

# 5 Health resources

## 5.1 Introduction

As with most areas of endeavour, the resources available to provide for the health care needs of a population are limited. Other chapters concentrate on the outcomes of the health system; this chapter focuses on the financial and human resources Australia uses and how they are allocated in achieving those outcomes.

When examining how much is spent on health and who provides the funds for that spending, two concepts are used—funding and expenditure. These concepts, while related, are quite distinct (see Box 5.1). Nevertheless, when discussing expenditure on major health services categories, which include public hospitals, medical services, pharmaceuticals and private hospitals, it is important to include some discussion of the particular funding arrangements for them.

### **Box 5.1: Defining health funding and expenditure**

#### ***Health funding***

*Health funding is reported on the basis of who provides the funds that are used to pay for health expenditure. In the case of public hospital care, for example, although the states and territories incur the related expenditure, the Australian Government and the states and territories together provide over 90% of the funding. Some other funding comes from private health insurers (for insured patients) and from individuals who choose to be treated as private patients and pay any fees charged.*

#### ***Health expenditure***

*Health expenditure is reported in terms of who incurs the expenditure, rather than who ultimately pays for that expenditure. In our example of public hospital care, all the related expenditures (that is, expenditure on medical and surgical supplies, drugs, salaries of doctors and nurses, etc.) are incurred by the states and territories although a considerable proportion of those expenditures is funded by transfers from the Australian Government.*

## **Summary of health resources in Australia**

Below are some important aspects of health resources in Australia featured in this chapter:

- National expenditure on health was equivalent to 9.3% of gross domestic product (GDP) in 2001–02, compared with 8.9% in 1999–00 (Table 5.1).
- Total health expenditure was \$66.6 billion in 2001–02, compared to \$55.8 billion in 1999–00 (Table 5.1). Of this, governments funded 68.6%, which was lower than the government share (69.9%) in 1999–00 (Table 5.11).

- Health expenditure per person was \$3,292 in 2001–02, up from \$3,034 in 1999–00 (constant 2000–01 dollars) (Table 5.3).
- Spending on hospital services accounted for more than one-third (35.4%) of recurrent expenditure in 2001–02, compared with 36.6% in 1999–00 (Table S.48).
- Real growth in recurrent expenditure averaged 5.7% per year between 1999–00 and 2001–02. The major drivers of this growth were expenditures on pharmaceuticals, which averaged growth of 13.9% per year and private hospitals (5.1% per year) (Table S.45).
- The Australian Government provided 46.3% of total funding in 2001–02 compared with 46.9% in 1999–00, while the states, territories and local governments provided 22.3%, compared with 23.0% in the earlier year. Funding from the non-government sector increased from 30.1% to 31.4%. (Table 5.11).
- In 2001, there were 2,322 health workers for every 100,000 people living in Australia. This was an increase from 2,206 in 1996.
- Nursing workers per 100,000 population decreased from 1,267 in 1996 to 1,259 in 2001.
- The health workforce is ageing. About 39% of people employed in health occupations were aged 45 years or more, up from 31% in 1996. The proportion of workers aged 45+ increased faster for females (from 29% to 37%) than for males (from 38% to 43%), reflecting the rapid ageing of the female nursing labour force.
- The ‘oldest’ health occupations were medical workers, complementary therapy workers and pharmacists.
- In the 2001 Census, 3,742 people reported being Indigenous and employed in a health occupation. Half of these were employed in nursing.
- Nearly half (47%) of medical workers reported working 49 or more hours per week, far higher than any other broad health occupational group. Conversely, more than half (51%) of nursing workers worked less than 35 hours per week.
- In most health industries there were decreasing rates of employees with increasing remoteness in 2001. For example, there were 1,147 per 100,000 head of population employed in hospitals in major cities, compared with 601 in very remote areas. Small industries, in particular, were not as well represented in more remote regions. For example, in the optometry and optical dispensing industry, the ratios were 53 per 100,000 population in major cities compared to 14 and 2 in remote and very remote areas, respectively.

## 5.2 Health expenditure

Health expenditure in Australia covers expenditure on the range of health goods and services that are provided by governments, by non-government organisations and by individual health service providers. It also includes expenditure on health research and administration and capital expenditure (such as buildings and equipment).

In this chapter, total expenditure on health is examined in terms of recurrent and capital expenditures. Recurrent expenditure, which relates to operational expenditures, is split between the major types of health goods and services and health-related activities. Capital expenditure, on the other hand, relates to large-scale investment in plant and facilities that often support a range of health services and cannot readily be allocated to individual health goods and services.

Some of the main factors contributing to changes in health expenditure over time are described in this chapter. Expenditure over recent years is compared across states and territories. Furthermore, Australia's expenditure is compared with that of other OECD member countries.

## Expenditure on health in Australia, 1991–92 to 2001–02

Estimated total expenditure on health in Australia in 2001–02 was \$66,582 million or 9.3% of national GDP (Table 5.1). By way of comparison, in 1999–00, Australians spent \$55,809 million or 8.9% of GDP on health, and the \$33,123 million spent on health in 1991–92 represented 8.1% of GDP in that year.

**Table 5.1: Total health expenditure and GDP, current prices, 1991–92 to 2001–02**

Year	Total health expenditure (\$ million)	GDP (\$ million)	Ratio of health expenditure to GDP (%)
1991–92	33,123	406,605	8.1
1992–93	35,098	426,231	8.2
1993–94	36,990	447,024	8.3
1994–95	39,216	471,349	8.3
1995–96	42,082	502,828	8.4
1996–97	45,296	529,885	8.5
1997–98	48,273	561,229	8.6
1998–99	51,629	591,916	8.7
1999–00	55,809	628,620	8.9
2000–01	60,897	669,307	9.1
2001–02 <sup>(a)</sup>	66,582	712,874	9.3

(a) Based on preliminary AIHW and ABS estimates.

Sources: AIHW Health Expenditure Database; ABS *Australian National Accounts—National Income, Expenditure and Product, June quarter*, various years (Cat. No. 5206.0).

Between 1991–92 and 2001–02, real growth in health expenditure averaged 4.6% per year (Table 5.2). The period of most rapid growth, averaging 5.4% per year, was between 1997–98 and 2001–02.

The gradual increase in the ratio of health expenditure to GDP was due to nominal expenditure on health rising faster than nominal expenditure on other areas within the economy. This, in turn was partly the result of faster real growth in the health area and partly due to excess health inflation (see Australian and international health expenditure for an explanation of excess health inflation).

**Table 5.2: Total health expenditure and GDP, constant prices<sup>(a)</sup>, 1991–92 to 2001–02**

Year	Total health expenditure		GDP	
	Amount (\$m)	Growth rate (%)	Amount (\$m)	Growth rate (%)
1991–92	41,002	..	473,559	..
1992–93	43,093	5.1	490,901	3.7
1993–94	44,417	3.1	510,002	3.9
1994–95	46,062	3.7	531,577	4.2
1995–96	48,021	4.3	554,001	4.2
1996–97	50,362	4.9	574,989	3.8
1997–98	52,280	3.8	600,590	4.5
1998–99	54,632	4.5	632,488	5.3
1999–00	57,810	5.8	657,771	4.0
2000–01	60,897	5.3	669,307	1.8
2001–02 <sup>(b)</sup>	64,529	6.0	695,633	3.9
<b>Average annual growth rates</b>				
		1992–93 to 1997–98		4.1
		1997–98 to 2001–02		3.7
		1991–92 to 2001–02		3.9

.. Not applicable.

(a) See Box 5.2 for explanation of constant price estimating method.

(b) Based on preliminary AIHW and ABS estimates.

Sources: AIHW Health Expenditure Database; ABS Australian National Accounts–National Income, Expenditure and Product, June quarter, various years (Cat. No. 5206.0).

### Box 5.2: Constant price estimates and current prices

Wherever ‘constant price’ estimates are shown they are intended to reflect changes in volume expressed in terms of prices in the reference year – 2000–01 in this publication. Most constant price estimates are calculated using the annually re-weighted chain price indexes produced by the Australian Bureau of Statistics (ABS). In some cases, however, chain price indexes are not available, and implicit price deflators derived by the ABS are then used to calculate the constant price estimates.

A full discussion of chain volume measures can be found in the 1997 ABS publication Chain Volume Measures in the Australian National Accounts (ABS Cat. No. 5248.0).

The term ‘current prices’ is used to refer to amounts reported for a particular year, unadjusted for inflation.

### Average per person expenditure on health services

In 2001–02, Australians spent, on average, \$3,397 per person on health (Table 5.3). After adjusting for inflation, per person health expenditure grew between 1991–92 and 2001–02 at an average of 3.4% per year. This growth reflects the combined effects of changes in the average number of health services used and the nature of those services.

**Table 5.3: Health expenditure per person, current and constant prices<sup>(a)</sup>, and annual growth rates, 1991–92 to 2001–02**

Year	Amount (\$)		Growth rate over previous year (%)	
	Current	Constant	Current	Constant
1991–92	1,904	2,357	..	..
1992–93	1,996	2,450	4.8	3.9
1993–94	2,082	2,500	4.3	2.0
1994–95	2,183	2,564	4.9	2.6
1995–96	2,313	2,639	5.9	2.9
1996–97	2,458	2,733	6.3	3.6
1997–98	2,591	2,807	5.4	2.7
1998–99	2,741	2,900	5.8	3.3
1999–00	2,929	3,034	6.9	4.6
2000–01	3,147	3,147	7.4	3.7
2001–02 <sup>(b)</sup>	3,397	3,292	8.0	4.6
<b>Average annual growth rates</b>				
1992–93 to 1997–98			5.4	2.8
1997–98 to 2001–02			7.0	4.1
1991–92 to 2001–02			6.0	3.4

.. Not applicable.

(a) See Box 5.2 for explanation of constant price estimating method.

(b) Based on preliminary AIHW and ABS estimates.

Source: AIHW Health Expenditure Database.

Between 1998–99 and 2000–01, per person expenditure on health in Australia grew at an average of 8.5% per year (Table 5.4). In five jurisdictions, South Australia (17.9%); Western Australia (10.9%); Victoria (10.3%); Queensland (9.5%); and the Northern Territory (15.9%), growth was faster than the national average, while the growth rates in Tasmania (8.0%), New South Wales (5.5%) and the Australian Capital Territory (3.2%) were all below that average.

**Table 5.4: Average per person expenditure on total health, 1998–99 to 2000–01, constant prices<sup>(a)</sup> (\$)**

State/territory	1998–99	1999–00	2000–01	Change 1998–99 to 2000–01 (%)
NSW	2,944	3,033	3,105	5.5
Vic	2,941	3,004	3,245	10.3
Qld	2,901	3,119	3,176	9.5
WA	2,748	2,868	3,047	10.9
SA	2,754	3,017	3,246	17.9
Tas	2,934	3,072	3,168	8.0
ACT	3,019	3,175	3,117	3.2
NT	3,036	3,260	3,518	15.9
<b>Australia</b>	<b>2,900</b>	<b>3,034</b>	<b>3,147</b>	<b>8.5</b>

(a) See Box 5.2 for explanation of constant price estimating method.

