

2 Total health expenditure

Total expenditure on health goods and services, health-related services and capital formation in Australia in 2003–04 was estimated at \$78.6 billion (Table 1). This was an increase of \$6.1 billion over the previous year. Most of this increase between 2002–03 and 2003–04 was in six areas of expenditure (Tables A3 and A4):

- hospitals—up \$1.9 billion
- medical services—up \$1.0 billion
- pharmaceuticals—up \$0.9 billion
- other professional services— up \$0.6 billion
- high-level residential care—up \$0.4 billion
- dental services—up \$0.3 billion.

After allowing for inflation, real growth between 2002–03 and 2003–04 was estimated at 4.5%. This was 0.1 percentage points below the average since 1993–94 (4.6%), and 0.6 percentage points below the 5-year average between 1997–98 and 2002–03 (5.1%) (Table 1).

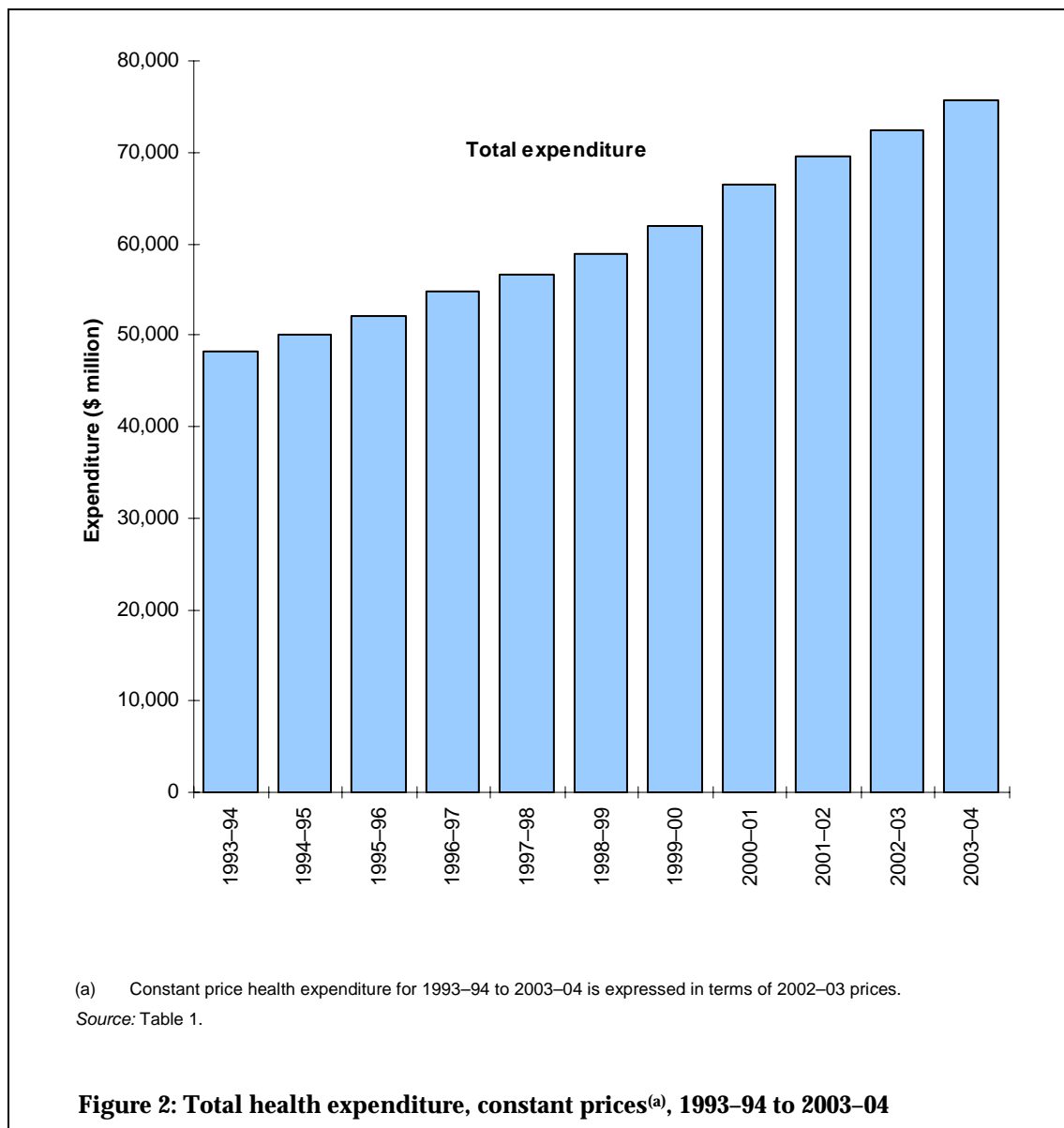
Table 1: Total health expenditure, current and constant prices^(a), and annual growth rates, 1993–94 to 2003–04

