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2018-19



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Summary

In 2018–19, an estimated \$195.7 billion was spent on health goods and services in Australia. This equates to an average of approximately \$7,772 per person and constituted 10% of overall economic activity for this period.

After adjusting for inflation, total health spending (recurrent and capital) was 3.1% more than in 2017–18. This was slightly lower than the average yearly growth rate over the decade to 2018–19 (3.5%).

During 2018–19, more than two-thirds (68.3%) of health spending was by governments—\$80.6 billion by the Australian Government and \$53.0 billion by state and territory governments. Government health spending represented 24.3% of government tax revenue, marginally decreased from 24.5% in 2017–18.

Non-government entities (including individuals, private health insurance providers, injury compensation insurers and other private sources) spent \$62.1 billion on health in 2018–19. Individuals were the largest contributor to this at \$31.8 billion (2.3% more than 2017–18).

More is being spent on hospitals and primary health care

During 2018–19, spending increased on most areas of health. The greatest increases in recurrent spending were for:

- hospitals, a \$2.8 billion increase in real terms. The \$79 billion spent on hospitals was equivalent to 40.4% of total health spending. Of this, \$61.8 billion was spent on public hospitals (4.0% more than in the previous year) and \$17.2 billion on private hospitals (2.5% higher than 2017–18).
- primary health care, a \$0.9 billion increase in real terms. A total of \$65.5 billion was spent. Of this, \$12.3 billion was on unreferred (mainly general practice) medical services. Spending on subsidised pharmaceuticals and other medications were roughly the same (\$11.7 billion each).

1 Introduction

Regular reporting of national health expenditure is important to understanding Australia's health system and how spending relates to changes such as the ageing population, increased chronic disease prevalence, and medicinal and technological developments.

Australia has a long history of national health expenditure reporting, which started with John Deeble's work in the 1970s. The Australian Institute of Health and Welfare (AIHW) has been reporting on health spending for more than 3 decades.

This edition of *Health expenditure Australia* presents estimates of the amount spent on health goods and services in Australia for 2018–19, and the decade leading up to this. This report's estimates are based on data from the AIHW's Health Expenditure Database (HED), a collation of more than 50 data sources capturing health spending by governments, individuals, insurers and other private sources. These data are used to derive the Australia's National Health Accounts (ANHA), reported annually by the AIHW.

This introduction chapter covers key background information, including an overview of the flow of funds in the health sector. Chapter 2 focuses on high-level results and how health spending has changed relative to other aspects of the Australian economy. Chapter 3 looks at who pays for health goods and services (source of funds), and Chapter 4 at what is purchased in the health sector (area of spending). Information about the HED and methods the AIHW uses to calculate spending estimates are in Chapter 5.

In addition to this annual series, the data quality statement and all tables (including those previously printed in appendices) are online in spreadsheets and data visualisations (Box 1.1). Please note that numbers in some sections or tables might not add up exactly due to rounding.

Box 1.1: Online information

Data quality statement

A data quality statement for the Health Expenditure Database 2018–19 is online at: https://meteor.aihw.gov.au/content/index.phtml/itemId/735937.

Available data tables

All tables referenced throughout this report are online at: https://www.aihw.gov.au/reports/health-welfare-expenditure/health-expenditure-australia-2018-19/data.

Online material also includes other, more detailed tables, as well as state and territory level information.

Interactive data visualisations

Interactive charts showing: (a) overview of health spending in Australia; (b) sources of funds and areas of spending; (c) health spending by location (state and territory level); (d) diagrams on flows of fund for broad and detailed areas of spending; and (e) a dynamic expenditure table, are online at: https://www.aihw.gov.au/reports/health-welfare-expenditure-australia-2018-19/contents/data-visualisation.

1.1 Health expenditure

Health expenditure is defined as spending on health goods and services. It includes:

- medical care
- · pharmaceuticals and medications
- public health
- rehabilitation
- · community health activities
- health administration and regulation
- health research
- capital formation.

Estimates of health spending include government and non-government health spending. Non-government spending includes spending by entities such as individuals, private health insurance providers, and injury compensation insurers. Estimates do not currently include:

- health-related activity spending by the Australian Defence Force (Chapter 3 has more details)
- some local government spending
- health spending by some non-government organisations, such as the National Heart Foundation and Diabetes Australia
- spending on the long-term health-care component of residential aged-care facilities.

Education and training of health professionals and many forms of spending with an outcome that would indirectly impact health—such as the production of more nutritious food, road safety, or law and order—are also not included.

Detailed information about AIHW's compilation of the health spending estimates is in Chapter 5 'Concepts, definitions and data sources'.

1.2 Structure and funding of Australia's health system

The Australian health system comprises a number of health subsystems managed and funded by different entities (Figure 1.1).

Australia's health care services are delivered, operated and funded by all levels of government (national, state and territory, and local) and the private sector (for-profit and not-for-profit organisations). The system comprises multiple components:

- Public health—focuses on preventing ill health through activities such as promoting health literacy and health programs like the National Immunisation Program.
- Primary health care—often a person's initial contact with the health system. Comprises services such as general practice, allied health services, pharmacy and community health. Covers health care not related to a hospital visit, such as health promotion, prevention and early intervention. A defining feature is that it can be accessed without other processes or referrals.
- Referred medical services—provide support to people with specific or complex health conditions and issues. Generally needs a referral from another health care provider.

- Hospitals—deliver services to admitted and non-admitted patients (outpatient clinics and emergency department care):
 - public hospitals are largely owned and managed by state and territory governments
 - private hospitals are owned and operated by for-profit companies or not-for-profit organisations.

At the national level, the Australian Government is primarily responsible for health programs such as:

- Medicare Benefits Schedule (MBS)
- Pharmaceutical Benefits Scheme (PBS)
- regulation of health products
- veterans' health
- private health insurance policy and regulation
- health workforce.

The Australian Government also provides funding to the states and territories to support the provision of goods and services such as hospitals services. It sets national tax policies that include health-related tax levies, rebates (such as the medical expenses tax rebate) and incentives (such as the private health insurance premium rebate).

To fund health spending, the Australian Government uses funds from a mix of sources, including general revenue and a levy on individual taxable income.

The Australian Government and state and territory governments share responsibility for funding and delivering health services including:

- public health programs
- community health services
- health and medical research
- Aboriginal and Torres Strait Islander health services
- mental health services
- health infrastructure.

Funding public hospital services is the joint responsibility of the Australian Government and state and territory governments. However, state and territory governments manage and administer these hospitals.

State and territory governments are also responsible for funding and managing community health services and public dental care, and regulating health care providers and private health facilities.

Local governments fund and deliver health services in some jurisdictions, such as environmental health programs, community and home-based health and support services, and some public health activities.

Non-government health services can be funded through:

- payments by individuals at point of service
- private health insurance
- government payments, such as through the MBS.

This non-government sector also comprises spending by individuals and other funding that includes:

- workers' compensation schemes
- compulsory third-party motor vehicle insurers
- funding for research from non-government sources
- miscellaneous non-patient revenue that hospitals receive.

The complex structure of Australia's health system means that funds often pass through several entities before health providers (such as hospitals, general practices and pharmacies) use them to deliver goods and services. Funding any part of the system does not necessarily correlate with responsibility for its management and/or operation. For example, the Australian Government partially funds public hospitals, but is not responsible for managing or regulating them; this is the responsibility of state and territory governments.

1.3 Spending allocation methods and consistency with other sources

The ANHA aims to support a long-term, whole-of-system understanding of health spending nationally and over time. This system is unique in Australia and it varies from other health system reporting in scope, degree of stability over time and classification systems used. Other systems tend to focus on specific funding programs, jurisdictions or time periods.

The long-term holistic approach requires developing methods to appropriately allocate spending figures from multiple and often overlapping data sources. These sources change over time to the relatively stable 'area' and 'source' categories used in the ANHA (Figure 1.1 has more information on these categories). In doing so, care is taken to avoid the risk of misallocation, unnecessary breaks in the time series, missed data and double counting.

The methods used in the ANHA are overseen by the Health Expenditure Advisory Committee (HEAC). The HEAC includes subject matter experts and representatives from the Australian Government and all state and territory governments. The AIHW has worked with the HEAC over many years to develop approaches to maximise the completeness and accuracy of the estimates over time and minimise the risk of double counting. For example, when estimating total spending on hospital services in a year, the funds the Australian Government gives to states and territories is subtracted from the hospital spending reported by the states and territories to derive the amount that the states and territories spent from their own resources.

This holistic approach, unique classification system and methods developed mean the figures reported here often vary from other data sources, particularly where other reporting tends to focus on specific funding programs, institutions, funders or purposes. For example, program-specific reporting such as for the Medicare Benefits Scheme, government budget papers or health department annual reports vary from the figures here due to differing classifications, scopes and methods used to account for double counting.

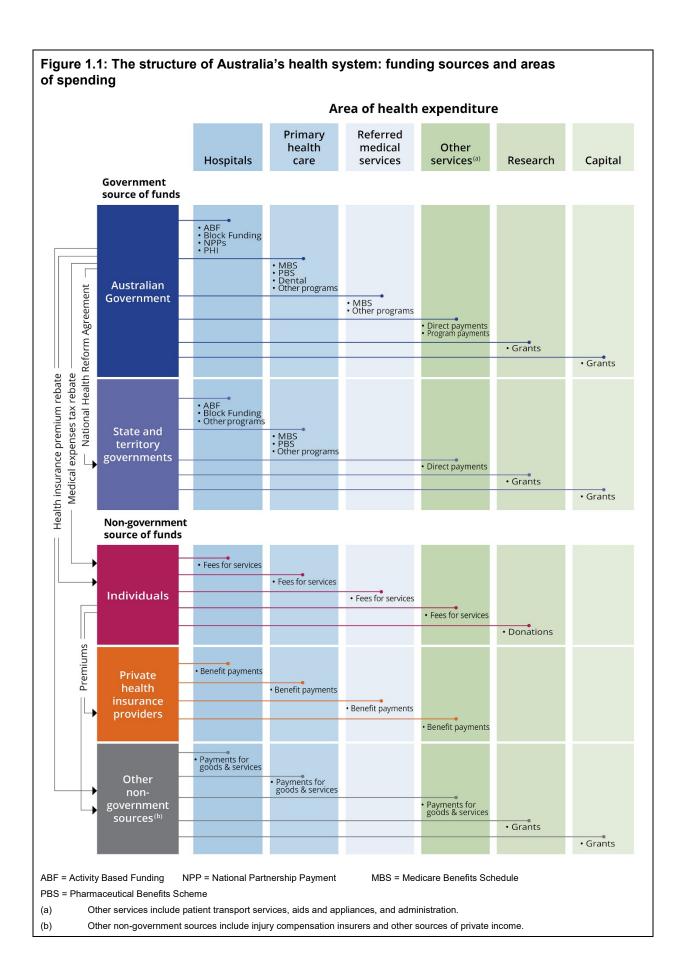
As part of ongoing data quality improvement activities, the AIHW, through the HEAC, works with the Australian Bureau of Statistics (ABS), the Australian Government, state and territory governments, the National Health Funding Body (NHFB), the Organisation for Economic Cooperation and Development (OECD) and other data suppliers to ensure the estimates presented in the ANHA are as complete and accurate as possible and reflect changes in health system financing over time. Chapter 5 provides more information about the methods and data sources used to develop the ANHA.

Examples of other health expenditure reporting include:

• The Australian Bureau of Statistics (ABS) uses the System of National Accounts to report Australia's National Accounts (ABS 2016). This economy-wide classification system is

broader than just the health sector and uses different data sources and estimation methods to the ANHA to ensure consistency across the economy. The AIHW is working with the ABS to better align the estimates wherever possible and over the course of 2020, the AIHW has conducted an external review of the ANHA approaches, including variances with the national accounts. Further information on this will be released as part of a separate technical report but preliminary findings suggest that the processes and quality assurance mechanisms employed by both agencies are consistent and reflect best practice in national statistics. Despite this, variances are unavoidable due to the different scope and classifications systems used. For example, where spending through health insurance is considered part of the health system under the ANHA, it is considered part of the insurance sector in the System of National Accounts. Another reason for variation comes from the ABS use of the Government Finance Statistics (GFS) as a source for government spending, which varies from the source used by the AIHW, which has been tailored specifically for the ANHA. While the basis for both systems is the general ledger transactions that are recorded by the various government agencies, including Departments of Health, the two vary for a number of reasons, including:

- The GFS approach is a 'purpose' classification, which means that the basis for classifying expenditures is the purpose for which the expenditure relates, rather than the nature of the product or service purchased. This means, for example, that remote housing constructed for the purpose of housing medical staff would be treated as health spending in the GFS but not in the ANHA.
- The health classification in the GFS potentially includes activities that are outside of the scope of the ANHA (e.g. nursing and convalescent home services) and may exclude activities that are within the scope of the ANHA.
- All governments within Australia produce financial reports, including annual reports, budget papers and specific program data. While these generally use the same source data as are provided to the AIHW (audited financial statements and 'general ledgers'). variations in scope can occur between what might, for example, be in a report covering spending across a health and human services portfolio and what is needed for the ANHA. Classifying the data to fit the ANHA classification system can require adjusting specific items to avoid duplication, or drawing on other data sources, such as hospital activity data, to 'fit' the spending into ANHA categories. For example, staff engaged by a specific health service might technically be considered departmental staff in some states and territories. In these cases, spending can essentially be captured twice in the annual report but this duplication is eliminated for reporting to the AIHW. The states and territories conduct this work each year as part of the Government Health Expenditure National Minimum Data Set (GHE NMDS) collation. The AIHW continually reviews this with the states and territories bilaterally and through HEAC to maximise consistency over time and between jurisdictions. The results, however, inevitably vary to some degree from what is publicly reported. A high level indicative overview outlining the variation between the ANHA figures for governments and the figures reported in the respective health authority annual reports for 2018–19 is presented in Table C2 to illustrate the observed variations.