Source: AIHW Health Expenditure Database.

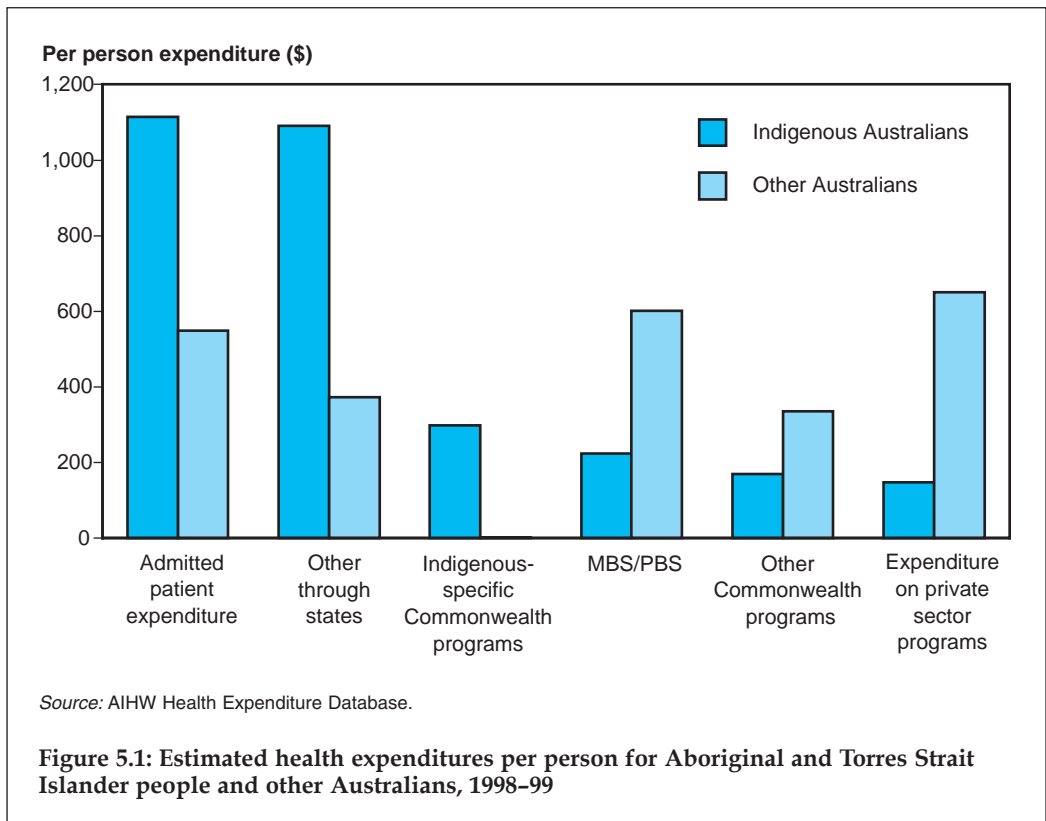
## Expenditure on health services for Aboriginal and Torres Strait Islander people

The latest estimates of expenditure on health for Aboriginal and Torres Strait Islander people relate to 1998–99 (AIHW 2001a).

Despite their much poorer health status on a number of health indicators (see Chapter 4), average per person expenditure on health services for Indigenous people in 1998–99 was only 22% higher than for the rest of the population.

Total recurrent health expenditure on Indigenous people was estimated at \$1,245 million, or 2.6% of total recurrent health expenditure across the entire population. That translates into an average of \$3,065 per Indigenous person, compared with an average of \$2,518 for other Australians (Table S.47).

There were substantial differences in the patterns of expenditure applying to services for Aboriginal and Torres Strait Islander people and to services for non-Indigenous people. The ratio of Indigenous per person expenditure to that of other Australians for all health programs for which state and territory governments had primary responsibility (including public hospitals and community health services) was 2.4:1 (Figure 5.1).



Although the Australian Government jointly funds public hospitals, they are not included as an Australian Government program for the purpose of determining Indigenous to non-Indigenous expenditure ratios. They are included as state or territory government health services.

For the other two major Commonwealth funding programs, Medicare and the PBS, average per person expenditure on Aboriginal and Torres Strait Islander people was just over one-third (37%) that of other Australians. After including spending on Indigenous-specific Australian Government programs (essentially grants to Aboriginal Community Controlled Health Services) and other nationwide Commonwealth health services, the Indigenous to non-Indigenous expenditure ratio was 0.74:1.

Average expenditure on private services (that is, neither Commonwealth nor state or territory services) provided to Aboriginal and Torres Strait Islander people, such as private hospital and dental services, and services provided by other health professionals, was also much lower than for the other Australian population. The Indigenous to non-Indigenous expenditure ratio for all non-government health goods and services, combined was 0.23:1.

**Expenditure on veterans**

Expenditure by the Department of Veterans’ Affairs (DVA) on health and other care services in 2002–03 totalled \$3,631 million. This provided services largely to eligible veterans, their war widows and widowers with gold or white DVA cards (Table 5.5). The largest components were for hospitals, and for Local Medical Officers (general practitioners) and specialists. Note that elsewhere in this chapter, DVA expenditure is included in expenditure of the Australian Government but not separately identified.

**Table 5.5: Department of Veterans’ Affairs health expenditure<sup>(a)</sup>, 2002–03**

Type of health service	\$ million
Public and Private hospitals	1,446
Local Medical Officers and Specialists	633
Residential Aged Care Subsidy	630
Pharmaceuticals	417
Allied Health	110
Rehabilitation Appliances	75
Dental Services	67
Community Nursing	63
Veterans’ Home Care	75
Travel for Treatment	68
Other	46
<b>Total</b>	<b>3,631</b>

(a) Actual expense for 2002–03.

Note: Components do not add to totals due to rounding.

Source: DVA unpublished data.

DVA health expenditure on eligible gold card holders rose from an average of \$5,800 per card holder in 1996–97 to an estimated \$10,300 in 2002–03 (Table 5.6).

**Table 5.6: Department of Veterans’ Affairs health expenditure, aggregate and per eligible gold and white card holder<sup>(a)</sup>, 1996–97 to 2002–03**

Year	DVA-administered health expenditure (\$ million)	Eligible veteran population <sup>(b)</sup> at 30 June (number)	Expenditure per gold cardholder (\$)
1996–97	1,600	340,327	5,800
1997–98	1,800	339,310	6,600
1998–99	2,000	353,840	6,900
1999–00	2,300	348,996	7,600
2000–01	2,500	345,131	8,400
2001–02	2,700	340,716	9,350
2002–03 <sup>(c)</sup>	3,000	335,160	10,300

(a) Excludes residential aged care subsidy, salaries and administration and certain minor items not directly related to veteran health care (e.g. health research). These expenditures are included in Table 5.7.

(b) Includes gold and white cardholders.

(c) Estimate subject to revision.

Source: DVA Annual Reports and DVA unpublished data.

### Recurrent expenditure by type of health service

In 2001–02, recurrent expenditure on health was estimated at \$62,693 million, or 94.2% of total expenditure on health, whereas in 2000–01 recurrent expenditure sat at \$57,297 million (tables S.43 and S.44). The largest component of recurrent expenditure in 2001–02 was for hospital services, totalling \$22,236 million. This was made up of public (non-psychiatric) hospitals (\$16,678 million), public (psychiatric) hospitals (\$409 million) and private hospitals (\$5,149 million).

Spending on medical services (\$11,187 million) and pharmaceuticals (\$8,989 million) were the next largest expenditures, representing 17.9% and 14.4% of all recurrent expenditure, respectively (Table S.48). High-level residential care and dental services accounted for 6.6% and 5.9% of recurrent expenditure, respectively. A further \$2,521 million or 4.0% of recurrent expenditure was spent on services provided by other health professionals, such as physiotherapists, chiropractors, acupuncturists, psychologists and podiatrists.

#### *Expenditure on hospitals*

Hospital services (public and private, combined) accounted for 35.4% of recurrent expenditure in 2001–02. This was marginally higher than in 2000–01 (35.3%). It was below the proportion in 1999–00 (36.6%) and much lower than at the beginning of the 1990s (39.7% in 1991–92) (Table S.48).

The decline between 1991–92 and 2001–02 was largely related to the public hospital systems of the states and territories. In 1991–92, 30.7% of all recurrent expenditure on health was for public (non-psychiatric) hospitals. This fell to 27.7% by 1999–00, 26.8% in 2000–01 and 26.7% in 2001–02. Expenditure on private hospitals, on the other hand, which had consumed 7.1% of recurrent expenditure in 1991–92, rose to 8.2% in 1998–99, fell to 8.0% in 1999–00 and 7.8% in 2000–01, and recovered to 8.0% in 2001–02.

Expenditure on public (non-psychiatric) hospitals represented three-quarters of all expenditure on hospitals during 2001-02 (Table S.42A). Such hospitals are largely funded through five-year funding agreements between the Commonwealth and the states and territories. Consequently, those funding agreements exert major influences on levels of expenditure on hospitals.

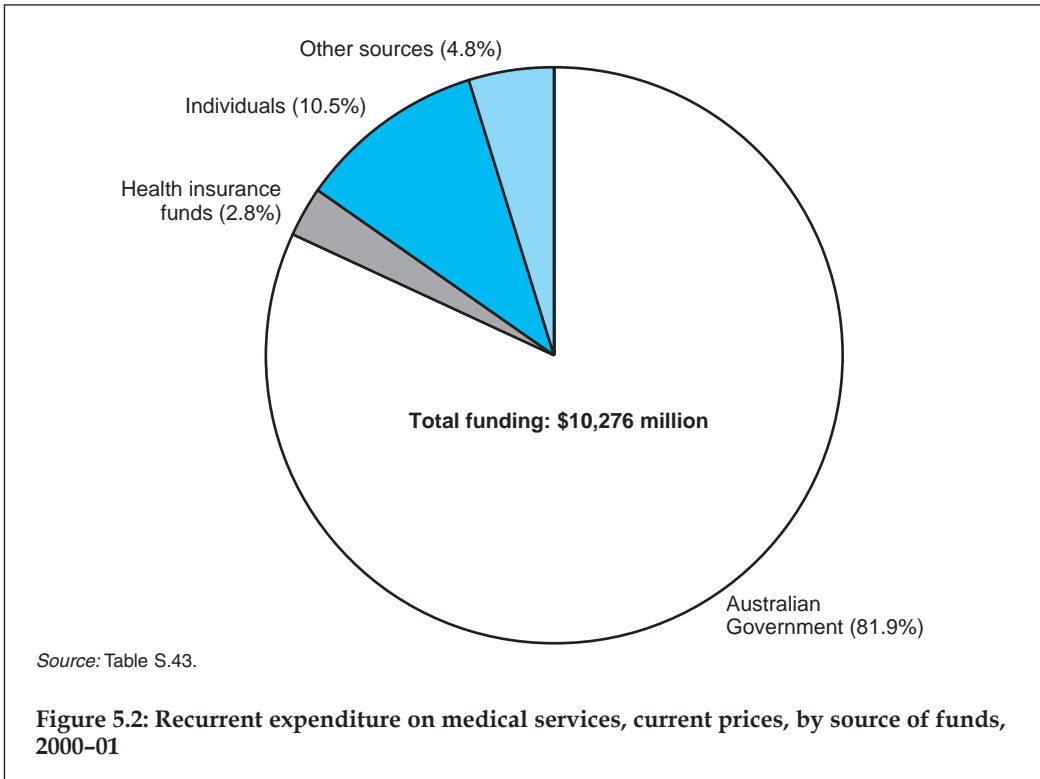
Private hospitals accounted for 23.2% of expenditure on hospitals and public (psychiatric) hospitals for the remaining 1.8%.

