

# HealthExpenditure

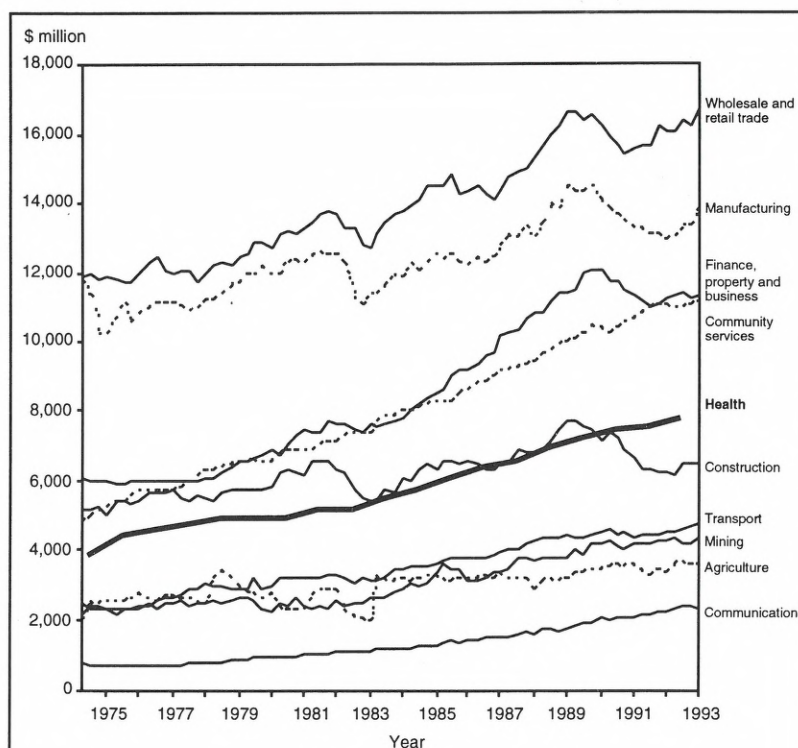
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## Australian health expenditure to 1992–93

*Health Expenditure Bulletin* no. 10 provides estimates of Australian total health expenditure by area of expenditure and source of funds to 1990–91, together with estimates of total health expenditure for 1991–92 and 1992–93. Health expenditure over the last decade has been reviewed. This bulletin also gives information on changes in price levels in the health sector compared with that of the rest of the economy and their impact on health expenditure.

### Health expenditure highlights

- Total health expenditure includes recurrent and capital expenditure by Australian governments and individuals. In 1992–93 it was \$34.3 billion or \$1,954 per person.
- Health expenditure rose in constant prices at an average annual rate of 4.2% from 1982–83 to 1992–93, giving a total rise of 50.3%.
- Health expenditure per person rose at an average annual rate of 2.7% in constant prices between 1982–83 and 1992–93, giving a total rise of 30.8%.
- Health expenditure as a proportion of gross domestic product (GDP) was estimated to be 8.5% in 1992–93, compared with 7.7% in 1982–83.



Note: Health is a subsector of the community services industry  
Source: ABS unpublished data

Figure 1: GDP by industry, Australia, constant 1989–90 prices, seasonally adjusted, quarterly

- The private sector share of health expenditure rose from 28.1% in 1984–85 to 32.2% in 1992–93. This rise in the private sector share was reflected in a fall in the public sector share, from 46.1% to 44.3% for the Commonwealth Government and from 25.8% to 23.5% for State and local government between 1984–85 and 1992–93.
- The Commonwealth Government share of health expenditure fell from 1984–85 to 1989–90 but since then has risen from 42.2% of expenditure in 1989–90 to



44.3% of expenditure in 1992–93.

- The Commonwealth Government share of public sector funded expenditure fell from 64.1% in 1984–85 to 61.4% in 1989–90, but since then has risen to 65.4% in 1992–93.
- The health services subgroup of the CPI rose over twice as fast as the overall CPI and the overall health price index in the period 1984–85 to 1992–93. The CPI health services subgroup only covers the privately funded portion (health insurance funds and individuals) of health expenditure.
- The annual growth rate of real health expenditure per person in Australia was 2.2% over the period 1979–80 to 1989–90. This rate is slightly higher than the average growth rate of 2.0% for seven selected member countries of the Organisation for Economic Co-operation and Development (OECD) and

greater than the growth rate in the United Kingdom, West Germany, New Zealand and Sweden (Table 21).

## General overview of the decade 1982–83 to 1992–93

Over the last decade, total health expenditure rose by an average annual rate of 10% in current prices and 4.2% in constant 1989–90 prices. In examining the growth of health expenditure, the decade to 1992–93 can be divided into three main periods, 1982–83 to 1984–85, 1984–85 to 1989–90 and 1989–90 to 1992–93. The third period was affected by economic recession but the earlier periods were not. Real health expenditure rose at an average annual rate of 4.9% from 1982–83 to 1989–90 versus 2.5% during the recession-affected period 1989–90 to 1992–93.

For the earlier two periods of the decade, there was no significant

difference in the average growth rates between the pre-Medicare period and the period after the introduction of the Medicare system. The average annual growth rate of real expenditure for 1982–83 to 1984–85 was 5.2%, which was only slightly higher than the rate of 4.7% for the period 1984–85 to 1989–90.

The latest GDP figures show that the recession lasted only five quarters—from the March quarter 1990 to the June quarter 1991. However, the recession affected health sector expenditure for a period longer than five quarters.

As the health sector is predominantly financed by governments, health financing depends on movements in government revenue. Declines in government revenue because of the recession started in 1989–90 and continued in 1990–91 and 1991–92. These revenue declines affected government expenditure in 1990–91, 1991–92 and 1992–93.

During the recession-affected years the average annual growth

**Table 1: Total health expenditure (current and constant 1989–90 prices) and rate of growth, 1982–83 to 1992–93**

Year	Total health expenditure (\$m)		Annual rate of growth (%)	
	Current prices	Constant 1989–90 prices <sup>(a)</sup>	Current prices	Constant 1989–90 prices <sup>(a)</sup>
1982–83	13,239	20,673		
1983–84	14,958	21,989	13.0	6.4
1984–85	16,546	22,862	10.6	4.0
1985–86	18,586	24,180	12.3	5.8
1986–87	21,115	25,341	13.6	4.8
1987–88	23,328	26,294	10.5	3.8
1988–89	26,154	27,748	12.1	5.5
1989–90	28,814	28,814	10.2	3.8
1990–91	31,132	29,358	8.0	1.9
1991–92 <sup>(b)</sup>	32,758	30,020	5.2	2.3
1992–93 <sup>(b)</sup>	34,338	31,068	4.8	3.5

**Notes:**

(a) Health expenditure 1982–83 to 1992–93 deflated to constant prices using specific health deflators (Table 17).

(b) Based on preliminary AIHW and ABS estimates (Table 16).

Source: AIHW unpublished data

rate of health expenditure dropped to 2.1% in the three years from 1989–90 to 1991–92, which is 2.8 percentage points lower than the average growth rates before the recession (Table 1). In 1992–93 the annual growth rate was estimated to be 3.5%, which was also substantially lower than the average growth rate of 4.9% in the period before the recession.

It is estimated that total health expenditure in 1992–93 was \$34.3 billion, a rise on the previous year of 4.8% in current prices and 3.5% in constant prices. Of the \$34.3 billion expenditure on health, the Commonwealth Government funded \$15.2 billion, a rise of 7.1% on the previous year (Table 6). This rise reflected a growth of 9.3% in the funding of medical services and benefits, 4.9% in the funding of hospital services, 14.8% in the funding of pharmaceuticals, and 2.1% in the funding of nursing homes and domiciliary care (Commonwealth of Australia, 1993).

## Health Expenditure

The large rise in medical services and benefits was partly due to a 4.6% rise in the number of services, and partly because of a 4.5% rise in the cost per service as a consequence of rises in medical fees and a drift toward the use of higher cost items.

State and local government health expenditure in 1992–93 was estimated to be \$8.1 billion (Table 6). This was an increase on the previous year of 0.9% in current prices but a fall of 0.3% in constant prices. The growth in State and local government expenditure (0.9%) was more constrained than the growth in Commonwealth Government expenditure (7.1%). In 1992–93 private sector funded expenditure rose by 4.6% in current prices and 3.4% in constant prices. Of the \$11.1 billion funded by the private sector, about \$4.0 billion was funded by private health

insurance funds. Benefits paid by these funds rose by 4.7% in 1992–93.

Areas showing comparatively low growth rates in 1992–93 included public hospital and nursing home funding, where budgets are largely controlled by government. Areas with higher growth rates included medical and pharmaceutical services, private hospitals and other areas with less government control.

The growth pattern and growth rates of recurrent expenditure are similar to those for total health expenditure, since recurrent expenditure accounts for around 95% of total expenditure. Growth rates of recurrent health expenditure in current prices fluctuated between 9.9% and 13.6% during the period 1982–83 to 1989–90, and fell from 10.4% in 1989–90 to 4.8% in 1992–93. In constant prices, the growth rate was as low as 2.1% in 1990–91, the recession year, while it rose to 3.5% in 1992–93. The average annual growth rates of recurrent

**Table 2: Recurrent health expenditure (including Government capital consumption) and rate of growth 1982–83 to 1992–93 (current and constant 1989–90 prices)**

Year	Amount (\$m)		Rate of growth (%)	
	Current prices	Constant 1989–90 prices <sup>(a)</sup>	Current prices	Constant 1989–90 prices <sup>(a)</sup>
1982–83	12,775	19,945		
1983–84	14,354	21,102	12.4	5.8
1984–85	15,777	21,778	9.9	3.2
1985–86	17,588	22,905	11.5	5.2
1986–87	19,982	24,012	13.6	4.8
1987–88	22,045	24,860	10.3	3.5
1988–89	24,789	26,309	12.4	5.8
1989–90	27,359	27,359	10.4	4.0
1990–91	29,683	27,935	8.5	2.1
1991–92 <sup>(b)</sup>	31,415	28,789	5.8	3.1
1992–93 <sup>(b)</sup>	32,922	29,787	4.8	3.5

**Notes:**

- (a) Health expenditure 1982–83 to 1992–93 deflated to constant prices using specific health deflators (Table 17).
- (b) Based on preliminary AIHW and ABS estimates (Table 16).

health expenditure between 1982–83 and 1992–93 were 9.9% in current prices and 4.1% in constant prices (Table 2).

Health expenditure per person in 1992–93 was \$1,954. Between 1982–83 and 1992–93, the average annual growth rates in current and constant prices were 8.5% and 2.7% respectively. During the recession-affected years of 1989–90 to 1992–93, real health expenditure per person grew 0.4%, 0.8% and 2.6% respectively, giving an average annual growth of 1.3%. This compares to an average annual growth of 3.4% in the period 1982–83 to 1989–90.

## Health expenditure as a proportion of GDP

During the past decade, total health expenditure as a proportion of GDP was constant at approximately 7.7% to 8.0% for

the first eight years. However, the proportion rose to 8.2% in 1990–91. Estimates of health expenditure for 1991–92 show that health expenditure as a proportion of GDP rose to 8.4% (Table 4). These rises were mainly due to the fall in or low growth of GDP in these years. Real GDP fell 0.4% in 1990–91 and rose only 0.6% in 1991–92 (Table 5). If real GDP had grown in these two years at the 3.6% average annual growth rate of GDP of the previous eight years (1981–82 to 1989–90), then the health-expenditure–GDP ratio in 1991–92 would have been 7.9%, not the 8.4% it actually was. The rise in health expenditure as a proportion of GDP from 1989–90 to 1991–92 can largely be attributed to the recession.

Figure 1 shows that health expenditure grows at a relatively steady rate and is much less dependent on the business cycle than other sectors of the

economy. For instance, manufacturing, construction, and wholesale and retail industries show marked fluctuations which are not observed in the health industry.

Although the health-expenditure–GDP ratio has gone up significantly, the growth rates of health expenditure in 1990–91 and 1991–92 were still substantially lower than those of the years before the recession. The constant price rises in health expenditure were only 1.9% in 1990–91 and 2.3% for 1991–92 compared to an average of 4.9% in the period 1982–83 to 1989–90. Revisions may change these numbers somewhat, but the data to date indicate that while the health-expenditure–GDP ratio has risen from 7.8% in 1989–90 to 8.4% in 1991–92, this has not been due to a significant rise in the growth rate of health expenditure.