- The Administrator of the National Health Funding Pool, supported by the National Health Funding Body (NHFB) publishes data on funding and payments through the National Health Funding Pool (NHFP) that was established under the National Health Reform Agreement (NHRA) (Box 5.1 has more details). These data form an important component of the spending outlined in this report, particularly with public hospital spending. However, not all public hospital spending outlined in this report is administered through the NHFP, so additional information sources are drawn on to capture the full scope of public hospital spending. From the perspective of the Australian Government, this includes spending such as by the Department of Veterans' Affairs (DVA), the Highly Specialised Drugs program, the Department of Health's own programs, including blood and organ programs, all of which operate outside of the NHFP. From the perspective of the states and territories, their funding contributions through the NHFP do not match their figures provided through the GHE NMDS for a variety of reasons, including:
 - additional 'top-up' funding provided to hospitals outside the NHFP where the cost of providing services exceeds the National Efficient Price under NHRA funding mechanisms and/or the particular services are outside the scope of NHRA arrangements;
 - locally sourced revenue and associated spending may not be administered through the NHFP. Where hospitals have local revenue sources (for example, private patients, accommodation charges, sub-rent revenue and car parking fees) and this is used to fund hospital services, this funding may not be administered through the NHFP but is captured in the ANHA;
 - funding related to centrally managed programs such as pathology and diagnostics services, where the provider for multiple hospitals might be contracted directly by the state/territory's health department (outside the NHFP), rather than these services being sourced by individual hospitals;
 - non-hospital services funded through the NHFP. In some jurisdictions, services such
 as community care and public health may be funded by contributions administered
 through the NHFP. This spending is reported and treated separately under the
 ANHA; and
 - differences between cash and accrual accounting cycles, which mean timing of cash payments, expenses and reporting can vary.
- The Independent Hospital Pricing Authority (IHPA) collects, validates and reports public hospital costing data under the National Hospital Cost Data Collection (NHCDC) to determine the National Efficient Price and National Efficient Cost for the purpose of Activity Based Funding (ABF) and Block Funding under the NHRA. These data have different scopes and standards compared with the ANHA. The IHPA does not report public hospital spending in the aggregate level. More about the IHPA and NHCDC can be found at https://www.ihpa.gov.au/.
- Each year the AIHW provides a derivation of the ANHA to the Organisation for Economic Co-operation and Development and the World Health Organization in accordance with the classification used for international reporting, known as the System of Health Accounts. Despite being derived from the same source data, differing classification systems can result in variations in figures for particular components of the health system.

1.4 More information about the estimates

The health spending figures presented in this report represent the best estimates based on the available data and estimation methods. Results are based on the HED finalised as at 1 September 2020. Revisions to data after this date will be reflected in online reporting.

Prices

Constant prices are used to present spending estimates in this report, unless otherwise indicated. These allow for comparisons between years since figures have been adjusted to account for the effect of inflation on the value of money over time. Constant price estimates in this report are based on 2018–19 prices. Current prices represent the dollar amount spent in the year referred to (Box 1.2).

Box 1.2: Presentation of the dollar value of spending estimates

Current prices

Spending at current prices refers to spending not adjusted for movements in prices (inflation) from 1 year to another and therefore represents the dollar amount spent in that year.

Comparisons over time using figures expressed in current prices can be misleading due to the effect of inflation and changing value of money. For example, \$1 billion spent in 2008–09 bought more health goods and services than \$1 billion spent in 2018–19.

Changes from year to year in the estimates of spending at current prices are referred to as 'nominal growth'. These changes come about because of the combined effects of inflation and increases in the volume of health goods and services consumed.

Constant prices

Constant prices account for inflation by removing the effect of changes in prices over time. This means spending can be compared over different time periods. Constant price estimates indicate what spending would have been had the same prices applied across all years.

The process of generating constant prices is known as 'deflating' and price indexes (deflators) are used to calculate comparative prices (Box 2.1). The result is a series of annual estimates of spending expressed in terms of the value of currency in a selected reference year.

The reference year used in this report is 2018–19.

Growth in spending, expressed in constant prices, is referred to as 'real growth' or 'growth in real terms' and represents changes in the real value of the amount of money spent in a given year.

Type of spending

Spending can be broadly categorised as being recurrent or capital.

Recurrent health spending is on goods and services consumed (Box 1.3). It represents the bulk of health-related goods and services (more than 90% of total health spending) consumed by the Australian population.

Capital expenditure, in contrast, relates to spending on infrastructure such as buildings and medical equipment. Since the level of capital investments tend to be variable from year to year, and often involve large expenditures (for example, a new hospital), capital spending can influence overall growth rates considerably.

In this report, spending on hospitals, primary health care, referred medical services, other services and research all relate to recurrent spending. Capital spending can also be in these areas, such as building new hospitals, but is reported as capital spending as a whole. It is not disaggregated by area of spending.

Box 1.3: Types of spending

Recurrent spending

Recurrent spending is generally on goods and services consumed within a year that does not result in creating or acquiring fixed assets. Recurrent health spending includes: health goods (such as medications and health aids and appliances); health services (such as hospital, dental and medical services); public health activities; and other activities that support health systems (such as research and administration).

Capital consumption or depreciation is included as part of recurrent spending.

Capital spending

Capital spending is on fixed assets like new buildings (such as hospitals) or medical equipment (such as CT scanners). It represents the cost of resources that last more than a vear.

2 Australia's health spending: an overview

This chapter presents estimates for health spending in Australia as a whole, on a per capita (per person) basis and across the states and territories. It does so for 2018–19 and the preceding decade. This chapter also examines how health spending has changed compared with economic activity more broadly, and income and wealth levels of the population.

2.1 Total health spending

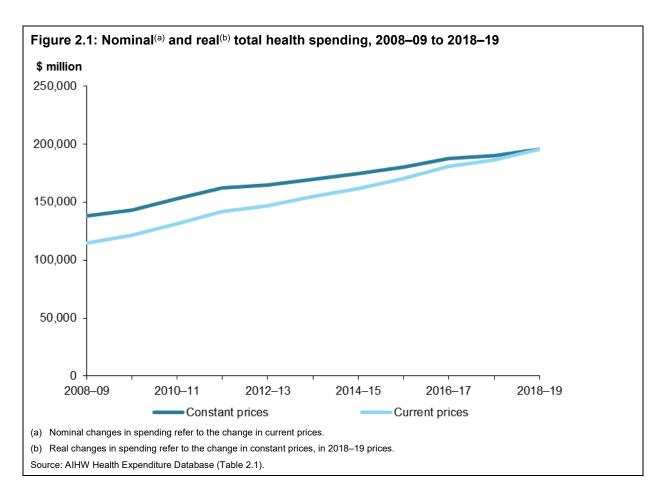
Estimates for total health spending capture the national aggregate of all spending on health goods and services for recurrent and capital purposes, including the medical expenses tax rebate.

In 2018–19, Australia spent an estimated \$195.7 billion on health. In real terms, this represented a 3.1% growth in spending from 2017–18, equating to an additional \$5.9 billion (Figure 2.1).

The main areas in which spending increased were:

- hospitals, by \$2.8 billion
- primary health care, by \$0.9 billion
- capital spending, by \$0.9 billion
- referred medical services, by \$0.6 billion (tables A5 and A6).

Real growth in spending in 2018–19 (3.1%) was slightly lower than the average over the decade from 2008–09 (3.5%).

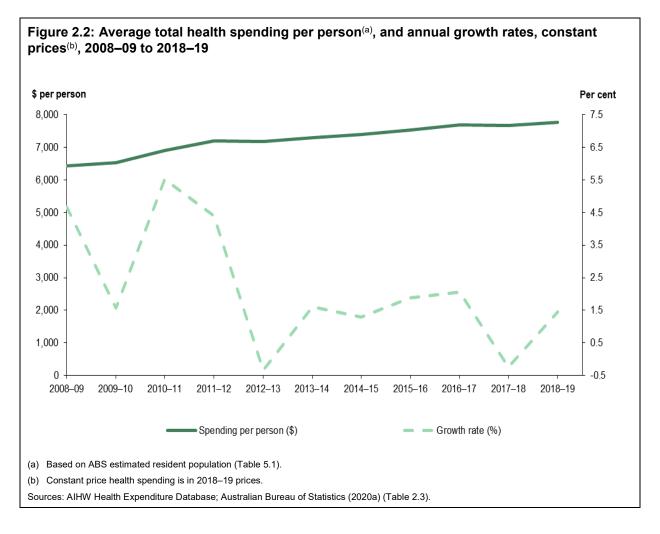


2.2 Health spending per person

Total spending per person takes into account population size and growth. This is a useful dimension to consider as a large increase in spending between years may not translate to greater health spending per person if the population has also grown at a fast rate.

In 2018–19, average per capita spending on health was \$7,772. In real terms, this was \$111 (1.5%) more per person than in 2017–18 (Figure 2.2).

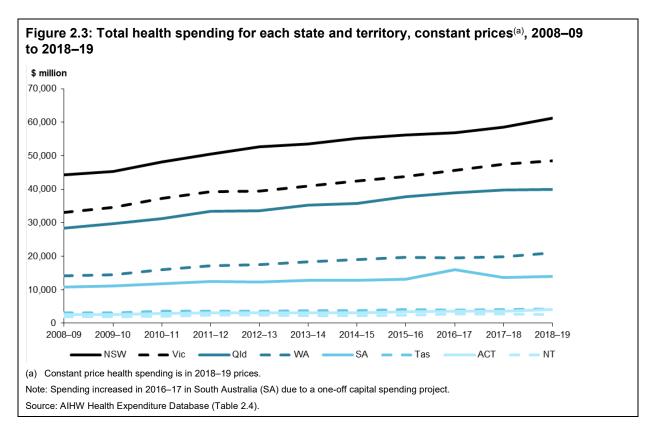
The growth in per capita spending in 2018–19 was slower than the average yearly increase over the decade (1.9%), but consistent with lower growth rates in the latter part of the decade. From 2008–09 to 2013–14, average growth was 2.5%. From 2013–14 to 2018–19 it was 1.3%.



2.3 Health spending in each state and territory

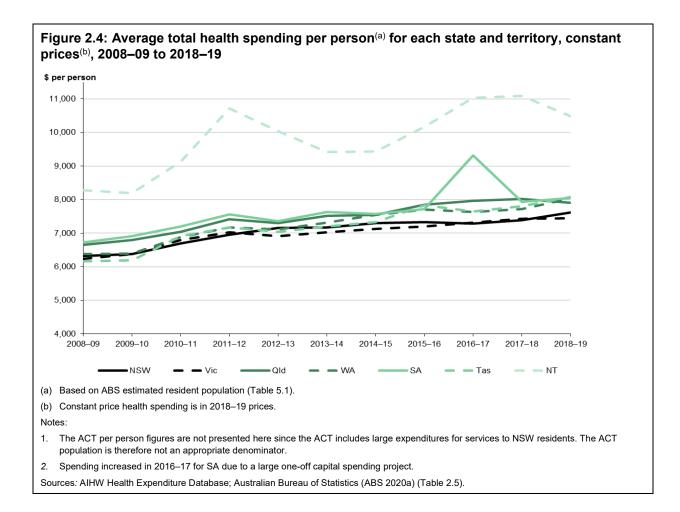
Of total health spending in 2018–19, more than half (56.1%) was spent in New South Wales (\$61.3 billion) and Victoria (\$48.6 billion) combined. These states also represented more than half (around 58%) of the Australian population (Figure 2.3; Table 5.1).

From 2017–18 to 2018–19, growth in total spending ranged from –5.8% in the Northern Territory to 10.6% in the Australian Capital Territory. For all states and territories except the Australian Capital Territory, growth was slower in the second half of the decade to 2018–19 compared with the first half.



In 2018–19, average per capita health spending was similar across all states and territories, except for the Northern Territory where average spending was \$10,483 per person, compared with the national average of \$7,772 (Figure 2.4).

Per capita spending grew in 2018–19 in all states and territories except for the Northern Territory and Queensland (Table 2.5).



2.4 The health sector relative to the economy

Health prices

The difference between health inflation and general inflation— excess health inflation— provides an insight into whether prices in the health sector are rising slower or faster than in the broader economy (Box 2.1).

In this report, the implicit price deflator (IPD) for gross national expenditure (GNE) is used to represent inflation for the general economy, while the total health price index is used to represent health inflation. However, it should be noted that excess health inflation can vary depending on the approach used to measure the economy and the method used to calculate the IPD. For illustrative purposes, data have also been presented for the IPD for gross domestic product (GDP) (Table 2.6).

Box 2.1: Inflation and deflators

Inflation refers to changes in prices over time. It can be positive (prices are rising over time and the same volume of goods cost more, so money is losing value) or negative (the same volume of goods are costing less).

Inflation is measured using price indexes, also known as deflators. These show the amount a price has changed over time relative to a base year.

The reference year, or base year, for the deflators used in this report is 2018–19.

Health inflation

Health inflation is a measure of the average rate of change in prices within the health goods and services sector of the economy.

For the health sector, the analysis is based on AlHW's total health price index.

Different deflators are calculated for different parts of the health sector.

The total health price index and industry-wide indexes are listed in Box 5.3. Table 5.3 provides the values and corresponding growth rates for each index over the decade to 2018–19.

General inflation

General inflation refers to the average rate of change in prices throughout the economy over time. There are different ways to measure the economy, and many methods for deriving deflators. The specific deflator can affect whether prices in the health sector appear to have risen slower or faster than the general inflation rate (excess health inflation).

In this report, the measure used for this is the IPD for GNE. GNE is a measure of the value of final expenditures on the goods and services purchased in the economy, including imports but excluding exports. IPD is an indicator of changes in the purchase price of these goods.

The IPD for GDP also illustrates the impact of different measures. The GDP IPD measures changes in the total value of goods and services Australian residents produce, including exports but excluding imports.

The ABS produces figures for deflators in the national accounts.

Excess health inflation

Excess health inflation is the amount by which the rate of health inflation exceeds general inflation. Excess health inflation will be positive when health prices are rising more rapidly than prices generally throughout the economy. It will be negative when the general level of prices throughout the broader economy are rising more rapidly than health prices.

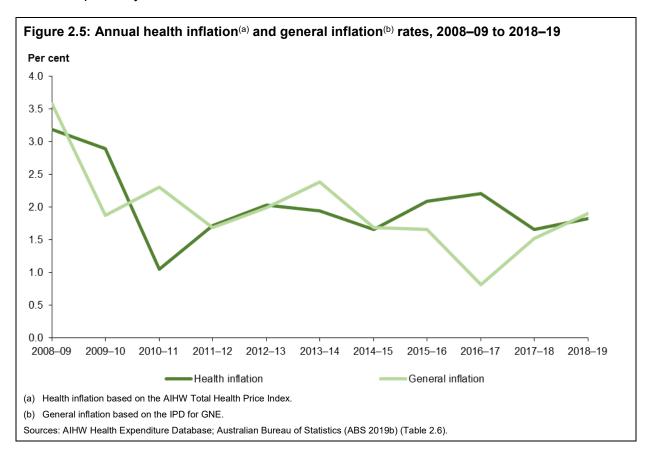
From 2017–18 to 2018–19, health inflation was 1.82%. General inflation, using the GNE IDP, was 1.90%. As such, excess health inflation was –0.08%, indicating that prices of health goods and services were rising slightly slower than prices in the general economy (Figure 2.5).