*Expenditure on medical services*

The following discussion of expenditure on medical services relates essentially to services provided by private medical practitioners operating on a fee-for-service basis. Most of these services attract benefits under Medicare. It includes medical services provided to private patients in hospitals, but does not include the 'medical' component of care provided to public patients in public hospitals, which is included as expenditure on hospitals.

Total expenditure on medical services in 2000-01 was \$10,276 million (Table S.43 and Figure 5.2). In 2001-02 it was estimated at \$11,187 million (Table S.44), or 17.9% of recurrent expenditure in that year (Table S.48).

Expenditure on medical services averaged real growth of 3.7% per year between 1991-92 and 2001-02 (Table S.45). Preliminary expenditure estimates for 2001-02 indicate that \$11.2 billion was spent on medical services in that year (Table S.44).



### *Medical indemnity*

Most of the estimated \$11.2 billion spent on medical services in 2001–02 flowed through private medical practices and was used to finance the expenses incurred by those practices. An important such expense is the premiums paid to indemnify the practices themselves and the practitioners who operate within the practices. In the case of general medical practices, professional indemnity insurance expenses were estimated at \$61.3 million in 2001–02 (ABS 2003). This represented, on average, 1.9% of the total operating expenses of those medical practices. For specialist practices, the professional indemnity insurance cover expenses totalled \$191.6 million, or about 4.8% of their operating expenses. For pathology laboratories it was \$3.7 million (0.3% of operating expenses). These estimates relate only to the expenses incurred by medical practices on behalf of either the practices or the medical practitioners who work in the practices (and who may be principals or employees of the practices). Some individual practitioners personally pay for indemnity cover and those payments are not included in expenses of the practices; therefore, the amounts shown above do not represent total expenditure on professional indemnity insurance.

### *Expenditure on pharmaceuticals*

Expenditure on pharmaceuticals includes expenditure on prescribed medications (both PBS and non-PBS) as well as over-the-counter medicines and other non-durable therapeutics.

Pharmaceutical expenditure increased consistently as a component of recurrent expenditure during the 1990s. In 1991–92 expenditure on pharmaceuticals sold in pharmacies, supermarkets and other retail outlets represented 9.9% of recurrent expenditure; this had risen to 14.1% by 2000–01 and an estimated 14.4% in 2001–02 (Table S.48).

Estimated expenditure on these non-hospital pharmaceuticals, alone, was \$8,989 million in 2001–02. This comprised \$5,586 million on benefit-paid pharmaceuticals and \$3,320 million on other non-hospital pharmaceuticals. The Commonwealth contributed \$4,746 million in benefits under the PBS and the Repatriation Pharmaceutical Benefits Scheme (RPBS). Individual patients paid \$841 million in statutory co-payments under the PBS and RPBS and \$3,189 million by way of payments for non-benefit pharmaceuticals (Table 5.7).

Total expenditure on all pharmaceuticals in 2001–02 was estimated at \$10,304 million (Table 5.7). This included \$1,315 million of drugs used by hospitals in the provision of hospital services. These in-hospital expenditures are not normally included in national estimates of expenditure on pharmaceuticals, but are included as part of estimates of expenditure on hospitals. The \$1,315 million estimated expenditure on in-hospital drugs was made up of \$1,105 million on drugs dispensed in public hospitals and \$210 million on drugs in private hospitals.

Expenditure on benefit-paid items under the PBS was the largest single component of total expenditure on pharmaceuticals. The cost to government under the PBS (not including expenditure under the RPBS) in 2001–02 was \$4,181 million. This increased to an estimated \$4,572 million in 2002–03 (Table 5.8). The share of total cost of the PBS met by the Commonwealth has risen each year in recent years. In 1998–99 the government share was 82.2% and this rose to 83.8% in 2001–02 and 84.2% in 2002–03.

**Table 5.7: Expenditure on pharmaceuticals<sup>(a)</sup>, current prices, 2001–02 (\$ million)**

	Benefit-paid pharmaceuticals	All other pharmaceuticals		Total pharmaceuticals
		Non-hospital	Hospital	
<b>Public sector</b>				
Australian Government Department of Veterans' Affairs	357	..	..	357
Australian Government Department of Health and Ageing <sup>(a)(b)</sup>	4,389	86	..	4,475
Public acute care and psychiatric hospitals <sup>(c)</sup>	..	..	1,105	1,105
<i>Total public sector</i>	<i>4,746</i>	<i>86</i>	<i>1,105</i>	<i>5,936</i>
<b>Private sector</b>				
Health insurance funds	..	44	..	44
Individuals	841	3,189	..	4,030
Private hospitals <sup>(d)</sup>	..	..	210	210
Other non-government	..	83	..	83
<i>Total private sector</i>	<i>841</i>	<i>3,317</i>	<i>210</i>	<i>4,334</i>
<b>Total<sup>(b)</sup></b>	<b>5,586</b>	<b>3,403</b>	<b>1,315</b>	<b>10,304</b>

.. Not applicable.

(a) Includes \$208 million in Section 100 payments for human growth hormones, IVF and other subsidised pharmaceuticals.

(b) Excludes \$307 million in payments for highly specialised drugs.

(c) Includes \$275 million in Australian Government payments to states for highly specialised drugs.

(d) Includes \$32 million in Australian Government payments for highly specialised drugs.

*Note:* Some components may not add to totals due to rounding.

*Source:* AIHW Health Expenditure Database.

**Table 5.8: Cost of PBS<sup>(a)</sup> items to the Australian Government and patients, 1998–99 to 2002–03 (\$ million)**

Benefit category	1998–99	1999–00	2000–01	2001–02	2002–03
<b>Patient contributions</b>					
General patients	318	346	407	444	489
Concessional patients	283	306	337	362	370
Total patient contributions	601	652	744	806	860
<b>Government benefits</b>					
General patients–no safety net	469	521	662	704	770
General patients–safety net	107	107	128	151	174
Total general patients	576	628	790	855	944
Concessional patients–no safety net	1,740	2,001	2,360	2,584	2,769
Concessional patients–safety net	467	548	660	743	859
Total concessional patients	2,207	2,548	3,020	3,326	3,629
Total cost to government	2,783	3,177	3,810	4,181	4,572
<b>Total cost of PBS benefit-paid items<sup>(b)</sup></b>	<b>3,384</b>	<b>3,828</b>	<b>4,554</b>	<b>4,987</b>	<b>5,432</b>

(a) Does not include Repatriation Pharmaceutical Benefits Scheme.

(b) Excludes Section 100 payments for human growth hormones, IVF and other non-PBS subsidised pharmaceuticals.

*Note:* Some components may not add to totals due to rounding.

*Source:* DoHA 2003.

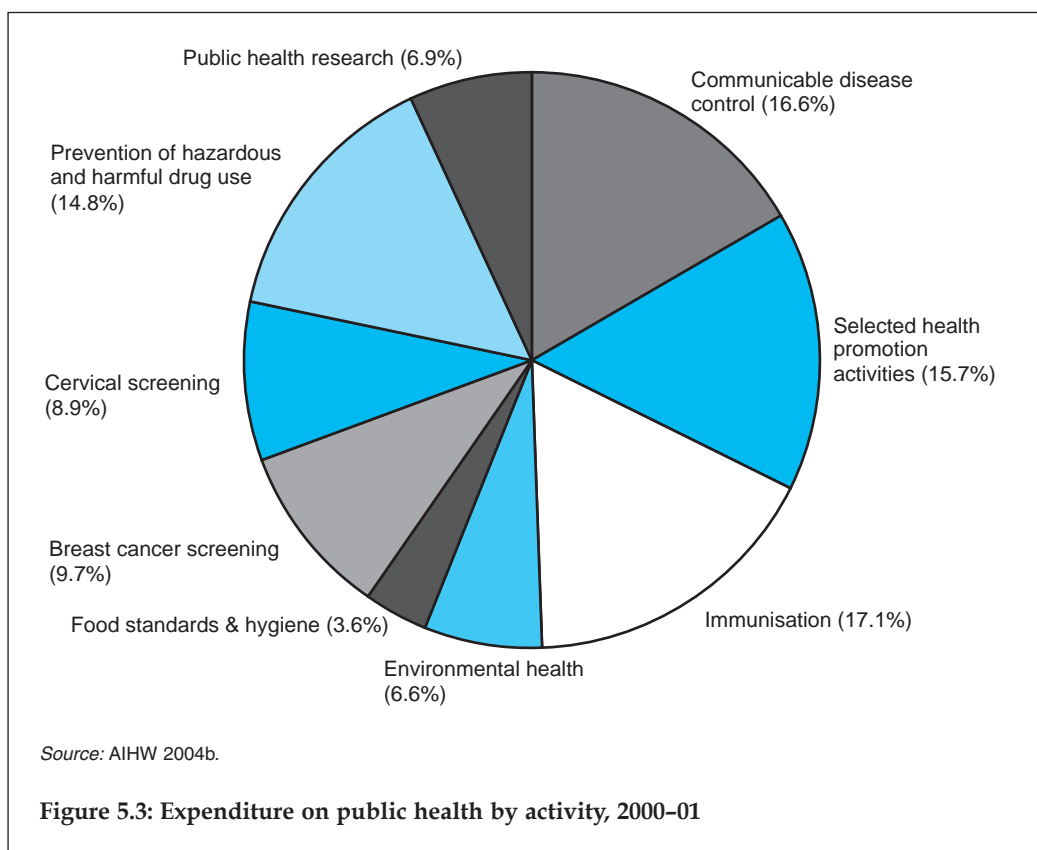
### Expenditure on public health activities

Expenditure on public health activities has been described through the National Public Health Expenditure Project, an initiative of the National Public Health Partnership (AIHW 2001c; AIHW 2002b).