**Table 3: Health expenditure per person (current and constant 1989–90 prices) and growth rate, 1982–83 to 1992–93**

Year	Expenditure per person (\$)		Rate of growth (%)	
	Current prices	Constant 1989–90 prices <sup>(a)</sup>	Current prices	Constant 1989–90 prices <sup>(a)</sup>
1982–83	866	1,352		
1983–84	966	1,420	11.6	5.0
1984–85	1,055	1,458	9.2	2.7
1985–86	1,169	1,521	10.8	4.3
1986–87	1,309	1,571	12.0	3.3
1987–88	1,424	1,605	8.8	2.2
1988–89	1,569	1,664	10.2	3.7
1989–90	1,703	1,703	8.5	2.3
1990–91	1,813	1,710	6.5	0.4
1991–92 <sup>(b)</sup>	1,881	1,724	3.7	0.8
1992–93 <sup>(b)</sup>	1,954	1,768	3.9	2.6

**Notes:**

(a) Health expenditure 1982–83 to 1992–93 deflated to constant prices using specific health deflators (Table 17).

(b) Based on preliminary AIHW and ABS estimates (Table 16).

Sources: Health expenditure—AIHW.

Mean resident population—1982–83 to 1985–86: ABS. Australian demographic statistics, December quarter, 1990. Cat. No. 3101.0 1986–87 to 1991–92; ABS. Australian demographic statistics, December quarter 1991. Cat. No. 3101.0 1992–93; ABS. Preliminary June 1992 and 1993 estimated resident population by age and sex States and Territories of Australia. Cat. No. 3201.0. The figure is calculated by averaging June 1992 and June 1993 resident populations.

During 1992–93 the 3.5% growth of real health expenditure was greater than the previous two years, but because GDP was growing at 2.6%—a more healthy rate than previous years—the health expenditure–GDP ratio only rose from 8.4% to 8.5%.

Overall, health expenditure in constant prices in the past decade has grown faster than GDP (Table 5). From 1982–83 to 1989–90, health expenditure growth was fairly close to GDP growth. Health expenditure, however,

has since continued to rise (though at a slower rate than previously) while GDP either fell or remained fairly constant in 1990–91 and 1991–92. GDP recovered in 1992–93 to more normal growth rates.

**Table 4: Total health expenditure, GDP (current prices) and growth rate, 1982–83 to 1992–93**

Year	Total health expenditure		GDP		Total health expenditure as % of GDP
	Amount (\$m)	Growth rate (%)	Amount (\$m)	Growth rate (%)	
1982–83	13,239		171,774		7.7
1983–84	14,958	13.0	194,831	13.4	7.7
1984–85	16,546	10.6	216,257	11.0	7.7
1985–86	18,586	12.3	240,224	11.1	7.7
1986–87	21,115	13.6	264,521	10.1	8.0
1987–88	23,328	10.5	298,426	12.8	7.8
1988–89	26,154	12.1	339,723	13.8	7.7
1989–90	28,814	10.2	370,007	8.9	7.8
1990–91	31,132	8.0	379,902	2.7	8.2
1991–92 <sup>(a)</sup>	32,758	5.2	388,071	2.2	8.4
1992–93 <sup>(a)</sup>	34,338	4.8	401,698	3.5	8.5

*Note:*

(a) Total health expenditure figures are based on preliminary AIHW and ABS estimates (Table 16).

*Sources:* GDP I figures: ABS. Australian national accounts—national income and expenditure, June quarter 1992 and September quarter 1993, Cat. No. 5206.0.

**Table 5: Total health expenditure, GDP (constant 1989–90 prices) and growth rate, 1982–83 to 1992–93**

Year	Total health expenditure		GDP		Total health expenditure as % of GDP
	Amount (\$m)	Growth rate (%)	Amount (\$m)	Growth rate (%)	
1982–83	20,673		275,444		7.5
1983–84	21,989	6.4	291,909	6.0	7.5
1984–85	22,862	4.0	306,651	5.1	7.5
1985–86	24,180	5.8	318,654	3.9	7.6
1986–87	25,341	4.8	326,505	2.5	7.8
1987–88	26,294	3.8	342,869	5.0	7.7
1988–89	27,748	5.5	359,506	4.9	7.7
1989–90	28,814	3.8	370,007	2.9	7.8
1990–91	29,358	1.9	368,524	–0.4	8.0
1991–92 <sup>(a)</sup>	30,020	2.3	370,857	0.6	8.1
1992–93 <sup>(a)</sup>	31,068	3.5	380,602	2.6	8.2

*Notes:*

(a) Total health expenditure figures are based on preliminary ABS estimates.

(b) Health expenditure 1982–83 to 1992–93 deflated to constant prices using specific health deflators (Table 17).

*Source:* GDP figures: ABS. Australian national accounts—national income and expenditure, December quarter 1992 and September quarter 1993, Cat. No. 5206.0

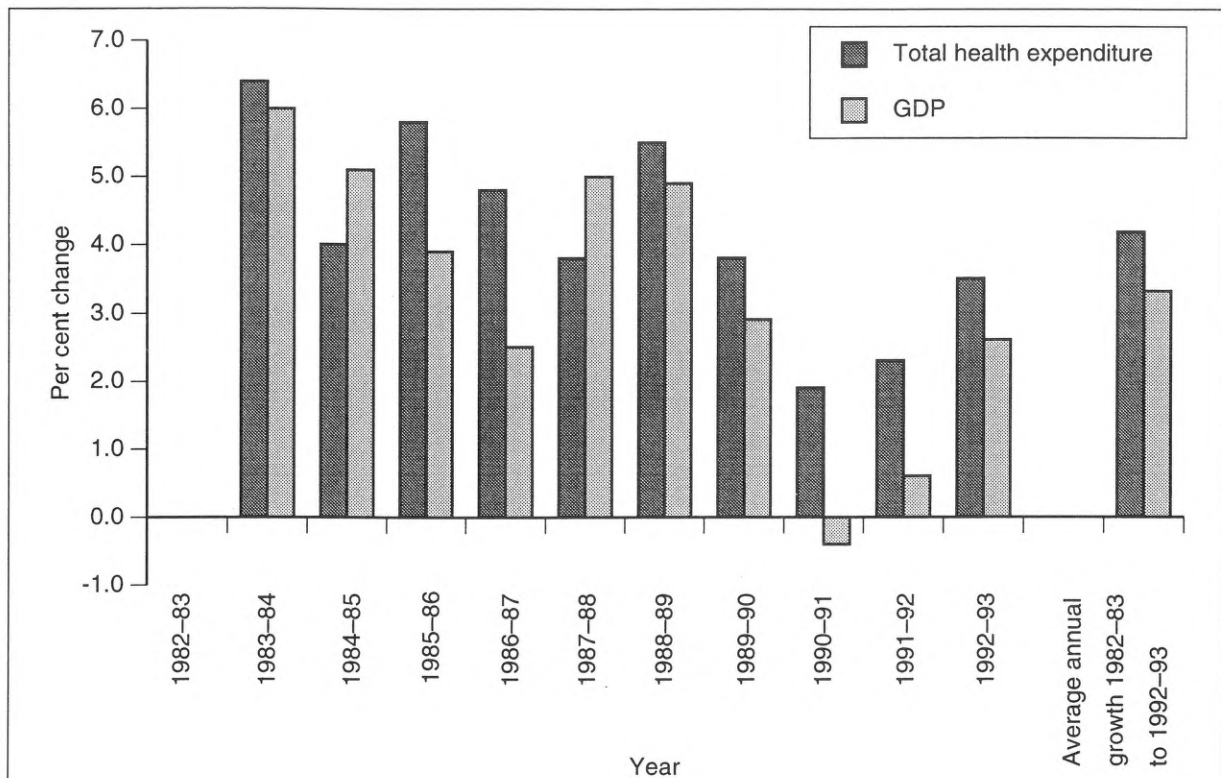


Figure 2: Health expenditure and GDP growth (real change on previous year) 1982-83 to 1991-92

## Health expenditure by source of funds

Since 1984-85, the proportion of total health expenditure funded by governments has fallen from 71.9% to 67.8%, while the proportion funded by the private sector rose from 28.1% to 32.2% (Table 6 and Figure 3). The fall in the proportion of health expenditure provided by governments resulted from a combination of falls in Commonwealth Government funding from 46.1% to 44.3% of total expenditure, and State and local government funding from 25.8% to 23.5%.

From 1985-86, individuals could claim a tax rebate from the Commonwealth Government for net medical expenses exceeding

\$1,000. This and other arrangements replaced a general tax rebate which covered expenses such as health services, funeral expenses and education expenses. The tax rebate rate was 30% in 1985-86, but fell to 29% in 1991-92. Amounts claimed by individuals are a loss for Commonwealth Government revenue and so are a 'tax expenditure' of the Commonwealth Government. Table 6 has been adjusted to include tax rebates on medical expenditure as part of Commonwealth Government expenditure, reducing private sector funded expenditure.

Tax rebates on medical expenditure were published as a separate item from other rebates from 1985-86 to 1988-89. However, from 1989-90 tax rebates on medical expenditure

are aggregated into 'Other rebates' and cannot be separated out. The Australian Institute of Health and Welfare (AIHW) has estimated the tax rebates on medical expenditure for 1989-90 to 1992-93. These amounts were then added to Commonwealth Government expenditure and subtracted from private sector expenditure.

The estimated cost of the rebates for 1989-90 to 1992-93 were \$56 million, \$63 million, \$70 million and \$78 million respectively. The final effect of the tax rebate is to raise the Commonwealth Government share while reducing the private sector share. Table 6 shows the proportion of health expenditure funded by the Commonwealth Government, State and local government, and the private sector, when tax rebates for medical expenses are included as part of

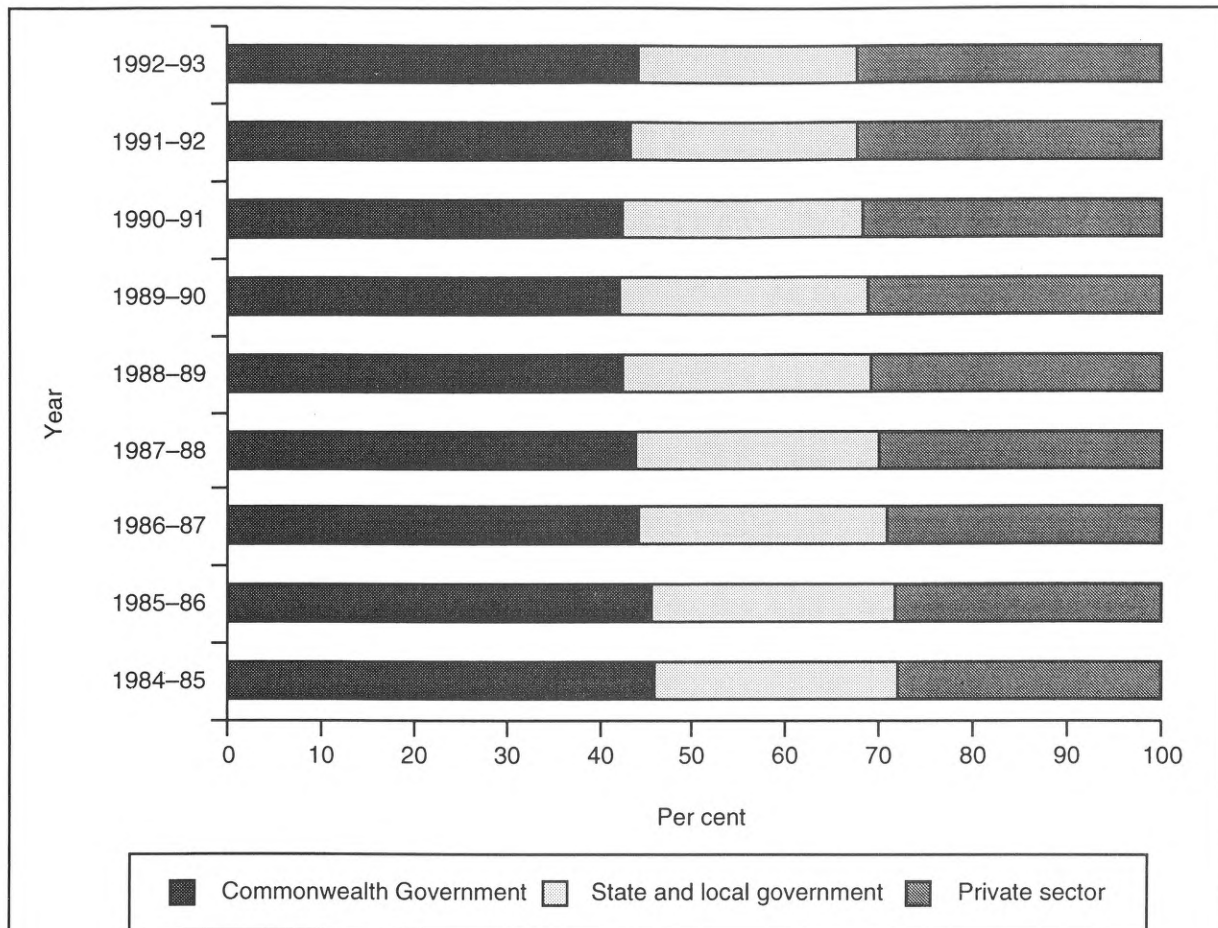


Figure 3: Change in public-private proportion of health expenditure, 1984-85 to 1992-93

Commonwealth expenditure. From 1984-85, this tax expenditure adjustment raised the Commonwealth Government share 0.2 percentage points on average and lowered the private sector share accordingly (Table 6).