When using IPD for GDP to represent economy-wide inflation, excess health inflation in 2018–19 was –1.38% (Table 2.6).

Over the decade to 2018–19, prices in the health sector were relatively stable compared with prices in the broader economy. This resulted in varying levels of excess health inflation, ranging from 1.38% in 2016–17, to –1.22% in 2010–11.

Both measures showed similar average annual growth rates from 2008–09 to 2018–19, indicating little disparity between change in prices in health compared with overall inflation.

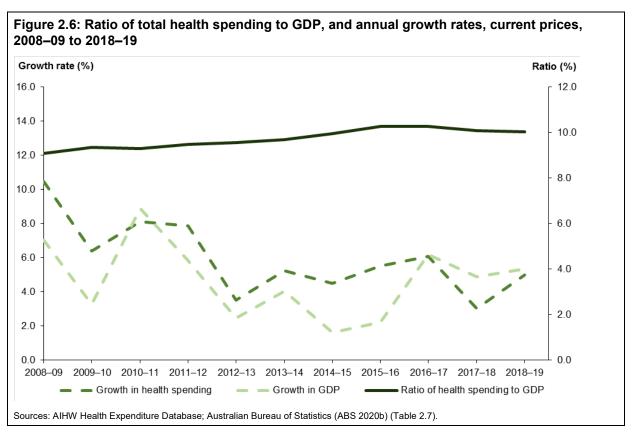
Excess health inflation grew on average 0.12% and 0.1% per year for the GNE and GDP IPDs, respectively.



Health spending and gross domestic product

The ratio of health spending to GDP, showing the proportion of total economic activity represented by the health sector, is an indicator of the contribution of health spending to the overall economy.

In 2018–19, health spending accounted for 10% of GDP in Australia, roughly the same as in 2017–18. From 2017–18 to 2018–19, nominal GDP increased at a slightly greater rate (5.3%) than the increase in nominal health spending (5%) (Figure 2.6).



Over the decade to 2018–19, annual real growth in health spending generally remained higher than GDP growth. In the first 5 years of the decade, growth in health spending was on average 1.5 percentage points greater than GDP growth. This fell to an average of 0.4 percentage points in the 5 years that followed (Table 2.8).

2.5 Government spending on health relative to taxation revenue

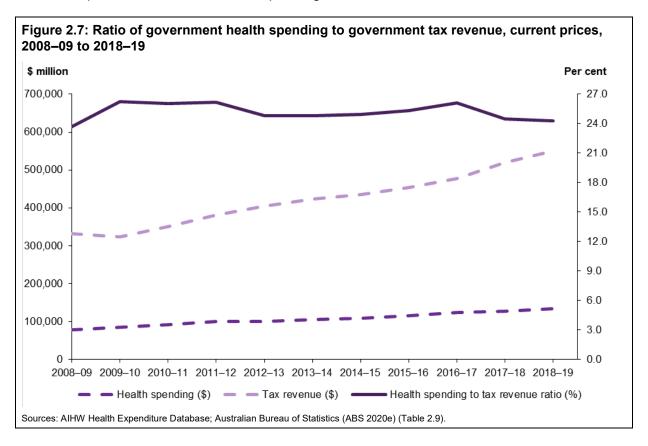
Taxation revenue is a major source of income used by governments to fund public services, including health spending. The Australian Government raises revenue through taxing individuals and businesses, including through:

- personal income tax
- goods and services tax (GST), for which all revenue is distributed to states and territories
- company tax.

State and territory governments receive funds from the Australian Government, but also collect taxes, such as stamp duty on the purchase of a house or taxes on payrolls.

During 2018–19, spending on health by all governments was \$133.6 billion, which represented 24.3% of government tax revenue (Figure 2.7). This is a marginal decline from 2017–18, where the health spending to tax revenue was 24.5%. This is attributed to government tax revenue growing faster than government health spending (6.1% compared with 5.2% over 2018–19, in nominal terms). More specifically, Australian Government health spending grew by 4.6% while tax revenue increased by 8.1%. State and territory government health spending increased by 6.2% while tax revenue grew by 3.1% (tables 3.2 and 3.7).

Over the decade to 2018–19, tax revenue growth was less consistent than the growth in government health spending, largely because of the Global Financial Crisis, which impacted government revenues. Over the decade, average annual nominal growth for tax revenue was 5.2% compared with 5.4% for health spending.



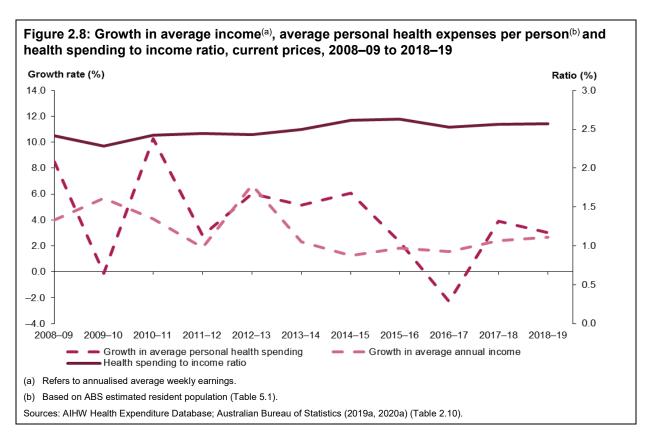
2.6 Personal health spending relative to income and wealth

In this section the estimate for personal out-of-pocket health expenses is represented by individual spending and non-government spending (including some private spending in hospitals and donations for health research, but excluding rebates from injury compensation insurers and private health insurance funds).

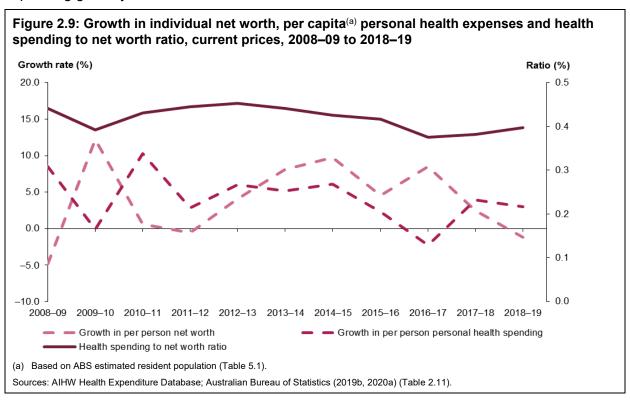
To estimate how personal health spending has compared with the financial resources available to individuals. 2 measures are considered:

- income is used to provide a sense of how health spending compared with average earnings throughout the year—how much was spent on health compared with how much earnt in that year
- net worth is used to provide a sense of how health spending compared with the overall wealth position of individuals in a given year, providing a more long-term sense of how health spending compared with personal wealth, particularly where health costs may be too high to be met by regular income.

In 2018–19, personal out-of-pocket health costs amounted to an average of \$1,649 per person, 2.6% of average annual income. In spite of fluctuations in the growth of average personal spending and average annual income, there was a slight increase in the proportion of health spending to personal income over the decade (Figure 2.8).



In 2018–19, personal spending on health represented on average 0.4% of individual net worth. This did not change much over the decade (Figure 2.9). On average, per person net worth grew nominally by 4.8% per year, while per person personal health spending grew by 3.7%. In 2018–19, per person net worth declined by 1.2%, while per person personal health spending grew by 3% in nominal terms.



3 Spending trends by source

During 2018–19, total health spending was \$195.7 billion. Of this, more than two-thirds (68.3% or \$133.6 billion) was government funded (41.2% by the Australian Government and 27.1% from state and territory governments). The remaining 31.7% was funded by non-government sources (Figure 3.1).

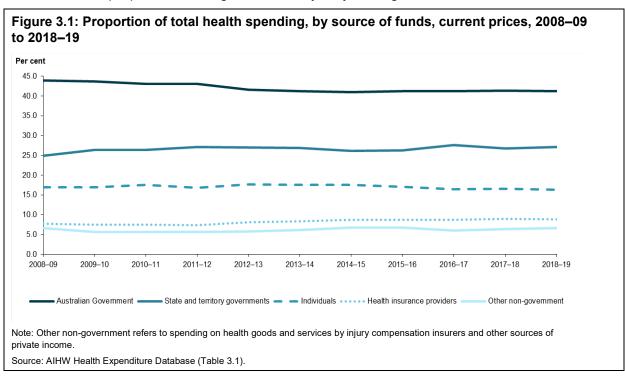
Between 2008–09 and 2018–19, the proportion of funding from the government sector fluctuated, with:

- spending funded by the Australian Government ranging between 41% in 2014–15 and 43.8% in 2008–09.
- the proportion of funding from state and territory governments varying between 24.9% in 2008–09 and 27.6% in 2016–17 (Table 3.1).

Non-government sources contributed about one-third (31.7% or \$62.1 billion) of total health spending in 2018–19. Contribution by individuals was 16.3% (\$31.8 billion), below the annual average for the decade of 17%.

Spending by private health insurance providers was \$17.2 billion in 2018–19. The proportion of funding by these insurers ranged between 7.4% in 2011–12 and 8.9% in 2017–18. This may have been, at least in part, a result of introducing means testing of the private health insurance premium rebate in 2012, which shifted funding from the Australian Government to private health insurance providers (Box 5.2).

Other non-government sources spent for 6.7% (\$13 billion) of total health spending in 2018–19. This proportion was higher than the yearly average for the decade.



3.1 Government sources

Australian Government spending

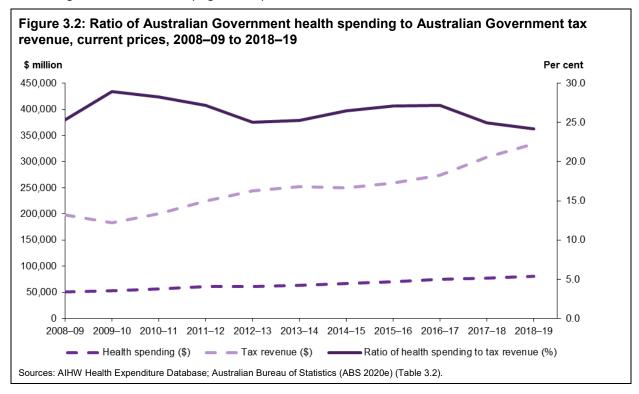
In 2018–19, Australian Government spending was \$80.6 billion, representing a \$2.4 billion real increase (3.1%) from 2017–18 (Table 3.1). This was higher than the average real growth in the decade to 2018–19 (2.9%).

The growth of Australian Government spending between 2017–18 and 2018–19 was due partly to an increase in spending on National Health Reform funding (5.3%) and the Australian Government's own programs (3.2%) (Table 3.3).

Health spending by the Department of Defence is not included in the estimates in this report. According to the Defence Joint Health Command, \$633 million was spent on health in 2018–19 (JHC 2019).

Spending relative to taxation revenue

The \$80.6 billion of health spending in 2018–19 by the Australian Government represented 24.2% of tax revenue, approximately 0.8 percentage points lower than in 2017–18. Unlike the years before 2017–18, when nominal growth for health spending and tax revenue were similar, in 2017–18 and 2018–19 tax revenue increased more quickly than health spending, resulting in a smaller ratio (Figure 3.2).



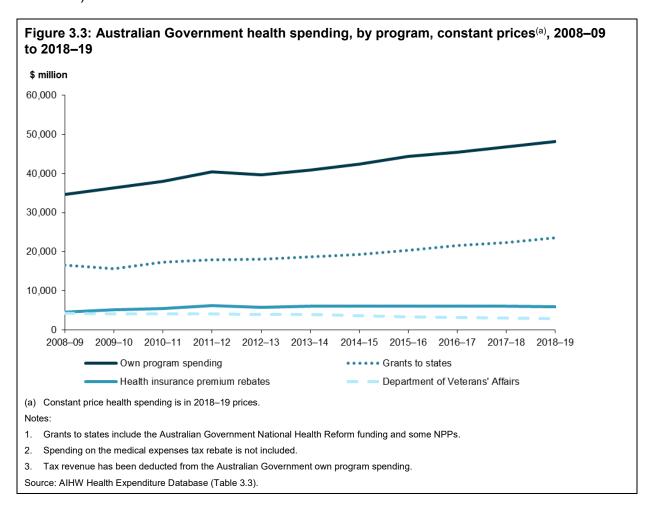
Spending programs

Australian Government spending in 2018–19 (Figure 3.3) comprised:

 direct Australian Government spending (\$48.3 billion, or 59.8%), mostly administered through the Department of Health on programs for which the government has responsibility, such as the MBS, PBS and health research

- National Health Reform funding (\$23.5 billion, or 29.2%), including Activity Based Funding, block funding arrangements, and National Partnership Payments (NPPs) to states and territories
- rebates and subsidies for privately insured people under the national *Private Health Insurance Act 2007* (\$5.9 billion, or 7.3%)
- DVA funding for goods and services provided to eligible veterans and their dependants (\$2.9 billion, or 3.5%)
- medical expenses tax rebate (\$0.05 billion (\$50 million), or 0.06%).

The 3.1% increase in Australian Government spending between 2017–18 and 2018–19 can be attributed to increases in its own program spending (\$1.5 billion increase) and funding to states and territories through National Health Reform funding and NPPs (\$1.2 billion increase).



Since 2008–09, Australian Government health spending increased over the decade in real terms. Its own program spending experienced the greatest increase (\$13.6 billion, an average increase of 3.4% each year), followed by grants to states and territories with an increase of \$7 billion (yearly average increase of 3.6%). Spending by DVA decreased by \$1.4 billion in the same period, an annual average decrease of 4% (more on DVA's spending is found later in this chapter).

Area of spending

During 2018–19, more than one-third (34.9%) of Australian Government health spending was for primary health care (\$28.2 billion) (Figure 3.4). Of this:

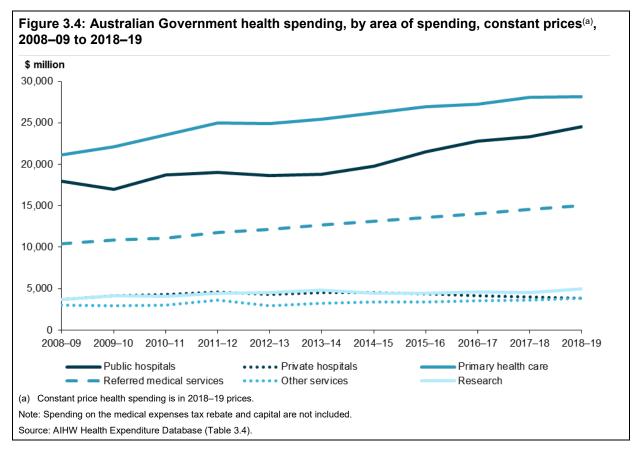
- pharmaceuticals subsidised through the PBS contributed \$10.3 billion
- unreferred medical services (mainly visits to a general practitioner) was \$10 billion
- spending on other health practitioners was \$2.4 billion (Table A6).