Year	Amount (\$ million)		Growth rate over previous year (%)	
	Current	Constant	Current	Constant
1993–94	36,990	48,112
1994–95	39,216	49,973	6.0	3.9
1995–96	42,082	52,089	7.3	4.2
1996–97	45,296	54,752	7.6	5.1
1997–98	48,288	56,615	6.6	3.4
1998–99	51,440	58,918	6.5	4.1
1999–00	55,255	61,857	7.4	5.0
2000–01	61,635	66,542	11.5	7.6
2001–02	66,769	69,507	8.3	4.5
2002–03	72,452	72,452	8.5	4.2
2003–04 ^(b)	78,598	75,695	8.5	4.5
Average annual growth rate				
1993–94 to 1997–98			6.9	4.2
1997–98 to 2002–03			8.5	5.1
1993–94 to 2003–04			7.8	4.6

(a) Constant price health expenditure for 1993–94 to 2003–04 is expressed in terms of 2002–03 prices.

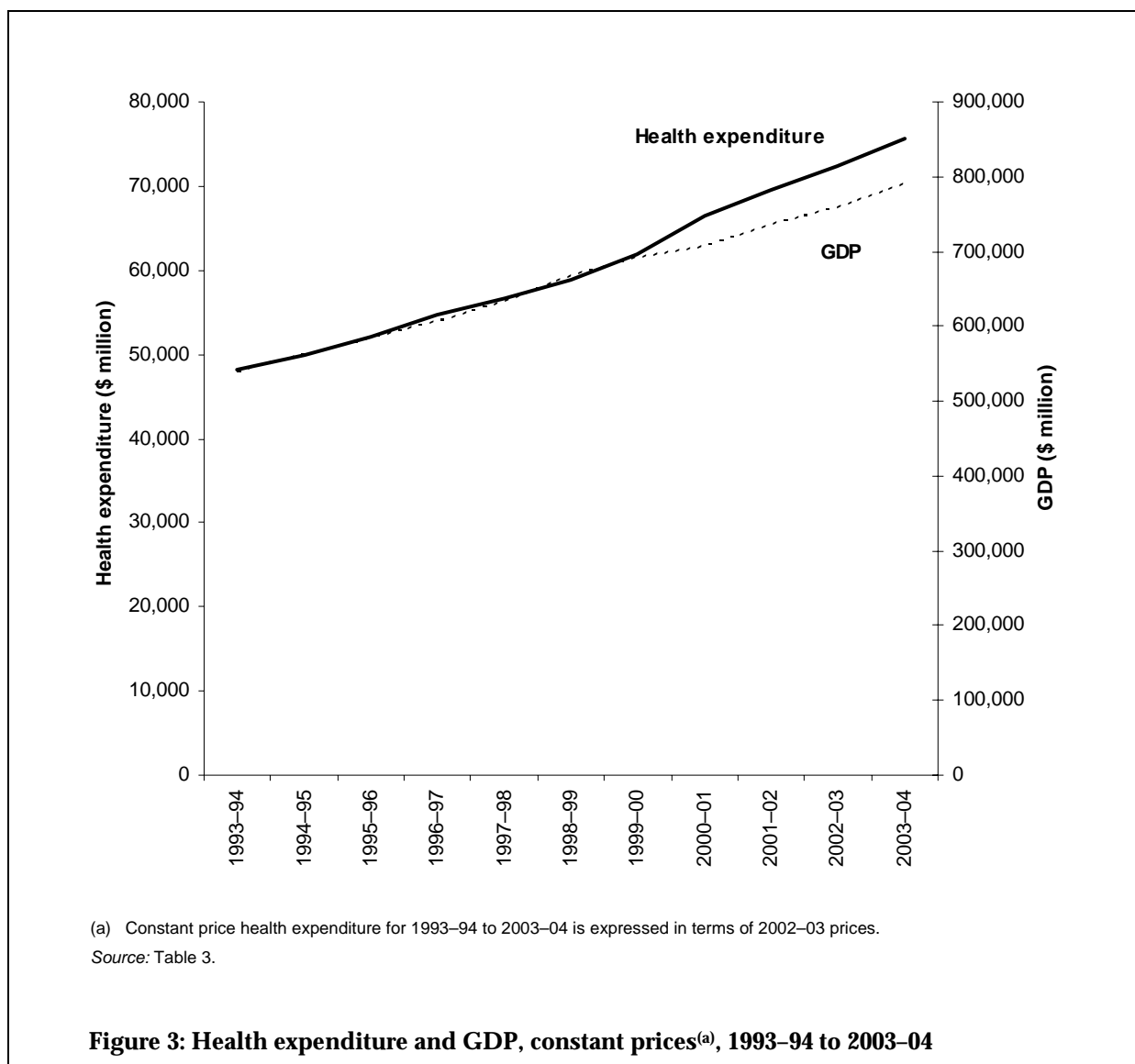
(b) Based on preliminary AIHW and ABS estimates.

Source: AIHW health expenditure database.



2.1 Health expenditure and the general level of economic activity

Both GDP and health expenditure grew in every year from 1993-94 to 2003-04 (Table 3 and Figure 3). Over the period 1993-94 to 1997-98 health expenditure and GDP grew, in real terms, at the same rate (4.2%). However, real health expenditure has grown more strongly than real GDP in every year since 1999-00.



At the national level, GDP is the main measure used to indicate the overall level of economic activity. It is also a principal measure used to assist international comparisons of the relative sizes and growth rates of different countries' health sectors, and this is discussed in Chapter 