### 2 Total health expenditure

Total expenditure on health goods and services in Australia in 2004–05 was estimated at \$87.3 billion (Table 1). Of this, 94.1% was for recurrent expenditure and (5.9%) was for capital formation and capital consumption. Total health expenditure increased by \$8.2 billion over the previous year. Most of the increase in recurrent expenditure was in the following six areas (Tables A2 and A3):

- hospitals up \$2.3 billion (31.0% of the overall increase in recurrent expenditure)
- medical services up \$1.7 billion (22.8%)
- aids and appliances up \$0.8 billion (10.3%)
- medications up \$0.6 billion (8.0%)
- high-level residential care up \$0.5 billion (6.9%)
- dental services up \$0.5 billion (6.1%).

After allowing for inflation, real growth between 2003–04 and 2004–05 was estimated at 5.9%. This was 0.6 percentage points above the average since 1994–95 (5.3%) (Table 1).

	Amount (\$ milli	ion)	Growth rate over previous year (%)			
Year	Current	Constant	Current	Constant		
1994–95	39,216	50,234				
1995–96	42,082	52,662	7.3	4.8		
1996–97	45,296	55,793	7.6	5.9		
1997–98	48,288	58,005	6.6	4.0		
1998–99	51,419	60,317	6.5	4.0		
1999–00	54,916	63,156	6.8	4.7		
2000–01	61,618	68,361	12.2	8.2		
2001–02	67,132	72,069	8.9	5.4		
2002–03	73,108	75,720	8.9	5.1		
2003–04	79,114	79,114	8.2	4.5		
2004–05	87,296	83,804	10.3	5.9		
Average annual growth rate	e					
1994–95 to 1997–98			7.2	4.9		
1997–98 to 2002–03			8.6	5.5		
1994–95 to 2004–05			8.3	5.3		

Table 1: Total health expenditure, current and constant prices <sup>(a)</sup> , and annual growth ra	tes,
1994–95 to 2004–05	

(a) Constant price health expenditure for 1994–95 to 2004–05 is expressed in terms of 2003–04 prices.

Source: AIHW health expenditure database.



# 2.1 Health expenditure and the general level of economic activity

The ratio of Australia's health expenditure to GDP (health to GDP ratio) indicates the proportion of overall economic activity contributed by the health sector. It is estimated that spending on health accounted for 9.8% of GDP in 2004–05 – up from 9.4% in the previous year and from 8.1% in 1994–95 (Table 2). This is a significant increase in the health to GDP ratio over the decade. The largest increases occurred in 2000–01 and 2004–05 when the ratio grew by 0.4 percentage points. Over the decade as a whole, GDP grew at 6.3% per year but the higher health expenditure growth of 8.3% per year pushed up the health to GDP ratio by 1.7 percentage points (Table 2).

	Total health e	xpenditure	GD	P	Ratio of health
Year	Amount (\$ million)	Nominal growth rate (%)	Amount (\$ million)	Nominal growth rate (%)	expenditure to GDP (%)
1994–95	39,216		486,578		8.1
1995–96	42,082	7.3	518,158	6.5	8.1
1996–97	45,296	7.6	545,736	5.3	8.3
1997–98	48,288	6.6	577,422	5.8	8.4
1998–99	51,419	6.5	607,863	5.3	8.5
1999–00	54,916	6.8	645,153	6.1	8.5
2000–01	61,618	12.2	689,340	6.8	8.9
2001–02	67,132	8.9	735,783	6.7	9.1
2002–03	73,108	8.9	782,798	6.4	9.3
2003–04	79,114	8.2	838,251	7.1	9.4
2004–05	87,296	10.3	893,704	6.6	9.8
Average annual gr	owth rate				
1994–95 to 1997–98	3	7.2		5.9	
1997–98 to 2002–03	3	8.6		6.3	
1994–95 to 2004–05	5	8.3		6.3	

Table 2: Total health expenditure and GDP, current prices, and annual growth rates, 1994–95 to 2004–05

Sources: AIHW health expenditure database and ABS 2006a.