Spending on public hospitals was the next largest area of Australian Government health spending (\$24.5 billion), followed by referred medical services (\$15 billion). It should be noted that in this report, in-hospital MBS funding (\$3.1 billion in 2018–19) is accounted for in referred and unreferred medical services rather than in hospitals (Table A13). The Australian Government spent a relatively smaller amount on health-related capital spending (\$188 million) compared with the states and territories.

The rise in total Australian Government spending between 2017–18 and 2018–19 was mostly due to an increase of \$1.2 billion on public hospitals, \$0.5 billion on research and \$0.4 billion on referred medical services (Figure 3.4). Apart from some smaller and regional hospitals, which receive Block Funding, public hospital funding is tied to Activity Based Funding under the NHRA which adjusts funding levels with the number and mix of patients treated. Since 2014–15 under this agreement, the Australian Government was to pay 45% of the efficient growth in the volume of services, subject to a yearly funding growth cap of 6.5% (Box 5.1). Since this time, the increase in Australian Government spending on public hospitals has averaged 5.4% per year in real terms. Before this, there was greater fluctuation in the growth of funds from year to year, with an average increase of 0.9% per year from 2008–09 to 2013–14.

Over the decade since 2008–09, primary health care (\$7 billion) and public hospitals (\$6.5 billion) had the largest real increases in funding from the Australian Government. In real terms, these areas had an average yearly increase of 2.9% and 3.1% respectively (Figure 3.4).

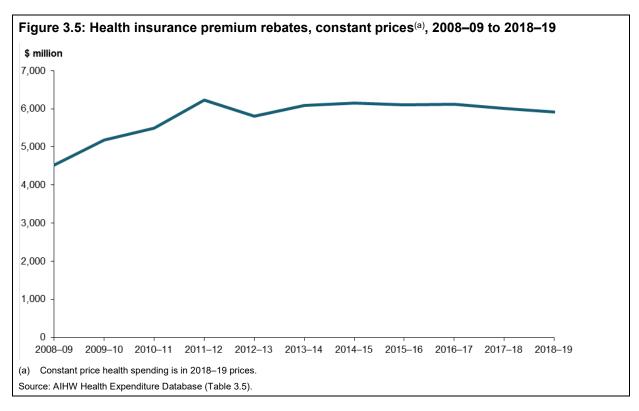
In 2018–19, private hospitals received an estimated real increase of \$0.15 billion compared with 2008–09, an annual average increase of 0.4% (Figure 3.4).



Private health insurance premium rebates

In 2018–19, the rebate for private health insurance premiums paid by the Australian Government was similar to 2017–18—\$5.9 billion compared with \$6 billion (Figure 3.5). The rebate amount presented in this report is an estimate of the rebate paid out as benefits (to estimate health spending). It is therefore smaller than the total rebate paid to individuals to reduce premiums, which are reported elsewhere (such as in Department of Health and ATO annual reports).

From 2008–09 to 2011–12, spending on premium rebates increased by 38.2%, equating to a \$1.7 billion increase. This was equivalent to an average annual growth rate of 7.9%. With subsequent changes to the thresholds, combined with changes to how the rebates were calculated (Box 5.2), the average rate of annual growth from introducing means testing of the rebate was –0.7%. This represented a decrease of spending of \$314 million in real terms from 2012–13 to 2018–19. However, spending overall on the private health insurance premium rebate in 2018–19 remained around \$1.4 billion higher than in 2008–09.

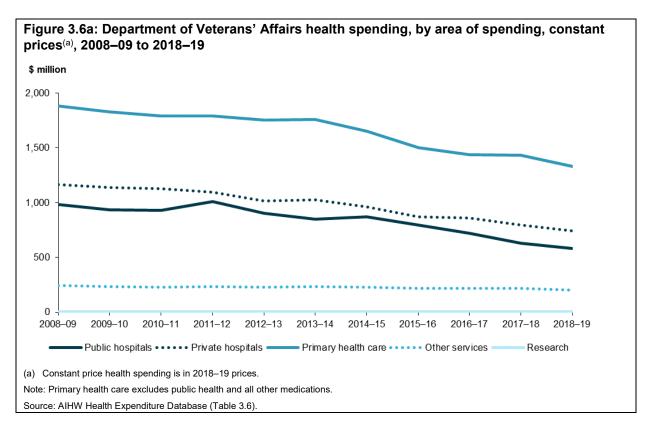


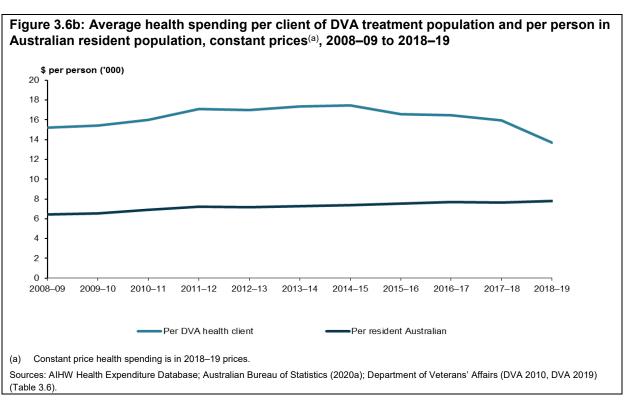
Department of Veterans' Affairs spending

In 2018–19, DVA spent \$2.9 billion on health, mostly on primary health care (\$1.3 billion) and hospitals (\$1.3 billion). Total DVA spending decreased by 7.2% in 2018–19, from \$3.1 billion in 2017–18 (Figure 3.6a).

Over the decade to 2018–19, there was a consistent decline in DVA spending on hospitals, with public hospitals decreasing by an average of 5.2% per year and private hospitals by 4.4% in real terms. DVA spending on primary health care also decreased in real terms by a yearly average of 3.4%, accompanied by an average decrease in spending on other services by 1.8%.

Based on the number of people in the DVA treatment population (which includes all cardholders), DVA spent \$13,690 on health per member of treatment population in 2018–19 which is 76.1% higher than the health spending per person in the total Australian population (\$7,772). This average health spending per member of DVA treatment population peaked in 2014–15 and decreased over the period 2015–16 to 2018–19 (Figure 3.6b).





State and territory government spending

In 2018–19, state and territory governments spent \$53 billion on health. This was an increase of 3.2% (\$1.6 billion) from 2017–18 in real terms (Table 3.1). The increase in their total spending between 2017–18 and 2018–19 was attributable to increases on:

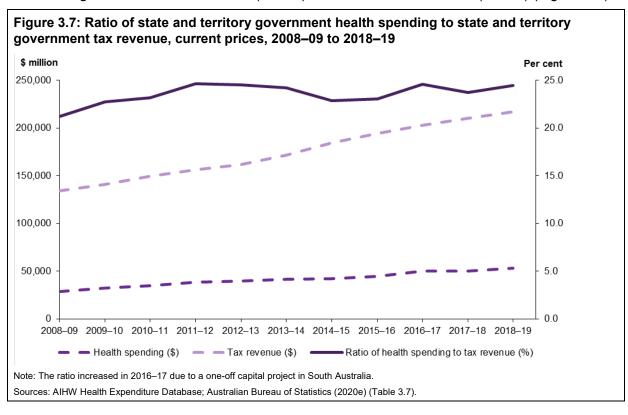
- private hospitals (4.6%)
- public hospitals (3.5%)
- research (2.7%)
- primary health care (2.3%).

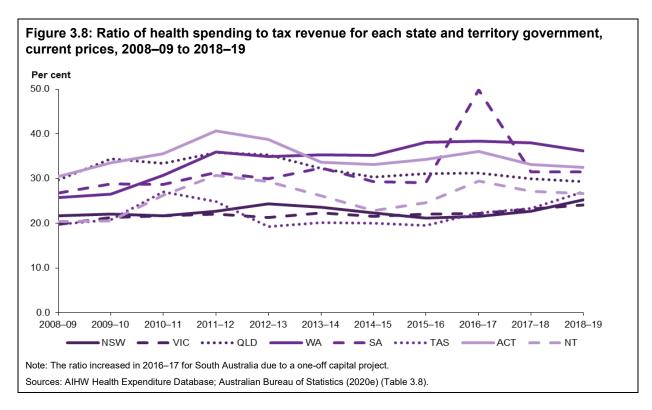
Other services decreased by 4.6% (Table 3.9).

Spending relative to taxation revenue

During 2018–19, health spending by state and territory governments was 24.4% of their tax revenue (Figure 3.7). This was 0.7 percentage points higher than 2017–18, reflecting that growth in health spending was faster than tax revenue growth.

In 2018–19, the ratio of health spending to tax revenue varied across states and territories, with the highest in Western Australia (36.2%) and the lowest in Victoria (24.1%) (Figure 3.8).





Area of spending

In 2018–19, state and territory governments spent \$33.3 billion (62.8%) on hospitals, with most (\$32.2 billion) on public hospitals. Another \$10.5 billion (19.8%) was spent on primary health care; \$8.4 billion of which was in community health services (Figure 3.9; Table A6).

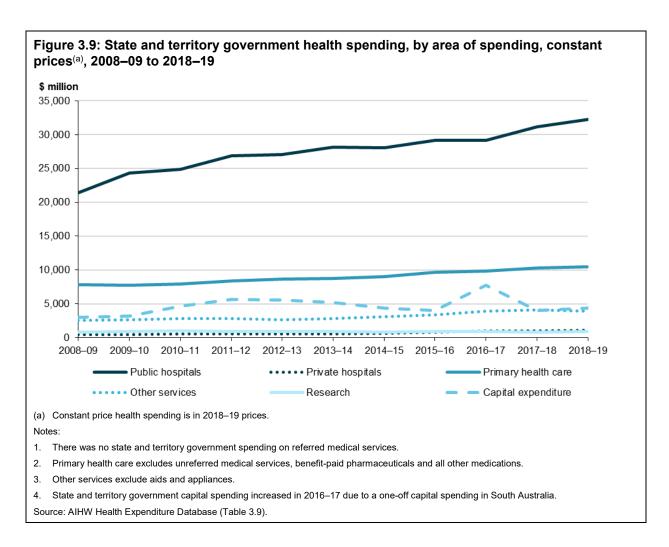
In 2018–19, state and territory spending increased in these areas:

- public hospital services by \$1.1 billion (3.5% increase compared with 2017–18)
- primary health care by \$0.24 billion (2.3%)
- private hospitals by \$0.05 billion (4.6%)
- research by \$ 0.02 billion (2.7%)
- capital by \$0.4 billion (10.2%).

Spending on other services decreased by \$0.2 billion (-4.6%).

Since 2008–09, state and territory government spending increased in real terms across all main areas. The greatest average yearly growth in spending over the decade was on private hospitals (8.6%), followed by other services (4.6%), public hospitals (4.2%) and capital investments (3.8%).

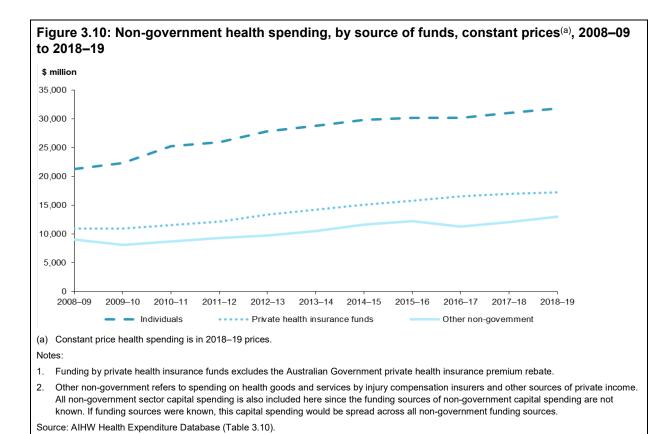
Spending on public hospitals in 2018–19 was almost 1.5 times higher in real terms than in 2008–09. However, it should be noted that the spending structure is different among different jurisdictions. For example, the Western Australia government spent nearly \$1 billion on private hospital services in 2018–19. Some other governments (such as New South Wales, the Northern Territory, Tasmania and Victoria) did not report spending on private hospitals (tables B1–B24).



3.2 Non-government sources

Non-government sources of spending include individuals, private health insurance providers and other non-government sources (such as injury compensation insurance providers, non-government sector capital spending; private spending on private hospitals and research).

In 2018–19, non-government sources spent \$62.1 billion on health (Figure 3.10). At \$31.8 billion (51.3%), individuals contributed more than half of non-government health spending, private health insurance providers \$17.2 billion (27.8%) and other non-government sources \$13 billion (21%).



Individual spending

Before receiving subsidies from the medical expenses tax rebate—\$50 million in 2018–19—individuals spent \$31.8 billion on health goods and services. This was 2.4% more than in 2017–18 and 45% more in real terms than was spent 10 years earlier in 2008–09 (Table 3.11).

In 2018–19, individuals spent \$10.8 billion (33.9%) on medications not subsidised through the PBS, including over-the-counter medications, vitamins and health-related products. Another \$6.1 billion (19%) was spent on dental services and \$4.2 billion (13.2%) on both referred and unreferred medical services.

From 2017–18 to 2018–19, the greatest increases in spending for individuals were an additional \$0.4 billion on medications (other than those subsidised by the PBS), \$0.3 billion on hospitals and \$0.1 billion on both referred and unreferred medical services. Spending on other health practitioners declined by \$0.3 billion (–10.9%).

