators are an important way to assess the health of our population and the success of our health services and health system. These summary measures describe particular aspects of our health and health system performance and have a range of purposes. They can:

- offer insights into the health of Australians and the quality of the health system at a point in time (and allow different population groups, different regions and different countries to be compared)
- provide information on the effectiveness of changes to policies or new practices and programs (when measured consistently over time)
- improve accountability and transparency of service provision, and support consumer choices relating to health care
- encourage ongoing improvement in service delivery by highlighting areas of innovation and where better performance is needed.

The indicators selected generally reflect what is important to governments, service providers, funders of services (including taxpayers), and to patients and the broader Australian community.

Nationally agreed health indicators are usually compiled and reported as 'sets' of measures, organised into frameworks. Health indicator frameworks provide the conceptual basis for the indicator sets; they describe the broad aspects of health, its determinants and the health care system to be measured (for example, equity, quality and efficiency). They also depict the relationships between the indicators within the framework, and provide transparency in describing which aspects of the system are being assessed (or not able to be assessed).

In Australia, a number of health indicator frameworks are used to assess aspects of our health and health system. Some are related, and hence specific indicators may appear in more than one framework—but they have different purposes. This article provides information on the major national indicator frameworks in Australia, including the new Australian Health Performance Framework (AHPF). It also outlines the latest data available against the indicators agreed for reporting under the National Health Performance Framework (NHPF), now subsumed by the AHPF.

Australian Institute of Health and Welfare 2018. *Australia's health 2018*. Australia's health series no. 16. AUS 221. Canberra: AIHW.

New Australian Health Performance Framework

The AHPF was recently agreed by Australian and state/territory health ministers. It provides a single, enduring framework that can be used in different ways to assess the Australian health care system and its inputs, processes and outcomes (NHIPPC 2017). It replaces the NHPF and the Performance and Accountability Framework, which had separate but interrelated purposes:

- The NHPF was agreed by the Australian Health Ministers' Advisory Council in 2001 (NHPC 2002) to provide a conceptual framework to understand and evaluate the health of Australians and the health system, and to serve as a general support for performance assessment, planning and benchmarking in the health sector. In recent years, the AIHW reported biennially on the national indicators agreed under this framework in the *Australia's health* report series (see, for example, AIHW 2016a).
- The Performance and Accountability Framework was agreed under the National Health Reform Agreement (COAG 2011) to provide Australians with comparable, locally relevant information about the performance of hospitals and health services to support informed decision making by consumers and health care providers and managers. The Performance and Accountability Framework indicators were identified for reporting in two streams: for Primary Health Networks, and for hospitals/Local Hospital Networks; data are published by the AIHW on the MyHealthyCommunities and MyHospitals websites, respectively.

While these indicator frameworks and indicators were designed for different uses, the purposes were related; hence, there was some overlap in the indicators reported. Health ministers decided that it would be preferable to merge the frameworks into a single framework that could be used in a flexible way. This would enable reporting for use by different audiences, for different populations and at different levels of the health system (for example, reporting at the international, national, state/territory, and local area level).

The AHPF comprises a Health System Conceptual Framework, and a Health System Performance Logic Model.

Health System Conceptual Framework

The conceptual framework depicts the indicator domains relevant to assessing the health system as a whole, namely: health status, determinants of health, and the health system (Figure 1.4.1). Key components are identified within these domains (for example, within the health status domain, it is relevant to consider including indicators that relate to health conditions, human functioning, wellbeing and deaths).

The conceptual framework also identifies a range of information needs that can be considered as 'health system context'; that is, factors that are often beyond the direct control of health system decision makers (such as the demographic composition of the population). This is not a performance domain as such, but recognises information that is relevant in the planning, delivery and evaluation of health services.

'Equity' is recognised as a principle that applies across all domains, and one that should be reflected in appropriate reporting. The interrelationships between all domains is recognised explicitly in this framework presentation.

Health System Performance Logic Model

The performance logic model presents similar domains to the conceptual model, but is organised in a program logic model. This indicates how the framework could be used to evaluate the outcome of specific health programs, initiatives and interventions—that is, in a performance measurement context (Figure 1.4.2).

For example, a number of the domains that were considered 'health system context' in the conceptual framework are considered to be 'health system inputs' in this model. Similarly, the 'health status' domain in this model is re-framed in terms of 'health system outcomes' where the focus is on measuring change in health status associated with a specific intervention or policy. The Health System Performance Logic Model is based on the service process model used for the *Report on Government Services* (RoGS) (SCRGSP 2018), which is further described elsewhere in this article.