	Total health ex	penditure	GDP	
Year	Amount (\$m)	Growth rate (%)	Amount (\$m)	Growth rate (%)
1994–95	50,234		596,953	
1995–96	52,662	4.8	621,543	4.1
1996–97	55,793	5.9	645,999	3.9
1997–98	58,005	4.0	674,932	4.5
1998–99	60,317	4.0	709,866	5.2
1999–00	63,156	4.7	738,123	4.0
2000–01	68,361	8.2	752,434	1.9
2001–02	72,069	5.4	780,817	3.8
2002–03	75,720	5.1	806,161	3.2
2003–04	79,114	4.5	838,251	4.0
2004–05	83,804	5.9	859,192	2.5
Average annual grov	vth rate			
1994–95 to 1997–98		4.9		4.2
1997–98 to 2002–03		5.5		3.6
1994–95 to 2004–05		5.3		3.7

### Table 3: Total health expenditure and GDP, constant prices<sup>(a)</sup>, and annual growth rates, 1994–95 to 2004–05

(a) Constant price expenditure for 1994–95 to 2004–05 is expressed in terms of 2003–04 prices.

Sources: AIHW health expenditure database and ABS 2006a.

The health to GDP ratio can increase during a period for one or both of the following reasons:

- the level of use of health goods and services can grow at a higher rate than the growth in the use of all goods and services in the economy (a volume effect)
- price changes in the health sector can be higher than the economy-wide price changes. This is a price effect and is called 'excess health inflation'.

These two components are shown in the last two columns of Table 4. The second last column is the differential real volume growth and shows the increase or decrease in the volume of health goods and services relative to the increase or decrease in the GDP volume. The last column is excess health inflation and shows the increase or decrease in the price of health goods and services compared to price changes in the economy as a whole.

In 2004–05, the health to GDP ratio moved to 9.8% from 9.4% in the previous year. The change in the health to GDP ratio was therefore 3.5% ((9.77/9.44)-1) (Table 4). This comprised a 3.3% faster increase in the volume of health goods and services relative to the increase in GDP volume and a 0.1% increase in the price of health goods and services above price increases in the general economy. The bulk of the change in the health to GDP ratio was therefore due to an increase in the volume of health goods and services over and above the increase in the volume of goods and services in the general economy between 2003–04 and 2004–05, not an increase in the relative cost of these goods and services.

In contrast, in 1998–99 the change in the health to GDP ratio was 1.2% (Table 4); comprising a 1.1% reduction in the volume of health goods and services relative to the increase in GDP volume and a 2.3% increase in the price of health goods and services above price increases in the general economy.

Year	Ratio of health expenditure to GDP	Change in ratio of health expenditure to GDP	Differential real volume growth <sup>(a)</sup>	Excess health inflation
1994–95	8.1		· ·	
1995–96	8.1	0.8	0.7	0.1
1996–97	8.3	2.2	1.9	0.3
1997–98	8.4	0.8	-0.5	1.3
1998–99	8.5	1.2	-1.1	2.3
1999–00	8.5	0.6	0.7	-0.1
2000–01	8.9	5.0	6.2	-1.1
2001–02	9.1	2.1	1.6	0.5
2002–03	9.3	2.4	1.8	0.6
2003–04	9.4	1.1	0.5	0.6
2004–05	9.8	3.5	3.3	0.1

Table 4: Components of growth in the health expenditure to GDP ratio, 1994–95 to 2004–05 (per cent)

(a) The ratio of the relative change of total health expenditure in constant prices to the relative change of GDP in constant prices, expressed in percentage terms.

Sources: AIHW health expenditure database and ABS 2006a.

From 1997–98 to 2002–03, real health expenditure growth averaged 5.5% per year, compared with a real GDP growth rate of 3.6% (Table 3), while average excess health inflation was 0.4% (Table 5). 2004–05 estimates indicate that real health and real GDP expenditure increased respectively by 5.9% and 2.5% (Table 3); a positive (0.1%) excess health inflation figure contributed to nominal growth (Table 5).