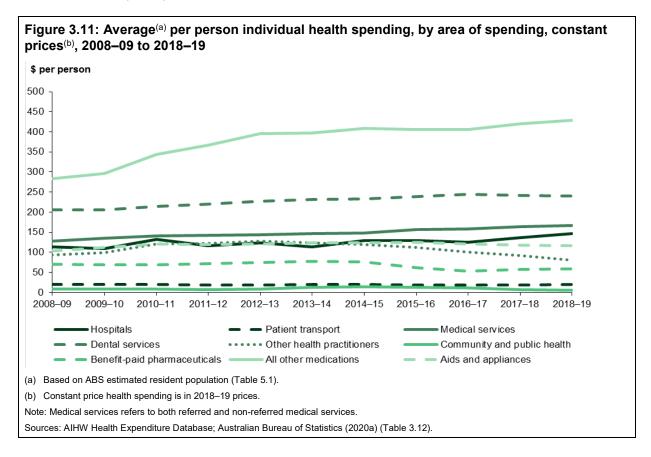
Per person individual health spending

Health spending by individuals equated to an average of \$1,265 per person in 2018–19. This was made up of:

- \$429 on non-subsidised medications
- \$240 on dental services
- \$167 on referred and unreferred medical services
- \$147 on hospital services
- \$117 on aids and appliances

- \$81 on health practitioners, such as chiropractors, optometrists, practice nurses and physiotherapists
- \$59 on medications partly subsidised by the PBS (Figure 3.11).

This annual per person spending was \$10 higher than in 2017–18 in real terms. The real growth in annual per person spending over the year was 0.8%. This was lower than the decade yearly average of 2.1%, but higher than the average growth over the past 5 years since 2013–14 (0.3%).

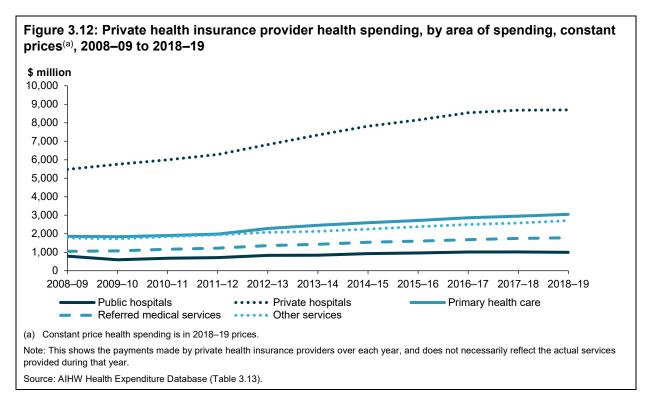


Private health insurance provider spending

Individuals can choose to take out private health insurance for hospital services, ancillary services or both. In 2018–19, more than 11 million Australians were covered through private health insurance for hospital treatment (APRA 2019). Private health insurance also covers general treatment for non-medical health services not covered by the MBS, such as dental, physiotherapy and optometry, when they occur outside a hospital admission.

During 2018–19, providers of private health insurance financed \$17.2 billion (8.8%) of total health spending. More than half (\$9.7 billion) was for hospital services, with private hospitals receiving an estimated \$8.7 billion (Figure 3.12). Approximately \$3.1 billion was spent on primary health care services, with \$2.1 billion of this for dental services (Table A6).

Spending by health insurance providers grew by \$0.2 billion in 2018–19 in real terms. This was a real growth of 1.5%, the slowest year of growth since 2009–10 (0.2%). Growth in health insurance provider spending in 2018–19 was approximately 3 percentage points below the average annual growth rate of 4.6% per year for the decade to 2018–19.



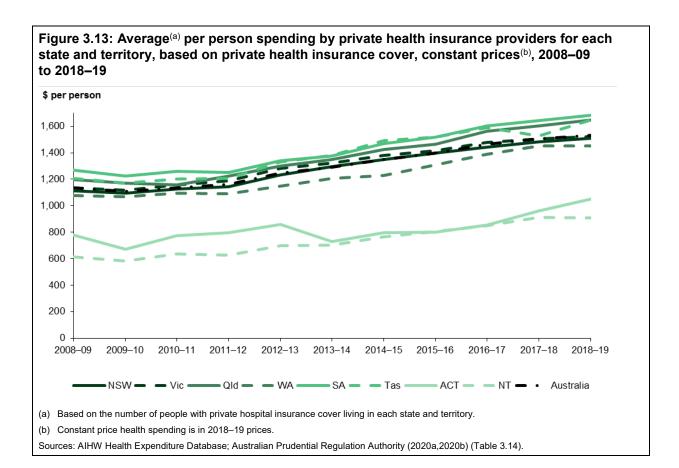
The introduction of income testing in July 2012 to the private health insurance premium rebate reduced the subsidies paid by the Australian Government on private health insurance premiums. Consequently, the health insurance provider's share of total health spending increased from 7.4% in 2011–12 to 8.8% in 2018–19. The Australian Government's share of total health spending fell by 1.8 percentage points over this period (Table 3.1).

Private health insurance provider health spending per person covered

In 2018–19, private health insurance providers spent an estimated average of \$1,532 per person covered by a private hospital insurance policy. This was a growth of \$29 (2%) from 2017–18 in real terms and was lower than the average annual growth of 3.1% per person over the decade (Figure 3.13).

South Australia (\$1,683), Queensland (\$1,649) and Tasmania (\$1,646) had the highest spending by private health insurance funds per person covered, at more than 1.5 times the amount of the Northern Territory (\$909) (Figure 3.13). Over the decade, average annual growth in spending by health insurance providers per person covered was greatest in the Northern Territory (4%) and lowest in South Australia (2.9%).

Nationally, spending by private health insurers equated to an average of \$684 per person in 2018–19, including those not covered by private health insurance. This represented no growth from 2017–18 in real terms. The average yearly growth rate for the decade from 2008–09 was 3% (Table 3.15).



Other non-government spending

In 2018–19, other non-government sources spent \$13 billion on health, representing 6.7% of total health spending in the year (Table 3.10). This includes spending by:

- compulsory third-party motor vehicle insurers
- workers' compensation insurers
- non-government sector capital spending and other private funding, including private spending on private hospitals and research.

The 2018–19 share represented an increase of 0.3 percentage points since 2017–18, higher than the decade average share of funds spent by other non-government sources on health (6.2%) (Table 3.1).

In 2018–19, injury compensation insurers spent \$3.3 billion on health goods and services: \$2.0 billion by workers' compensation insurers and \$1.3 billion by compulsory third-party motor vehicle insurers. This represented an increase of 5.7% compared with 2017–18, and was 3.5 percentage points above average annual growth over the decade (2.2%) (Table 3.16). Growth across the 10 years was volatile for both types of injury compensation insurers, but both had a positive average annual growth rate over the decade.

4 Trends by area of spending

Health funds are spent on health-related goods and services including:

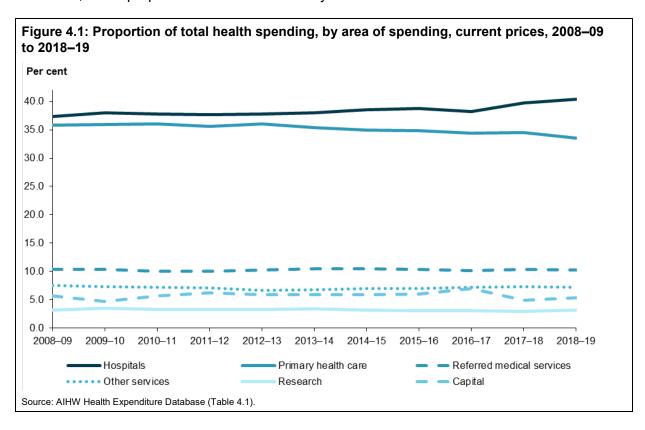
- hospitals (public and private)
- primary health care
- referred medical services
- research
- other services, such as patient transport, aids and appliances, and health administration
- accumulation of health-related capital.

In 2018–19, of total health spending (excluding the medical expenses tax rebate), \$185.2 billion was recurrent spending and \$10.4 billion was capital spending (Table 2.2).

Spending was distributed across health services, with:

- 40.4% (\$79 billion) on hospitals
- 33.5% (\$65.6 billion) on primary health care
- 10.3% (\$20.2 billion) on referred medical services (including \$3.1 billion of in-hospital MBS spending).

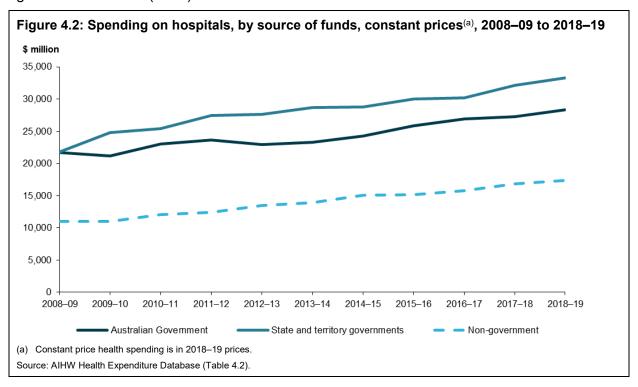
The remaining 15.8%, or \$30.9 billion, was on other services, research and capital (Figure 4.1). Apart from variations in capital spending, which ranged from 4.8% in 2009–10 to 7% in 2016–17, these proportions had been relatively stable since 2008–09.



4.1 Hospitals

During 2018–19, a total of \$79 billion was spent on Australia's public and private hospitals, with \$33.3 billion (42.1%) funded by state and territory governments and \$28.4 billion (35.9%) by the Australian Government. The remaining \$17.4 billion (22%) came from non-government sources (Figure 4.2). However, it should be noted that in-hospital MBS funding (\$3.1 billion in 2018–19) is counted in referred and unreferred medical services in this report rather than in hospitals (Table A13).

Spending on hospitals in 2018–19 was 3.7% higher than in 2017–18 and just below the 3.8% average annual growth for the decade. The increase in 2018–19 resulted from increased funding by the Australian Government (4%), states and territories (3.6%) and non-government entities (3.4%).



Public hospitals

Spending on the public hospital system was \$61.8 billion in 2018–19 (Figure 4.3). In the same year:

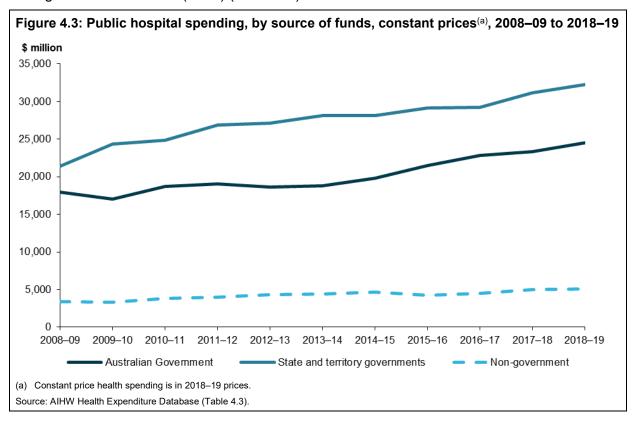
- 3 in 5 (60%) of the 11.5 million episodes of admitted patient care occurred in public hospitals
- more than 8 million presentations were made to Australian public hospital emergency departments
- 39 million non-admitted patient care service events were provided to public patients in outpatient clinics (AIHW 2020a, 2020b, 2020c).

Spending was up from \$59.4 billion in 2017–18, a real increase of 4%, which was above the average annual real growth over the decade.

In 2018–19, state and territory governments, which have primary responsibility for administering public hospitals, contributed the most funding at \$32.2 billion (52.1%). This was followed by the Australian Government with \$24.5 billion (39.6%) and non-government

entities at \$5.1 billion (8.2%). Growth in spending by the Australian Government was 5.1% in real terms, compared with 3.5% by state and territory governments and 1.6% by non-government entities (Table 4.3).

Over the 10-year period to 2018–19, overall spending increased by 3.7% on average per year, with the highest increase from state and territory governments (4.2%), followed by the non-government sector (4%). Australian Government contributions increased by 3.1% per year on average in real terms. Over the most recent half of the period, the growth rate for the Australian Government (5.4%) was above that of the states and territories (2.8%) and non-government sources (3.0%) (Table 4.3).



As part of ongoing quality assurance and in accordance with section A103 of the 2020-2025 Addendum to the National Health Reform Agreement (NHRA), the AIHW is working with the Administrator of the National Health Funding Pool (NHFP) and states and territories to achieve consistent and transparent reporting of public hospital funding.

The Administrator of the NHFP provides monthly reports of the amounts paid by the Australian Government and by each state and territory government for public hospital services delivered in accordance with the NHRA. These figures are reflected in the budget outcome reporting that the AIHW uses as part of its methodology for estimating public hospital spending.

For the 2018–19 financial year, the NHFP and budget outcome papers showed Australian Government public hospital spending of \$21.3 billion, a 9.1% growth from 2017–18 (in nominal terms). In comparison, the ANHA showed Australian Government public hospital spending of \$24.5 billion, an 8.3% per cent growth from 2017–18 (in nominal terms). The major difference between these figures is the inclusion of slower-growth public hospital related programs in the ANHA, including spending on high cost drugs administered through hospitals and funding for veterans' hospital services (see Table A11 for more detail on the trends for these components). These programs are not considered within the narrower scope

of the NHFP arrangements but are classified as public hospital spending in the broader scope of the ANHA.

For the states and territories, the NHFP showed public hospital spending of \$27.7 billion in 2018–19, with growth of 4.5% from 2017–18, compared with \$32.2 billion in the ANHA and growth of 6.7% (in nominal terms). The major difference between these figures was additional spending reported to the AIHW by New South Wales and Victoria beyond what was managed through the NHFP, with New South Wales a particular driver of the difference in the growth rates in 2018-19 (see Table C1 for more detail).

Private hospitals

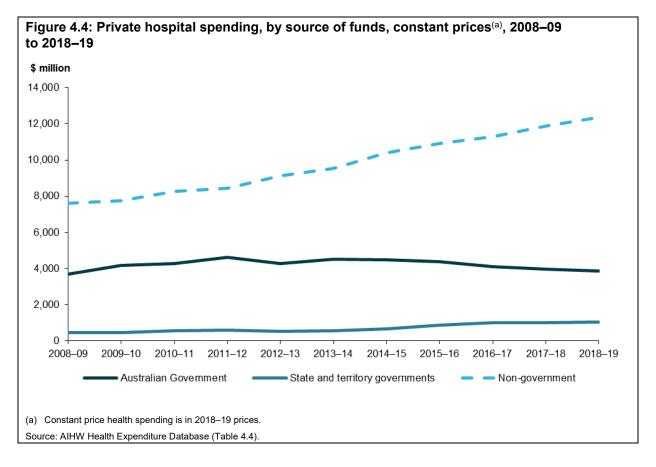
Most (71.6%, \$12.3 billion) of the estimated \$17.2 billion spent on private hospitals was funded by the non-government sector:

- private health insurance providers, \$8.7 billion
- individuals, \$2.2 billion
- other non-government, \$1.4 billion (Table A6).