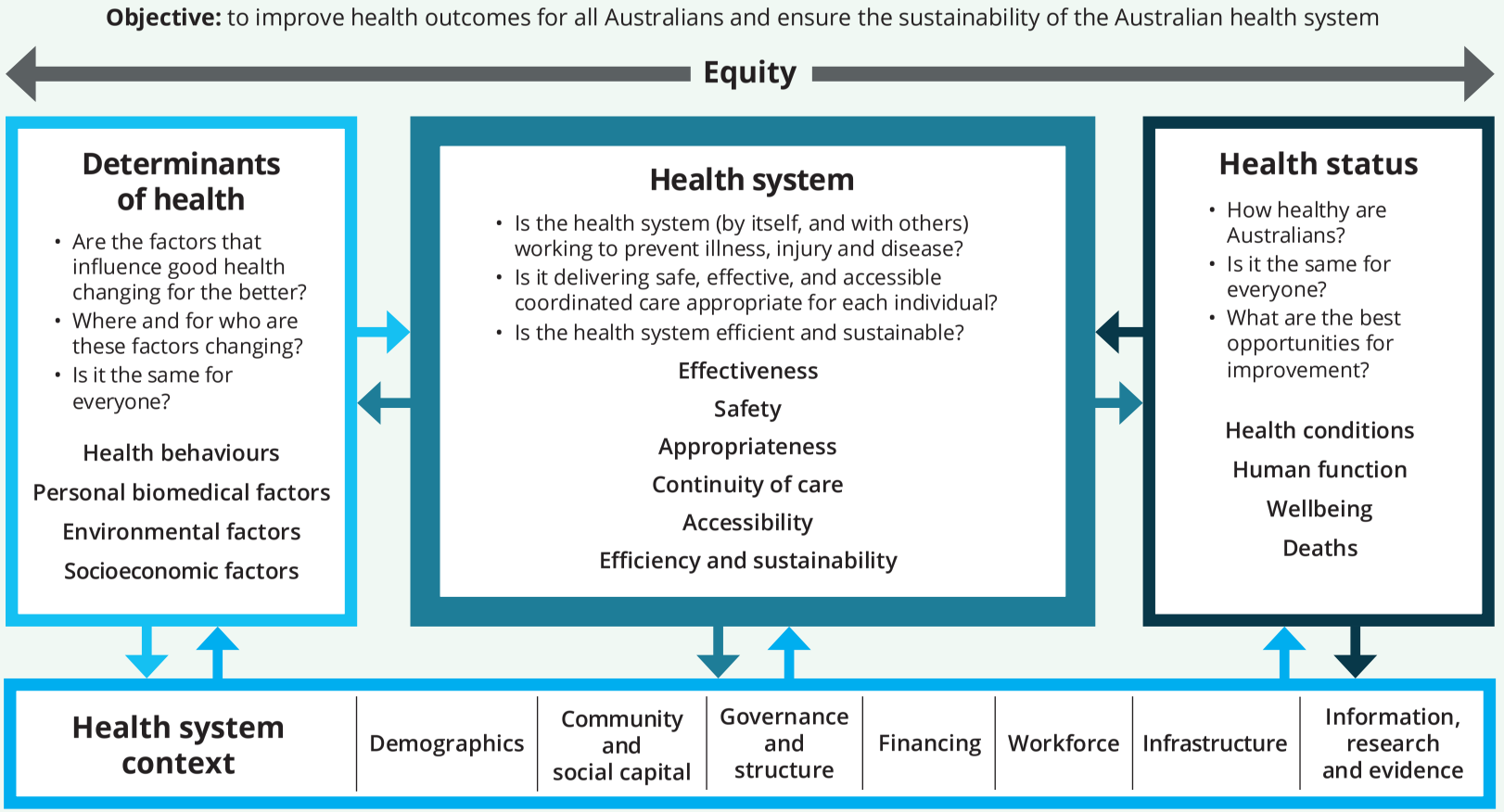
Implementing the new framework

Indicator sets and reporting arrangements for the AHPF will be developed, aiming to ensure that indicator content and reporting formats continue to reflect national strategic priorities for health and health care delivery, and are delivered in ways that are most relevant for key audiences.