Both GDP and health expenditure grew in every year from 1994–95 to 2004–05 (Table 3 and Figure 3). Real health expenditure has grown more strongly than real GDP in every year since 1999–00. The greatest difference in the annual rate of growth of real health expenditure and real GDP, 6.3%, was in 2000–01 (Table 3).



#### **Health inflation**

The differences in the rate at which health prices move and the general level of inflation in the economy as a whole can have a strong influence on the health to GDP ratio. The general level of inflation is measured using the implicit price deflator for GDP, and health inflation is indicated using the total health price index (Table 5). Australia's health inflation has tended to move ahead of the general level of inflation in most years.

Between 1994–95 and 2004–05, the average rate of general inflation was 2.5% per year (Table 5). Health inflation during that period averaged 2.9% per year, giving an excess health inflation rate of 0.4% per year. From 2003–04 to 2004–05, health inflation was 4.2% – the highest it has been over the decade.

Period	Health inflation <sup>(a)</sup>	General inflation <sup>(b)</sup>	Excess health inflation
1994–95 to 1995–96	2.4	2.3	0.1
1995–96 to 1996–97	1.6	1.3	0.3
1996–97 to 1997–98	2.5	1.3	1.3
1997–98 to 1998–99	2.4	0.1	2.3
1998–99 to 1999–00	2.0	2.1	-0.1
1999–00 to 2000–01	3.7	4.8	–1.1
2000–01 to 2001–02	3.3	2.9	0.5
2001–02 to 2002–03	3.7	3.0	0.6
2002–03 to 2003–04	3.6	3.0	0.6
2003–04 to 2004–05	4.2	4.0	0.1
Average annual rates of inflation			
1994–95 to 1997–98	2.2	1.6	0.5
1997–98 to 2002–03	3.0	2.6	0.4
1994–95 to 2004–05	2.9	2.5	0.4

Table 5: Annual rates of health inflation, 1994-95 to 2004-05 (per cent)

(a) Based on the total health price index (see Glossary).

(b) Based on the implicit price deflator for GDP (see Appendix C).

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

Sources: AIHW health expenditure database and ABS 2006a.

#### 2.2 Health expenditure per person

As the population grows, it could be anticipated that health expenditure must also increase, to maintain the average level of goods and services available to each person in the community. By examining health expenditure on a per person basis, the influence of changes in the overall size of the population is removed from the analysis.

During 2004–05, estimated per person health expenditure averaged \$4,319 (Table 6).

Real growth in per person health expenditure between 1994–95 and 2004–05 averaged 4.0% per year, compared with 5.3% for aggregate national health expenditure (Tables 1 and 6). The difference between these two growth rates is the result of growth in the overall size of the Australian population.

	Amount (\$)		Growth rate over previou	ıs year (%)
Year	Current	Constant	Current	Constant
1994–95	2,183	2,797		
1995–96	2,313	2,894	5.9	3.5
1996–97	2,459	3,029	6.3	4.6
1997–98	2,594	3,116	5.5	2.9
1998–99	2,732	3,205	5.3	2.9
1999–00	2,884	3,316	5.6	3.5
2000–01	3,195	3,545	10.8	6.9
2001–02	3,437	3,690	7.6	4.1
2002–03	3,700	3,832	7.6	3.9
2003–04	3,958	3,958	7.0	3.3
2004–05	4,319	4,146	9.1	4.7
Average annual growth rate	9			
1994–95 to 1997–98			5.9	3.7
1997–98 to 2002–03			7.4	4.2
1994–95 to 2004–05			7.1	4.0

Table 6: Average health expenditure per person<sup>(a)</sup>, current and constant prices<sup>(b)</sup>, and annual growth rates, 1994–95 to 2004–05

(a) Based on annual mean resident population (see Appendix F).

(b) Constant price health expenditure for 1994–95 to 2004–05 is expressed in terms of 2003–04 prices.

Source: AIHW health expenditure database.