5. The ratio of Australia's health expenditure to GDP (health-GDP ratio) provides an indication of the proportion of overall economic activity contributed by the health sector. It is estimated that spending on health accounted for 9.7% of GDP in 2003-04 —up from 9.6% in the previous year and from 8.3% in 1993-94 (Table 2).

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

- the level of use of goods and services in health can grow at a different rate from the growth in the use of all goods and services in the economy (a quantity effect)
- price changes in the health sector can differ from economy-wide price changes—excess health inflation (a price effect).

Table 2: Total health expenditure and GDP, current prices, and annual growth rates, 1993–94 to 2003–04

Year	Total health expenditure		GDP		Ratio of health expenditure to GDP (%)
	Amount (\$ million)	Nominal growth rate (%)	Amount (\$ million)	Nominal growth rate (%)	
1993–94	36,990	..	446,307	..	8.3
1994–95	39,216	6.0	470,168	5.3	8.3
1995–96	42,082	7.3	501,257	6.6	8.4
1996–97	45,296	7.6	527,994	5.3	8.6
1997–98	48,288	6.6	559,139	5.9	8.6
1998–99	51,440	6.5	589,597	5.4	8.7
1999–00	55,255	7.4	623,461	5.7	8.9
2000–01	61,635	11.5	668,426	7.2	9.2
2001–02	66,769	8.3	713,229	6.7	9.4
2002–03	72,452	8.5	758,147	6.3	9.6
2003–04 ^(a)	78,598	8.5	811,643	7.1	9.7
Average annual growth rate					
		6.9		5.8	
		8.5		6.3	
		7.8		6.2	

(a) Based on preliminary AIHW and ABS estimates.