In 2000–01, estimated national expenditure on public health by the Australian Government and by state and territory health departments was \$987.0 million (Table S.50). This amounted to 1.7% of total recurrent expenditure on health during that year.

At the national level, expenditure on organised immunisation accounted for \$169.0 million or 17.1% of all expenditure on public health activities during 2000–01 and was the most significant single area of expenditure (Figure 5.3). The next largest areas of expenditure were communicable disease control (16.6% or \$163.6 million) and selected health promotion (15.7% or \$155.3 million). Another significant area of expenditure was on prevention of hazardous and harmful drug use (\$146.2 million).

State and territory health departments spent \$690.7 million on public health activities, of which \$253.0 million was funded by the Australian Government. In addition, the Australian Government spent \$296.3 million directly on its own public health programs.



## Capital expenditure

The roles of the different sectors in funding capital expenditure are quite diverse. State and territory governments control large-scale assets such as hospitals, community health centres and residential aged care facilities. Consequently, most of their capital expenditure is for the purchase of new or replacement assets. Most non-government investment relates to private hospitals and residential care facilities using a combination of funding by the private sector and by governments.

Total capital expenditure in 2000–01 was \$2,631 million (Table S.43). Of this, 52.2% was sourced from state, territory and local governments. Non-government sources and the Australian Government accounted for 44.6% and 3.2%, respectively (Table 5.9).

**Table 5.9: Shares of outlays on health capital, current prices, 1991–92 to 2000–01 (per cent)**

Year	Government		Total	Non-government	Total
	Australian Government	State/territory and local			
1991–92	12.9	50.7	63.6	36.4	100.0
1992–93	8.8	49.4	58.1	41.9	100.0
1993–94	5.3	48.5	53.9	46.1	100.0
1994–95	0.5	54.6	55.1	44.9	100.0
1995–96	4.4	49.6	54.0	46.0	100.0
1996–97	2.7	52.1	54.8	45.2	100.0
1997–98	2.6	57.0	59.7	40.3	100.0
1998–99	6.5	54.3	60.8	39.2	100.0
1999–00	3.2	53.1	56.2	43.8	100.0
2000–01	3.2	52.2	55.4	44.6	100.0

*Note:* Some components may not add to totals due to rounding.

*Source:* AIHW Health Expenditure Database.

## Australian and international health expenditure

This section compares Australia's health expenditure during the 1990s with that of other members of the OECD, with particular reference to six countries (Canada, France, Japan, New Zealand, the United Kingdom and the United States) with which Australia shares similar economic and social structures. The comparison gives an indication of the relative economic share of their health service delivery systems. Differences between countries, in terms of what is included as 'health services', complicate the comparison to some extent. Therefore, caution is advised when drawing conclusions from these comparisons.

Considerable work is currently being undertaken by the OECD to standardise definitions and increase the international comparability of estimates of health expenditure by member countries.

One useful measure of the relative burdens of health systems in different countries is the health expenditure to GDP ratio. This measures the proportion of a country's production that is used up by its health system. The average health expenditure to GDP ratio for all those OECD members that submitted data in both 1991 and 2001 was 9.4%

in 1991, 9.9% in 1996 and 10.6% in 2001 (Table S.52). For the group of seven selected countries mentioned above, the ratio was 10.0% in 1991, 10.6% in 1996 and 11.5% in 2001 (Table S.49). Australia's ratio (8.1% in 1991, 8.5% in 1996 and 9.3% in 2001) was consistently below both the OECD average and that of the smaller group throughout the period. The United States was by far the highest spender on health care, spending 13.9% of GDP on health in 2001.

Health expenditure per person was calculated after adjusting for differences in the purchasing powers of national currencies. This was done using broad GDP purchasing power parity calculations.

Throughout the period, Australia's per person expenditure on health was below both the OECD average and that of the seven selected countries. In 2001, its average was \$3,397, compared with the OECD average of \$3,690 (Table S.52) and the smaller group average of \$4,755 (Table 5.10).

**Table 5.10: Health expenditure per person, Australia and other selected OECD countries, current prices, 1991 to 2001<sup>(a)</sup> (\$)**

Year <sup>(a)</sup>	Australia	Canada	France	Japan	NZ	UK	USA	Average <sup>(b)</sup>
1991	1,904	2,483	2,240	1,594	1,355	1,410	4,051	2,847
1996	2,458	2,721	2,583	2,192	1,639	1,872	4,930	3,541
2001	3,397	3,741	3,432	2,856	2,291	2,669	6,548	4,755

(a) Australian and New Zealand data relate to the year ending 30 June in the following year; data for France relate to the calendar year indicated; data for Canada, Japan and the United Kingdom relate to the year commencing 1 April in the year indicated; and United States data relate to the year ending 30 September.

(b) Average weighted by population.

Note: Expenditures converted to Australian dollar values using GDP purchasing power parities.

Sources: AIHW Health Expenditure Database, OECD 2003.

Nominal increases in expenditure on health over time are the result of the combined effects of inflation (both general inflation and health inflation) and changes in the quantities of services used, either from population growth or from more intensive per person use of services.

Prices within the health sector often move at different rates from other prices throughout an economy. Movements in health prices (health inflation) result from a combination of the general inflationary pressures that apply throughout the economy and inflationary pressures that relate specifically to the health sector. The inflation (above the general rate of inflation) that can be attributed to these health sector-specific price pressures is referred to as 'excess health inflation'. The ability of a nation's health financing system to control health prices is an important factor in controlling growth in the share of GDP required to fund expenditure on health.

During the 1990s Australia's excess health inflation rate averaged 0.7% (Table S.53). Its general inflation rate over the same period averaged 1.8%, giving it an overall health inflation rate of 2.5% per year between 1991 and 2001. Canada (0.1%) and France (0.0%) both had excess health inflation rates that were below Australia's. Japan, on the other hand, had an excess health inflation rate of 2.7%.

Consequently, while Australia's health expenditure to GDP ratio increased by 1.2 percentage points, from 8.1% in 1991 to 9.3% in 2001, Canada's ratio did not increase from its 1991 level (9.7%) and France's increased by only 0.7 percentage points, from 8.8% in 1991 to 9.5% in 2001 (Table S.51). Japan's ratio, on the other hand, grew by 2.1 percentage points, from 5.9% in 1991 to 8.0% in 2001.

### 5.3 Funding of health expenditure

Funding for health services comes from both government and non-government sources. In the case of government sources, the contribution of each level of government—Commonwealth, state and territory, or local—differs, depending on the particular health services concerned.

Both the major levels of governments (that is, the Commonwealth (Australian Government), and the state and territory governments) provide funding for health services from their respective revenue sources. Local governments also fund health services from their own revenues. There are often difficulties in distinguishing funding provided by local governments from that provided by state governments for particular health care activities. Therefore, for much of the discussion that follows, funding by state and territory governments and local governments are combined.

The Commonwealth provided 46.3% of the funding for health expenditure in 2001–02; states and territories and local governments funded 22.3% and non-government sources provided 31.4% of funding (Table 5.11).

**Table 5.11: Government and non-government sector expenditure as a proportion of total health expenditure, 1991–92 to 2001–02, current prices (per cent)**

Year	Government			Non-government				
	Australian Government <sup>(a)</sup>	State/territory and local	Total	Health insurance funds	Individuals <sup>(a)</sup>	Other	Total	Total
1991–92	42.8	24.6	67.3	11.5	16.7	4.5	32.7	100.0
1992–93	43.6	23.4	66.9	11.3	16.8	4.9	33.1	100.0
1993–94	45.1	21.3	66.4	11.0	17.0	5.7	33.6	100.0
1994–95	44.8	21.6	66.3	10.7	17.1	5.9	33.7	100.0
1995–96	45.1	22.0	67.1	10.5	16.0	6.3	32.9	100.0
1996–97	43.7	22.9	66.7	10.4	16.7	6.3	33.3	100.0
1997–98	44.7	23.8	68.5	8.8	16.5	6.1	31.5	100.0
1998–99	46.1	22.9	69.0	7.5	17.5	6.0	31.0	100.0
1999–00	46.9	23.0	69.9	6.5	17.4	6.2	30.1	100.0
2000–01	47.1	22.6	69.7	6.8	18.2	5.3	30.3	100.0
2001–02 <sup>(b)</sup>	46.3	22.3	68.6	7.4	18.6	5.4	31.4	100.0

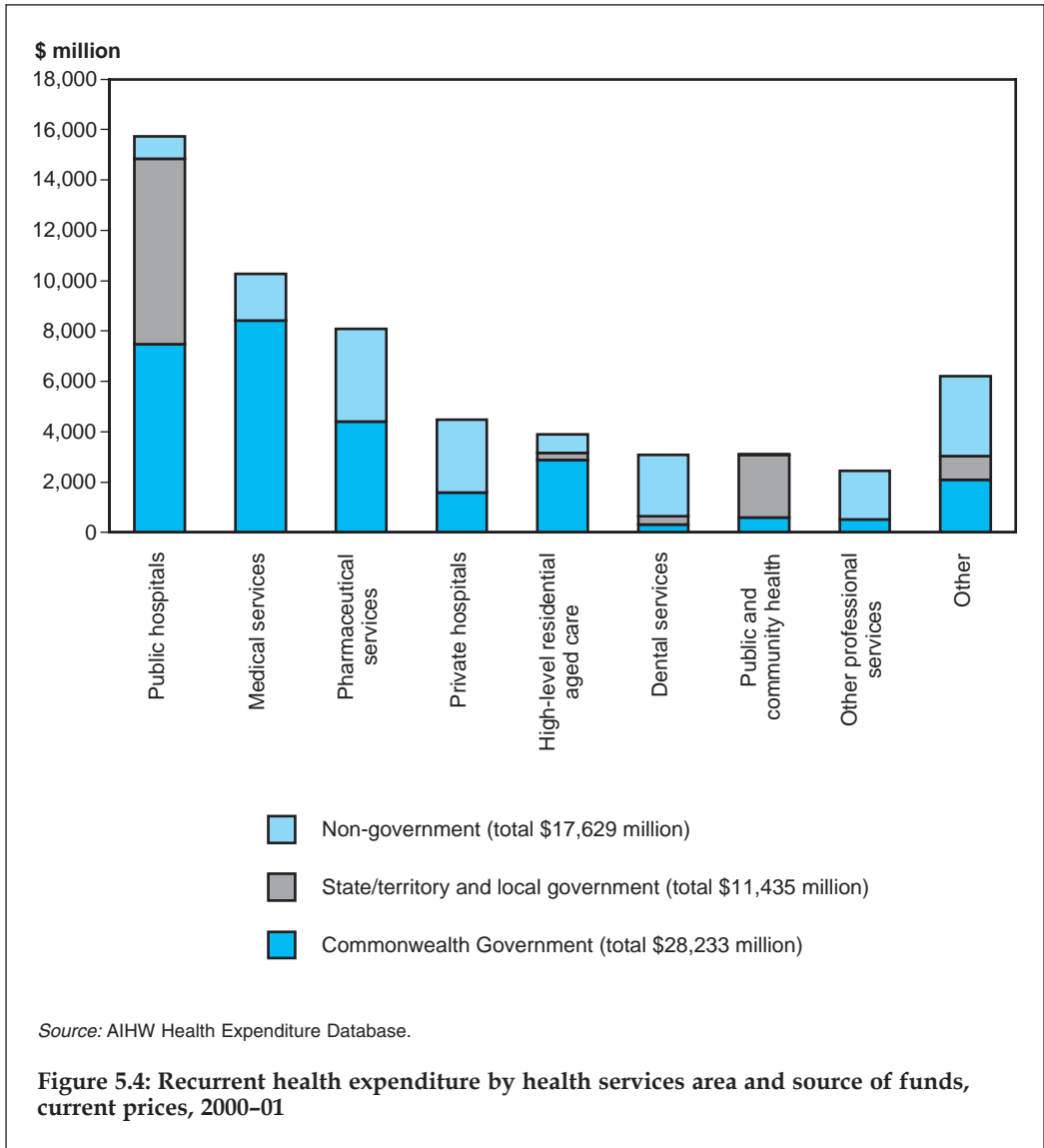
(a) Australian Government and individuals' expenditure has been adjusted for tax expenditures (see Table S.42).