In the first instance, indicators previously agreed for reporting under the NHPF and the Performance and Accountability Framework have been transferred to the AHPF. Data for those indicators previously agreed to be relevant for national reporting (that is, the NHPF indicators) are summarised later in this article, but presented against the AHPF conceptual framework. At a later date, it is expected that these existing indicators will be reviewed in working towards a full set of indicators under the framework.

This work is also expected to identify relevant tiers for reporting that would allow for data presentation to be disaggregated in different ways—for example, at the state/territory and national levels and at different geographic levels, as well as for individual service providers, targeted population groups, people experiencing different health conditions, and for public and private health care providers and funders.

Figure 1.4.1: AHPF Health System Conceptual Framework



Note: See supplementary document S1.4 'Australian Health Performance Framework: detailed Health System Conceptual Framework' for a more detailed version of this figure <www.aihw.gov.au/reports/australias-health/australias-health-2018/related-material>.

Source: Adapted from National Health Information and Performance Principal Committee 2017.

Australian Government
Australian Institute of Health and Welfare
Australia's health 2018
AIHW

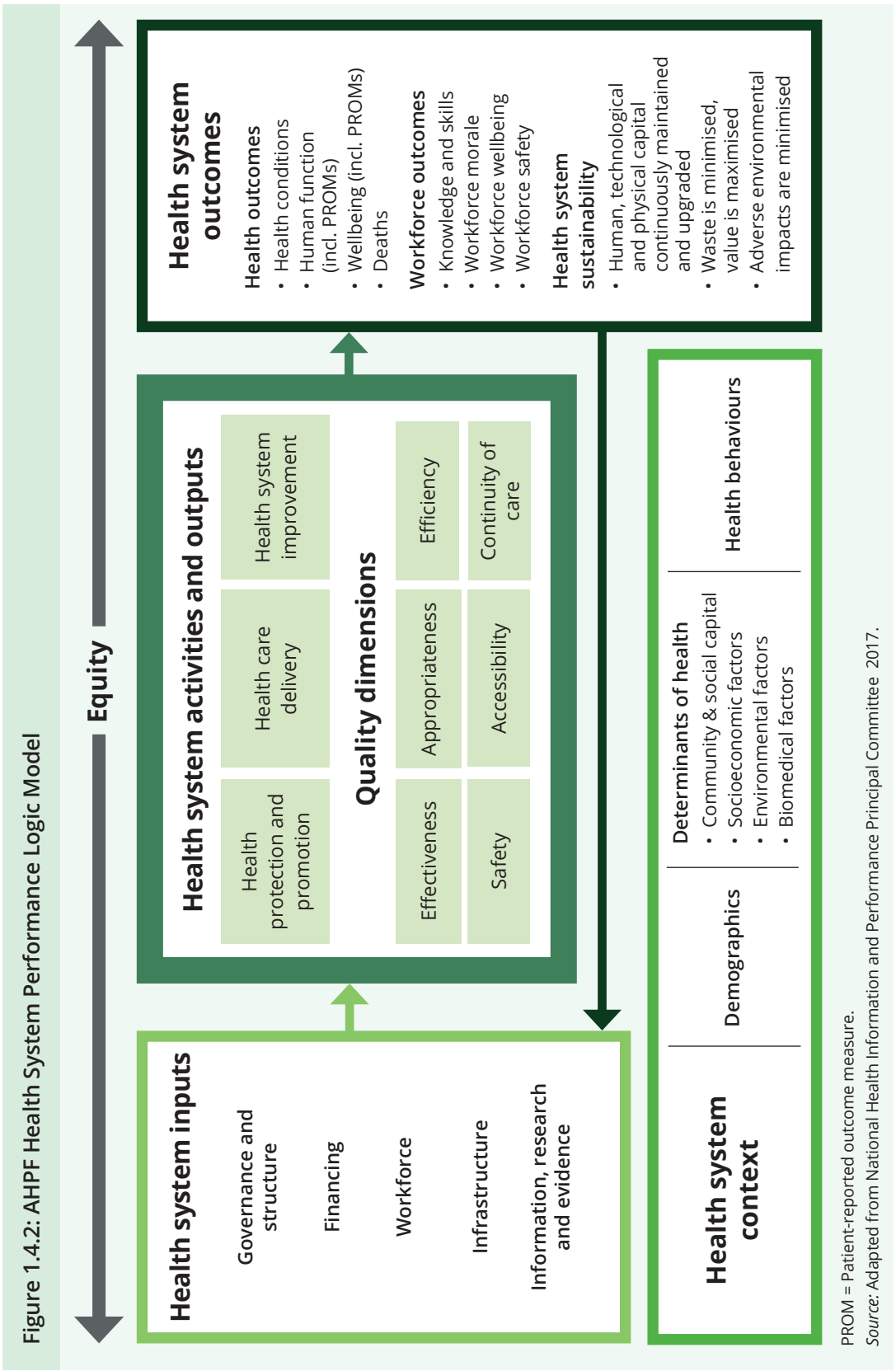


Figure 1.4.2: AHPF Health System Performance Logic Model

PROM = Patient-reported outcome measure.