During the period 1984-85 to 1992-93, the average annual growth rate of total health expenditure in constant prices was 3.1% for the Commonwealth Government, and 2.5% for State and local government. These were lower than the private sector growth rate of 5.3%. For recurrent health expenditure, the growth pattern and rates were similar to those for total health expenditure.

## Changes in the distribution of recurrent health expenditure from 1985-86 to 1990-91

### 1. Where the dollar was spent in 1990-91

Figure 4 shows detailed health expenditure for 1990-91 (the most recent year for which complete data are available) according to source—Commonwealth Government, State and local government, and private sector. Recurrent health expenditure was \$29.2 billion in current prices, 94% of the total \$31.1

billion. The expenditure on acute hospitals was \$11.1 billion, made up of \$9.2 billion on public acute hospitals and \$1.8 billion on private hospitals. Between 1985-86 and 1990-91, the proportion of recurrent expenditure devoted to acute hospitals fell from 39.3% to 37.9%.

In 1990-91, nursing home care was responsible for \$2.6 billion (8.7% of the \$29.2 billion of recurrent health expenditure), medical services for \$5.5 billion (18.9%), pharmaceuticals \$2.8 billion (9.6%) and dental services \$1.5 billion (5.1%). A total of \$1.2 billion (4.1%) was spent on other health professional services, such as physiotherapy, chiropractic services and podiatry.

**Table 6: Health expenditure by source of funds adjusted for tax rebates on medical expenditure, 1982–83 to 1992–93 (current prices)**

Year	Source of funds				Total
	Commonwealth Government	State and local government	Total government	Private	
	<b>Amount (\$m)</b>				
1982–83	5,085	3,566	8,651	4,588	13,239
1983–84	5,727	3,957	9,684	5,274	14,958
1984–85	7,625	4,267	11,892	4,654	16,546
1985–86	8,507	4,815	13,322	5,264	18,586
1986–87	9,368	5,577	14,946	6,169	21,115
1987–88	10,279	6,077	16,356	6,971	23,328
1988–89	11,137	6,925	18,062	8,092	26,154
1989–90 <sup>(a)</sup>	12,160	7,635	19,795	9,019	28,814
1990–91	13,281	7,992	21,274	9,858	31,132
1991–92	14,209	7,980	22,189	10,569	32,758
1992–93	15,224	8,055	23,279	11,059	34,338
	<b>Percentage</b>				
1982–83 <sup>(b)</sup>	38.4	26.9	65.3	34.7	100
1983–84 <sup>(b)</sup>	38.3	26.5	64.7	35.3	100
1984–85 <sup>(b)</sup>	46.1	25.8	71.9	28.1	100
1985–86 <sup>(c)</sup>	45.8	25.9	71.7	28.3	100
1986–87 <sup>(c)</sup>	44.4	26.4	70.8	29.2	100
1987–88 <sup>(c)</sup>	44.1	26.0	70.1	29.9	100
1988–89 <sup>(c)</sup>	42.6	26.5	69.1	30.9	100
1989–90 <sup>(d)</sup>	42.2	26.5	68.7	31.3	100
1990–91 <sup>(d)</sup>	42.7	25.7	68.3	31.7	100
1991–92 <sup>(d)</sup>	43.4	24.4	67.7	32.3	100
1992–93 <sup>(d)</sup>	44.3	23.5	67.8	32.2	100

*Notes:*

- (a) ACT became self-governing from just before 1989–90 and therefore is included in the State and local government column from 1989–90 on.
- (b) The estimated figures of medical expenditure tax rebate for 1982–83 to 1984–85 are from Table 4 of the Treasury's December 1990 Tax Expenditure Statement. The rebates for 1982–83 to 1984–85 were \$591 million, \$21 million and \$27 million respectively.
- (c) The 1985–86 to 1988–89 medical tax rebate statistics come from the Australian Taxation Office, Taxation Statistics, AGPS, Canberra, Table 1.17. The rebates for 1985–86 to 1988–89 were \$28 million, \$41 million, \$47 million and \$50 million respectively.
- (d) The medical expenditure tax rebates for 1989–90 to 1992–93 have been estimated by applying the growth rate in total private expenditure to the 1988–89 level of medical expenditure rebate. The rebates estimated for 1989–90 to 1992–93 were \$56 million, \$63 million, \$70 million and \$78 million respectively.



**Table 7: Health expenditure by source of funds unadjusted for tax rebates on medical expenditure, 1982–83 to 1992–93 (current prices)**

Year	Source of funds				Total
	Commonwealth Government	State and local government	Total government	Private	
	<b>Amount (\$m)</b>				
1982–83	4,494	3,566	8,060	5,179	13,239
1983–84	5,706	3,957	9,663	5,295	14,958
1984–85	7,598	4,267	11,865	4,681	16,546
1985–86	8,479	4,815	13,294	5,292	18,586
1986–87	9,328	5,577	14,905	6,210	21,115
1987–88	10,233	6,077	16,309	7,018	23,328
1988–89	11,087	6,925	18,012	8,142	26,154
1989–90 <sup>(a)</sup>	12,104	7,635	19,739	9,076	28,814
1990–91	13,219	7,992	21,211	9,921	31,132
1991–92 <sup>(b)</sup>	14,139	7,980	22,119	10,639	32,758
1992–93 <sup>(b)</sup>	15,146	8,055	23,201	11,137	34,338
	<b>Percentage</b>				
1982–83	33.9	26.9	60.9	39.1	100
1983–84	38.1	26.5	64.6	35.4	100
1984–85	45.9	25.8	71.7	28.3	100
1985–86	45.6	25.9	71.5	28.5	100
1986–87	44.2	26.4	70.6	29.4	100
1987–88	43.9	26.0	69.9	30.1	100
1988–89	42.4	26.5	68.9	31.1	100
1989–90 <sup>(a)</sup>	42.0	26.5	68.5	31.5	100
1990–91	42.5	25.7	68.1	31.9	100
1991–92 <sup>(b)</sup>	43.2	24.4	67.5	32.5	100
1992–93 <sup>(b)</sup>	44.1	23.5	67.6	32.4	100

*Notes:*

(a) ACT became self-governing since 1989–90 and therefore is included in the State and local government column from 1989–90.

(b) Based on preliminary AIHW and ABS estimates.

## 2. Changes in institutional health services 1985–86 to 1990–91

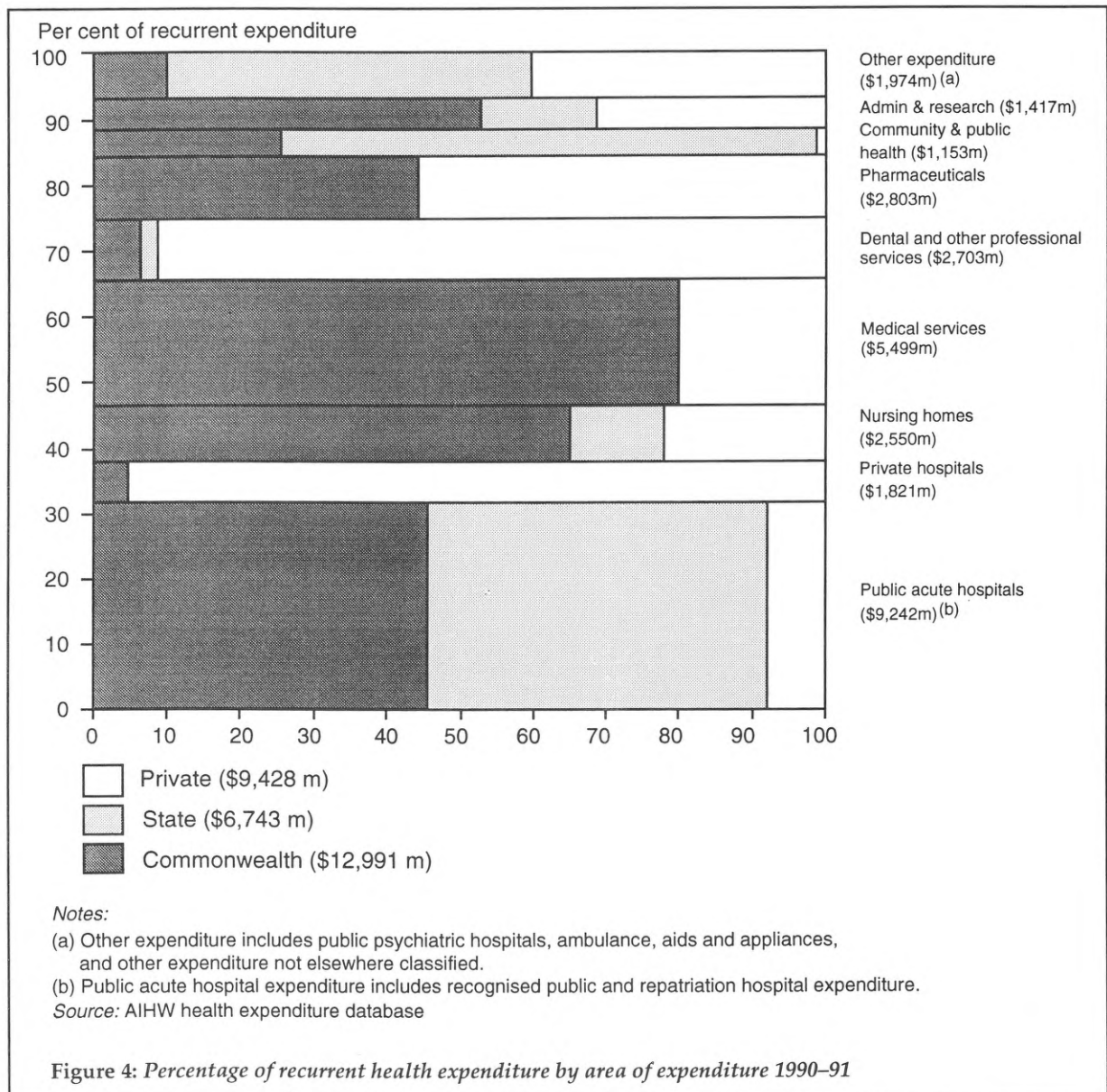
Over the period 1985–86 to 1990–91, slightly more than half of total recurrent health expenditure has been on institutional health services. In 1985–86 it was 53.7% but fell to 50.9% in 1990–91. The fall in the proportion of recurrent expenditure on institutional services was mainly due to a fall in the expenditure share of

hospitals from 42.9% in 1985–86 to 40.6% in 1990–91. Specifically, the falls were 2.2 percentage points in recognised public hospitals, and 0.9 percentage points in public psychiatric hospitals (see Tables 8 to 13).

From 1987–88, a new method has been applied by the AIHW for estimating expenditure on nursing homes. Nursing home expenditure prior to 1987–88, and from 1987–88 on, are therefore not directly comparable. Two changes were made in the method, and as far as the estimate

of total nursing home expenditure is concerned, the changes offset each other to a significant extent. However, there is a definite discontinuity in the estimate of the proportion of expenditure funded by the private sector. The new method gives a higher figure.

From 1987–88 on, the proportion of recurrent expenditure on nursing homes fell from 8.8% in 1987–88 to 8.6% in 1988–89 and 8.5% in 1989–90. It rose slightly to 8.7% in 1990–91.



### 3. Changes in non-institutional health services from 1985–86 to 1990–91

The fall in the proportion of expenditure on institutional services is reflected in the rise in the proportion spent on non-institutional services. Areas where proportions of recurrent expenditure rose significantly over the five-year period 1985–86 to 1990–91 were medical services—from 18.0% to 18.9%, other professional services—from 3.3% to 4.1%, and pharmaceuticals—from 8.7% to 9.6%.

For pharmaceuticals, the rise was attributable mainly to the rise in the 'non-benefits paid' item. The 'non-benefits paid' item includes not only over-the-counter (OTC) drugs, but also prescribed drugs for which no subsidies are paid through the Pharmaceutical Benefits Scheme (PBS). The higher rate of growth of the item was largely due to the rise in the patients' copayment, but other factors had a role such as the de-listing from the PBS of a range of OTC drugs and the move by most public hospitals to reduce the supply of drugs provided to non-inpatients and to inpatients on their discharge from hospital.

The rise in the patients' copayment on PBS prescribed drugs means that some PBS scripts do not attract a government subsidy and that patients bear all the costs of these drugs. General beneficiaries now pay (as of April 1994) the first \$16.00 of the cost of a PBS prescription. The de-listing of the drugs from the PBS meant that PBS subsidies were no longer payable, thus increasing the number of non-PBS items sold and their costs. The reduction of drugs supplied by public hospitals effectively transferred

costs from the public hospitals to patients and the Commonwealth Government (through subsidies provided by PBS).