Another \$3.9 billion (22.3%) was spent by the Australian Government and \$1.1 billion (6.1%) by state and territory governments (Figure 4.4). Government spending in private hospitals can occur where state and territory governments contract with private hospitals to provide services to public patients, or where individual public hospitals buy services from private hospitals for public patients.

From 2017–18 to 2018–19, real spending grew by \$0.4 billion (2.5%). This was due to an increase of non-government spending (\$0.5 billion), attributable mainly to increased spending on private hospitals by individuals (tables A5 and A6).

The overall increase in estimated spending on private hospitals in 2018–19 was around 1.4 percentage points below the decade average yearly growth rate (2.5% and 3.9% respectively).



4.2 Primary health care

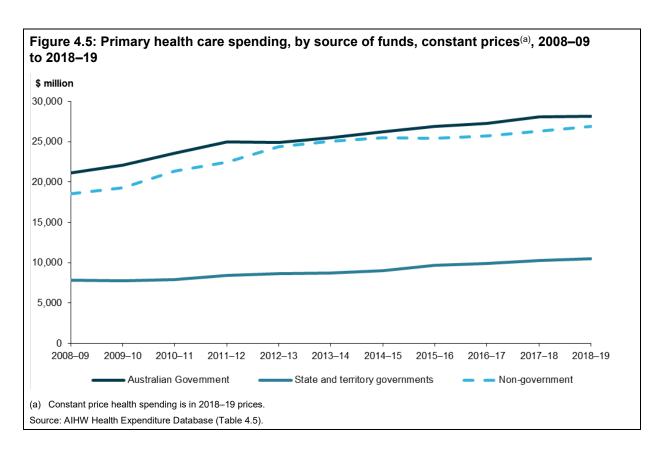
In 2018–19, \$65.5 billion was spent on primary health care (Table 4.5). More than two-thirds (70.6%) of funds (\$46.3 billion) were on:

- unreferred medical services (\$12.3 billion)
- subsidised pharmaceuticals (\$11.7 billion)
- unsubsidised medications (\$11.7 billion)
- dental services (\$10.6 billion) (Table A6).

The Australian Government spent \$28.2 billion (43%), non-government entities \$26.9 billion (41%), and state and territory governments \$10.5 billion (16%) (Figure 4.5).

The \$0.9 billion increase in spending in 2018–19 in real terms (\$64.6 billion to \$65.5 billion) was mainly due to increased spending from non-government entities of \$0.6 billion (Table 4.5).

Between 2008–09 and 2018–19, real growth averaged 3.3% each year. Non-government spending on primary health care increased the most over the decade, by \$8.3 billion, representing an average yearly real growth of 3.8%.

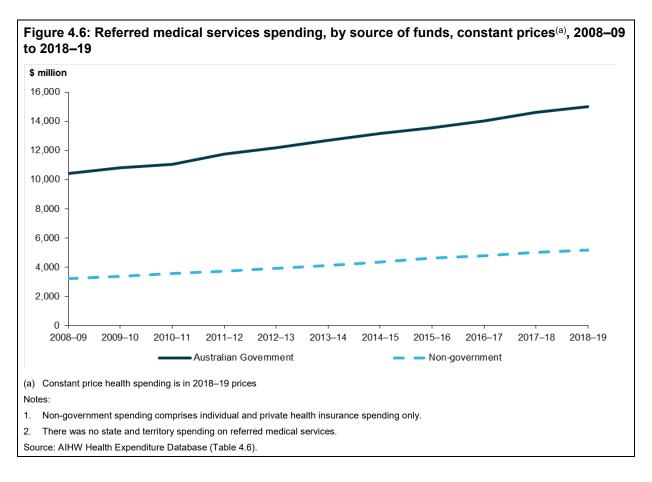


4.3 Referred medical services

During 2018–19, \$20.2 billion was spent on services where a person had been referred by a general practitioner or medical specialist to another non-hospital specialist or allied health professional. Government benefit paid and patient contribution for most in-hospital MBS items are also accounted for in referred medical services. About 3 in every 4 dollars were funded by the Australian Government (74.4%, or \$15 billion) mainly through the MBS, and the remainder by non-government entities (25.6%, or \$5.2 billion). State and territory governments do not contribute funding to this area (Figure 4.6).

Spending on referred medical services increased by \$0.6 billion in 2018–19. This was a real growth rate of 2.9%. Spending by the Australian Government and non-government entities experienced real growth of 2.7% (\$0.4 billion) and 3.2% (\$0.2 billion) respectively over this time.

Over the decade, referred medical expenses increased by an average of 4% each year. This was as a result of 3.7% yearly average growth by the Australian Government and 4.9% by non-government funding.



4.4 Other services

Estimated total spending on other services in 2018–19 was \$14.2 billion. Of this:

- \$5.1 billion was spent on administration
- \$4.7 billion on aids and appliances
- \$4.3 billion on patient transport services (Table A6).

Overall:

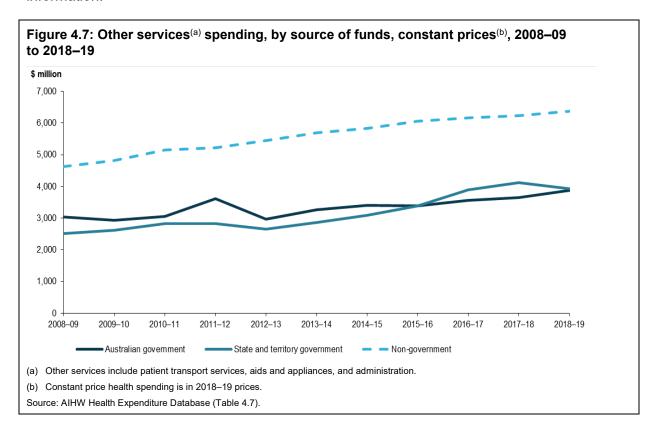
- non-government entities contributed \$6.4 billion (45%)
- state and territory governments \$3.9 billion
- Australian Government \$3.9 billion (Figure 4.7).

Compared with 2017–18, total spending increased in real terms by \$0.2 billion (1.2%) in 2018–19. This growth was attributable mainly to an increase in Australian Government spending of \$0.2 billion (6.1%). Non-government entities' spending increased by \$0.1 billion (2.1%), while spending by state and territory governments decreased by \$0.2 billion (–4.6%). Administration attracted the largest increase in funding, with an additional \$0.2 billion (4%) in 2018–19 compared with 2017–18 (tables A5 and A6).

In the decade since 2008–09, the real average annual growth rate on other services was 3.4%. State and territory government spending in this area averaged 4.6% growth per year, ranging from 15.1% increase in 2016–17 to a decline of 6.1% in 2012–13.

Non-government spending on other services experienced positive growth in every year since 2008–09, with an average annual growth rate of 3.3%. Australian Government funding was particularly volatile during this time, with the highest real growth in funding of 18.7% in

2011–12 followed by the lowest real decrease in growth of –18.1% in 2012–13. This is likely due to the start of National Health Reform funding in 2012–13 as per the NHRA, and the discontinuation of many Specific Purpose Payments in the same year. Box 5.1 has more information.

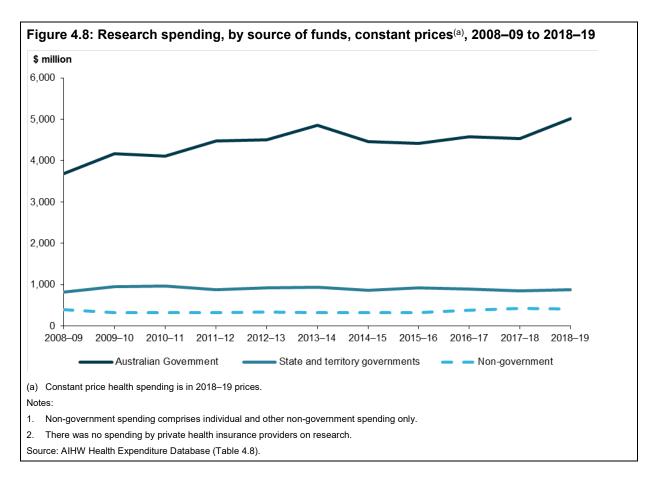


4.5 Research

During 2018–19, an estimated \$6.3 billion was spent on health and medical research. Of this, the:

- Australian Government contributed \$5 billion (79.6%)
- state and territory governments \$0.9 billion (13.9%)
- non-government sector \$0.4 billion (6.6%) (Figure 4.8).

In real terms, spending on research increased by \$0.5 billion (8.7%) between 2017–18 and 2018–19. This was higher than the decade average annual real growth rate of 2.5%.

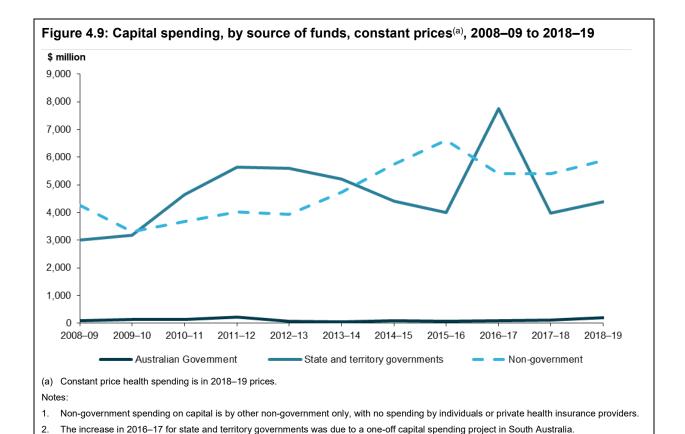


4.6 Capital spending

Capital spending is an important component of total health spending. However, capital outlays often relate to relatively high-cost items that have useful lives extending over many years. As such, growth in capital spending from year to year can be difficult to interpret. For example, 2016–17 capital spending estimates were affected by a large amount of capital spending on the new Royal Adelaide Hospital in South Australia. This one-off spending inflated 2016–17 data and accounted for the 28.3% decrease in capital spending in 2017–18.

Capital spending on health facilities and investments in 2018–19 was \$10.4 billion. Over the decade to 2018–19, spending on capital accounted for around 6% of total health spending per year on average (Table 2.2).

From 2008–09 to 2018–19, capital spending by state and territory governments averaged around half (49.8%) of capital spending, the non-government sector averaged 48.8% and the Australian Government averaged 1.3% (Figure 4.9).



Source: AIHW Health Expenditure Database (Table 4.9).

5 Concepts, definitions and data sources

5.1 Government funding sources

Australian Government

Australian Government total health spending includes spending:

- by the Department of Health
- on private health insurance premium rebates
- on the net medical expenses tax rebate
- by universities and other health-related bodies on health research
- by DVA.

This also includes grants to states and territories, such as funding paid under the NHRA; and spending on other programs, such as the MBS and PBS.

Data on Australian Government health spending come from Treasury, the Department of Health, ABS, Australian Prudential Regulation Authority (APRA), ATO and DVA.

Most Australian Government's spending can be readily allocated on a state and territory basis:

- National Health Reform funding (referred to as the National Healthcare Specific Purpose Payments before 1 July 2012) and health-related NPPs to the states and territories (Box 5.1)
- MBS and PBS payments and most DVA spending (all based on residence of patients).

Data on other Australian Government health spending are generally not reportable by state and territory. In these cases, estimation methods are used to derive state and territory spending results. For example, non-MBS payments to primary health care medical service providers are allocated according to the proportion of vocationally registered general practitioners in each state or territory.

In this report, Australian Government spending for 2008–09 includes \$1.2 billion funding through the 5-year National Partnership Agreement on Health and Hospital Workforce Reform. This funding was spread over 5 years and has been offset against 2008–09 state and territory government funding.

Australian Government spending for public hospital services in 2016–17 includes some payments related to 2015–16, as part of the NHRA.

In 2017, the Australian Government funded the Tasmanian Government for the Mersey Community Hospital, through a grant under Section 96 of the Australian Constitution. The grant agreement was for 10 years starting in 2017–18.

Box 5.1: Australian Government funding for public hospitals

Public hospital services are jointly funded by the Australian Government and state and territory governments, complemented by payments from non-government sources.

Before 2008

When Medicare was introduced in 1984, the Australian Government negotiated bilateral funding agreements with each state and territory to provide public hospital services. These were initially known as Medicare Agreements, but were renamed in 2003 the Australian Health Care Agreements. The last agreement expired in 2008.

Under these agreements, the Australian Government paid grants to states and territories for public hospital services in the form of Specific Purpose Payments. For health this largely comprised a base funding level adjusted for population growth, inflation, population ageing, the veteran population, hospital output costs and private health insurance membership levels.

National Healthcare Agreement (2008–2011)

After the last Australian Health Care Agreement expired, new financial arrangements were introduced that resulted in the National Healthcare Agreement. This agreement committed to the national implementation of Activity Based Funding to provide a basis for more efficient use of taxpayer funding of hospitals, and for increased transparency in the use of these funds.

NPPs were also established to drive initiatives across sectors and improve outcomes by offering reward and incentive payments to jurisdictions for delivering outcomes in key areas.

National Health Reform Agreement (2011)

The signing of the NHRA in 2011 (COAG 2011) signalled the shift in public hospital funding to Activity Based Funding, with the NHRA detailing a new framework for funding of hospital and other elements of health care. More details about the NHRA can be found at https://www.publichospitalfunding.gov.au/

Source: Biggs 2018.

Medical expenses tax rebate

The medical expenses tax rebate (or net medical expenses tax offset) is an Australian Government subsidy to assist with the cost of medical expenses. Taxpayers who spend large amounts of money on health-related goods and services can claim a tax rebate.

Before 2012–13, the tax rebate was 20 cents in the dollar and applied to the amount spent over the threshold for a financial year. From July 2012, the tax rebate became means tested. In March 2014, eligibility for it changed again, restricting who could claim and the type of medical expenses that could be claimed. The rebate was phased out by the end of 2018–19 (ATO 2020a).

The areas of spending the rebate funded cannot be identified separately, so it is not possible to allocate funding to specific categories of health spending. Instead, the rebate is shown in the tables as being funded by the Australian Government back to individuals. Related spendings are included in estimates of health spending.

Private health insurance premium rebates

The Australian Government's private health insurance premium rebate is a refund on private health insurance premiums. It replaced the Private Health Insurance Incentives Scheme subsidy in 1999.

The rebate relates to the premiums payable by private health insurance providers by individuals. It is regarded as an indirect Australian Government subsidy of all the types of services funded through private health insurance. It includes rebates paid through the tax system and rebates paid to health insurance funds, which directly reduce premiums (Box 5.2).