Source: Adapted from National Health Information and Performance Principal Committee 2017.

Other national health performance frameworks

As well as the AHPF, there are other national performance indicator frameworks and monitoring activities used in Australia and applied in the health context. Key frameworks are summarised in this section.

National Healthcare Agreement

The National Healthcare Agreement is an agreement between the Australian Government and state and territory governments that outlines the role and aims of Australia's health system, the roles and responsibilities of the parties, the policy and reform directions proposed to achieve desired outcomes, and accountability requirements (COAG 2012a). These requirements include reporting against specific performance indicators and performance benchmarks outlined within the specified outcome areas (better health, better health services, social inclusion and Indigenous health, and sustainability of the health system). Where possible, indicator data are disaggregated for specific population groups to ensure that the aims of focusing on social inclusion and tackling Indigenous disadvantage are being met.

The National Healthcare Agreement indicator data are reported annually in the RoGS series (for example, SCRGSP 2018), along with other indicator data.

As well as the National Healthcare Agreement, a range of other national agreements (for example, the National Indigenous Reform Agreement—COAG 2012b) include performance indicators for health and health service delivery. Some of these indicators are also included in the National Healthcare Agreement.

Report on Government Services

Publication of an annual RoGS was initiated by the heads of government (now the Council of Australian Governments) to provide information on the equity, efficiency and effectiveness of a range of government human and social services in Australia, and to promote ongoing performance improvement. The first RoGS was published in 1995.

In recent years, the RoGS has been based on performance indicators set against a framework (consistent across all service areas) that reflects the review's focus on outcomes, consistent with the demand of governments for outcomes-oriented performance information.

Performance indicators included in the RoGS are supplemented by information on outputs, grouped under equity, effectiveness and efficiency headings. The RoGS for 2018 included chapters on public hospitals, ambulance services, primary and community health, and mental health management (SCRGSP 2018).

Sector and population specific frameworks

As well as national performance frameworks, there are several other (related) performance frameworks. These support more in-depth monitoring of the health status of, and services delivered to, specific populations—for example, the Aboriginal and Torres Strait Islander Health Performance Framework (AHMAC 2017)—or focus on specific types of health services, such as the National Core Maternity Indicators (AIHW 2016b).

Performance monitoring and reporting at other 'levels' of the health system are also undertaken; for example, by states and territories, by some service provider organisations, and by participating in international reporting activities (see Chapter 1.5 'International comparisons' for some indicator data available at the international level).

Over time, some of these Australian indicator frameworks may be 're-framed' by the owners of the indictor sets and presented against the AHPF. This would help to ensure that similar indicators in different indicator sets are reported consistently wherever possible.

Other related monitoring and reporting activities

Supplementing the national indicator framework and performance reporting arrangements are the activities of health service providers in measuring and monitoring performance within their organisations, and in improving clinical outcomes and the appropriateness of services. These activities are related to (but not considered the same as) 'performance reporting', and organisations may or may not choose to make this information publicly available. For example, the national Key Performance Indicators for Aboriginal and Torres Strait Islander primary health care support continuous quality improvement within services (AIHW 2017).

In recent years, the Australian Commission on Safety and Quality in Health Care has supported these activities. As part of its work to lead coordinated improvement in safety and quality in health care across Australia, the Commission undertakes and helps to enable the development of safety- and quality-related indicators for use in such local monitoring (see Chapter 7.9 'Safety and quality of hospital care' for more information about safety and quality monitoring in Australian hospitals).

AHPF indicators for national reporting

The rest of this article presents the latest data for indicators currently agreed for national reporting in the AHPF. These indicators were previously agreed as NHPF indicators; the other indicators that have been transitioned to the AHPF were previously agreed for reporting either at local area levels (that is, at the Primary Health Network level), or the hospital (or Local Hospital Network) level. Data for those indicators will continue to be made available on the MyHealthyCommunities and MyHospitals websites.