### 4. Average annual growth rates from 1985–86 to 1990–91

Over the period 1985–86 to 1990–91, the average annual growth rate of recurrent expenditure on institutional services (in current prices) was 9.9%, which was 2.7 percentage points lower than that of non-institutional services (Table 14).

Within institutional services, private hospitals grew at a faster average annual rate than recognised public hospitals by 3 percentage points during the period 1985–86 to 1990–91, and faster than total recurrent health expenditure. Within non-institutional services, all the seven areas grew at higher average annual rates than that of total recurrent expenditure over the five-year period.

When inflation is taken into account, the difference in growth rates between institutional and non-institutional services was less (1.7 percentage points). This is because the inflation rate was higher in the non-institutional sector, with pharmaceuticals and other professional services showing the highest inflation rates (Table 15). The difference may also reflect the fact that there is less government control over non-institutional services than over institutional services.

## Estimates of total health expenditure, ABS and AIHW data

The latest and the most complete total health expenditure figure estimated by the AIHW is for 1990–91. A preliminary estimate for total health expenditure in 1991–92 of \$32.8 billion was obtained by multiplying the AIHW expenditure figure for 1990–91 by the ABS health expenditure growth rate for 1990–91 to 1991–92 (Table 16). The 1991–92 to 1992–93 health expenditure growth rate is estimated using data from State health authorities, Commonwealth budget papers, AIHW estimates and the ABS National Accounts (for private sector information). The growth rate was estimated to be 4.8% in nominal terms giving a preliminary estimate for total health expenditure in 1992–93 of \$34.3 billion. These estimates are preliminary and will be revised when more data are available.

Total health expenditure as estimated by the AIHW has always been higher than the ABS estimate. This is partly due to the AIHW policy of including health research funded by universities as health expenditure, whereas ABS classifies it in the 'education sector'. The difference is also partly due to methodological differences.

## Health prices

Table 17 includes detailed deflators for the health sector. To obtain constant prices expenditure by individual areas of health expenditure, specific types of deflator are applied to each expenditure area. For example, to obtain the constant

Table 8: Total health expenditure by area of expenditure and source of funds<sup>(a)</sup> 1985–86<sup>(b)</sup>

	Public sector			Private sector				Total (\$m)	Percentage of recurrent expenditure
	Commonwealth Government (\$m)	State and local government (\$m)	Total government (\$m)	Health insurance funds (\$m)	Individuals (\$m)	Other <sup>(c)</sup> (\$m)	Total private (\$m)		
<b>Total health expenditure</b>	<b>8,479</b>	<b>4,815</b>	<b>13,294</b>	na	na	na	<b>5,292</b>	<b>18,586</b>	..
Capital expenditure	93	460	553	na	na	na	<sup>(d)</sup> 445	998	..
Capital consumption	35	381	416	(e)	(e)	(e)	(e)	416	..
<b>Total recurrent expenditure</b>	<b>8,350</b>	<b>3,975</b>	<b>12,325</b>	<b>1,767</b>	<b>2,665</b>	<b>415</b>	<b>4,847</b>	<b>17,172</b>	<b>100.0</b>
<i>Total institutional</i>	<i>4,249</i>	<i>3,209</i>	<i>7,458</i>	<i>1,017</i>	<i>542</i>	<i>205</i>	<i>1,764</i>	<i>9,221</i>	<i>53.7</i>
Total hospitals	3,093	2,936	6,028	977	176	191	1,344	7,372	42.9
Recognised public <sup>(f)</sup>	2,651	2,373	5,024	340	–	153	493	5,518	32.1
Private	168	–	168	634	132	34	800	969	5.6
Repatriation	254	6	260	4	–	2	6	266	1.6
Public psychiatric	18	557	575	–	44	1	44	619	3.6
Total nursing homes	1,081	158	1,240	–	303	3	306	1,546	9.0
Government and other	775	158	933	–	209	2	211	1,144	6.7
Deficit financed	307	–	307	–	94	1	95	402	2.3
Other institutional services	75	114	190	40	63	11	114	304	1.8
Ambulance	45	114	159	40	63	11	114	273	1.6
Other institutional (nec)	31	–	31	–	–	–	–	31	0.2
<i>Total non-institutional</i>	<i>4,101</i>	<i>766</i>	<i>4,868</i>	<i>750</i>	<i>2,124</i>	<i>210</i>	<i>3,083</i>	<i>7,951</i>	<i>46.3</i>
Medical services	2,686	–	2,686	17	271	117	405	3,091	18.0
Dental services	25	70	94	294	489	2	785	879	5.1
Other professional services	69	–	69	90	329	85	503	572	3.3
Community and public health <sup>(g)</sup>	152	536	688	1	–	–	1	689	4.0

(continued)

Table 8(continued): Total health expenditure by area of expenditure and source of funds<sup>(a)</sup> 1985–86<sup>(b)</sup>

	Public sector			Private sector				Total (\$m)	Percentage of recurrent expenditure
	Commonwealth Government (\$m)	State and local government (\$m)	Total government (\$m)	Health insurance funds (\$m)	Individuals (\$m)	Other <sup>(c)</sup> (\$m)	Total private (\$m)		
Total pharmaceuticals	693	–	693	31	763	5	798	1,491	8.7
Benefits paid items	693	–	693	–	243	–	243	936	5.4
All other items	–	–	–	31	520	5	555	555	3.2
Aids and appliances	43	2	45	84	229	2	315	361	2.1
Administration	258	73	332	233	–	–	233	565	3.3
Research <sup>(h)</sup>	166	25	191	–	43	–	43	234	1.4
Other non-institutional	9	60	69	–	–	–	–	69	0.4

Notes:

- (a) This table records the amounts provided by the Commonwealth Government, State and local government, and the private sector to fund expenditure on health. It does not give the actual amount spent directly on health goods and services by each sector.
- (b) Details of revisions to these figures since *Health Expenditure Information Bulletin* no.8 are provided on pages 39 and 40.
- (c) The 'Other' column includes the health costs paid by workers' compensation and motor vehicle third party insurance funds.
- (d) Capital expenditure for the private sector cannot be broken down by source of funds.
- (e) Capital consumption (depreciation) for the private sector is included in recurrent expenditure.
- (f) From *Health Expenditure Information Bulletin* no.7 onwards, identified health grants (IHGs) of \$1,483 million have been included as part of Commonwealth outlays on health, even though they have in the past been classified as part of general revenue grants from the Commonwealth Government to the State Governments by the Department of Finance. State and local government outlays on health have consequently been reduced by the amount of IHGs. (Budget Statement 1987–88. Budget Paper No.1. AGPS, Canberra: 279.)
- (g) It includes the old categories of community health services and health promotion and illness prevention (see definition in Technical notes). Health promotion and illness prevention accounted for 22% of the combined category in 1985–86.
- (h) Health research expenditure in this table is subdivided according to which sector performs the research not on the source of funds basis which is used for the other areas of expenditure. Also, there is some double counting of research expenditure. Some research expenditure is included in the public hospitals row as well as the research row. Also, please note that the research expenditure row includes capital as well as recurrent expenditure. Research performed by business enterprises is not included, as it is effectively included in other sections of the table, e.g. health research expenditure by pharmaceutical companies is an input to the production of pharmaceuticals, so it becomes part of 'Total pharmaceuticals' expenditure.

Table 9: Total health expenditure by area of expenditure and source of funds<sup>(a)</sup> 1986-87<sup>(b)</sup>

Area of expenditure	Public sector			Private sector				Total (\$m)	Percentage of recurrent expenditure
	Commonwealth Government (\$m)	State and local government (\$m)	Total government (\$m)	Health insurance funds (\$m)	Individuals (\$m)	Other <sup>(c)</sup> (\$m)	Total private (\$m)		
<b>Total health expenditure</b>	<b>9,328</b>	<b>5,577</b>	<b>14,905</b>	na	na	na	<b>6,210</b>	<b>21,115</b>	..
Capital expenditure	117	518	635	na	na	na	<sup>(d)</sup> 499	1,133	..
Capital consumption	41	413	454	(e)	(e)	(e)	(e)	454	..
<b>Total recurrent expenditure</b>	<b>9,170</b>	<b>4,646</b>	<b>13,817</b>	<b>2,178</b>	<b>3,012</b>	<b>521</b>	<b>5,711</b>	<b>19,528</b>	<b>100.0</b>
<i>Total institutional</i>	<i>4,557</i>	<i>3,853</i>	<i>8,409</i>	<i>1,278</i>	<i>630</i>	<i>271</i>	<i>2,179</i>	<i>10,588</i>	<i>54.2</i>
Total hospitals	3,245	3,521	6,766	1,234	225	256	1,716	8,482	43.4
Recognised public <sup>(f)</sup>	2,857	2,829	5,686	414	–	202	616	6,302	32.3
Private	90	–	90	816	172	50	1,037	1,127	5.8
Repatriation	278	6	284	4	–	3	7	291	1.5
Public psychiatric	20	686	706	–	54	2	55	761	3.9
Total nursing homes	1,214	195	1,410	–	338	4	342	1,752	9.0
Government and other	858	195	1,054	–	233	3	235	1,289	6.6
Deficit financed	356	–	356	–	106	1	107	463	2.4
Other institutional services	97	137	234	45	66	11	121	355	1.8
Ambulance	46	137	183	45	66	11	121	304	1.6
Other institutional (nec)	51	–	51	–	–	–	–	51	0.3
<i>Total non-institutional</i>	<i>4,614</i>	<i>794</i>	<i>5,407</i>	<i>900</i>	<i>2,382</i>	<i>251</i>	<i>3,533</i>	<i>8,940</i>	<i>45.8</i>
Medical services	2,971	–	2,971	38	334	128	499	3,471	17.8
Dental services	26	72	98	345	552	2	898	996	5.1
Other professional services	81	–	81	105	364	112	582	663	3.4
Community and public health <sup>(g)</sup>	192	531	723	2	–	–	3	725	3.7

(continued)

Table 9(continued): Total health expenditure by area of expenditure and source of funds<sup>(a)</sup> 1986–87<sup>(b)</sup>

Area of expenditure	Public sector			Private sector				Total (\$m)	Percentage of recurrent expenditure
	Commonwealth Government (\$m)	State and local government (\$m)	Total government (\$m)	Health insurance funds (\$m)	Individuals (\$m)	Other <sup>(c)</sup> (\$m)	Total private (\$m)		
Total pharmaceuticals	833	–	833	30	823	7	860	1,693	8.7
Benefits paid items	833	–	833	–	189	–	189	1,022	5.2
All other items	–	–	–	30	634	7	671	671	3.4
Aids and appliances	40	1	41	98	266	2	365	406	2.1
Administration	246	83	329	282	–	–	282	611	3.1
Research <sup>(h)</sup>	215	29	243	–	44	–	44	287	1.5
Other non-institutional	10	78	87	–	–	–	–	87	0.4

Notes:

- (a) This table records the amounts provided by the Commonwealth Government, State and local government, and the private sector to fund expenditure on health. It does not give the actual amount spent directly on health goods and services by each sector.
- (b) Details of revisions to these figures since *Health Expenditure Information Bulletin No. 8* are provided on pages 39 and 40.
- (c) The 'Other' column includes the health costs paid by workers' compensation and motor vehicle third party insurance funds.
- (d) Capital expenditure for the private sector cannot be broken down by source of funds.
- (e) Capital consumption (depreciation) for the private sector is included in recurrent expenditure.
- (f) From *Health Expenditure Information Bulletin No. 7* onwards, identified health grants (IHGs) of \$1,651 million have been included as part of Commonwealth outlays on health, even though they have in the past been classified as part of general revenue grants from the Commonwealth Government to the State Governments by the Department of Finance. State and local government outlays on health have consequently been reduced by the amount of IHGs. (Budget Statement 1987–88. Budget Paper No.1. AGPS, Canberra: 279.)
- (g) It includes the old categories of community health services and health promotion and illness prevention (see definition in Technical notes). Health promotion and illness prevention accounted for 26% of the combined category in 1986–87.
- (h) Health research expenditure in this table is subdivided according to which sector performs the research not on the source of funds basis which is used for the other areas of expenditure. Also, there is some double counting of research expenditure. Some research expenditure is included in the public hospitals row as well as the research row. Also, please note that the research expenditure row includes capital as well as recurrent expenditure. Research performed by business enterprises is not included, as it is effectively included in other sections of the table, e.g. health research expenditure by pharmaceutical companies is an input to the production of pharmaceuticals, so it becomes part of 'Total pharmaceuticals' expenditure.