(b) Based on preliminary AIHW and ABS estimates.

Note: Some components may not add to totals due to rounding.

Source: AIHW Health Expenditure Database.

As mentioned previously, the relative importance of the major funding sources varies according to the type of health service being funded. The Commonwealth is the most important source of funds for high-level residential aged care, medical services and health research. State and territory governments, on the other hand, provide most of the funding for community health services and public health activities. Funding for public hospitals is shared between the Australian Government and the states and territories, while funding for pharmaceuticals is shared between the Australian Government and non-government sources. Private hospitals are largely funded by non-government sources (Figure 5.4).



## Funding by the Commonwealth

The Commonwealth provides most of the funding for:

- medical services and certain dental and other professional services covered by Medicare;
- high-level residential aged care; and
- pharmaceuticals under the Pharmaceutical Benefits Scheme (PBS).

Yet another avenue for funding by the Commonwealth is through specific purpose payments (SPPs) to the states and territories. The main health SPPs provided during 2000–01 were the payments under the Australian Health Care Agreements (AHCAs) and the Public Health Outcomes Funding Agreements, and SPPs for the provision of highly specialised drugs to outpatients in public hospitals and blood transfusion services.

It also funds health activities indirectly by subsidising private health insurance cover through the private health insurance rebates.

In 2001–02 more than half of the Commonwealth's recurrent health funding was directed to medical services (29.6%) and public (non-psychiatric) hospitals (26.2%) (calculated from Table S.44). Pharmaceuticals (15.8%) and high-level residential aged care (10.1%) were also major consumers of the Commonwealth's recurrent funding in 2001–02.

The Australian Government's Medicare Levy (see Box 5.3) raised \$5.0 billion in 2001–02. This was equivalent to 16.2% of the estimated total health funding by the Australian Government, and is slightly lower than its share of 16.9% in 1999–00. As a proportion of total Commonwealth funding of health, the levy's contribution was higher than in its first full year of operation (1984–85), when it was 10.1%.

### Box 5.3: Medicare levy

*All Australian Government funding for health services comes from its general revenues, one part of which is notionally identified as health-related – the Medicare Levy.*

*This levy was introduced in 1984 and was originally set at 1.0% of taxable earnings. It has been increased several times since then and is currently set at 1.5% of taxable income. It has also been subject to 'one-off' surcharges from time to time to cover non-health initiatives of the Australian Government.*

*From October 1997, a surcharge of 1.0% has been levied on high-income earners without private insurance cover for hospital care.*

## Funding by state and territory and local governments

The bulk of the funding from this combined source comes from the state and territory governments. The contribution by local governments is confined to some high-level residential aged care homes and public and community health services.

State and territory governments also make health-specific payments to local governments, and these are included in the estimates of funding by the state or territory governments concerned. Likewise, Commonwealth payments to the state and territory

governments for health are regarded as funding by the Australian Government and are not included as funding by state and territory governments.

Nationally, most funding by state, territory and local governments was directed to services in public hospitals (\$8.1 billion or 54.5% in 2001–02). In addition, a large proportion of the capital expenditure funded by state and local governments would be in respect of public hospital facilities (Table S.44).

State and territory governments fund a range of health goods and services from their own resources. In addition to their joint funding of public hospital services, states and territories incur expenditure in regulating other health services that operate within their borders, and providing or purchasing ambulance, dental and community health services. They provide most of the funding for these types of services and are a major funding source for public health activities in Australia.

### **Funding by non-government sources**

The main non-government funding sources are out-of-pocket expenditure by individuals and benefits paid by private health insurance. Other non-government sources include providers of compulsory motor vehicle third party insurance and workers' compensation insurance.

In 2001–02 out-of-pocket payments totalled \$12.5 billion, or 60% of all non-government health funding. Private health insurance funds contributed \$4.9 billion (23%), and a further \$3.6 billion (17%) came from other sources, such as the compulsory motor vehicle third party and workers' compensation insurers and private funders of capital.

### **Real growth in funding, by sources of funds**

Over the longer period (1991–92 to 2001–02) funding by governments has generally grown more rapidly than non-government funding. But in recent years (1999–00 to 2001–02) non-government funding growth (7.5% per year) has outstripped growth in expenditure by both the Commonwealth (6.1%) and states and territories (4.4%) (Table 5.12).

States and territories are responsible for funding in areas with relatively lower growth rates than those for which the Australian Government provides most of the funding. For example, a large share of funding by states and territories is directed to public hospitals. Total expenditure on public hospitals between 1991–92 and 2001–02 grew in real terms at an average of 3.0% a year (3.3% for public (non-psychiatric) hospitals and –5.9% for public (psychiatric) hospitals (Table S.45)). On the other hand, expenditure on medical services and pharmaceuticals, for which the Commonwealth provides most of the funding, experienced real average growth of 3.8%, and 9.4% per year, respectively, over that same period.

### **Influence of Commonwealth–state health service funding agreements**

Commonwealth and state and territory funding for public hospitals and some related state health services has, during the life of Medicare, been governed by a series of five-year agreements between the Commonwealth and each of the states and territories (see Box 5.4 for details). These have had an important influence on both the overall level of expenditure on health in Australia and on the contributions made by the different sources to the funding of health services.

**Table 5.12: Funding of health, constant prices<sup>(a)</sup>, and annual growth rates, 1991–92 to 2001–02**

Year	Government							
	Australian Government <sup>(b)</sup>		State/territory and local		Non-government <sup>(b)</sup>		Total	
	Amount (\$m)	Growth (%)	Amount (\$m)	Growth (%)	Amount (\$m)	Growth (%)	Amount (\$m)	Growth (%)
1991–92	16,722	..	9,531	..	14,749	..	41,002	..
1992–93	17,982	7.5	9,486	-0.5	15,626	5.9	43,093	5.1
1993–94	19,139	6.4	8,993	-5.2	16,285	4.2	44,417	3.1
1994–95	19,886	3.9	9,526	5.9	16,650	2.2	46,062	3.7
1995–96	21,090	6.1	10,260	7.7	16,671	0.1	48,021	4.3
1996–97	21,665	2.7	11,369	10.8	17,328	3.9	50,362	4.9
1997–98	23,259	7.4	12,339	8.5	16,682	-3.7	52,280	3.8
1998–99	25,027	7.6	12,370	0.2	17,236	3.3	54,632	4.5
1999–00	26,978	7.8	13,269	7.3	17,564	1.9	57,810	5.8
2000–01	28,734	6.5	13,751	3.6	18,412	4.8	60,897	5.3
2001–02 <sup>(c)</sup>	29,799	3.7	14,449	5.1	20,281	10.2	64,529	6.0
<b>Average annual growth rates</b>								
1992–93 to 1997–98		5.3		5.4		1.3		3.9
1997–98 to 2001–02		6.4		4.0		5.0		5.4
1991–92 to 1999–00		6.2		4.2		2.2		4.4
1999–00 to 2001–02		6.1		4.4		7.5		5.7
1991–92 to 2001–02		5.9		4.2		3.2		4.6

.. Not applicable.

(a) See Box 5.2 for explanation of constant price estimating method.

(b) Australian Government and non-government sector funding adjusted for tax expenditures (see Table S.42).

(c) Based on preliminary AIHW and ABS estimates.

Note: Some components may not add to totals due to rounding.

Source: AIHW Health Expenditure Database.

### **Box 5.4: Commonwealth–state health funding agreement periods**

*First Medicare (Compensation) Agreement: 1984 to June 1988*

*Second Medicare Agreement: 1 July 1988 to 30 June 1993*

*Third Medicare Agreement: 1 July 1993 to 30 June 1998*

*First Australian Health Care Agreement: 1 July 1998 to June 2003*

*Second Australian Health Care Agreement: 1 July 2003 to 30 June 2008*

The agreements influence the relative shares of funding for total health provided by the different levels of government in particular years. In the first year following the signing of a set of agreements, the Commonwealth's share of funding tends to increase. Over the remainder of the agreements period, Commonwealth funding declines as the states and territories increase their funding share.

This trend is masked in the agreements period 1998–2003, primarily because of the Commonwealth’s 30% health insurance premium rebate, which has helped to maintain the Commonwealth’s share of funding. Consequently, in the fourth year of the agreements, 2001–02, the Commonwealth’s share of funding (46.3%) was marginally higher than in the first year, 1998–99 (Table 5.11).