Key findings are presented in the following section—reported in three sections that align with the AHPF conceptual framework domains: health status, determinants of health, and health system. Note that as there are currently no agreed information requirements for the 'health system context' domain (as there was no equivalent domain included in the previous NHPF), information on this domain is not presented in this chapter, although relevant context information is available elsewhere in this report. Where possible, indicators are disaggregated for relevant population groups to ensure that they also satisfy the 'equity' reporting requirements under the framework.

Also included for each section is a table stating whether new data have become available since *Australia's health 2016* (AIHW 2016a) and whether the available data show a favourable or unfavourable trend (where this could be assessed).

For more information on each indicator and to view detailed data see the online data visualisation tool at <www.aihw.gov.au/reports/australias-health/australias-health-2018/contents/indicators-of-australias-health>.

Assessment of trends

Trends have generally been assessed using the most recent 10 years of data where comparable data were available for at least 3 time periods. In a small number of cases (where data sources have become available irregularly or on a triennial basis), a slightly longer time period was considered (up to 12 years). These time periods were used for the trend assessment even where time series information is presented in this article for longer periods; the exceptions are cancer survival rates and rates of overweight and obesity, for which the trend assessment is based on the longer time series information discussed in the indicator text.

A favourable trend is noted when the indicator has moved in the desired direction—for example, the proportion of people eating the recommended number of serves of fruit and vegetables should increase and instances of unsafe sharing of needles should decrease. A trend is considered unfavourable if it is opposite to the desired direction. For indicators where the measure does not appear to have changed meaningfully over the time period, the trend is described as 'no change'. For indicators where there are insufficient data to support trend analysis, the trend is described as 'no data/insufficient data'.

Limitations of the AHPF performance indicators

The performance indicators for national reporting were last reviewed and endorsed (as indicators under the NHPF—now replaced by the AHPF) by health ministers in 2009. Over time, some limitations have become evident for a number of them. Data quality may have diminished, for example, where changes in service delivery has meant that data would need to be captured from more disparate sources, or changes in policies and priority areas for monitoring have meant that the usefulness of some indicators is now questionable.

In this report, a small number of indicators previously reported at the national level are not reported here:

- *Survival following an acute coronary heart disease event* (last reported in 2012). The AIHW has judged that, due to changes in the method used to identify acute coronary events, reporting on this indicator is not appropriate.
- *Proportion of people with diabetes who complete a GP annual cycle of care* (last reported in 2012). The AIHW has assessed that the available data are likely to result in an underestimate, due to changes in treatment patterns, and a recognition that people with diabetes may use other avenues for care.
- *Selected potentially avoidable GP-type presentations to emergency departments* (last reported in 2014). Previous work has shown limitations in the method used (AIHW 2015) and so the data are not presented here; indicator data are presented in the RoGS (SCRGSP 2018).
- *Cost per casemix-adjusted separation for acute and non-acute episodes* (last reported in 2014). A range of stakeholders regard the previous calculation method as being no longer appropriate, and a revised method has not yet been agreed.

For indicators where no new data are available or where new data could not be readily obtained, previously reported data are used, though new disaggregations are presented where appropriate.

Key results

Health status

The health status domain is assessed by considering measures related to the incidence or prevalence of health conditions, and measures related to human functioning, wellbeing and mortality rates and life expectancy.

The indicators reported for health status are outlined in Table 1.4.1.

For more information on each indicator and to view detailed data see the online data visualisation tool at <www.aihw.gov.au/reports/australias-health/australias-health-2018/contents/indicators-of-australias-health>.