Table 10: Total health expenditure by area of expenditure and source of funds<sup>(a)</sup> 1987-88<sup>(b)</sup>

Area of expenditure	Public sector			Private sector				Total (\$m)	Percentage of recurrent expenditure
	Commonwealth Government (\$m)	State and local government (\$m)	Total government (\$m)	Health insurance funds (\$m)	Individuals (\$m)	Other <sup>(c)</sup> (\$m)	Total private (\$m)		
<b>Total health expenditure</b>	<b>10,233</b>	<b>6,077</b>	<b>16,309</b>	na	na	na	<b>7,018</b>	<b>23,328</b>	..
Capital expenditure	157	496	654	na	na	na	<sup>(d)</sup> 629	1,282	..
Capital consumption	46	430	476	(e)	(e)	(e)	(e)	476	..
<b>Total recurrent expenditure</b>	<b>10,029</b>	<b>5,150</b>	<b>15,180</b>	<b>2,537</b>	<b>3,389</b>	<b>464</b>	<b>6,389</b>	<b>21,569</b>	<b>100.0</b>
<i>Total institutional</i>	<i>4,866</i>	<i>4,320</i>	<i>9,186</i>	<i>1,487</i>	<i>699</i>	<i>207</i>	<i>2,393</i>	<i>11,579</i>	<i>53.7</i>
Total hospitals	3,520	3,945	7,465	1,436	212	193	1,840	9,306	43.1
Recognised public <sup>(f)</sup>	3,123	3,180	6,302	469	-	136	605	6,908	32.0
Private	49	-	49	962	152	53	1,167	1,216	5.6
Repatriation	327	6	333	5	-	3	8	341	1.6
Public psychiatric	21	760	780	-	59	1	60	841	3.9
Total nursing homes <sup>(g)</sup>	1,271	213	1,485	-	416	4	420	1,905	8.8
Other institutional services	75	161	236	51	71	10	132	368	1.7
Ambulance	34	161	195	51	71	10	132	327	1.5
Other institutional (nec)	41	-	41	-	-	-	-	41	0.2
<i>Total non-institutional</i>	<i>5,163</i>	<i>831</i>	<i>5,994</i>	<i>1,050</i>	<i>2,690</i>	<i>257</i>	<i>3,997</i>	<i>9,990</i>	<i>46.3</i>
Medical services	3,187	0	3,187	104	440	156	700	3,887	18.0
Dental services	26	74	101	378	627	2	1,006	1,107	5.1
Other professional services	84	-	84	118	481	79	679	763	3.5
Community and public health <sup>(h)</sup>	248	571	819	1	-	5	6	825	3.8

(continued)



Table 10(continued): Total health expenditure by area of expenditure and source of funds<sup>(a)</sup> 1987–88<sup>(b)</sup>

Area of expenditure	Public sector			Private sector				Total (\$m)	Percentage of recurrent expenditure
	Commonwealth Government (\$m)	State and local government (\$m)	Total government (\$m)	Health insurance funds (\$m)	Individuals (\$m)	Other <sup>(c)</sup> (\$m)	Total private (\$m)		
Total pharmaceuticals	1,021	–	1,021	27	806	11	843	1,864	8.6
Benefits paid items	1,021	–	1,021	–	137	–	137	1,158	5.4
All other items	–	–	–	27	669	11	707	707	3.3
Aids and appliances	45	2	47	108	291	5	403	450	2.1
Administration	307	73	381	314	–	–	314	695	3.2
Research (i)	233	35	268	–	45	–	45	313	1.5
Other non-institutional	11	75	86	–	–	–	–	86	0.4

Notes:

- (a) This table records the amounts provided by the Commonwealth Government, State and local government and the private sector to fund expenditure on health. It does not give the actual amount spent directly on health goods and services by each sector.
- (b) Details of revisions to these figures since *Health Expenditure Information Bulletin* no.8 are provided on pages 39 and 40.
- (c) The 'Other' column includes the health costs paid by workers' compensation and motor vehicle third party insurance funds.
- (d) Capital expenditure for the private sector cannot be broken down by source of funds.
- (e) Capital consumption (depreciation) for the private sector is included in recurrent expenditure.
- (f) From *Health Expenditure Information Bulletin* no.7 onwards, identified health grants (IHGs) of \$1,820 million have been included as part of Commonwealth outlays on health, even though they were until recently classified as part of general revenue grants from the Commonwealth Government to the State Governments by the Department of Finance. State and local government outlays on health have consequently been reduced by the amount of IHGs. (Commonwealth financial relations with other levels of government 1988–89. 1988–89 Budget Paper No.4. AGPS, Canberra:672).
- (g) 1987–88 nursing home expenditure is not comparable with earlier years because, from 1987–88, non-aged nursing homes expenditure was not included and the method for calculating individual contributions changed (see Technical notes of Health Expenditure Information Bulletin No 6 for further details).
- (h) It includes the old categories of community health services and health promotion and illness prevention (see definition in Technical notes). Health promotion and illness prevention accounted for 27% of the combined category in 1987–88.
- (i) Health research expenditure in this table is subdivided according to which sector performs the research not on the source of funds basis which is used for the other areas of expenditure. Also, there is some double counting of research expenditure. Some research expenditure is included in the public hospitals row as well as the research row. Also, please note that the research expenditure row includes capital as well as recurrent expenditure. Research performed by business enterprises is not included, as it is effectively included in other sections of the table, e.g. health research expenditure by pharmaceutical companies is an input to the production of pharmaceuticals, so it becomes part of 'Total pharmaceuticals' expenditure.

Table 11: Total health expenditure by area of expenditure and source of funds<sup>(a)</sup> 1988–89<sup>(b)</sup>

Area of expenditure	Public sector			Private sector				Total (\$m)	Percentage of recurrent expenditure
	Commonwealth Government (\$m)	State and local government (\$m)	Total government (\$m)	Health insurance funds (\$m)	Individuals (\$m)	Other <sup>(c)</sup> (\$m)	Total private (\$m)		
<b>Total health expenditure</b>	<b>11,087</b>	<b>6,925</b>	<b>18,012</b>	na	na	na	<b>8,142</b>	<b>26,154</b>	..
Capital expenditure	92	599	691	na	na	na	<sup>(d)</sup> 674	1,365	..
Capital consumption	44	443	487	(e)	(e)	(e)	(e)	487	..
<b>Total recurrent expenditure</b>	<b>10,951</b>	<b>5,883</b>	<b>16,834</b>	<b>2,770</b>	<b>4,017</b>	<b>682</b>	<b>7,468</b>	<b>24,302</b>	<b>100.0</b>
<i>Total institutional</i>	<i>5,228</i>	<i>4,904</i>	<i>10,132</i>	<i>1,591</i>	<i>739</i>	<i>352</i>	<i>2,681</i>	<i>12,813</i>	<i>52.7</i>
Total hospitals	3,742	4,484	8,226	1,537	226	337	2,100	10,326	42.5
Recognised public	3,280	3,662	6,942	484		257	741	7,683	31.6
Private	52	–	52	1,046	162	75	1,283	1,335	5.5
Repatriation	400	6	406	7		4	11	417	1.7
Public psychiatric	10	816	826	–	64	1	65	891	3.7
Total nursing homes <sup>(f)</sup>	1,390	254	1,644	–	437	4	441	2,085	8.6
Other institutional services	95	167	262	54	76	11	140	402	1.7
Ambulance	36	167	203	54	76	11	140	343	1.4
Other institutional (nec)	59	–	59	–	–	–	–	59	0.2
<i>Total non-institutional</i>	<i>5,723</i>	<i>979</i>	<i>6,702</i>	<i>1,179</i>	<i>3,278</i>	<i>330</i>	<i>4,787</i>	<i>11,489</i>	<i>47.3</i>
Medical services	3,516	–	3,516	136	516	192	844	4,359	17.9
Dental services	27	75	103	418	730	3	1,151	1,253	5.2
Other professional services	93	–	93	126	658	84	868	961	4.0
Community and public health <sup>(g)</sup>	269	668	937	1	–	19	20	957	3.9

(continued)

Table 11(continued): Total health expenditure by area of expenditure and source of funds<sup>(a)</sup> 1988–89<sup>(b)</sup>

Area of expenditure	Public sector			Private sector				Total (\$m)	Percentage of recurrent expenditure
	Commonwealth Government (\$m)	State and local government (\$m)	Total government (\$m)	Health insurance funds (\$m)	Individuals (\$m)	Other <sup>(c)</sup> (\$m)	Total private (\$m)		
Total pharmaceuticals	1,104	–	1,104	30	1,025	9	1,064	2,169	8.9
Benefits paid items	1,104	–	1,104	–	168	–	168	1,273	5.2
All other items	–	–	–	30	857	9	896	896	3.7
Aids and appliances	46	2	48	120	304	24	448	495	2.0
Administration	409	99	508	348	–	–	348	856	3.5
Research <sup>(h)</sup>	248	44	292	–	45	–	45	337	1.4
Other non-institutional	12	90	102	–	–	–	–	102	0.4

Notes:

- (a) This table records the amounts provided by the Commonwealth Government, State and local government and the private sector to fund expenditure on health. It does not give the actual amount spent directly on health goods and services by each sector.
- (b) Details of revisions to these figures since *Health Expenditure Information Bulletin* no.8 are provided on pages 39 and 40.
- (c) The 'Other' column includes the health costs paid by workers' compensation and motor vehicle third party insurance funds.
- (d) Capital expenditure for the private sector cannot be broken down by source of funds.
- (e) Capital consumption (depreciation) for the private sector is included in recurrent expenditure.
- (f) 1988–89 and 1987–88 nursing home expenditure is not comparable with earlier years because, from 1987–88, non-aged nursing homes expenditure was not included and the method for calculating individual contributions changed (see Technical notes of *Health Expenditure Information Bulletin* no.6 for further details).
- (g) It includes the old categories of community health services and health promotion and illness prevention (see definition in Technical notes). Health promotion and illness prevention accounted for 28% of the combined category in 1988–89.
- (h) Health research expenditure in this table is subdivided according to which sector performs the research not on the source of funds basis which is used for the other areas of expenditure. Also, there is some double counting of research expenditure. Some research expenditure is included in the public hospitals row as well as the research row. Also, please note that the research expenditure row includes capital as well as recurrent expenditure. Research performed by business enterprises is not included, as it is effectively included in other sections of the table, e.g. health research expenditure by pharmaceutical companies is an input to the production of pharmaceuticals, so it becomes part of 'Total pharmaceuticals' expenditure.

Table 12: Total health expenditure by area of expenditure and source of funds<sup>(a)</sup> 1989–90<sup>(b)</sup>

Area of expenditure	Public sector			Private sector				Total (\$m)	Percentage of recurrent expenditure
	Commonwealth Government (\$m)	State and local government (\$m)	Total government (\$m)	Health insurance funds (\$m)	Individuals (\$m)	Other <sup>(c)</sup> (\$m)	Total private (\$m)		
<b>Total health expenditure</b>	<b>12,104</b>	<b>7,635</b>	<b>19,739</b>	na	na	na	<b>9,076</b>	<b>28,814</b>	..
Capital expenditure	138	694	832	na	na	na	<sup>(d)</sup> 624	1,456	..
Capital consumption	46	464	510	(e)	(e)	(e)	(e)	510	..
<b>Total recurrent expenditure</b>	<b>11,920</b>	<b>6,477</b>	<b>18,397</b>	<b>3,127</b>	<b>4,453</b>	<b>872</b>	<b>8,452</b>	<b>26,849</b>	<b>100.0</b>
<i>Total institutional</i>	<i>5,587</i>	<i>5,294</i>	<i>10,882</i>	<i>1,809</i>	<i>724</i>	<i>426</i>	<i>2,959</i>	<i>13,841</i>	<i>51.6</i>
Total hospitals	3,966	4,806	8,772	1,754	187	404	2,345	11,117	41.4
Recognised public	3,439	4,091	7,529	511	–	291	802	8,331	31.0
Private	69	–	69	1,235	132	107	1,474	1,543	5.7
Repatriation	445	3	448	8	–	5	12	460	1.7
Public psychiatric	14	712	726	–	56	1	57	783	2.9
Total nursing homes (f)	1,530	296	1,826	–	456	3	459	2,285	8.5
Other institutional services	92	192	283	55	81	19	155	439	1.6
Ambulance	35	190	225	55	81	19	155	381	1.4
Other institutional (nec)	57	1	58	–	–	–	–	58	0.2
<i>Total non-institutional</i>	<i>6,332</i>	<i>1,183</i>	<i>7,515</i>	<i>1,318</i>	<i>3,729</i>	<i>446</i>	<i>5,493</i>	<i>13,008</i>	<i>48.4</i>
Medical services	3,934	8	3,942	151	585	275	1,011	4,953	18.4
Dental services	29	63	91	463	808	2	1,273	1,364	5.1
Other professional services	104	–	104	141	727	103	971	1,075	4.0
Community and public health <sup>(g)</sup>	272	852	1,124	1	–	43	44	1,168	4.4

(continued)

Table 12(continued): Total health expenditure by area of expenditure and source of funds<sup>(a)</sup> 1989–90<sup>(b)</sup>