### **Box 5.5: Treatment of 30% rebate on private health insurance premiums in expenditure estimates**

*When individuals purchase private health insurance, they are charged periodic premiums (per month, quarter, year etc.). These premiums enable the private health insurers to fund their liabilities with respect of approved health expenditure incurred by people with insurance cover.*

*The Private Health Insurance Incentives Act (1997) introduced a means-tested subsidy aimed at helping low-to-middle income earners obtain private health insurance cover. This was replaced, in January 1999, by a 30% premium rebate that is payable to anyone with private health insurance cover. The rebate, like the subsidy it replaced, may be claimed as a reduced health insurance premium or as a tax rebate. As such, the rebate reduces the price of private health insurance and is not directly related to potential benefits liability of the funds in respect of those members. At the same time, the revenues flowing into the funds are maintained at a level considered necessary to meet the emerging liabilities of the funds.*

*The gross premiums charged by funds (including the subsidy or rebate) are based on a community rating principle. As such, the premiums can vary between funds given the actual and potential benefit liabilities of the entire fund but not between the individual members on the basis of individual risk.*

*Before 1997 all health benefits paid out of the funds, plus the cost of administering the funds, were regarded as health funding by health insurance funds.*

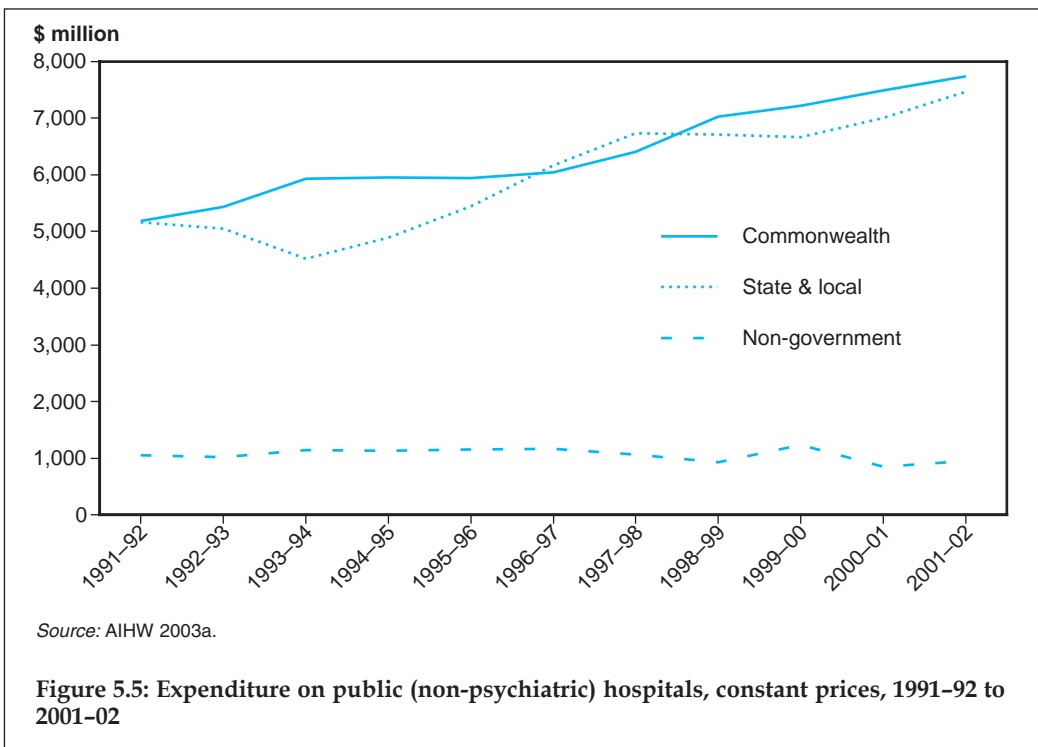
*The introduction of the Private Health Insurance Incentives Subsidy (PHIIS) and its replacement premium rebate meant that part of the revenue used by the funds to pay for the health benefits and administration is provided by the Australian Government. In this way, the Commonwealth shares with the funds the funding of part of the charges raised by service providers.*

*In this report, the 30% rebate on premiums is allocated across all the expenses incurred by the funds each year (benefit payments related to health goods and services, benefit payments for non-health goods and services, management expenses, and adjustment to provisions for outstanding and future potential claims). However, only that proportion of the rebate that can be attributed to benefits for health goods and services and to management expenses is included as funding for health by the Australian Government. This same amount is deducted from the gross benefits and management expenses paid by the health insurance funds in the calculation of health funding by private health insurance.*

## Funding of hospitals

The discussion below examines the changes in the funding for hospitals over the latest three completed health care agreement periods (i.e. from July 1988 to the end of June 2001, the latest year for which comprehensive data are available). In this discussion, funding by the Australian Government includes funding provided outside the Commonwealth–State agreements (for example, funding by DVA for services provided to eligible veterans and their dependants).

The funding shares of the different levels of government have tended to follow the same patterns as described previously in relation to total health funding, with rises and falls depending on proximity to the beginning of an agreement period (Figure 5.5). In most years since 1991–92, funding for hospitals provided by the Commonwealth was greater than that provided by states and territories.



From 1997–98 to 1998–99 (that is, from the end of one agreement period to the beginning of the next), the Commonwealth’s share of funding for hospitals increased, from 38.2% to 42.0% (Table 5.13). This was due partly to the new agreements and partly to the effect of the 30% rebate on private health insurance premiums on funding shares for private hospitals. The Commonwealth’s share of funding continued to increase over the life of that particular agreement period. This was largely due to changes in the private health insurance arrangements (see Box 5.6) and was mostly felt through the funding of private hospitals.

**Table 5.13: Shares of recurrent expenditure on hospitals, current prices, 1988–89 to 2001–02 (per cent)**

Year	Government			Non-government	Total
	Australian Government	State/territory and local	Total		
1988–89	37.0	41.2	78.1	21.9	100.0
1991–92	36.2	39.3	75.6	24.4	100.0
1992–93	37.5	37.7	75.2	24.8	101.0
1993–94	40.5	33.4	73.8	26.2	100.0
1995–96	37.7	35.7	73.4	26.6	100.0
1997–98	38.2	38.2	76.4	23.6	100.0
1998–99	42.0	36.9	78.8	21.2	100.0
1999–00	43.8	35.8	79.6	20.4	100.0
2000–01	45.0	34.9	80.0	20.0	100.0
2001–02 <sup>(a)</sup>	44.0	36.4	80.4	19.6	100.0

(a) Based on preliminary AIHW and ABS estimates.

Note: Some components may not add to totals due to rounding.

Source: AIHW Health Expenditure Database.

The Australian Government's rebate on private health insurance premiums has been treated as an indirect subsidy to the different types of goods and services that receive funding through private health insurance (see Box 5.5). Because benefit payments for private hospital services comprise the main type of private health insurance expenditure, this treatment of the rebate has resulted in a marked apparent movement of funding for hospitals away from non-government sources to the Australian Government.

## Funding of medical services

Most funding for medical expenditure is provided by the Commonwealth through Medicare benefits (Figure 5.4). The Commonwealth also provides other forms of support to private medical practices and these are included in the estimates of its funding for medical services. Yet another form of Commonwealth funding for medical services is that provided by the DVA for eligible veterans and their dependants.

Direct expenditure on medical services by state, territory and local governments is negligible.

Most non-government funding for medical services is through co-payments for services provided under Medicare. In 2000–01 these totalled \$1,078 million. Health insurance funds provided \$287 million and other non-government sources (mostly workers' compensation and compulsory motor vehicle third party insurers) contributed a further \$492 million.

The Commonwealth's share of funding for medical services increased during the early 1990s – from 80.7% in 1991–92 to 82.8% in 1993–94 (Table 5.14). This is reflected in the fall in the share of funding being provided by individuals (11.7% to 9.9%), and occurred during a period of rapid growth in bulk-billing.

In 1991–92, 62.8% of medical services were bulk-billed and by 1993–94 this had risen to 68.1%. Although the bulk-billing rate continued to increase after 1993–94 to 1999–00, the annual increases were much lower than had been the case during that earlier period. In recent times, the bulk-billing rate declined (from 72.3% in 1999–00 to 70.4% in 2001–02). At the same time, the Commonwealth's share of funding also declined (from 82.3% to 81.0%).

**Table 5.14: Shares of recurrent funding for medical services, current prices, and proportion of medical services bulk-billed, 1991–92 to 2001–02 (per cent)**

Year	Australian Government	Non-government				Total	Total	Bulk-billing rate
		Health insurance	Individuals	Other	Total			
1991–92	80.7	3.2	11.7	4.4	19.3	100.0	62.8	
1992–93	81.6	3.2	10.8	4.5	18.4	100.0	65.1	
1993–94	82.8	3.0	9.9	4.3	17.2	100.0	68.1	
1994–95	82.4	2.9	9.6	5.0	17.6	100.0	69.6	
1995–96	82.5	2.8	9.6	5.0	17.5	100.0	71.1	
1996–97	81.9	2.8	10.0	5.3	18.1	100.0	71.8	
1997–98	81.7	2.5	10.6	5.2	18.3	100.0	71.8	
1998–99	81.7	2.2	10.8	5.3	18.3	100.0	72.0	
1999–00	82.3	2.0	10.3	5.4	17.7	100.0	72.3	
2000–01	81.9	2.8	10.5	4.8	18.1	100.0	71.4	
2001–02 <sup>(a)</sup>	81.0	3.7	10.7	4.6	19.0	100.0	70.4	

(a) Based on preliminary AIHW and ABS estimates.

Source: AIHW Health Expenditure Database.

## Private health insurance

All Australians are eligible to receive public hospital treatment at no direct personal cost. Private health insurers provide cover for people who choose to be treated by doctors of their choice in hospitals. They may also provide a range of other benefits to insured people (Box 5.6).

Total funding for health services through private health insurance (that is, total benefits paid both out of members' net premiums and the Commonwealth rebate – see Box 5.5 on page 5) in 2001–02 was \$7,036 million (Table S.56). This was 10.6% of estimated \$66,582 million in total expenditure on health in that year (Table S.44). Of the funding through health insurance, an estimated \$2,110 million (30.0%) was funded from the Australian Government's 30% rebate.

This was the second year that the lifetime cover arrangements had been in operation (see Box 5.6). In the previous year, 2000–01 health funding through private insurance was \$6,191 million (Table S.56), of which 30% rebate contributed \$2,031 million. In the two years before the lifetime cover arrangements, 1998–99 and 1999–00, health funding through private insurance had been \$4,843 million and \$5,186 million, respectively (AIHW 2002a).