- In 2015, the heart attack rate for men was more than twice that for women, though rates have declined for both men and women since 2007. Overall, there has been a decline of 37% in the rate of heart attack since 2007.
- In the latest 10 years for which data are available, there has been an increase in the incidence of breast cancer in females and a decrease in the incidence of bowel cancer. Rates of melanoma of the skin and lung and cervical cancer have remained stable over this period.
- Over the last 10 years for which data are available, notification rates for hepatitis B and C have fallen, but rates of syphilis, chlamydia and gonorrhoea have risen. The notification rate of human immunodeficiency virus (HIV) has remained steady and was 4.2 notifications per 100,000 people in 2016.
- In 2013, there were 5,100 new cases of end-stage kidney disease—an age-standardised rate of 19 per 100,000 people. The incidence rate increases substantially with age.
- In 2015–16, there were an estimated 509,900 hospitalised cases due to injury and poisoning. Rates of hospitalised cases for injury and poisoning increase substantially with age for people aged 75 and over.
- In 2015, 5.0% of liveborn singleton babies were of low birthweight. The proportion of low birthweight singleton babies born to Aboriginal and Torres Strait Islander mothers was 2.2 times the proportion of babies born to non-Indigenous mothers.
- In 2015, 1.4 million people had a severe or profound core activity limitation—that is, a limitation in communication, mobility and/or self-care activities. Overall, the proportion of people with a severe/profound core activity limitation had decreased since 2003.
- The death rate for infants aged under 1 and children aged 1–4 has decreased since 2001—a trend that has been maintained in the most recent 10 years for which data are available. Since 2001, the death rate for Indigenous infants also fell, however, the rate is still almost twice that for all infants.
- Life expectancy for a boy born in Australia between 2014 and 2016 was 80.4 years, and for a girl, 84.6 years. However, the estimated life expectancy for an Indigenous boy born between 2010 and 2012 was 10.6 years lower than for a non-Indigenous boy, and for girls the difference was 9.5 years.

Table 1.4.1: Indicators of AHPF domain—health status

Trend legend	✔ Favourable	✘ Unfavourable	~ No change	•• No data/insufficient data

AHPF dimension/Indicator	New data available	10-year trend assessment
Health conditions		
Incidence of heart attacks	Yes	✔
Incidence of selected cancers		
Breast cancer (females)[(a)]	Yes	—
Bowel cancer	Yes	✔
Melanoma of the skin	Yes	~
Lung cancer	Yes	~
Cervical cancer	Yes	~
Incidence of sexually transmissible infections and blood-borne viruses		
Syphilis	Yes	✘
Human immunodeficiency virus (HIV)	Yes	~
Hepatitis B	Yes	✔
Hepatitis C	Yes	✔
Chlamydia	Yes	✘
Gonorrhoea	Yes	✘
Incidence of end-stage kidney disease	Yes	~
Hospitalisation for injury and poisoning	Yes	✘
Proportion of babies born with low birthweight	Yes	~
Human function		
Severe or profound core activity limitation	Yes	✔
Wellbeing		
Psychological distress	No	~
Self-assessed health status	No	~
Deaths		
Infant/young children mortality rate		
All infants (<1 year)	Yes	✔
Indigenous infants (<1 year)	Yes	✔
All children aged 1–4 years	Yes	✔
Life expectancy		
All males	Yes	✔
All females	Yes	✔
Indigenous males	No	••
Indigenous females	No	••

(a) Breast cancer incidence has increased but is not assessed as unfavourable because increases in observed incidence may be due to improved detection.

Determinants of health

The determinants of health domain is assessed by considering measures related to health behaviours, and personal biomedical, environmental and socioeconomic factors.

The indicators reported for health status are outlined in Table 1.4.2.

For more information on each indicator and to view detailed data see the online data visualisation tool at <www.aihw.gov.au/reports/australias-health/australias-health-2018/contents/indicators-of-australias-health>.

- In 2014–15, 14.5% of people aged 18 years and over smoked daily (16.9% of men and 12.1% of women). Age-adjusted daily smoking rates have fallen since 1989–90.
- In 2014–15, 17% of adults consumed more than 2 standard drinks per day on average, exceeding the lifetime risk guideline. Men were almost 3 times as likely as women to consume alcohol at risky levels.
- In 2014–15, 50% of adults and 68% of children ate sufficient serves of fruit, and 7% of adults and 5% of children ate sufficient serves of vegetables.
- Over half (52%) of all adults aged 18–64 were not sufficiently active to gain a health benefit in 2014–15; among adults aged 65 and older, 75% were not sufficiently active.
- In 2016, 19% of injecting drug users reported using needles and syringes after someone else.
- The proportion of households with children aged 0–14 in which a person smokes inside the home fell between 1995 and 2016 (from 31% to 2.8%).
- The proportion of Australian adults who are overweight or obese was 63% in 2014–15; among children aged 5–17, it was 27%.
- In 2015–16, 2.2 million people lived on less than half the median equivalised household income (that is, less than $427 per week), including 1.2 million people living on less than 40% of the median ($341).
- More than two-thirds (69%) of people aged 25–64 had a non-school qualification in 2017. People living in *Major cities* and *Inner regional* areas were more likely to have a non-school qualification than people living in *Outer regional* or in *Remote* and *Very remote* areas.