## 2.3 Total health expenditure by states and territories

As well as being affected by national priorities, health expenditure in Australia is influenced by the different health policy initiatives pursued by the state and territory governments. Consequently, while expenditure broadly aligns with the spread of the population, there are differences between the states and territories in the way health expenditure is distributed. Further, there are changes in average expenditures because of different socioeconomic and demographic profiles, and the mix of public and private providers in the states and territories.

Disaggregation of total health expenditure on a state and territory basis has been undertaken since 1996–97. This has enabled some limited comparison of expenditure patterns over time for each of the states and territories. It is estimated that, during 2004–05, 58.5% (\$51.0 billion) of total national health expenditure was incurred in the two most populous states, New South Wales (\$29.2 billion) and Victoria (\$21.9 billion) (Table 7). These two states account for 58.1% of the total Australian population (Appendix F).

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
1996–97	15,679	11,310	8,242	3,963	3,550	1,308	764	480	45,296
1997–98	16,551	11,979	8,822	4,561	3,753	1,264	828	530	48,288
1998–99	17,741	12,762	9,368	4,829	3,958	1,310	894	557	51,419
1999–00	18,630	13,586	10,229	5,106	4,429	1,361	951	625	54,916
2000–01	20,830	15,342	11,716	5,674	4,841	1,480	1,043	691	61,618
2001–02	22,447	17,229	12,363	6,218	5,274	1,717	1,151	732	67,132
2002–03	24,490	18,945	13,145	6,861	5,852	1,688	1,272	855	73,108
2003–04	26,733	19,863	14,638	7,561	6,332	1,769	1,415	804	79,114
2004–05	29,155	21,889	16,035	8,602	7,098	1,958	1,586	972	87,296

Table 7: Total health expenditure, current prices, by state and territory, 1996–97 to 2004–05 (\$ million)

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

Source: AIHW health expenditure database.

Table 8: Total health expenditure,	constant prices <sup>(a)</sup> ,	by state and terri	tory, 1996-97	to 2004-05
(\$ million)	_	-	-	

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
1996–97	19,514	14,002	10,072	4,807	4,297	1,566	954	580	55,793
1997–98	19,976	14,528	10,537	5,398	4,447	1,494	994	631	58,005
1998–99	20,848	15,085	10,963	5,594	4,595	1,513	1,066	653	60,317
1999–00	21,408	15,739	11,766	5,842	5,038	1,548	1,108	707	63,156
2000–01	23,089	17,089	13,035	6,266	5,335	1,625	1,165	757	68,361
2001–02	24,101	18,499	13,331	6,668	5,617	1,828	1,243	781	72,069
2002–03	25,378	19,591	13,661	7,099	6,045	1,742	1,323	880	75,720
2003–04	26,733	19,863	14,638	7,561	6,332	1,769	1,415	804	79,114
2004–05	27,968	21,042	15,370	8,251	6,837	1,879	1,523	934	83,804

(a) Constant price health expenditure for 1996–97 to 2004–05 is expressed in terms of 2003–04 prices.

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

Source: AIHW health expenditure database.

Year	NSW	Vic	Qld	WA	SA	Tas	ACT <sup>(b)</sup>	NT	Australia
1996–97	2,511	2,469	2,447	2,225	2,402	2,758		2,603	2,459
1997–98	2,623	2,594	2,578	2,522	2,526	2,672		2,811	2,594
1998–99	2,782	2,737	2,696	2,629	2,650	2,777		2,911	2,732
1999–00	2,888	2,881	2,896	2,741	2,949	2,885		3,221	2,884
2000–01	3,189	3,214	3,260	3,004	3,210	3,139		3,519	3,195
2001–02	3,397	3,566	3,369	3,249	3,481	3,636		3,693	3,437
2002–03	3,677	3,878	3,498	3,543	3,844	3,555		4,314	3,700
2003–04	3,988	4,022	3,806	3,849	4,139	3,684		4,043	3,958
2004–05	4,320	4,382	4,084	4,313	4,617	4,047		4,834	4,319

Table 9: Average health expenditure per person<sup>(a)</sup>, current prices, by state and territory, 1996–97 to 2004–05 (\$)

(a) Based on annual mean resident population (see Appendix F).