### **Box 5.6: Private health insurance arrangements**

*Since 1984, private health insurance funds in Australia have offered insurance cover for approved services provided in public and private hospitals. They also offer cover through ancillary tables for a range of non-hospital health and health-related services. There are four categories of health insurance membership – singles, couples without children, sole parents, and couples with children.*

*The funds can tailor their insurance products to meet particular needs of different groups of contributors. For example, they may offer tables that exclude benefits for obstetrics or hip replacements, which may be attractive to some groups of contributors. The premiums for such insurance reflect the particular exclusion(s) and are lower than for similar insurance that does not contain such exclusion(s). ‘Front-end deductible’ tables are also available. These allow contributors to meet a set amount of the charge for hospital care from their own pockets whilst paying a reduced premium.*

*Health insurance arrangements changed substantially on 1 July 2000, with the introduction of ‘lifetime’ health cover incentives. These encourage people to take out and retain private health insurance cover throughout their lives. From that date, people who join a health insurance fund before their thirtieth birthday and maintain their hospital cover pay lower premiums throughout their lives than someone who joins later in life. People over 30 years old who take out hospital cover pay a loading of 2% for each year that their entry age is over 30. Fund members who had hospital cover at 1 July 2000 and maintain it are exempt from the loading. People who were aged 65 years and over at 1 July 1999 are also exempt from the premium loading.*

The net funding of health services by private health insurance (that is, not including the amount met from the premium rebate) increased from \$4,160 million in 2000–01 to \$4,926 million in 2001–02 (tables S.43 and S.44). In the last two years before lifetime cover, 1998–99 and 1999–00, net funding had been \$3,886 million and \$3,614 million, respectively (AIHW 2002a).

An influx of new members about the time the lifetime health cover arrangements were introduced in July 2000 (see Box 5.6), coupled with the statutory waiting periods for eligibility for benefits, meant that funds’ net incomes during 2000–01 exceeded the net health-related benefits and administrative expenditure by \$1.1 billion. Accordingly, combined operating profits, before abnormalities and extraordinary items, of the funds in that year were much higher (\$852 million) than in 1999–00 (\$381 million). In 2001–02, health insurance funds had an operating loss,

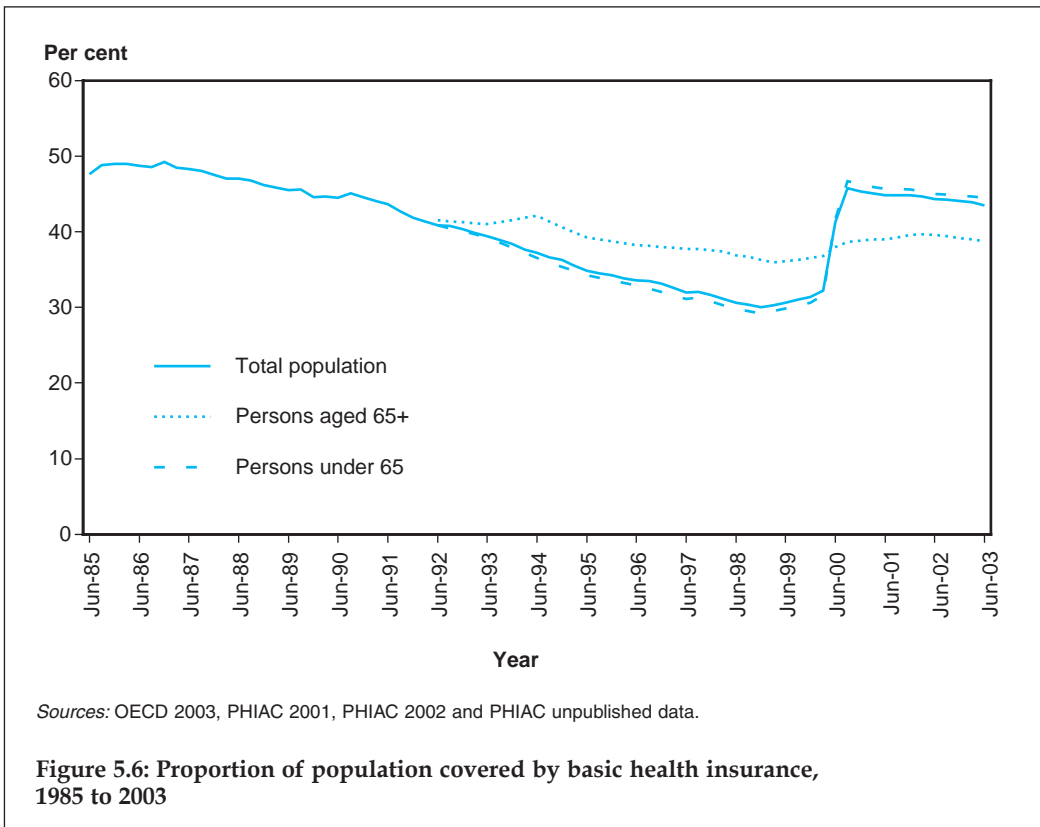
before abnormals and extraordinary items, of \$32 million (Table S.56). Much of this turn-around was due to a large fall in other revenue—from \$226 million in 2000-01 to \$66 million in 2001-02.

In 2001-02, benefits paid for private hospital services accounted for \$2,381 million, or 48.3% of the net health funding by private insurance funds (4,926 million). Dental benefits (\$661 million, 13.4%) and administration (\$511 million, 10.4%) were the next largest areas of funding by private insurance.

There was also a large increase in private health insurance funding for non-health ancillaries—such as funeral expenses, gym memberships, etc.—during 2001-02. These rose from a net \$19 million in 2000-01 to \$52 million in 2001-02.

### Trends in private health insurance coverage, membership and premiums

At the end of June 2003, 8.6 million Australians or 43.5% of the population were covered by private health insurance (PHIAC 2003). This was down by 1.1 percentage points from 44.3% in June 2002 and represented an overall fall of 2.3 percentage points from the peak of 8.8 million (45.7%) at the end of the first quarter following the introduction of the lifetime cover arrangements in July 2000 (Figure 5.6).



From 1985, when about 50% of the population had private health insurance cover, to December 1998, the general trend in coverage had been downward. At the end of December 1998, 30% of the population were covered by health insurance.

From December 1998 to September 2000 coverage grew each quarter. This was largely due to:

- the introduction, in October 1997, of a tax levy of 1% of taxable income for high income earners (single people with incomes over \$50,000 and couples with incomes greater than \$100,000) without insurance cover for hospital services;
- replacement of the Private Health Insurance Incentives Scheme by the non-means-tested 30% rebate on premiums in 1999; and
- the introduction of the 'lifetime health cover' arrangements (see Box 5.6).

This latest change exerted by far the greatest immediate influence on the level of coverage. Coverage increased from 32.3% in March 2000, a quarter before the deadline for joining a fund (1 July 2000), to 45.7% in September 2000, immediately after the deadline.

Since September 2000 there has been a consistent fall in the level of cover each quarter.

## **Expenditure on diseases**

This section provides an overview of how health expenditure in Australia is distributed among specific disease and injury groups, and by age groups and sex. The estimates were derived using a method that ensures that they add across disease, age and sex groups to the total Australian health system expenditure for 2000-01 allocable by disease. They provide a useful description of the use and costs of health services in Australia, as well as a reference source for planners and researchers interested in costs and usage patterns for a particular disease group (AIHW 2004a).

It should be noted that expenditure on disease should not be used as a measure of the size of the disease burden on the community (i.e. as the 'size of the problem'). It does not equate to loss of health due to disease, nor to the priority for intervention. Neither should the estimates of disease expenditure be regarded as estimates of potential savings from prevention. Moreover, it should be emphasised that this analysis does not attempt to estimate the total economic impact of diseases in the Australian community. Not included are the costs that accrue to patients such as the cost of pain and suffering, travel costs of patients, the social and economic burden on carers and family, and lost quality and quantity of life.

The total health expenditure in Australia in 2000-01, summarised at the broad disease group level, is shown in Table 5.15. The disease cost estimates allocate around 86% of the recurrent health expenditure in 2000-01, or just over \$49.1 billion in total. The remaining \$11.7 billion of health expenditure which cannot be allocated by disease includes recurrent expenditure on community and public health services, health administration, the transport of patients, and health aids and appliances of \$8.1 billion and capital expenditures of \$3.6 billion.

Table 5.15: Diseases and injury by burden of disease chapter: health system costs by health sector, 2000-01 (\$ million)

Burden of disease chapter	Hospitals <sup>(a)</sup>	Aged care homes <sup>(b)</sup>	Out-of-hospital medical services	Dental <sup>(d)</sup> and other professional services <sup>(c) (e)</sup>	Total pharmaceuticals <sup>(f)</sup>	Research	Total expenditure allocated by disease	% of total allocated expenditure
Cardiovascular	2,533	526	782	78	1,411	153	5,484	11.2
Nervous system	1,115	2,168	573	410	468	204	4,878	9.9
Musculoskeletal	1,828	482	879	760	680	55	4,684	9.5
Injuries	2,830	105	622	284	184	6	4,031	8.2
Respiratory	1,437	88	840	64	1,189	35	3,654	7.4
Oral health	189	0	15	3,110	34	27	3,374	6.9
Mental disorders <sup>(g)</sup>	1,196	366	499	144	616	109	2,929	6.0
Digestive system	1,571	34	347	204	637	31	2,825	5.7
Neoplasms	1,988	37	258	24	183	215	2,705	5.5
Genitourinary	1,317	14	469	31	233	13	2,078	4.2
Endocrine, nutritional & metabolic	396	14	340	64	714	68	1,594	3.2
Skin diseases	562	13	341	103	344	13	1,376	2.8
Maternal conditions	1,178	0	107	10	9	11	1,315	2.7
Infectious & parasitic	478	8	366	27	209	139	1,226	2.5
Diabetes mellitus	289	38	183	36	234	35	814	1.7
Neonatal causes	334	0	12	0	1	11	358	0.7
Congenital anomalies	158	6	19	1	2	37	221	0.5
Signs, symptoms, ill-defined conditions and other contact with the health system <sup>(h)</sup>	2,633	0	1,802	174	996	21	5,626	11.4
<b>Total</b>	<b>22,030</b>	<b>3,899</b>	<b>8,454</b>	<b>5,524</b>	<b>8,085</b>	<b>1,182</b>	<b>49,174</b>	<b>100.0</b>
<b>As percent of total</b>	<b>44.8</b>	<b>7.9</b>	<b>17.2</b>	<b>11.2</b>	<b>16.4</b>	<b>2.4</b>	<b>100.0</b>	

(a) Public and private acute hospitals and psychiatric hospitals. Includes a preliminary estimate of private medical services provided in hospital.

(b) Includes expenditure on residents that require and receive a level of care that falls within one of the four highest levels in residential aged care services.

(c) Based on preliminary AIHW estimates.

(d) Expenditure on dental services was \$3,084 million and is all included in the 'Oral health' category.

(e) Includes services delivered outside of hospitals by paramedical professionals such as physiotherapists, chiropractors, occupational therapists, audiologists, speech therapists, hydropaths, podiatrists, therapeutic and clinical massage therapists, clinical psychologists, dietitians and osteopaths.

(f) Includes all pharmaceuticals for which a prescription is needed, including private prescriptions and under-copayment prescriptions, and includes over-the-counter medicaments such as vitamins and minerals, patent medicines, first aid and wound care products, analgesics, feminine hygiene products, cold sore preparations and a number of complementary health products that are sold in both pharmacies and other retail outlets.