Sources: AIHW health expenditure database and ABS 2005.

The general trend in the health–GDP ratio was a gradual increase over the 11-year period. The largest increase occurred in 2000–01, when the ratio grew by 0.3 percentage points (Table 2), the increase being largely due to volume effects (see Table 3). Between 1999–00 and 2000–01, real growth in expenditure on other professional services, aids and appliances, community health, research and benefit-paid pharmaceuticals accelerated (Table A5).

From 1997–98 to 2002–03, real health expenditure growth averaged 5.1% per year, compared with a real GDP growth rate of 3.7% (Table 3), while average excess health inflation was 0.7% (Table 4).

Preliminary estimates for 2003–04 indicate a continued increase in health–GDP ratio of 0.1 percentage points due to both volume and price effects (Table 2). Real health and real GDP expenditure increased respectively by 4.5% and 4.0% (Table 3); a positive (0.9%) excess health inflation figure contributed to nominal growth (Table 4).

Table 3: Total health expenditure and GDP, constant prices^(a), and annual growth rates, 1993–94 to 2003–04

Year	Total health expenditure		GDP	
	Amount (\$m)	Growth rate (%)	Amount (\$m)	Growth rate (%)
1993–94	48,112	..	538,345	..
1994–95	49,973	3.9	561,020	4.2
1995–96	52,089	4.2	584,108	4.1
1996–97	54,752	5.1	606,304	3.8
1997–98	56,615	3.4	633,587	4.5
1998–99	58,918	4.1	667,168	5.3
1999–00	61,857	5.0	692,521	3.8
2000–01	66,542	7.6	707,063	2.1
2001–02	69,507	4.5	734,639	3.9
2002–03	72,452	4.2	758,147	3.2
2003–04 ^(b)	75,695	4.5	788,473	4.0
Average annual growth rate				
1993–94 to 1997–98		4.2		4.2
1997–98 to 2002–03		5.1		3.7
1993–94 to 2003–04		4.6		3.9

(a) Constant price health expenditure for 1993–94 to 2003–04 is expressed in terms of 2002–03 prices.

(b) Based on preliminary AIHW and ABS estimates.

Sources: AIHW health expenditure database and ABS 2005.

Table 4: Annual rates of health inflation, 1993–94 to 2003–04 (per cent)

Period	Health inflation	General inflation ^(a)	Excess health inflation
1993–94 to 1994–95	2.1	1.1	1.0
1994–95 to 1995–96	3.0	2.4	0.5
1995–96 to 1996–97	2.4	1.5	0.9
1996–97 to 1997–98	3.1	1.3	1.7
1997–98 to 1998–99	2.4	0.1	2.2
1998–99 to 1999–00	2.3	1.9	0.4
1999–00 to 2000–01	3.7	5.0	-1.3
2000–01 to 2001–02	3.7	2.7	1.0
2001–02 to 2002–03	4.1	3.0	1.1
2002–03 to 2003–04	3.8	2.9	0.9
Average annual rates of inflation			
1993–94 to 1997–98	2.6	1.6	1.0
1997–98 to 2002–03	3.2	2.5	0.7
1993–94 to 2003–04	3.1	2.2	0.8

(a) Based on the implicit price deflator for GDP.

Note: Components may not add due to rounding.

Sources: AIHW health expenditure database and ABS 2005.

Health inflation

As mentioned previously, 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-GDP ratio. The general level of inflation is measured by reference to the implicit price deflator for GDP, and health inflation is indicated by reference to the total health price index (see Table 4). Australia's health inflation has tended to move ahead of the general level of inflation in most years.