In the ANHA, the premium rebate is pro-rated across all expense categories (including change in provisions for outstanding claims). The rebate amount in this report is an estimate of the rebate paid out as benefits (to estimate health spending). It is therefore smaller than the total rebate paid to individuals to reduce premiums, which are reported elsewhere (such as in Department of Health and ATO annual reports).

State and territory governments

Most health spending data for each state and territory government comes from their health authorities. These data are supplied on an accrual basis through the GHE NMDS. More information on the GHE NMDS is on the AIHW's Metadata Online Registry (https://meteor.aihw.gov.au/content/index.phtml/itemId/540601).

When state and territory governments receive funding from the Australian Government, such as National Health Reform funding and health-related NPPs, the spending is included as spending by the Australian Government. The corresponding amount is deducted from the state or territory government to remove double counting. Revenue from other sources (such as from DVA or non-government entities) are accounted for in a similar way.

Comparing state and territory data

Caution should be exercised when comparing results between states and territories. Where possible, consistent estimation methods and data sources have been applied, but some differences in the data on which estimation methods are based exist between jurisdictions.

Estimating per person spending

Health spending estimates for individual states and territories include spendings on health goods and services. This may include health goods and services provided to patients from other states and territories (except for public hospital spending, where adjustments have been made through the NHRA to account for cross-border service provision). In calculating spending per person, the population that provides the denominator is the estimated resident population of the state or territory in which the spending was incurred (ABS 2019a). Since not all cross-border goods and services can be accounted for, this can lead to an overestimation or underestimation of spending per capita in each state and territory.

This issue particularly affects the estimates for the Australian Capital Territory, which provides a high volume of services to New South Wales residents. Therefore, per person estimates for the Australian Capital Territory are not reported in this publication. They are included in the national estimates.

The estimated resident population for the states and territories as at 31 December 2019 was used to calculate the per person estimates of spending (ABS 2020a) (Table 5.1).

Local governments

Health spending data are not collected separately from local government authorities. Where these authorities received funding from the Australian Government or state or territory government, it is included as spending from that body.

Own source funding by local government authorities is not included.

Goods and services tax in government revenues

Australian Government tax revenues exclude revenues from the GST, while state and territory and local government tax revenues tax revenues include this tax. This is because the GST is collected by the Australian Government on behalf of states and territories and then distributed to them.

5.2 Non-government funding sources

Individuals

Individuals incur medical costs through:

- co-payments (or out-of-pocket expenses) for subsidised goods and services—for example, co-payments for specialist services subsidised through the MBS
- co-payments for the cost of health goods and services with third-party payers—for example, private health insurance funds
- meeting the full cost of goods and services—for example, medications the PBS does not subsidise.

Individual spending estimates do not include premiums paid for private health insurance.

Until 2015–16, retail sales of medicines, such as in supermarkets, were sourced from *Retail World* (Flanagan 2007, 2008) and its annual reports (Gloria 2009 to 2016). From 2016–17 to 2018–19, estimates were based on data sourced from a private research firm, Information Resources Incorporated (IRI) (IRI 2018a, 2019a, 2020a).

Data for over-the-counter medicines sold at pharmacies for 2007–08, 2010–11 and 2012–13 to 2015–16, were sourced from IRI. For 2008–09, 2009–10 and 2011–12, estimates were based on data sourced from *Retail World*'s annual reports (Gloria 2009, 2010, 2011) and previous IRI-Aztec data. From 2016–17 to 2018–19, data were sourced from IRI (2018b, 2019b, 2020b).

Due to data unavailability, individuals' spending on private scripts in 2018–19 is modelled on historical data.

Estimates of individuals' spending on dental services, other health practitioners and aids and appliances rely mostly on private health insurance data from APRA and ABS survey data. To estimate individual out-of-pocket spending for these categories, growths in the cost of services are combined with changes in the proportion of the population who have ancillary health cover from year to year. Spending on these services by private health insurance providers, MBS, PBS and injury compensation insurers is deducted to arrive at the spending estimates funded by individuals.

From 2008–09, states and territories had provided estimates of spending by individuals on patient transport services through the GHE NMDS. Before this, estimates were based on data from the Productivity Commission's Report on Government Services (SCRCSSP 2003; SCRGSP 2007, 2009).

Data from various sources are used to estimate individuals' spending, including multiple cross offsets to avoid double counting. In some states and territories where individuals' spending on some areas (such as private hospitals or other services) appeared to be negative figures, it can be interpreted that "Individuals" are "subsidised" by some other sources of funding, including DVA, private health insurers, workers' compensation and third-party vehicle insurance providers.

Private health insurance providers

The funds used by private health insurance providers are indirectly sourced from individuals who pay premiums to these providers, which may be subsidised by the Australian Government. These premiums are not treated as health spending and are not reflected in health spending estimates. Health spending by private health insurance providers are the amounts paid to health providers. To avoid double counting, health insurance provider spending estimates do not include subsidies from the Australian Government through health insurance premium rebates. When creating the AIHW HED, the subsidy amount is subtracted from total spending of private health providers and is attributed to the Australian Government. This results in total private health provider spending less than the amount paid out.

The spending also shows the payments made by health insurance funds over the year, not necessarily the actual services provided.

Private health insurance pays for some or all costs of:

- treatment in public or private hospitals as a private patient
- health services not covered under the MBS, such as dental, optometry and physiotherapy.

In April 2007, a legislative variation altered the scope of private health insurance. It now means insuring liability for treatments by a hospital or other treatment provider to manage a disease, condition or injury. Before this, non-health services—such as funeral benefits and domestic assistance—were offered with health insurance policies (Australian Government 2016).

Individuals pay fees (premiums) to private health insurance providers, who subsidise the cost of hospital and some primary health care services. These fees are partly subsidised by the Australian Government, which provides eligible members with a rebate on their premium (Box 5.2).

The estimates calculated for spending by private health insurance providers equate to the total benefits paid, minus the private health insurance premium rebate. As mentioned in Subsection 5.1, the rebate amount in this report is an estimate of the rebate paid out as benefits (to estimate health spending). It is therefore smaller than the total rebate paid to individuals to reduce premiums. These are reported elsewhere (such as in Department of Health and ATO annual reports). This portion of the rebate was deducted from the gross benefits the health insurance provider paid to calculate health spending by private health insurance providers for particular areas of spending. These rebate amounts were then added to the spending by the Australian Government for those areas.

Box 5.2: Private health insurance premium rebate

Two mechanisms exist for rebates on private health insurance premiums:

- Insurers offer members a reduced premium and then claim reimbursement from the Australian Government.
- Members pay the full premium and claim the rebate through the tax system at the end of the financial year.

The private health insurance rebate on premiums paid by individuals was introduced in 1999, initially providing a 30% discount on premiums for people aged under 65, with older Australians received higher rebates.

In July 2012, the Australian Government introduced income testing of the rebate by creating income thresholds (income tiers). These thresholds attracted different rebate levels. This meant higher income earners would progressively receive lower rebates, or no rebate.

In 2014, the Australian Government changed the way the rebate was calculated, resulting in a lower rebate being available. Since then, the rebate has progressively declined. For example, in 2014 it ranged from around 29% for lower income earners (Base tier rate), to no rebate for highest income earners (Tier 3). In 2018, the Base tier rebate was 25%.

Also in 2014, income tiers that had been indexed annually until 2014–15 were frozen. In the 2016–17 Budget, the Australian Government announced it would maintain this freeze until 2021. This has the effect of decreasing rebates if incomes are rising.

Sources: Biggs 2017; Australian Taxation Office (ATO) 2020b.

With the availability of private health insurance prostheses data (APRA 2020b), the split between public and private hospital data for private health insurance providers between 2009–10 and 2017–18 was re-calculated in this report.

Private health insurance provider spending by states and territories

Spending on health goods and services by providers of private health insurance within a state or territory is assumed to be equal to the amount of benefits paid by health insurance funds to patients who live in that state or territory minus the health insurance premium rebate.

Calculations using the number of privately insured people are based on data from APRA (2020a) (Table 5.2).

Australian Capital Territory

Before 2009–10, data on private health insurance spending for the Australian Capital Territory were included in the total for New South Wales. To estimate spending for the Australian Capital Territory, the AIHW used the territory's admitted patient separation numbers for public and private hospitals to derive its proportion of total Australian Capital Territory and New South Wales separations. It then applied this proportion to private health insurance spending.

From 2009–10, private health insurance spending data for the Australian Capital Territory have been available separately; however, these figures have not been used retrospectively to update earlier data.

Other non-government sources

Other non-government sources of funds include:

- workers' compensation insurers
- compulsory third-party motor vehicle insurers
- other privately funded health spending, such as some private hospital spending and research.

Workers compensation and compulsory third-party motor vehicle insurance payments data were obtained from Comcare and the respective injury compensation insurance regulatory authorities in each state and territory.

5.3 Areas of spending

Public hospitals

In Australia, public hospitals offer free services to eligible patients. These services are broad and include those for admitted and non-admitted patients.

Admitted patient services are for patients formally admitted to hospital, either on the same day or involving an overnight stay of 1 or more nights in hospital. They include medical, surgical and other acute care, as well as child birth, mental health and non-acute care. Non-admitted patient services are provided in emergency departments and outpatient clinics. They include dispensing medicines, district nursing and some community health services.

Public hospitals and the services they provide are jointly funded by the Australian Government and state and territory governments, complemented by payments from non-government sources. Australian Government funds are primarily based on activity levels—Activity Based Funding (Box 5.1). Public hospitals are administered by the relevant state or territory health authority which provide additional funds for them. Non-government sources provide funds to public hospitals for services such as ambulatory care and programs not covered by the MBS.

For the ANHA, state and territory health authorities directly provide estimates of spending on public hospital services through the GHE NMDS. These reflect only public hospital expenses used in providing hospital services. This can include services provided off-site, such as hospital-in-the-home and dialysis.

Public hospital spending excludes expenses incurred in providing community and public health services, dental, patient transport services, and health research undertaken by public hospitals. These excluded expenses are captured under their respective categories, such as Other services or Primary health care. Defence force hospitals are not included in the scope of public hospitals.

In some cases, public hospitals receive fees from medical practitioners in return for the right to practise privately within the hospital. The medical practitioner may then receive payment from the MBS, individuals and/or private health insurance funds for these services. In the ANHA, spending from these sources is captured in the expenditure data, but the fees received by the hospital are not always captured as revenue in the hospital's data. This can effectively lead to a double counting of spending on the same service. For example, it may appear as though the hospital paid for a portion of the service as well as the MBS.

Cross-border service provision

For public hospitals, cross-border activity-based funding under the NHRA is paid directly by the Administrator of the NHFP to the jurisdiction where services were provided.

Private hospitals

Private hospitals cater for patients treated by a doctor of their own choice. Patients are charged fees for accommodation and other services provided by the hospital and relevant medical and paramedical practitioners. Acute care and psychiatric hospitals are included, as are private free-standing day hospital facilities.

Private hospitals are largely owned and operated by private (non-government) organisations—either for-profit companies or not-for-profit organisations. State and territory governments license or register private hospitals.

Data on spending on private hospitals comes from the annual ABS Private Health Establishments Collection, with the most recent results published in *Private Hospitals*, *Australia*, *2016–17* (ABS 2018). The final collection was conducted for 2016–17. Data from this collection contributed to estimates of both individual and other private spending. Consequently, spending estimates for 2017–18 are modelled on historical data. From 2018–19, the Private Hospital Data Bureau (Department of Health 2020) has been used to estimate the patient revenue component of private hospitals. The other revenue component continues to be modelled on historical data. Care should therefore be exercised when comparing private hospital spending between 2018–19 and previous financial years.

Care should also be taken when comparing private hospital spending for years up to 2007–08 with subsequent years. In 2007–08, data were not collected, and an estimate of private hospital spending was made using data from the preceding years. Between 2008–09 and 2016–17, spending by individuals in private hospitals was estimated from reported revenue (rather than from reported spending, as previously used) in the ABS collection.

Contracting of private hospital services

Private hospital spending also includes spending by a private hospital in providing contracted and/or ad hoc treatments for public patients.

This is collected through the GHE NMDS, which reports funding by state and territory governments for services private hospitals provide. This includes where state and territory governments had contracts with private hospitals to provide services to public patients. It also includes where individual public hospitals purchased services from private hospitals for public patients.

Primary health care

Primary health care is typically a person's first contact with the health system. It includes recurrent spending on health goods and services, such as unreferred medical services (for example, general practitioner visits), dental services, other health practitioner services, pharmaceuticals, and community and public health services. It encompasses care not related to a hospital visit. It includes activities such as prevention, health promotion, early intervention, treatment of acute conditions and management of chronic conditions. However, it also includes a small amount of in-hospital MBS (Table A13).

Primary health care is delivered in settings such as general practices, community health centres, Aboriginal health services and allied health practices (for example, physiotherapy, dietetic and chiropractic practices). It comes under numerous funding arrangements.

Spending on primary health care includes spending on unreferred medical services, dental services, other health practitioner services, pharmaceuticals, and community and public health services. Referred non-hospital medical services (for example, specialist visits) are not classified as primary health care.

Unreferred medical services

These are medical services provided to a person by, or under the supervision of, a medical practitioner that have not been referred to that practitioner by another medical practitioner or person with referring rights.

Dental services

These are services registered dental practitioners provide. They include oral and maxillofacial surgery items, orthodontic, pedodontic and periodontic services, cleft lip and palate services, dental assessment and other dental items listed in the MBS. It covers services funded by health funds, state and territory governments and individuals' out-of-pocket payments.

Data on spending on dental services are obtained from sources including private health insurance and the MBS. Out-of-pocket expenses where people attend the dentist with no private health cover is based on a modelled estimate.

Spending on orthodontics is included in dental expenditure, even though the principal purpose of some procedures is cosmetic, rather than health per se.

Other health practitioners

These include practice nurses, chiropractors, optometrists, physiotherapists, occupational therapists, speech therapists, audiologists, dieticians, podiatrists, homeopaths, naturopaths, practitioners of Chinese medicine and other forms of traditional medicine.

Community health and other

These are non-residential health services offered to patients and clients in an integrated and coordinated manner in a community setting, or the coordination of health services elsewhere in the community. Such services are provided by, or on behalf of, state and territory governments.

The term 'other' in 'community health and other' includes recurrent health spending that could not be allocated to a specific category. An example of this is spending by substance abuse treatment centres, providers of general health administration, or providers of regional health services not further defined.