(g) Does not include expenditure on community mental health services.

(h) Signs, symptoms and ill-defined conditions' includes diagnostic and other services for signs, symptoms and ill-defined conditions where the cause of the problem is unknown. 'Other contact with the health system' includes fertility control, reproduction and development; elective plastic surgery; general prevention, screening and health examination; and treatment and aftercare for unspecified disease.

The seven disease groups that account for the greatest health expenditure in Australia are:

- Cardiovascular diseases – \$5.4 billion (11.0% of total allocated health expenditure)
- Nervous system disorders – \$4.9 billion (9.9%)
- Musculoskeletal diseases – \$4.7 billion (9.6%)
- Injuries – \$4.1 billion (8.3%)
- Respiratory diseases – \$3.5 billion (7.2%)
- Oral health – \$3.4 billion (6.9%)
- Mental disorders \$3.0 billion (6.1%).

These seven conditions together account for \$29 billion, or 59% of allocated health expenditure.

For 2000–01, cardiovascular disease was the most expensive group (\$5.4 billion), and also accounted for 38% of deaths.

Nervous system disorders was the second most expensive group (\$4.9 billion) and has increased markedly since 1993–94 due to significantly increased expenditure on aged care home care for people with dementia. Total expenditure for Alzheimer’s and other dementias in 2000–01 was \$2.2 billion.

The National Health Priority Areas (NHPAs) are cardiovascular health, cancer control, injury prevention and control, mental health, musculoskeletal conditions, diabetes mellitus and asthma.

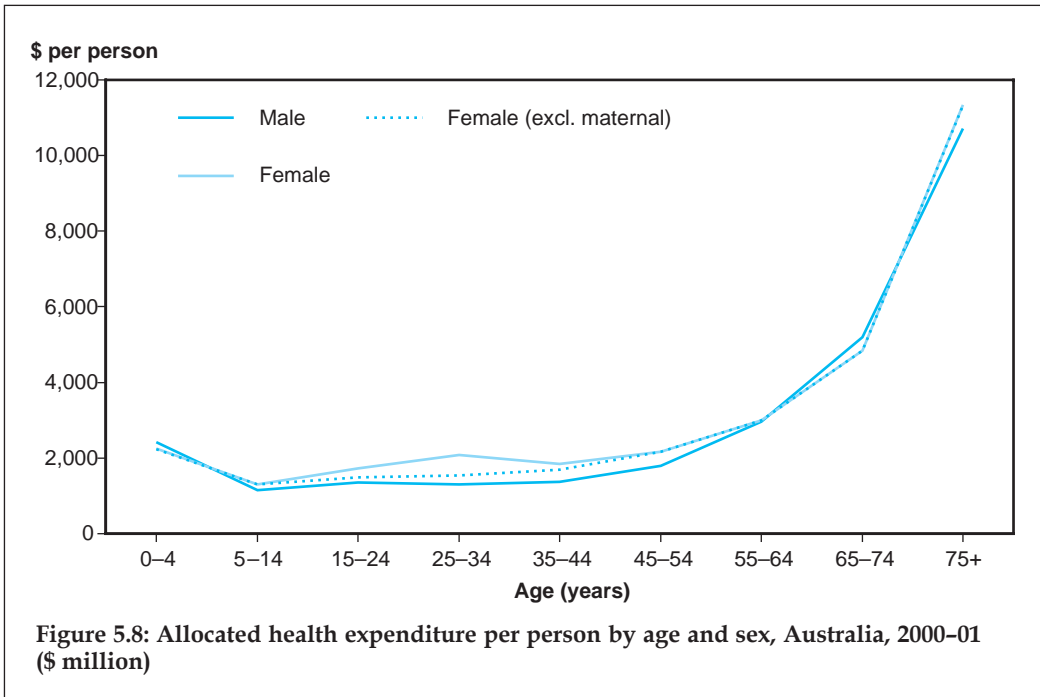
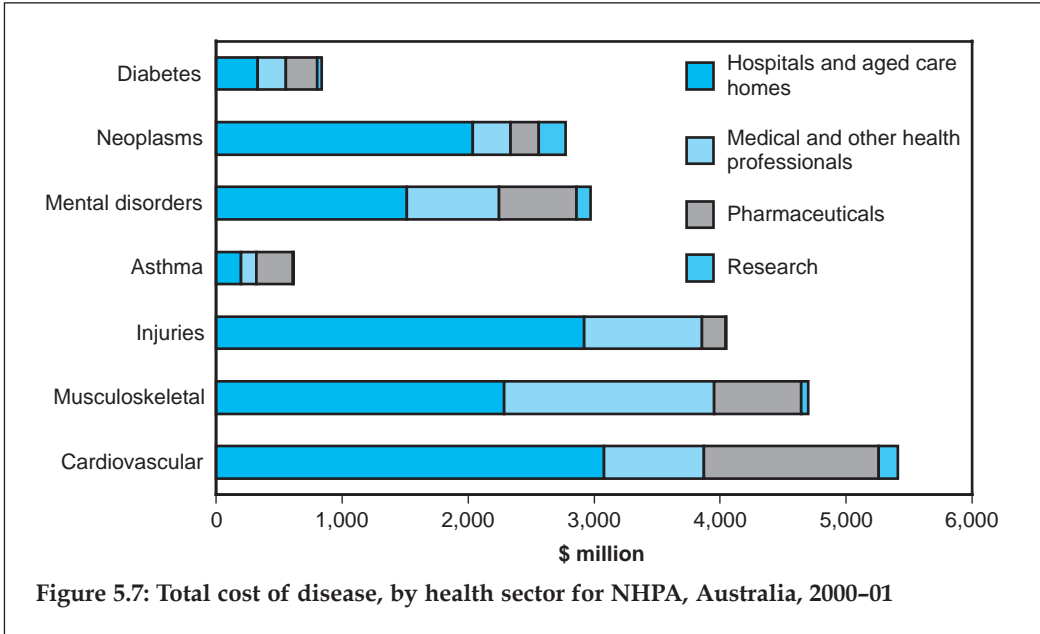
Four of the seven NHPAs rank within the top seven conditions listed in Table 5.15 – cardiovascular disease, musculoskeletal diseases, mental disorders and injury. The fifth, neoplasms (which includes cancer), ranks ninth (\$2.76 billion, or 5.6% of allocated expenditure); and the sixth, diabetes, ranks fifteenth (\$0.8 billion or 1.7% of allocated expenditure). Diabetes also is a cause of other diseases such as cardiovascular and renal diseases, so total health expenditure attributable to diabetes is greater than \$0.8 billion. Asthma is the seventh NHPA. It is contained within the respiratory diseases group and accounts for \$0.6 billion, or 1.2% of allocated health expenditure.

Different illnesses require different treatment modes (Figure 5.7). For cardiovascular diseases, injuries, neoplasms and mental disorders, expenditure in hospitals and aged care homes account for a relatively high proportion of total expenditure, reflecting these conditions’ demand for labour-intensive health services. Pharmaceutical costs for asthma, diabetes, cardiovascular conditions and mental disorders constitute a significant part of the total cost of treating these diseases. For musculoskeletal diseases, medical and other professional services are a greater proportion of costs than for other diseases.

Health system expenditures allocated by disease are 26% higher for females than for males – \$27.4 billion compared with \$21.8 billion. Expenditure per person is \$2,821 for females, which is 24% higher than the \$2,277 for males. When maternal conditions are excluded, expenditure per person for females is 18% higher than for males. (Table 5.16 and Figure 5.8).

This remaining difference for females largely reflects the fact that there are more women than men in the older age groups, where expenditure is highest, and it is in this age group that expenditure in aged care homes is very high.

Expenditure per person is higher for females than males for disease groups such as the nervous system, musculoskeletal conditions and oral health. It is higher for males for the cardiovascular, cancer and injury groups (Table 5.16).



**Table 5.16: Allocated health expenditure per person by age, sex and burden of disease chapter, Australia, 2000–01**

Selected burden of disease chapter and sex	Age (years)									Total
	0–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75+	
<i>Cardiovascular</i>										
Male	128	33	43	48	94	228	552	1,090	1,969	285
Female	316	12	20	50	88	193	363	718	1,735	274
<i>Neoplasms</i>										
Male	39	13	18	54	42	126	269	602	951	147
Female	22	17	27	46	89	183	245	381	492	135
<i>Musculoskeletal</i>										
Male	61	50	102	155	185	230	345	500	855	213
Female	71	35	94	132	181	269	395	598	1,373	277
<i>Nervous system</i>										
Male	178	70	48	68	76	115	167	439	1,747	189
Female	127	57	66	72	80	121	166	493	2,862	309
<i>Injuries</i>										
Male	181	160	339	235	173	165	211	298	694	238
Female	111	132	137	119	126	143	165	300	812	191
<i>Maternal conditions</i>										
Female	9	1	236	541	152	2	0	0	15	137
<b>Total</b>										
<b>Male</b>	<b>2,426</b>	<b>1,146</b>	<b>1,357</b>	<b>1,300</b>	<b>1,363</b>	<b>1,798</b>	<b>2,958</b>	<b>5,191</b>	<b>10,719</b>	<b>2,277</b>
<b>Female</b>	<b>2,248</b>	<b>1,294</b>	<b>1,721</b>	<b>2,083</b>	<b>1,835</b>	<b>2,160</b>	<b>2,998</b>	<b>4,842</b>	<b>11,346</b>	<b>2,821</b>
<b>Female (excl. maternal)</b>	<b>2,238</b>	<b>1,293</b>	<b>1,485</b>	<b>1,542</b>	<b>1,683</b>	<b>2,158</b>	<b>2,998</b>	<b>4,842</b>	<b>11,332</b>	<b>2,684</b>

Health expenditure per person is \$2,426 on average per year for males aged 0 to 4 years. It then decreases to \$1,146 for boys aged 5 to 14 years and from there increases with age to \$10,719 for men aged 75 years and over. For females, the pattern is the same for children, but in adulthood expenditure peaks in the 25–34 years age group, reflecting child-bearing expenditure; it then declines for the age range 35 to 44 years and from there increases steadily with age to \$11,346 per year for women aged 75 years or over (Figure 5.8).

## 5.4 Health workforce

In a climate of rapid change over recent years, the present and future capability of the health workforce has come under question. Some of the factors contributing to this concern include: an ageing population; the emergence of new diseases, treatments and technologies; changing employment patterns; an increasing focus on rural and Indigenous health; trends in litigation; and the limited growth expected in the workforce, reflecting the low fertility rates of recent years.

According to the ABS Census, in 2001 there were 450,792 people in Australia who were employed in health occupations, but not all of these were working in health industries. For example, many safety inspectors work in government administration or the mining and