Between 1993-94 and 2003-04, the average rate of general inflation was 2.2% per year (Table 4). Health inflation during that period averaged 3.1% per year, giving an excess health inflation rate of 0.8% per year. In the last four years (1999-00 to 2002-03), health inflation was higher (3.7%, 3.7%, 4.1% and 3.8%, respectively) than at any other time during the period since 1993-94.

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 2003-04, estimated per person health expenditure averaged \$3,931 (Table 5).

Real growth in per person health expenditure between 1993-94 and 2003-04 averaged 3.4% per year, compared with 4.6% for aggregate national health expenditure (Tables 3 and 5).

The difference between these two growth rates is the result of growth in the overall size of the Australian population.

Table 5: Average health expenditure per person^(a), current and constant prices^(b), and annual growth rates, 1993–94 to 2003–04

Year	Amount (\$)		Growth rate over previous year (%)	
	Current	Constant	Current	Constant
1993–94	2,082	2,708
1994–95	2,183	2,782	4.9	2.7
1995–96	2,313	2,863	5.9	2.9
1996–97	2,459	2,972	6.3	3.8
1997–98	2,594	3,041	5.5	2.3
1998–99	2,733	3,130	5.4	2.9
1999–00	2,901	3,248	6.2	3.8
2000–01	3,196	3,451	10.2	6.2
2001–02	3,418	3,559	7.0	3.1
2002–03	3,667	3,667	7.3	3.0
2003–04 ^(c)	3,931	3,785	7.2	3.2
Average annual growth rate				
1993–94 to 1997–98			5.6	2.9
1997–98 to 2002–03			7.2	3.8
1993–94 to 2003–04			6.6	3.4

(a) Based on annual mean resident population.

(b) Constant price health expenditure for 1993–94 to 2003–04 is expressed in terms of 2002–03 prices.

(c) Based on preliminary AIHW and ABS estimates.

Source: AIHW health expenditure database.

2.3 Total health expenditure, by state and territory

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 2003–04, 59.8% (\$47.0 billion) of total national health expenditure was incurred in the two most populous states, New South Wales (\$26.5 billion) and Victoria (\$20.5 billion) (Table 6). These two states account for 58.3% of the total Australian population.

Table 6: Total health expenditure, current prices, by state and territory, 1996–97 to 2003–04 (\$ million)

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	17,740	12,761	9,368	4,834	3,968	1,321	893	556	51,440
1999–00	18,701	13,654	10,378	5,127	4,438	1,363	971	623	55,255
2000–01	20,708	15,453	11,722	5,689	4,824	1,489	1,060	690	61,635
2001–02	22,428	17,288	12,197	6,092	5,153	1,722	1,165	725	66,769
2002–03	24,291	19,063	12,975	6,640	5,697	1,661	1,278	845	72,452
2003–04 ^(a)	26,471	20,514	14,192	7,183	6,139	1,782	1,407	910	78,598

(a) Based on preliminary AIHW and ABS estimates.

Note: Components may not add due to rounding.

Source: AIHW health expenditure database.

Table 7: Total health expenditure, constant prices^(a), by state and territory, 1996–97 to 2003–04 (\$ million)

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
1996–97	19,066	13,854	9,883	4,702	4,191	1,562	927	567	54,752
1997–98	19,438	14,267	10,262	5,254	4,336	1,478	966	615	56,615
1998–99	20,317	14,821	10,731	5,421	4,486	1,486	1,024	632	58,918
1999–00	20,882	15,491	11,602	5,658	4,931	1,511	1,090	691	61,857
2000–01	22,295	16,814	12,681	6,075	5,189	1,601	1,149	739	66,542
2001–02	23,293	18,052	12,751	6,302	5,352	1,790	1,213	755	69,507
2002–03	24,291	19,063	12,975	6,640	5,697	1,661	1,278	845	72,452
2003–04 ^(b)	25,455	19,720	13,688	6,943	5,942	1,721	1,350	876	75,695

(a) Constant price health expenditure for 1996–97 to 2003–04 is expressed in terms of 2002–03 prices.