Area of expenditure	Public sector			Private sector				Total (\$m)	Percentage of recurrent expenditure
	Commonwealth Government (\$m)	State and local government (\$m)	Total government (\$m)	Health insurance funds (\$m)	Individuals (\$m)	Other <sup>(c)</sup> (\$m)	Total private (\$m)		
Total pharmaceuticals	1,264	–	1,264	35	1,194	11	1,240	2,504	9.3
Benefits paid items	1,264	–	1,264	–	185	–	185	1,448	5.4
All other items	–	–	–	35	1,009	11	1,055	1,055	3.9
Aids and appliances	51	2	53	136	370	13	519	572	2.1
Administration	377	128	505	390	–	–	390	896	3.3
Research <sup>(h)</sup>	289	51	341	–	45	–	45	385	1.4
Other non-institutional	12	78	90	–	–	–	–	90	0.3

Notes:

- (a) This table records the amounts provided by the Commonwealth Government, State and local government and the private sector to fund expenditure on health. It does not give the actual amount spent directly on health goods and services by each sector.
- (b) Details of revisions to these figures since *Health Expenditure Information Bulletin* no.8 are provided on pages 39 and 40.
- (c) The 'Other' column includes the health costs paid by workers' compensation and motor vehicle third party insurance funds.
- (d) Capital expenditure for the private sector cannot be broken down by source of funds.
- (e) Capital consumption (depreciation) for the private sector is included in recurrent expenditure.
- (f) Nursing home expenditure for 1987–88 to 1989–90 is not comparable with earlier years because, from 1987–88, non-aged nursing homes expenditure was not included and the method for calculating individual contributions changed (see Technical notes of *Health Expenditure Information Bulletin* no.6 for further details).
- (g) This includes the old categories of community health services and health promotion and illness prevention (see definition in Technical notes). Health promotion and illness prevention accounted for 32% of the combined category in 1989–90.
- (h) Health research expenditure in this table is subdivided according to which sector performs the research not on the source of funds basis which is used for the other areas of expenditure. Also, there is some double counting of research expenditure. Some research expenditure is included in the public hospitals row as well as the research row. Also, please note that the research expenditure row includes capital as well as recurrent expenditure. Research performed by business enterprises is not included, as it is effectively included in other sections of the table, e.g. health research expenditure by pharmaceutical companies is an input to the production of pharmaceuticals, so it becomes part of 'Total pharmaceuticals' expenditure.

Table 13: Total health expenditure by area of expenditure and source of funds<sup>(a)</sup> 1990–91

Area of expenditure	Public sector			Private sector			Total private (\$m)	Total (\$m)	Percentage of recurrent expenditure
	Commonwealth Government (\$m)	State and local government (\$m)	Total government (\$m)	Health insurance funds (\$m)	Individuals (\$m)	Other <sup>(c)</sup> (\$m)			
<b>Total health expenditure</b>	<b>13,219</b>	<b>7,992</b>	<b>21,211</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>9,921</b>	<b>31,132</b>	<b>..</b>
Capital expenditure	181	775	956	na	na	na	<sup>(c)</sup> 493	1,449	..
Capital consumption	47	474	521	(d)	(d)	(d)	(d)	521	..
<b>Total recurrent expenditure</b>	<b>12,991</b>	<b>6,743</b>	<b>19,734</b>	<b>3,491</b>	<b>5,096</b>	<b>841</b>	<b>9,428</b>	<b>29,162</b>	<b>100.0</b>
<i>Total institutional</i>	<i>6,070</i>	<i>5,526</i>	<i>11,596</i>	<i>2,075</i>	<i>858</i>	<i>328</i>	<i>3,262</i>	<i>14,857</i>	<i>50.9</i>
Total hospitals	4,307	5,012	9,319	2,012	207	305	2,524	11,843	40.6
Recognised public	3,711	4,301	8,012	550	–	164	714	8,726	29.9
Private	86	–	86	1,451	152	132	1,734	1,821	6.2
Repatriation	494	3	497	11	–	8	19	516	1.8
Public psychiatric	17	707	724	–	55	1	56	780	2.7
Total nursing homes <sup>(e)</sup>	1,658	325	1,983	–	562	5	567	2,550	8.7
Other institutional services	105	189	294	63	89	19	171	465	1.6
Ambulance	38	189	227	63	89	19	171	398	1.4
Other institutional (nec)	67	–	67	–	–	–	–	67	0.2
<i>Total non-institutional</i>	<i>6,921</i>	<i>1,218</i>	<i>8,138</i>	<i>1,416</i>	<i>4,238</i>	<i>513</i>	<i>6,166</i>	<i>14,305</i>	<i>49.1</i>
Medical services	4,384	8	4,392	173	636	297	1,107	5,499	18.9
Dental services	33	62	95	503	887	16	1,406	1,501	5.1
Other professional services	138	–	138	156	749	159	1,064	1,202	4.1
Community and public health <sup>(f)</sup>	293	844	1,138	1	–	14	15	1,153	4.0

(continued)

Table 13(continued): Total health expenditure by area of expenditure and source of funds<sup>(a)</sup> 1990–91

Area of expenditure	Public sector			Private sector				Total (\$m)	Percentage of recurrent expenditure
	Commonwealth Government (\$m)	State and local government (\$m)	Total government (\$m)	Health insurance funds (\$m)	Individuals (\$m)	Other <sup>(c)</sup> (\$m)	Total private (\$m)		
Total pharmaceuticals	1,245	–	1,245	39	1,506	13	1,558	2,803	9.6
Benefits paid items	1,245	–	1,245	–	224	–	224	1,468	5.0
All other items	–	–	–	39	1,282	13	1,335	1,335	4.6
Aids and appliances	60	2	62	153	407	13	573	635	2.2
Administration	470	126	596	391	–	–	391	986	3.4
Research <sup>(g)</sup>	279	98	378	–	53	–	53	431	1.5
Other non-institutional	17	77	94	–	–	–	–	94	0.3

Notes:

- (a) This table records the amounts provided by the Commonwealth Government, State and local government and the private sector to fund expenditure on health. It does not give the actual amount spent directly on health goods and services by each sector.
- (b) The 'Other' column includes the health costs paid by workers' compensation and motor vehicle third party insurance funds.
- (c) Capital expenditure for the private sector cannot be broken down by source of funds.
- (d) Capital consumption (depreciation) for the private sector is included in recurrent expenditure.
- (e) Nursing home expenditure for 1987–88 to 1990–91 is not comparable with earlier years because, from 1987–88, non-aged nursing homes expenditure was not included and the method for calculating individual contributions changed.
- (f) This includes the old categories of community health services and health promotion and illness prevention.
- (g) Health research expenditure in this table is subdivided according to which sector performs the research not on the source of funds basis which is used for the other areas of expenditure. Also, there is some double counting of research expenditure. Some research expenditure is included in the public hospitals row as well as the research row. Also, please note that the research expenditure row includes capital as well as recurrent expenditure. Research performed by business enterprises is not included, as it is effectively included in other sections of the table, e.g. health research expenditure by pharmaceutical companies is an input to the production of pharmaceuticals, so it becomes part of 'Total pharmaceuticals' expenditure.

Table 14: Changes in health expenditure on previous year (current prices) 1982–83 to 1990–91

Area of expenditure	Annual change on previous year (per cent)								Average <sup>(b)</sup>	Average <sup>(b)</sup>
	1983–84	1984–85	1985–86	1986–87	1987–88	1988–89	1989–90	1990–91	1985–86 to 1990–91	1982–83 to 1990–91
<b>Total health expenditure</b>	<b>13.0</b>	<b>10.6</b>	<b>12.3</b>	<b>13.6</b>	<b>10.5</b>	<b>12.1</b>	<b>10.2</b>	<b>8.0</b>	<b>10.9</b>	<b>11.5</b>
Capital expenditure	30.1	27.4	29.7	13.6	13.2	6.4	6.7	-0.5	8.0	15.4
Capital consumption	5.0	6.1	9.5	9.1	4.8	2.3	4.7	2.2	4.4	5.8
<b>Total recurrent expenditure</b>	<b>12.6</b>	<b>10.0</b>	<b>11.5</b>	<b>13.7</b>	<b>10.5</b>	<b>12.7</b>	<b>10.5</b>	<b>8.6</b>	<b>11.2</b>	<b>11.5</b>
<i>Total institutional</i>	<i>9.9</i>	<i>9.0</i>	<i>9.0</i>	<i>14.8</i>	<i>9.4</i>	<i>10.7</i>	<i>8.0</i>	<i>7.3</i>	<i>9.9</i>	<i>10.1</i>
Total hospitals	8.6	8.5	8.8	15.0	9.7	11.0	7.7	6.5	9.8	10.0
Recognised public	7.7	8.7	9.2	14.2	9.6	11.2	8.4	4.7	9.7	9.8
Private	12.1	8.2	11.5	16.4	7.9	9.8	15.5	18.0	12.7	12.0
Repatriation	14.3	7.0	9.7	9.1	17.4	22.2	10.3	12.0	15.0	12.9
Public psychiatric	9.5	8.1	1.6	22.9	10.4	6.0	-12.1	-0.3	3.8	6.4
Total nursing homes	17.1	11.7	10.1	13.3	8.8	9.5	9.6	11.6	10.2	11.0
Other institutional services	7.8	8.3	8.7	16.9	3.7	9.1	9.2	6.0	8.5	9.0
Ambulance	8.0	8.4	7.9	11.3	7.6	4.9	11.0	4.5	7.7	8.1
Other institutional (nec)	6.4	7.9	16.6	66.6	-19.2	42.8	-1.2	15.8	14.3	15.9
<i>Total non-institutional</i>	<i>16.2</i>	<i>11.4</i>	<i>15.4</i>	<i>12.3</i>	<i>11.5</i>	<i>14.5</i>	<i>13.2</i>	<i>10.2</i>	<i>12.6</i>	<i>13.1</i>
Medical services	14.1	11.2	15.1	12.3	12.0	12.1	13.6	11.0	12.3	12.7
Dental services	17.9	15.0	22.8	13.3	11.1	13.2	8.8	10.0	11.3	14.0
Other professional services	31.2	12.0	17.9	15.9	15.1	26.0	11.9	11.8	16.7	17.3
Community and public health <sup>(a)</sup>	14.1	24.4	13.7	5.3	13.7	16.0	22.1	-1.3	12.6	13.7
Total pharmaceuticals	15.9	8.1	13.0	13.5	10.1	16.3	15.5	12.0	13.7	12.9
Benefits paid items	10.9	16.2	10.1	9.2	13.2	9.9	13.8	1.4	10.2	11.0
All other items	24.2	-4.0	18.2	20.8	5.4	26.8	17.8	26.5	18.6	15.6
Aids and appliances	14.4	6.9	19.9	12.5	10.9	10.0	15.5	11.1	12.0	12.6
Administration	12.9	1.6	3.1	8.2	13.7	23.2	4.6	10.1	12.6	9.6
Research	19.9	20.0	6.9	22.7	9.0	7.6	14.4	11.8	12.1	13.4
Other non-institutional	32.9	9.3	18.0	26.1	-1.5	18.5	-11.4	4.3	5.3	11.0

*Notes:*

(a) It includes the old categories of community health services and health promotion and illness prevention (see definition in Technical notes).

(b) Average growth rates are calculated using log linear regression.