(b) ACT per person figures are not calculated, as the expenditure numbers for the ACT include substantial expenditures for NSW residents. Thus the ACT population is not the appropriate denominator.

Source: AIHW health expenditure database.

On a per person basis, in 2004–05 the estimated national average level of expenditure on health was \$4,319. The per person expenditure estimates must be treated with caution as the expenditure often includes costs of interstate patients whereas the population is the resident population of the state. Tasmania (\$4,047) had the lowest average level of expenditure which was \$272 below the national average (Table 9).

Table 10: Annual growth in health expenditure per person<sup>(a)</sup>, constant prices<sup>(b)</sup>, all sources of funding, by state and territory, 1996–97 to 2004–05 (per cent)

Period	NSW	Vic	Qld	WA	SA	Tas	ACT <sup>(c)</sup>	NT	Australia
1996–97 to 1997–98	1.3	2.9	3.0	10.6	3.0	-4.3		6.4	2.9
1997–98 to 1998–99	3.3	2.8	2.5	2.0	2.8	1.5		1.9	2.9
1998–99 to 1999–00	1.5	3.2	5.6	3.0	9.0	2.3		6.7	3.5
1999–00 to 2000–01	6.5	7.2	8.8	5.8	5.5	5.0		5.8	6.9
2000–01 to 2001–02	3.2	6.9	0.2	5.0	4.8	12.4		2.3	4.1
2001–02 to 2002–03	4.5	4.8	0.1	5.2	7.1	-5.2		12.6	3.9
2002–03 to 2003–04	4.7	0.3	4.7	5.0	4.2	0.4		-8.9	3.3
2003–04 to 2004–05	3.9	4.8	2.9	7.5	7.5	5.4		14.9	4.7
Average annual growth rate									
1996–97 to 2004–05	3.6	4.1	3.4	5.5	5.5	2.0		5.0	4.0
1997–98 to 2002–03 <sup>(d)</sup>	3.8	5.0	3.4	4.2	5.8	3.0		5.8	4.2

(a) Based on annual mean resident population.

(b) Constant price health expenditure for 1996–97 to 2004–05 is expressed in terms of 2003–04 prices.

(c) ACT per person figures are not calculated, as the expenditure numbers for the ACT include substantial expenditures for NSW residents. Thus the ACT population is not the appropriate denominator.

(d) AHCA period.

Source: AIHW health expenditure database.

The state-based health expenditure data include estimates of expenditure that have been funded by sources other than the state and territory governments. These include funding by the Australian Government, private health insurance funds, individuals (through out-of-pocket payments) and providers of injury compensation cover. This means that estimates of expenditure within a state are not limited to those areas of responsibility of state and territory governments.

Average annual real growth in total health expenditure over the period 1996–97 to 2004–05 was highest in Western Australia (7.0%) and lowest in Tasmania (2.3%). The national average for that period was 5.2% (Table 11).

To the greatest extent possible, the AIHW has applied consistent methods to derive estimates for the different states and territories. But there will be differences from one jurisdiction to another in the quality of the data on which these estimates are based. This means that, while some broad comparisons can be made, caution should be exercised when comparing the results for jurisdictions.

The work of the Health Expenditure Advisory Committee (HEAC) (see Chapter 6) will, over time, further enhance the quality and comparability of health expenditure data reported in the *Health expenditure Australia* publications.