(b) Based on preliminary AIHW and ABS estimates.

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

Source: AIHW health expenditure database.

Table 8: Average health expenditure per person^(a), current prices, by state and territory, 1996–97 to 2003–04 (\$)

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
1996–97	2,511	2,469	2,447	2,225	2,402	2,758	2,473	2,603	2,459
1997–98	2,623	2,594	2,578	2,522	2,526	2,672	2,680	2,811	2,594
1998–99	2,782	2,737	2,696	2,631	2,656	2,800	2,874	2,908	2,733
1999–00	2,899	2,896	2,939	2,752	2,955	2,891	3,094	3,210	2,901
2000–01	3,171	3,237	3,261	3,012	3,198	3,157	3,342	3,512	3,196
2001–02	3,394	3,578	3,324	3,183	3,401	3,647	3,635	3,660	3,418
2002–03	3,648	3,902	3,453	3,429	3,742	3,500	3,962	4,264	3,667
2003–04 ^(b)	3,946	4,150	3,693	3,652	4,011	3,712	4,351	4,571	3,931

(a) Based on annual mean resident population.

(b) Based on preliminary AIHW and ABS estimates.

Source: AIHW health expenditure database.

On a per person basis, in 2003–04 the estimated national average level of expenditure on health was \$3,931. Western Australia (\$3,652) had the lowest average level of expenditure while the Northern Territory (\$4,571) had the highest (Table 8).

Table 9: Annual growth in health expenditure per person^(a), constant prices^(b), all sources of funding, by state and territory, 1996–97 to 2003–04 (per cent)

Period	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
1996–97 to 1997–98	0.9	2.1	2.2	10.0	2.9	–5.1	4.2	6.1	2.3
1997–98 to 1998–99	3.4	2.9	3.0	1.6	2.9	0.8	5.4	1.2	2.9
1998–99 to 1999–00	1.6	3.4	6.4	2.9	9.3	1.7	5.5	7.8	3.8
1999–00 to 2000–01	5.4	7.2	7.4	5.9	4.8	6.0	4.3	5.6	6.2
2000–01 to 2001–02	3.3	6.1	–1.5	2.4	2.7	11.7	4.5	1.3	3.1
2001–02 to 2002–03	3.5	4.5	–0.6	4.1	5.9	–7.7	4.7	12.0	3.0
2002–03 to 2003–04 ^(c)	4.0	2.2	3.2	2.9	3.7	2.4	5.3	3.2	3.2
Average annual growth rate									
1996–97 to 2003–04 ^(c)	3.2	4.0	2.8	4.2	4.6	1.2	4.8	5.3	3.5
1997–98 to 2002–03 ^(d)	3.4	4.8	2.9	3.4	5.1	2.3	4.9	5.5	3.8

(a) Based on annual mean resident population.

(b) Constant price health expenditure for 1996–97 to 2003–04 is expressed in terms of 2002–03 prices.

(c) Based on preliminary AIHW and ABS estimates.

(d) AHCA period.

Source: AIHW health expenditure database.

During the period covered by the first set of Australian Health Care Agreements (AHCAs) between the Australian Government and the states and territories, that is, from the end of the 1997–98 fiscal year to 2002–03, four states and territories recorded real average annual growth rates per person that were above the national average of 3.8%— Northern Territory (5.5%), South Australia (5.1%), Australian Capital Territory (4.9%) and Victoria (4.8%). Western Australia (3.4%), New South Wales (3.4%), Queensland (2.9%) and Tasmania (2.3%) had growth rates below the national average (Table 9).