Table 15: *Changes in health expenditure on previous year (constant 1989–90 prices) 1982–83 to 1990–91*

Area of expenditure	Annual change on previous year (per cent)								Average <sup>(b)</sup>	Average <sup>(b)</sup>
	1983–84	1984–85	1985–86	1986–87	1987–88	1988–89	1989–90	1990–91	1985–86 to 1990–91	1982–83 to 1990–91
<b>Total health expenditure</b>	<b>6.4</b>	<b>4.0</b>	<b>5.8</b>	<b>4.8</b>	<b>3.8</b>	<b>5.5</b>	<b>3.8</b>	<b>1.9</b>	<b>4.1</b>	<b>4.6</b>
Capital expenditure	21.8	22.2	17.6	4.3	7.9	0.4	1.1	-2.3	2.4	8.4
Capital consumption	-1.3	1.5	0.5	2.5	0.7	-2.4	-0.5	0.0	-0.2	0.3
<b>Total recurrent expenditure</b>	<b>6.0</b>	<b>3.2</b>	<b>5.3</b>	<b>4.9</b>	<b>3.6</b>	<b>6.0</b>	<b>4.1</b>	<b>2.1</b>	<b>4.3</b>	<b>4.5</b>
<i>Total institutional</i>	<i>3.5</i>	<i>2.6</i>	<i>3.0</i>	<i>4.6</i>	<i>3.7</i>	<i>4.1</i>	<i>2.3</i>	<i>1.4</i>	<i>3.3</i>	<i>3.4</i>
Total hospitals	2.3	2.1	2.9	4.8	4.1	4.4	2.0	0.7	3.3	3.2
Recognised public	1.4	2.3	3.2	4.1	4.0	4.6	2.7	-1.0	3.1	3.1
Private	5.6	1.9	5.4	6.1	2.3	3.3	9.4	11.5	6.0	5.1
Repatriation	7.7	0.7	3.7	-0.5	11.4	14.9	4.5	5.9	8.1	6.0
Public psychiatric	3.2	1.8	-3.9	12.0	4.7	-0.3	-16.8	-5.8	-2.4	-0.1
Total nursing homes	10.3	5.2	4.0	3.3	3.2	2.9	3.8	5.4	3.6	4.2
Other institutional services	1.6	2.0	2.7	6.5	-1.6	2.6	3.4	0.1	2.0	2.3
Ambulance	1.7	2.0	2.0	1.5	2.0	-1.4	5.1	-1.3	1.3	1.5
Other institutional (nec)	0.2	1.6	10.2	51.9	-23.4	34.3	-6.5	9.5	7.5	8.8
<i>Total non-institutional</i>	<i>9.3</i>	<i>4.0</i>	<i>8.7</i>	<i>4.9</i>	<i>2.7</i>	<i>7.7</i>	<i>5.8</i>	<i>2.8</i>	<i>5.0</i>	<i>5.6</i>
Medical services	6.4	2.5	9.2	6.4	2.5	6.3	4.3	3.1	4.5	5.2
Dental services	8.6	5.5	11.1	2.1	0.9	3.2	-0.1	1.9	1.6	3.9
Other professional services	23.4	5.4	11.9	5.9	9.1	18.3	6.1	5.6	9.7	10.2
Community and public health (a)	7.6	17.3	7.1	-0.4	9.3	9.8	16.3	-5.9	7.2	7.8
Total pharmaceuticals	11.7	3.2	6.6	5.7	1.1	9.5	10.9	4.6	6.6	6.2
Benefits paid items	6.9	11.0	3.9	1.7	4.0	3.5	9.3	-5.3	3.3	4.5
All other items	19.7	-8.3	11.6	12.4	-3.2	19.4	13.1	18.2	11.3	8.8
Aids and appliances	10.2	2.1	13.1	4.7	1.8	3.6	10.9	3.8	5.0	6.0
Administration	6.3	-4.1	-2.9	2.3	9.3	16.6	-0.3	5.0	7.2	4.0
Research	13.4	13.6	0.7	16.0	4.8	1.8	9.1	6.5	6.8	7.7
Other non-institutional	24.9	3.0	11.1	19.3	-5.3	12.1	-15.6	-0.5	0.3	5.3

*Notes:*

(a) It includes the old categories of community health services and health promotion and illness prevention (see definition in Technical notes).

(b) Average growth rates are calculated using log linear regression.

price estimate of expenditure on medical services the current price estimate of expenditure on medical services is deflated by the 'Doctor' price index of the Private Final Consumption Expenditure (PFCE) series produced by the ABS. Detailed definitions and sources for the deflators and indices in Table 17 are contained in 'Technical notes'.

Time-series data of health-related deflators are compared with a number of economy-wide

deflators in Tables 17 and 18. The total CPI has moved slightly faster than health prices in the period 1984–85 to 1989–90, after which the reverse was true. Inflation in the health sector as measured by the health price index was 6.0% in 1990–91, 2.9% in 1991–92 and 1.3% in 1992–93. General inflation as measured by the CPI was 5.3% in 1990–91, 1.9% in 1991–92 and 1.0% in 1992–93.

On average, growth rates of average weekly earnings (AWE) were higher than the health price

index growth rates in the period 1970–71 to 1991–92. The only period with a lower AWE growth rate was from 1984–85 to 1991–92.

The health services subgroup of the CPI fluctuated substantially because of the changes in health financing arrangements (Figure 5).

From 1984–85 on, the total health expenditure price index showed a slower rise than that of the health services subgroup of the CPI. The reasons for growth rates of CPI health services subgroup being

**Table 16: ABS and AIHW estimates of health expenditure, 1985–86 to 1991–92**

	Year						
	1985–86	1986–87	1987–88	1988–89	1989–90	1990–91	1991–92
<b>ABS estimates of health expenditure</b>							
Commonwealth Government final consumption	974	1,064	1,162	1,519	1,451	1,603	1,732
State and local government final consumption	6,772	7,655	8,399	9,219	9,995	10,441	10,993
Private final consumption	9,250	10,631	12,065	13,558	15,019	16,800	18,074
Total final consumption expenditure	16,996	19,350	21,626	24,296	26,465	28,844	30,799
Commonwealth Government gross fixed capital	41	58	71	45	51	91	109
State and local government gross fixed capital	497	550	519	591	740	817	844
Total government fixed capital expenditure	538	608	590	636	791	908	953
Total health expenditure (excluding private capital)	17,534	19,958	22,216	24,932	27,256	29,752	31,752
Change (%)	10.7	13.8	11.3	12.2	9.3	9.2	6.7
<b>AIHW estimates of health expenditure</b>							
Total health expenditure (excluding private capital)	18,141	20,616	22,699	25,480	28,190	30,639	32,315
Change (%)	11.9	13.6	10.1	12.3	10.6	8.7	5.5
Total health expenditure (including private capital)	18,586	21,115	23,328	26,154	28,814	31,132	<sup>(a)</sup> 32,758
Change (%)	12.3	13.6	10.5	12.1	10.2	8.0	5.2

**Note:**

(a) Total health expenditure figures are based on preliminary AIHW and ABS estimates.

**Sources:**

ABS health expenditure data for 1982–83 to 1986–87 from ABS unpublished data.

ABS health expenditure data for 1987–88: ABS. Australian national accounts—national income and expenditure March quarter 1992. 5206.0

ABS health expenditure data for 1988–89 to 1991–92: ABS. Australian national accounts—national income and expenditure June quarter 1992. Cat. No.5206.0

twice as high as growth rates for the total health expenditure price index and the overall CPI are complex and need further investigation. Some of the factors include the shifting of costs from the government sector to the private sector, higher rates of growth of prices in the private sector and higher costs per client in the private sector.

## International comparisons of health expenditure

Health expenditure per person in Table 19 is reported in terms of purchasing power parities (PPPs). The US dollar is used as a numeraire. The dollars in the

table are not adjusted for inflation, but because of the purchasing power parity adjustment, the inflation rate is effectively the same across all countries.

There is substantial similarity in the growth rate of health expenditure per person for the nine countries listed in the period 1970 to 1991, with the difference between highest and lowest being 3.2%, and six of the countries being between 9.9% and 10.7%. Japan showed the highest growth of 11.9% per year followed by the United States with 10.7%. Australia had a growth rate of 10.0% which was sixth among the nine countries.

The United States in this period has had a higher growth rate than most other countries. This

difference was most noticeable in the years from 1985 to 1991, when the United States average growth rate was 9.1%. Japan was fairly high at 8.4% but all the other countries were 7.4% or below.

It should be noted that because the PPP being used here is the general Purchasing Power Parity index, the amounts in this table do not represent the quantum of health inputs being put into the health system. They represent instead the opportunity cost of health services consumption, i.e. they represent the quantum of general goods and services that are being invested in the health services sector.

The OECD do publish health-specific purchasing power parities but these are not

Table 17a: Health expenditure and economy-wide deflators 1970–71 to 1992–93 (1989–90 = 100)

Year	Government final consumption expenditure (GFCE)						IPD2	GDP-IPD	AWE
	Total health expenditure price index	State/local hospital and clinical	State/local total health and welfare	Commonwealth other health and welfare	IPD1	Total GFCE			
1970–71	17.1	15.6	17.3	17.3	16.4	16.9	15.9	17.8	14.3
1971–72	18.7	17.3	19.0	19.0	18.0	18.6	17.0	19.1	16.0
1972–73	20.2	18.3	20.4	20.4	19.4	20.4	18.6	20.8	17.5
1973–74	23.3	21.1	23.6	23.6	22.4	23.8	21.3	23.8	20.1
1974–75	27.8	27.8	29.2	29.8	28.7	30.0	28.1	28.2	25.8
1975–76	32.3	32.1	34.7	33.6	33.3	34.5	32.6	32.5	29.1
1976–77	36.6	36.7	39.4	40.4	37.6	38.7	36.0	36.1	32.7
1977–78	39.6	39.8	42.7	43.4	40.6	41.9	39.1	38.9	36.1
1978–79	42.2	42.1	45.4	45.8	43.2	44.6	41.8	41.9	38.7
1979–80	46.6	46.5	49.3	50.0	47.0	49.0	46.8	46.5	42.6
1980–81	51.9	51.9	55.2	55.9	52.6	54.9	52.5	51.2	48.5
1981–82	57.9	58.0	61.6	64.0	58.7	62.2	59.3	56.5	54.8
1982–83	64.0	64.5	68.3	69.4	65.1	68.7	67.4	62.4	62.5
1983–84	68.0	68.5	72.6	73.2	69.1	72.8	71.7	66.8	67.0
1984–85	72.4	77.2	77.2	77.2	73.3	77.2	75.0	70.4	72.1
1985–86	76.9	82.2	82.2	82.0	77.7	82.2	81.7	75.4	76.6
1986–87	83.3	86.9	86.9	86.7	84.4	86.9	87.0	80.9	82.6
1987–88	88.7	90.3	90.3	90.2	89.1	90.3	90.6	87.0	87.0
1988–89	94.3	95.4	95.4	95.3	94.9	95.4	95.0	94.5	93.6
1989–90	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1990–91	106.0	105.3	105.3	104.9	105.1	105.3	102.2	103.2	107.1
1991–92	109.1	108.4	108.4	107.7		108.4	102.2	104.9	109.2
1992–93	110.5	111.3	111.3	109.7		111.3	102.5	106.0	111.0

Source: ABS with some re-referencing by AIHW

Table 17b: Health expenditure and economy-wide deflators 1970-71 to 1992-93 (1989-90 = 100)

Year	Private final consumption expenditure					CPI (weighted average of capital cities)						
	Total health expenditure price index	Doctor	Dentists	Chemists	Other medical	IPD3	Total	Health services subgroup	Hospital & medical services subcomponent	Dental services subcomponent	Optical services subcomponent	Pharmaceutical services subcomponent
1970-71	17.1	16.9	11.6	29.7	16.4	14.5	18.0					
1971-72	18.7	18.9	12.8	30.2	18.2	15.5	19.3					
1972-73	20.2	20.0	14.1	31.3	19.7	16.7	20.4	17.4				
1973-74	23.3	22.7	16.1	31.3	22.5	19.1	23.1	20.4				
1974-75	27.8	26.4	19.8	33.4	28.5	24.5	26.9	26.2				
1975-76	32.3	32.0	24.0	37.7	32.9	28.5	30.4	14.6				
1976-77	36.6	36.2	28.0	40.8	37.4	31.4	34.6	40.0				
1977-78	39.6	39.4	32.0	44.3	40.5	34.1	37.9	50.5				
1978-79	42.2	41.2	35.7	47.6	43.1	36.6	41.0	43.9				
1979-80	46.6	45.9	39.3	50.9	46.8	40.9	45.2	48.0				
1980-81	51.9	51.1	43.2	56.2	52.4	46.1	49.4	51.4	50.7	43.1		43.2
1981-82	57.9	56.0	47.4	61.9	58.4	52.1	54.6	69.7	71.7	47.3		47.9
1982-83	64.0	61.5	52.3	67.1	64.8	59.2	60.9	89.9	94.5	52.1		55.7
1983-84	68.0	65.9	56.8	69.7	68.9	62.7	65.1	79.4	81.6	56.4		61.7
1984-85	72.4	71.5	61.9	72.9	73.2	66.3	67.8	53.3	50.7	61.7		65.2
1985-86	76.9	75.4	68.5	77.3	77.2	74.4	73.5	58.1	55.1	68.1		73.6
1986-87	83.3	79.6	76.0	83.0	84.5	83.2	80.4	71.5	69.2	75.7		85.2
1987-88	88.7	87.0	83.7	90.4	89.1	88.3	86.3	83.1	82.4	83.4	91.7	88.2
1988-89	94.3	91.8	91.8	96.0	94.9	94.6	92.6	92.4	92.4	91.5	96.6	94.4
1989-90	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1990-91	106.0	107.7	108.0	107.0	105.9	101.2	105.3	111.8	113.4	108.3	103.8	106.7
1991-92	109.1	110.1	114.2	112.5	108.7	101.1	107.3	128.8	135.0	114.9	106.2	112.0
1992-93	110.5	109.4	118.5	117.1	109.9	103.3	108.4	132.3	138.1	118.8	111.0	112.7

Source: ABS with some referencing by AIHW.