Changes to how the Department of Health reported Aboriginal and Torres Strait Islander health spending contributed to the fall in spending on community health services between 2014–15 and 2015–16. In 2015–16, a number of Aboriginal and Torres Strait Islander community health program funding allocations were combined with other Indigenous programs. This resulted in some spending on community health services being attributed to other areas of spending, such as unreferred medical services.

Public health

Public health involves activities and services funded or provided by state and territory health departments that deal with issues related to populations, rather than individuals. They aim to protect and promote the health of the whole population or specified population subgroups. They also aim to prevent preventing illness or injury in the whole population or specified population subgroups. Examples include communicable disease control, organised immunisation, food standards and hygiene, cancer screening, and prevention of hazardous and harmful drug use.

Benefit-paid pharmaceuticals

These are medications listed in the schedule of the PBS and the Repatriation PBS for which pharmaceutical benefits have been paid or are payable. They do not include listed pharmaceutical items where the full cost is met from the patient co-payment under the PBS or Repatriation PBS.

All other medications

These are pharmaceuticals for which no PBS or Repatriation PBS benefit is paid. They include:

- pharmaceuticals listed in the PBS or Repatriation PBS, the total costs of which are equal to, or less than, the statutory patient contribution for the class of patient (under co-payment pharmaceuticals)
- pharmaceuticals dispensed through private prescriptions that do not fulfil the criteria for payment of benefit under the PBS
- over-the-counter medicines, including pharmacy-only medicines, aspirin, cough and cold medicines, vitamins and minerals, herbal and other complementary medicines, and medical non-durables such as condoms, adhesive and non-adhesive bandages.

Referred medical services

These are medical services where the person has been referred by a general practitioner or medical specialist. Typically, a general practitioner refers patients to specialists, allied health professionals, and pathology or radiology providers.

In-hospital MBS services (except for dental and optometry) are mainly allocated to the 'referred medical services' area of spending, as this is not identified as occurring in a public or private hospital. The benefit paid is attributed to the Australian Government (Table A13), while the fee charged minus benefit paid is attributed to individuals. Spending by private health insurance funds on in-hospital medical services is allocated directly from the data supplied by APRA, and the amount is offset from individual referred medical spending. As a result, spending by the Australian Government, individuals, and private health insurers on public and private hospital services is under-estimated. The spending on referred medical services is over-estimated.

Other services

Patient transport services

These are services or organisations primarily engaged in transporting patients by ground or air—along with health (or medical) care. They are often provided for a medical emergency, but not restricted to this. Vehicles used are generally equipped with lifesaving equipment and operated by medically trained personnel. Patient transport services include public ambulance services or flying doctor services, such as the Royal Flying Doctor Service and Care Flight.

Also included are patient transport programs, such as patient transport vouchers or support programs to help isolated patients with travel to get specialised health care. From 2003–04, this category has included patient transport expenses in the operating costs of public hospitals.

Aids and appliances

These are medical goods used more than once for therapeutic purposes, such as glasses, hearing aids, wheelchairs, orthopaedic appliances, and prostheses fitted externally (rather than implanted surgically). They are not part of admitted patient care.

Administration

These are activities related to formulating and administering government and non-government health policy, and in setting and enforcing standards for health personnel and health services. One activity is regulating and licensing providers of health services.

The term includes only administrative services that cannot be allocated to a particular health good or service. Such services might include maintaining an office for the chief medical officer, a departmental liaison officer in the office of the minister, or other agency-wide items for which it is not possible to derive appropriate or meaningful allocations to particular health programs.

Until 2008–09, departmental costs for some Australian Government regulators were reported under public health services. Regulators were the Therapeutic Goods Administration, Office of the Gene Technology Regulator, and National Industrial Chemicals Notification and Assessment Scheme. These are now reported as administration expenses.

Administration spending for Western Australia went up substantially in 2016–17 after a new reporting framework was introduced by the state's Department of Health. As a result, corporate costs are directly allocated to administration and no longer distributed across service areas.

Research

This is research with a health socioeconomic objective undertaken in tertiary institutions, private non-profit organisations or government facilities. It excludes commercially oriented research funded by private business, the costs of which are assumed to be included in prices charged for the goods and services (for example, medications developed and/or supported by research activities).

Research spending data in this report come from the Research and experimental development survey series, generally only available every second year (ABS 2010, 2020c, 2020d). Where data were unavailable, estimates were calculated based on historical data.

Capital expenditure and capital consumption

Capital expenditure is spending on large-scale fixed assets (for example, new buildings and equipment with a useful life extending over a number of years). Australian Government capital spending is often by way of grants and subsidies to other levels of government or to non-government organisations. State and territory governments, in contrast, devote much of their resources to new and replacement capital for government service providers (for example, hospitals and community health facilities). Non-government capital spending is mainly on private hospitals.

Capital consumption is the amount of fixed capital used each year. It is sometimes referred to as depreciation. Capital consumption is included in recurrent expenditure.

In the ANHA, capital expenditure cannot be disaggregated by the area in which it has been spent. For example, it is not possible to determine the proportion of capital expenditure related to hospitals or primary health care. Conversely, capital consumption is considered as

part recurrent expenditure in the ANHA and throughout the report. It is thus captured or allocated in spending on different areas of health.

The data for capital expenditure and capital consumption are sourced from the ABS's government finance statistics.

In earlier *Health expenditure Australia* reports, private capital consumption was included as part of recurrent spending, while government capital consumption was reported as part of total health expenditure but not recurrent expenditure. From *Health expenditure Australia* 2007–08 (AIHW 2009) onwards, government capital consumption has been included as part of recurrent health expenditure.

5.4 Price indexes (deflators)

A price index, also known as a deflator, is a measure of inflation. It shows relative price change of the amount by which a price has changed over time relative to a base year. For example, the Consumer Price Index is a measure of the average change over time in the prices paid by households for a fixed basket of goods and services.

Constant price estimates for spending aggregates have been derived using annually re-weighted chain price indexes or IPDs. Various methods are used to calculate a price index. The AIHW uses annually re-weighted Laspeyres (base-period-weighted) chain price indexes and IPDs. Chain price indexes are calculated at a detailed level, and give a close approximation to measures of pure price change. IPDs are affected by changes in the composition of goods. Chain indexes, which give better measures of pure price change, are preferred to IPDs, but available indexes are not always ideal. In some cases it has been necessary to use proxies for preferred indexes.

The reference, or base, year for both deflators used in this report is 2018–19. As such, constant price estimates indicate what spending would have been had 2018–19 prices applied in all years. This assumes that any change in spending is a measure of changes in the volume of goods and services purchased.

The Australian economy

In this report, the measure used for general inflation is the IPD for GNE.

GNE is a broad measure of the value of final expenditures on the goods and services purchased in the economy, including personal consumption, investment and purchases made by governments and foreigners, which includes imports but excludes exports. IPD gives an indication of changes in the purchase price of these goods.

For comparative purposes, some analysis is also presented using the GDP IPD. This measures change in the total value of goods and services Australian residents produce, including exports but excluding imports. For example, where exports form a major part of an economy's production, the GDP inflation figure can reflect international trends more than shifts in domestic pricing. In these cases, GNE may give a more accurate indication of inflation in domestic prices.

The health sector

The total health price index is the AIHW's index of annual ratios of estimated total national health spending at current prices to estimated total national health spending at constant prices. Since the national total health price index is a measure of the change in average health prices from year to year at the national level, it can be used as a broad deflator for the

health sector. The AIHW's method for deriving constant price estimates also allows it to produce total health price indexes for each state and territory.

All prices in the total health price index for this report are referenced to 2018–19 (tables 5.2 and 5.3).

Subsections of the health sector

Many price indexes (deflators) exist for the Australian health sector. They are distinguished by the:

- scope of the index—the economic variable to which the price indexes refer (such as all health spending, capital consumption, capital expenditure); the economic agents over which the indexes are combined (such as all agents, households, all government, state and territory governments); and the segment of health services to which the indexes refer (such as all health services, medical services, pharmaceuticals)
- technical manner in which the indexes are constructed—IPD or directly computed indexes (for example, base-weighted, current-weighted or symmetric indexes, chained or unchained indexes).

Different indexes are appropriate for different analytical purposes. The AIHW selected indexes where the scope matches the particular health services being analysed, rather than broad-brush indexes covering all health services.

This report uses a range of deflators (Box 5.3). Most are specific to the type of spending to which they are applied. For hospitals, for example, the government final consumption expenditure (GFCE) hospitals and nursing homes deflator is used.

These deflators are sourced from the ABS:

- GFCE for hospitals and nursing homes
- professional health workers wage rate index
- household final consumption expenditure (HFCE) for chemist goods
- gross fixed capital formation.

The ABS deflators use 2017–18 as their base year, but for this report the AIHW has re-referenced them to 2018–19.

Box 5.3: Area of health spending, by type of deflator applied

Area of spending Deflator applied

Public hospitals^(a)/Public hospitals services^(a) GFCE hospitals and nursing homes
Private hospitals GFCE hospitals and nursing homes
Patient transport services GFCE hospitals and nursing homes
Medical services MBS medical services fees charged

Dental services Dental services

Other health practitioners Other health practitioners

Community health and other^(b) Professional health workers wage rate index

Public health GFCE hospitals and nursing homes

Benefit-paid pharmaceuticals

All other medications

Aids and appliances

PBS pharmaceuticals

HFCE on chemist goods

Aids and appliances

Administration Professional health workers wage rate index
Research Professional health workers wage rate index

Capital expenditure Gross fixed capital formation

Medical expenses tax rebate Professional health workers wage rate index

(a) Public hospital services exclude certain services provided in hospitals, and can include services provided off site, such as hospital in the home and dialysis.

The AIHW derives the chain price index from the MBS medical services fees charged and the IPD for PBS pharmaceuticals from data provided by the Australian Government Department of Health. The IPDs for dental services, other health practitioners, and aids and appliances were derived from ABS and APRA data. Table 5.3 shows the total health price index and other industry-wide indexes used in this report, referenced to 2018–19, the corresponding annual growth rates for each of these indexes over the decade to 2018–19.

The method to derive the deflator for the MBS medical services fees charged has been revised for this year's report. To compare over time, this change has been back-cast to 1985–86.

⁽b) 'Other' includes recurrent health spending that could not be allocated to a specific area of spending. For example, spending by substance abuse treatment centres, providers of general health administration, or providers of regional health services not further defined.

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Tuan Phan, Kien Nguyen, Khoi Dang and Hang Hoang collected and analysed the data and wrote this publication. Jason Thomson and Adrian Webster provided invaluable advice.

Abbreviations

ABS Australian Bureau of Statistics

ACT Australian Capital Territory

AIHW Australian Institute of Health and Welfare

ANHA Australia's National Health Accounts

APRA Australian Prudential Regulation Authority

ATO Australian Taxation Office

DVA Department of Veterans' Affairs

GDP gross domestic product

GFCE government final consumption expenditure

GHE NMDS Government Health Expenditure National Minimum Data Set

GNE gross national expenditure

GST goods and services tax

HEAC Health Expenditure Advisory Committee

HED AIHW health expenditure database

HFCE household final consumption expenditure

IPD implicit price deflator

IRI Information Resources Incorporated

MBS Medicare Benefits Schedule
NHFB National Health Funding Body

NHFP National Health Funding Pool

NHRA National Health Reform Agreement

NPP National Partnership Payment

NSW New South Wales
NT Northern Territory

OECD Organisation for Economic Co-operation and Development

PBS Pharmaceutical Benefits Scheme

Qld Queensland SA South Australia

Tas Tasmania Vic Victoria

WA Western Australia

Glossary

Activity Based Funding: Way of funding public hospitals so they get paid for the number and mix of patients they treat.

admitted patient: Patient who undergoes a hospital's formal admission process to receive treatment and/or care, and ends with a formal separation process.

average annual income: Calculated from average weekly earnings statistics, which are the average gross (before tax) earnings of employees. Estimates of average weekly earnings are derived by dividing estimates of weekly total earnings of the number of employees.

capital consumption: Amount of fixed capital used each year. Also referred to as depreciation.

chain price index: Annually re-weighted index providing a close approximation to measures of pure price change.

co-payment: Payment made by an individual who shares the cost of goods and services with third-party payers, such as a private health insurance provider or the Australian Government for a PBS or Repatriation PBS medicine (see **out-of-pocket costs**).

hospital services: Services provided to a patient receiving **admitted patient** services or non-admitted patient services in a hospital, but excluding non-admitted dental services, community health services, patient transport services, public health activities and health research done within the hospital. Can include services provided off-site, such as dialysis or hospital in the home.

individual net worth: Calculated from household net worth, which is the difference between the stock of assets (financial and non-financial) and stock of liabilities (including shares and other equity).

local government: The 6 states and the Northern Territory have established a further level of government. Local governments handle community needs such as waste collection, public recreation facilities and town planning. In the Australian Capital Territory, responsibilities usually handled by local government are administered by the territory government.

Medicare: National, government-funded scheme that subsidises the cost of personal medical services for all Australians and aims to help them afford medical care. The MBS is the listing of the Medicare services subsidised by the Australian Government. The schedule is part of the wider Medicare Benefits Scheme (Medicare).

out-of-pocket costs: Total costs incurred by individuals for health-care services over and above any refunds from the MBS, the PBS and private health insurance funds (see **co-payment**).

over-the-counter medicines: Medicinal preparations that are not prescription medicines and are primarily bought from pharmacies and supermarkets.

Pharmaceutical Benefits Scheme (PBS): National, government-funded scheme that subsidises the cost of a wide variety of pharmaceutical drugs (see Repatriation Pharmaceutical Benefits Scheme).

private patient: Person admitted to a private hospital or to a public hospital who decides to choose the doctors who will treat them or to have private ward accommodation. These patients are charged for medical services, food and accommodation.

public patient: Person admitted to hospital at no charge and mostly funded through public sector health or hospital service budgets.

Repatriation Pharmaceutical Benefits Scheme (Repatriation PBS): Provides assistance to eligible veterans (with recognised war- or service-related disabilities) and their dependants for pharmaceuticals listed on the PBS and a supplementary repatriation list, at the same cost as patients entitled to the concessional payment under the PBS (see **Pharmaceutical Benefits Scheme**).

total health price index: Ratio of total national health expenditure at current prices, to total national health expenditure at constant prices.

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Regular reporting of national health expenditure is vital to understanding the health system and its relationship to the economy as whole. In 2018–19:

- Total health spending was \$195.7 billion, equating to \$7,772 per person.
- Health spending increased by 3.1%, which was slightly lower than the decade average of 3.5%.
- The majority of health spending went on hospitals (40.4%) and primary health care (33.5%).
- Health spending accounted for 10% of overall economic activity.

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