Table 10: Average annual growth in health expenditure, constant prices^(a), by state and territory, by area of expenditure, 1996–97 to 2002–03 (per cent)

Area of expenditure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Hospitals	2.3	4.5	3.7	5.5	3.4	0.8	3.9	4.9	3.5
Public (non-psychiatric)	2.8	6.7	4.6	5.0	3.6	1.8	3.8	5.0	4.4
Public (psychiatric)	-2.5	16.3	-3.9	5.0	4.3	9.0	0.1
Private	1.2	-1.3	2.5	6.6	2.5	-2.2	4.3	4.6	1.4
High-level residential care	0.9	4.4	5.3	4.6	4.8	0.4	12.4	0.2	3.2
Ambulance	6.6	11.9	10.9	7.5	21.0	0.7	10.5	43.8	10.6
<i>Total institutional</i>	2.2	4.7	4.2	5.4	4.2	0.7	4.8	6.5	3.7
Medical services	2.7	2.6	2.9	3.5	2.7	1.7	0.6	2.9	2.7
Other health professionals	3.2	3.3	3.3	0.6	2.4	4.4	1.5	11.1	3.1
Pharmaceuticals	11.7	10.8	10.4	9.9	11.6	10.2	12.4	14.4	11.0
Benefit-paid items	9.7	11.1	11.7	12.1	10.7	10.1	12.5	17.6	10.8
All other items	15.7	10.4	8.6	6.9	13.5	10.5	12.2	10.9	11.5
Aids and appliances	16.4	11.3	9.5	7.5	14.2	10.5	5.2	7.3	12.1
Dental services	2.3	4.1	4.6	12.7	3.6	5.2	6.0	14.1	4.4
Community health, public health, administration, research and other non-institutional	8.3	10.7	5.8	5.8	10.5	-5.8	10.4	6.2	7.7
<i>Total non-institutional</i>	6.2	6.5	5.8	6.5	7.0	2.3	6.4	7.2	6.2
Total recurrent	4.3	5.7	5.1	6.0	5.7	1.6	5.7	6.9	5.1
Capital outlays	-2.9	-7.8	-9.2	-0.3	-5.7	-29.5	1.5	1.2	-5.9
Capital consumption	7.5	18.4	15.4	11.1	7.3	3.8	-4.7	16.3	11.3
Total capital	0.1	-1.6	-2.6	3.5	-2.6	-17.8	-0.9	7.0	-1.2
Direct health expenditure	4.1	5.5	4.6	5.9	5.3	1.0	5.5	6.9	4.8

(a) Constant price health expenditure for 1996–97 to 2003–04 is expressed in terms of 2002–03 prices.

Source: AIHW health expenditure database.

The state-based health expenditure data include estimates of expenditure that has 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.