Table 1.4.2: Indicators of AHPF domain—determinants of health

Trend legend	✔ Favourable	✘ Unfavourable	~ No change	.. No data/insufficient data

AHPF dimension/Indicator	New data available	10-year trend assessment
Health behaviours		
Health literacy	No	..
Proportion of adults who are daily smokers	No	✔
Proportion of adults at risk of long-term harm from alcohol	No	✔
Fruit and vegetable intake	No	..
Physical inactivity	No	..
Unsafe sharing of needles	Yes	
Children exposed to tobacco smoke in the home	Yes	✔
Personal biomedical factors		
Proportion of persons obese and overweight	No	(a)
Environmental factors		
Water quality	No	~
Socioeconomic factors		
Proportion of people with low income	Yes	✔
Educational attainment	Yes	✔

(a) The trend assessment for this indicator is based on 20 years of data (rather than 10).

Health system

The health system domain is assessed through measures related to the quality of the health system (that is, aspects of effectiveness, safety, appropriateness, and the continuity and accessibility of care), and also by looking at the efficiency and sustainability of health care.

The indicators reported for the health system domain are outlined in Table 1.4.3.

For more information on each indicator and to view detailed data see the online data visualisation tool at <www.aihw.gov.au/reports/australias-health/australias-health-2018/contents/indicators-of-australias-health>.

- Overall, immunisation rates for children aged 1 and 5 have risen in recent years, though the 10-year trend for immunisation rates among 2-year-olds has shown no clear trend.
- Nearly two-thirds (65%) of females who gave birth in 2015 attended at least one antenatal visit in the first trimester of pregnancy.
- About half of all women in the relevant target age groups participated in BreastScreen Australia and the National Cervical Screening Program (55% and 56% respectively) in 2015 and 2016 combined. For the National Bowel Cancer Screening Program, 41% of invitees in targeted age groups participated in 2015 and 2016.
- In 2015–16, there were an estimated 26.4 potentially preventable hospitalisations per 1,000 people (accounting for 6.4% of all hospital separations). These are hospitalisations that are thought to have been avoidable if timely and adequate non-hospital care had been provided.
- The 5-year relative survival for all cancers combined for 2009–2013 was 68%, an increase of 20 percentage points from 48% in 1984–1988. This represents the percentage of people diagnosed with cancer who survived for at least 5 years after diagnosis, relative to people of the same age and sex in the general population.
- In 2016, there were around 27,000 potentially avoidable deaths in Australia—105 deaths per 100,000 people. This is a decrease of 45% from the rate in 1997. These are deaths from selected conditions that are considered to have been potentially preventable in the context of the present health system.
- In 2015–16, there were 5.4 adverse events per 100 hospital separations. These are incidents in which harm resulted to a person receiving health care, such as infections and problems with medication and medical devices.
- More than 148.7 million non-referred general practitioner (GP) attendances were claimed through Medicare in 2016–17 and 127.5 million (86%) of these services were bulk-billed.
- In 2016–17, the median waiting time for all admissions from the public hospital elective surgery waiting list was 38 days. Overall, Indigenous Australians had longer median waiting times than Other Australians for elective surgery (45 and 38 days respectively).
- In 2016–17, 73% of all emergency department presentations were seen within the recommended time for their triage category. Presentations triaged as *Urgent* had the lowest proportion of presentations seen on time (66%), while almost 100% of *Resuscitation* presentations were seen within the recommended time.
- The number of employed full-time equivalent medical practitioners and nurses/midwives rose (by 14% and 12% respectively) between 2011 and 2016. In 2016, the rate of full-time equivalent medical practitioners was 400 per 100,000 population; for nurse/midwives it was 1,145 per 100,000 population).