Area of expenditure	NSW	Vic	Qld	WA	SA	Tas	АСТ	NT	Australia
Hospitals	3.9	5.1	4.3	6.5	4.7	1.7	4.5	6.2	4.6
Public (non-psychiatric)	3.7	5.6	2.9	5.3	4.8	2.1	4.1	5.6	4.3
Public psychiatric	-0.2	11.3	2.3	-0.2	4.2	-8.4		94.5	1.5
Private	5.5	3.4	7.6	10.3	4.1	1.3	6.6	6.0	5.7
High-level residential care	1.8	5.0	6.5	5.8	5.4	2.5	9.8	5.2	4.1
Ambulance and other institutional	10.5	10.2	9.5	7.3	16.9	5.1	7.6	28.2	10.5
Total institutional	3.7	5.3	4.8	6.4	5.2	2.0	5.1	7.0	4.7
Medical services	2.9	2.5	3.7	3.3	2.5	1.5	2.2	3.8	2.9
Other health practitioners	-1.0	-1.4	-1.6	-2.9	1.3	2.5	-6.2	3.7	-1.2
Medications	9.0	8.6	9.4	8.5	9.4	7.7	9.5	13.1	8.9
Benefit-paid pharmaceuticals	8.9	10.2	11.2	10.8	9.7	9.1	10.8	16.3	9.9
All other medications	9.3	6.1	6.7	5.1	8.7	5.2	6.8	9.5	7.2
Aids and appliances	14.9	12.9	13.5	10.5	12.5	9.0	12.1	9.8	13.2
Dental services	3.0	3.6	2.5	9.1	2.9	3.8	4.8	11.7	3.7
Community health, public health, administration, research and other non-institutional	7.4	5.2	6.7	9.5	12.3	-3.2	10.3	2.8	7.1
Total non-institutional	5.2	4.7	5.8	6.7	6.7	2.1	6.2	4.9	5.4
Total recurrent	4.5	5.0	5.4	6.6	6.0	2.1	5.8	5.8	5.1
Capital expenditure	5.4	8.8	3.6	16.9	4.4	6.3	16.5	11.6	6.7
Capital consumption	7.7	17.1	13.5	14.1	10.9	8.7	1.7	17.3	11.5
Direct health expenditure <sup>(b)</sup>	4.6	5.2	5.4	7.0	6.0	2.3	6.0	6.1	5.2

Table 11: Average annual growth in health expenditure, constant prices<sup>(a)</sup>, by state and territory, by area of expenditure, 1996–97 to 2004–05 (per cent)

(a) Constant price health expenditure for 1996–97 to 2004–05 is expressed in terms of 2003–04 prices.

(b) Expenditure has not adjusted for non-specific tax expenditures.

Source: AIHW health expenditure database.

#### 2.4 Sources of growth in real health expenditure

Expenditure on hospitals accounted for the largest proportion of real growth in recurrent health expenditure between 1994–95 and 2004–05 (34.0%) (Figure 4) — public hospitals (24.2%) and private hospitals (9.8%). One-fifth (19.9%) of the growth over this period came from medications, and expenditure on medical services contributed a further 11.4% of growth. Together, these three areas of expenditure accounted for 65.3% of the growth in expenditure during the decade. As the health to GDP ratio rose, the combined expenditure of these three areas as a percentage of GDP rose in real terms from 5.4% in 1994–95 to 6.1% in 2004–05.

![](_page_12_Figure_0.jpeg)

### 2.5 Sources of nominal growth in health expenditure

The nominal growth in health expenditure can be analysed in terms of population growth, inflation and the real increase in expenditure per person. Real increase in expenditure per person is indicative of increases in service use per person. Two factors contribute to nominal growth in health expenditure:

- the combined effects of general inflation and excess health inflation
- changes in the quantities of services used, reflecting either population growth (less significant in Australia's case) or more intensive per capita use of services.

Underlying these two factors are the effects of changes in the population's age structure, changes in the composition and relative prices of health goods and services, changes in technology and medical practice and general economic and social conditions.

Nominal health expenditure grew from \$39.2 billion in 1994–95 to \$87.3 billion in 2004–05 (Table 1). Of the \$48.1 billion increase, 37.1% (\$17.8 billion) was due to inflation, 14.2% (\$6.8 billion) was from population growth and 48.7% (\$23.4 billion) was due to an increase in real expenditure per person (the interactions between the three growth elements have been allocated in proportion to the size of each growth element).