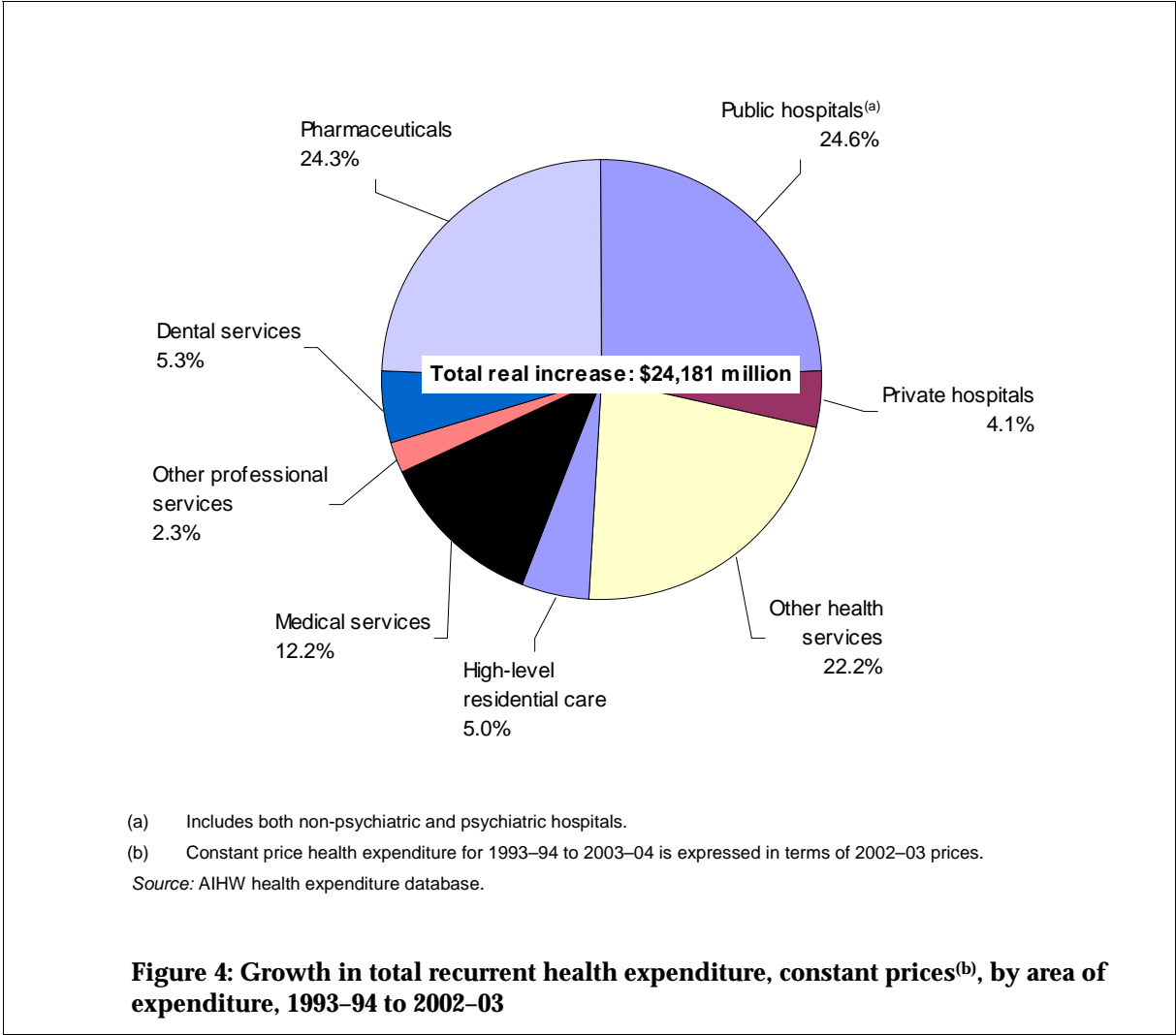
Average annual real growth in total health expenditure over the period 1996–97 to 2002–03 was highest in Northern Territory (6.9%) and lowest in Tasmania (1.0%). The national average for that period was 4.8% (Table 10). These differences largely reflect trends in expenditure on hospitals, ambulance and other health professionals in those states.

To the greatest extent possible, the Australian Institute of Health and Welfare (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.

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 1993–94 and 2002–03 (28.7%) (Figure 4)—public hospitals (24.6%) and private hospitals (4.1%). Another quarter of the growth over this period came from pharmaceuticals (24.3%), and expenditure on medical services contributed a further 12.2% of growth. Together, these three areas of expenditure accounted for 65.2% of the growth in expenditure during the decade; accordingly, their combined expenditure as a percentage of GDP rose from 5.3% in 1993–94 to 6.1% in 2002–03.



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 real increase in expenditure per person (or utilisation). 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, and general economic and social conditions.

While it is difficult to precisely quantify the various interrelated effects, it is estimated that of the 111.9% of nominal health expenditure growth between 1993–94 and 2003–04, 39.4% was due to inflation; 12.6% due to population growth and 35.0% to the increase in real expenditure per person (Appendix A tables). The balance is due to the interaction between these elements of growth.