Table 1.4.3: Indicators of AHPF domain—health system performance

Trend legend	✓ Favourable	✗ Unfavourable	~ No change	•• No data/insufficient data

AHPF dimension/Indicator	New data available	10-year trend assessment
Effectiveness		
Immunisation rates for vaccines in the national schedule		
1 year	Yes	✓
2 years	Yes	~
5 years	Yes	✓
Adults	No	••
Proportion of pregnancies with an antenatal visit in the first trimester	Yes	~
Cancer screening rates		
Breast	Yes	••
Cervical	Yes	~
Bowel	Yes	••
Selected potentially preventable hospitalisations	Yes	~
Survival of people diagnosed with cancer	Yes	✓[(a)]
Potentially avoidable deaths	Yes	✓
Survival following acute coronary heart disease event[(b)]	—	••
Safety		
Adverse events treated in hospital	Yes	~
Falls resulting in patient harm in hospitals	Yes	✗
Appropriateness		
No indicators for this dimension		
Continuity of care		
Proportion of people with asthma with a written asthma action plan	No	✓
Proportion of people with mental illness with a GP care plan	No	✓
Proportion of people with diabetes with a GP annual cycle of care[(b)]	—	••
Accessibility		
Bulk-billing for non-referred (GP) attendances	Yes	✓
Differential access to hospital procedures	Yes	••
Waiting time for elective surgery	Yes	✗
Waiting time for emergency department care	Yes	~
Selected potentially avoidable GP-type presentations to emergency departments[(b)]	—	••
Efficiency and sustainability		
Cost per casemix-adjusted separation for acute and non-acute care episodes[(b)]	—	••
Net growth in health workforce		
Medical practitioners	Yes	✓
Nurses and midwives	Yes	✓

(a) The trend assessment for this indicator is based on 30 years of data (rather than 10).

(b) Not reported here due to lack of data or agreed methodology—see section 'Limitations of the AHPF performance indicators'.

What is missing from the picture?

As already noted, the indicators previously agreed for reporting under the NHPF (as national-level indicators) have been reported here against the AHPF domains where suitable data are available. In the future, it is expected that the framework will be 're-populated' with a refreshed set of indicators for national reporting (also identifying indicators suitable for other levels of reporting). It will be necessary to identify information needs associated with those areas of the framework for which national-level indicators had not previously been agreed—including the 'appropriateness' component area in the health system domain, and all components of the 'health system context' domain, as these information needs were not covered by the NHPF.

Where do I go for more information?

For more health indicators, see the MyHealthyCommunities and MyHospitals websites.

More information about the performance of health and other government services is available at <www.pc.gov.au>.

More information about safety and quality monitoring of health services is available at <www.safetyandquality.gov.au>.

References

AHMAC (Australian Health Ministers' Advisory Council) 2017. Aboriginal and Torres Strait Islander Health Performance Framework 2017 report. Canberra: AHMAC.

AIHW (Australian Institute of Health and Welfare) 2015. Emergency department care 2014–15: Australian hospital statistics. Health services series no. 65. Cat. no. HSE 168. Canberra: AIHW.

AIHW 2016a. Australia's health 2016. Australia's health series no. 15. Cat. no. AUS 199. Canberra: AIHW.

AIHW 2016b. National Core Maternity Indicators data visualisations. Canberra: AIHW. Viewed 13 December 2017, <https://www.aihw.gov.au/reports/mothers-babies/ncmi-dynamic-data-displays/contents/dynamic-data-displays>.

AIHW 2017. National Key Performance Indicators for Aboriginal and Torres Strait Islander primary health care: results from June 2016. National key performance indicators for Aboriginal and Torres Strait Islander primary health care series no. 4. Cat. no. IHW 177. Canberra: AIHW.

COAG (Council of Australian Governments) 2011. National Health Reform Agreement. Canberra: Council on Federal Financial Relations. Viewed 27 March 2018, <http://www.federalfinancialrelations.gov.au/content/npa/health/_archive/national-agreement.pdf>.

COAG 2012a. National Healthcare Agreement. Canberra: Council on Federal Financial Relations. Viewed 13 December 2017, <http://www.federalfinancialrelations.gov.au/content/npa/health/_archive/healthcare_national-agreement.pdf>.

COAG 2012b. National Indigenous Reform Agreement. Canberra: Council on Federal Financial Relations. Viewed 13 December 2017, <http://www.federalfinancialrelations.gov.au/content/npa/health/_archive/indigenous-reform/national-agreement_sept_12.pdf>.

NHIPPC (National Health Information and Performance Principal Committee) 2017. Adelaide: COAG Health Council. The Australian Health Performance Framework. Viewed 16 February 2018, <http://www.coaghealthcouncil.gov.au/Portals/0/OOS318_Attachment%201.pdf>.

NHPC (National Health Performance Committee) 2002. National report on health sector performance indicators 2001. Brisbane: Queensland Health.

SCRGSP (Steering Committee for the Review of Government Service Provision) 2018. Report on government services 2018. Canberra: Productivity Commission.