Table 18a: Percentage change in health expenditure and economy-wide deflators 1970–71 to 1992–93

Year	Government final consumption expenditure (GFCE)					IPD1	Total GFCE	IPD2	GDP-IPD	AWE
	Total health expenditure price index	State/local hospital and clinical	State/local total health and welfare	Commonwealth other health and welfare						
1970–71 to 71–72	9.5	10.9	9.6	9.6	9.6	10.1	6.9	7.3	12.1	
1971–72 to 72–73	7.8	5.9	7.7	7.7	7.7	9.7	8.9	8.9	9.5	
1972–73 to 73–74	15.6	15.1	15.6	15.6	15.5	16.7	14.8	14.4	14.8	
1973–74 to 74–75	19.0	31.8	23.6	26.2	28.0	26.1	31.6	18.5	28.0	
1974–75 to 75–76	16.5	15.8	18.9	13.0	16.1	15.0	16.0	15.2	12.9	
1975–76 to 76–77	13.3	14.2	13.6	20.0	12.8	12.2	10.6	11.1	12.4	
1976–77 to 77–78	8.2	8.4	8.4	7.6	8.2	8.3	8.5	7.8	10.4	
1977–78 to 78–79	6.5	5.9	6.2	5.5	6.2	6.4	6.9	7.7	7.4	
1978–79 to 79–80	10.3	10.5	8.8	9.1	8.9	9.9	12.0	11.0	9.9	
1979–80 to 80–81	11.5	11.6	12.0	11.9	11.8	12.0	12.2	10.1	13.9	
1980–81 to 81–82	11.5	11.8	11.5	14.5	11.7	13.3	12.9	10.4	13.1	
1981–82 to 82–83	10.7	11.2	11.0	8.5	10.9	10.5	13.8	10.4	14.1	
1982–83 to 83–84	6.2	6.2	6.3	5.5	6.2	6.0	6.3	7.1	7.2	
1983–84 to 84–85	6.4	6.2	6.3	5.4	6.0	6.0	4.6	5.4	7.6	
1984–85 to 85–86	6.2	6.5	6.5	6.2	6.1	6.5	8.9	7.1	6.3	
1985–86 to 86–87	8.4	5.7	5.7	5.7	8.6	5.7	6.5	7.3	7.8	
1986–87 to 87–88	6.5	3.9	3.9	4.0	5.6	3.9	4.1	7.5	5.3	
1987–88 to 88–89	6.2	5.6	5.6	5.7	6.4	5.6	4.9	8.6	7.5	
1988–89 to 89–90	6.1	4.8	4.8	4.9	5.4	4.8	5.3	5.8	6.9	
1989–90 to 90–91	6.0	5.3	5.3	4.9	5.1	5.3	2.2	3.2	7.1	
1990–91 to 91–92	2.9	2.9	2.9	2.7		2.9	0.0	1.6	2.0	
1991–92 to 92–93	1.3	2.7	2.7	1.9		2.7	0.3	1.0	1.7	
Average annual growth rate <sup>(a)</sup>										
1970–71 to 74–75	12.6	14.5	13.5	13.9	14.3	15.0	14.5	12.1	15.1	
1974–75 to 79–80	10.4	10.4	10.6	10.8	10.0	9.9	10.2	10.0	10.4	
1979–80 to 84–85	9.3	9.5	9.5	9.2	9.4	9.6	10.3	8.9	11.3	
1984–85 to 89–90	6.8	5.2	5.2	5.2	6.5	5.2	5.7	7.4	6.7	
1989–90 to 92–93	3.3	3.6	3.6	3.1		3.6	0.7	1.9	3.4	
1970–71 to 92–93 <sup>(a)</sup>	9.2	9.0	9.0	9.0	9.9	9.1	9.4	8.9	10.1	

Note:

(a) Growth rate for IPD1 refers to 1970–71 to 1990–91.

Table 18b: Percentage change in health expenditure and economy-wide deflators 1970–71 to 1992–93

Year	Private final consumption expenditure						CPI (weighted average of capital cities)					
	Total health expenditure price index	Doctor	Dentists	Chemists	Other medical	IPD3	Total	Health services subgroup	Hospital & medical services subcomponent	Dental services subcomponent	Optical services subcomponent	Pharmaceutical services subcomponent
1970–71 to 71–72	9.5	11.9	10.6	1.7	11.0	7.4	7.2					
1971–72 to 72–73	7.8	6.1	9.7	3.7	7.9	7.4	5.7					
1972–73 to 73–74	15.6	13.5	14.2	-0.1	14.7	14.5	13.2	17.4				
1973–74 to 74–75	19.0	16.3	23.0	6.8	26.2	28.0	16.5	28.0				
1974–75 to 75–76	16.5	21.2	21.3	12.9	15.8	16.5	13.0	-44.2				
1975–76 to 76–77	13.3	13.1	16.8	8.3	13.6	10.2	13.8	174.1				
1976–77 to 77–78	8.2	8.9	14.1	8.7	8.2	8.6	9.5	26.1				
1977–78 to 78–79	6.5	4.4	11.8	7.3	6.4	7.2	8.2	-13.1				
1978–79 to 79–80	10.3	11.6	10.1	6.9	8.7	11.8	10.2	9.4				
1979–80 to 80–81	11.5	11.3	9.8	10.5	11.9	12.6	9.3	7.2				
1980–81 to 81–82	11.5	9.5	9.8	10.2	11.5	13.1	10.5	35.4	41.4	9.8		10.9
1981–82 to 82–83	10.7	9.8	10.3	8.4	11.0	13.6	11.5	29.1	31.8	10.3		16.2
1982–83 to 83–84	6.2	7.2	8.6	3.8	6.3	5.9	6.9	-11.7	-13.6	8.2		10.8
1983–84 to 84–85	6.4	8.5	9.0	4.7	6.3	5.7	4.1	-32.8	-37.9	9.5		5.7
1984–85 to 85–86	6.2	5.4	10.6	6.0	5.4	12.2	8.4	9.0	8.7	10.3		12.8
1985–86 to 86–87	8.4	5.6	11.0	7.4	9.4	11.8	9.4	23.0	25.6	11.1		15.8
1986–87 to 87–88	6.5	9.3	10.1	8.9	5.5	6.1	7.3	16.2	19.0	10.2		3.4
1987–88 to 88–89	6.2	5.5	9.7	6.2	6.5	7.1	7.3	11.3	12.1	9.8	5.4	7.0
1988–89 to 89–90	6.1	9.0	9.0	4.1	5.4	5.7	8.0	8.2	8.3	9.3	3.5	6.0
1989–90 to 90–91	6.0	7.7	8.0	7.0	5.9	1.2	5.3	11.8	13.4	8.3	3.8	6.6
1990–91 to 91–92	2.9	2.2	5.8	5.2	2.7	-0.1	1.9	15.3	19.0	6.1	2.3	5.0
1991–92 to 92–93	1.3	-0.6	3.8	4.1	1.1	2.2	1.0	2.7	2.3	3.4	4.5	0.6
Average annual growth rate <sup>(a)</sup>												
1970–71 to 74–75	12.6	11.4	13.8	2.8	14.0	13.4	10.3					
1974–75 to 79–80	10.4	10.8	14.6	8.6	10.1	10.2	10.8	20.6				
1979–80 to 84–85	9.3	9.2	9.5	7.5	9.5	10.4	8.8	6.1				
1984–85 to 89–90	6.8	7.0	10.1	6.8	6.6	8.4	8.0	14.3	15.8	10.2		8.7
1989–90 to 92–93	3.3	3.0	5.8	5.4	3.1	1.0	2.6	10.3	12.1	5.9	3.4	4.1
1970–71 to 92–93 <sup>(a)</sup>	9.2	9.2	11.4	7.1	9.2	10.1	9.0	9.8	6.9	9.3	3.7	8.6

Note:

(a) Growth rate for health services subgroup refers to 1972–73 to 1992–93; growth rate for optical services subgroup refers to 1987–88 to 1992–93; growth rates for hospital & medical services, dental services and pharmaceutical services subgroups refer to 1980–81 to 1992–93. Growth rates are calculated using log linear regression.

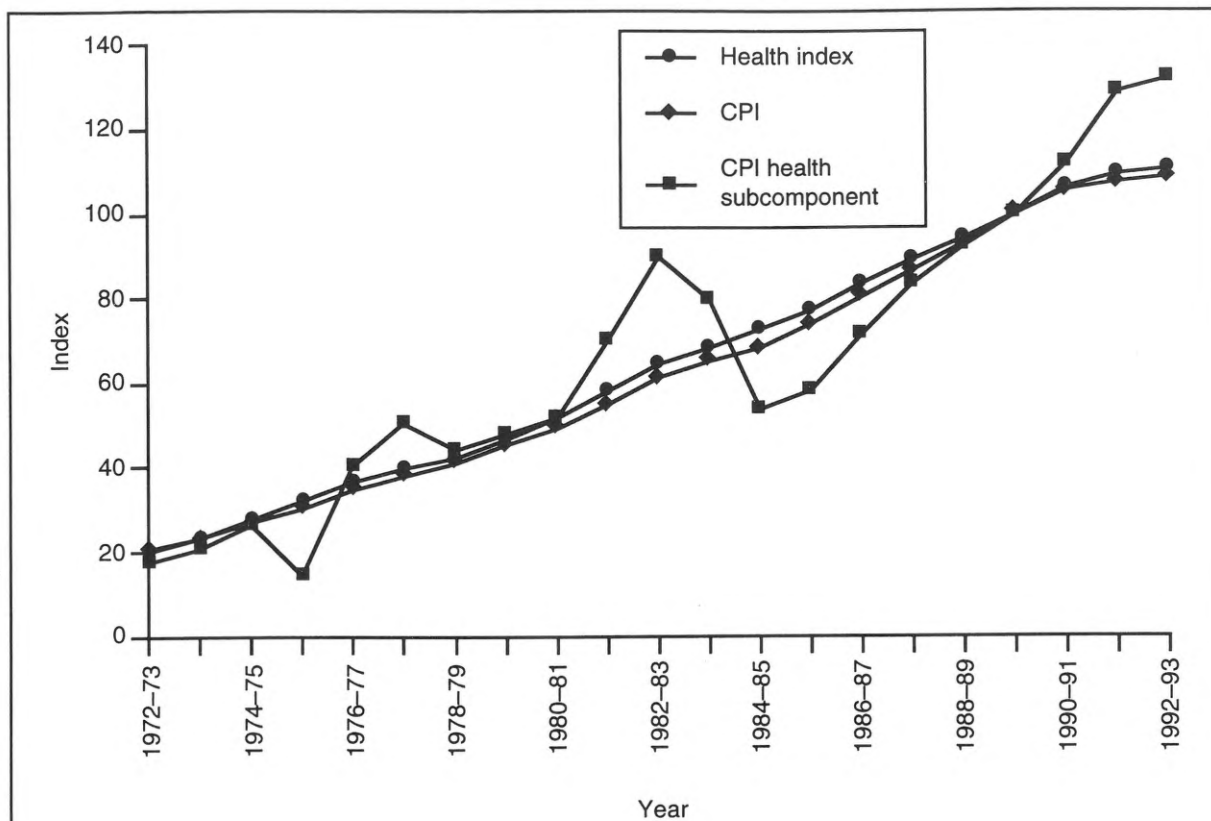


Figure 5: Health prices and CPI index

available on a consistent basis across all countries, so are not able to be used to compare the quantum of health inputs of different countries.

For long-term international comparisons, the proportion of GDP spent on health expenditure is the best single indicator of a nation's resources used in health care relative to the country's ability to provide them.

The change in the share of GDP expended on health depends on the growth in GDP as well as on the growth in health expenditure. Since the mid 1980s, most OECD countries have shown a levelling off in health expenditure as a percentage of GDP. The exception has been the United States (Table 20).

Most OECD countries have contained health expenditure as a

percentage of GDP, without experiencing adverse impacts on population health. There is a great deal of debate as to whether the level of health expenditure is, in fact, an important determinant of health in industrialised countries. The difficulty in resolving this apparently simple question relates to the difficulty of measuring overall health status in industrialised countries and to the fact that there is a lack of hard evidence as to the overall health impact of most of the treatments and services delivered by modern health care systems (Harvey 1991). Thus it is not clear what level of health expenditure as a percentage of GDP is necessary to maintain population health, and there is little evidence that increasing expenditure as a percentage of GDP would

significantly improve overall health status.

From 1989 to 1991 there was a rise from 8.2% to 8.7% in the percentage of GDP spent on health in the nine OECD countries listed. Most of this rise was due to a slowdown in economic activity, and did not indicate an unusually high rise in health expenditure (Table 19).

Despite the large rises in health expenditure per person in Japan, health expenditure as a proportion of that country's GDP is still lower than in other OECD countries. This may be partly due to measurement differences and partly because it started at such a low level. There are some indications that Japanese health expenditure may be underestimated by as much as 50%.

Table 19: Health expenditure per person for nine countries, purchasing power parity conversion, 1969–70 to 1990–91

Financial year	Australia <sup>(a)</sup>	Year	Canada	France	West Germany	Japan	New Zealand <sup>(b)</sup>	Sweden	UK	USA	Nine countries weighted mean	Nine countries unweighted mean
	(\$US)		(\$US)	(\$US)	(\$US)	(\$US)	(\$US)	(\$US)	(\$US)	(\$US)	(\$US)	(\$US)
1969–70	179	1970	253	203	216	127	180	271	149	346	244	214
1970–71	205	1971	289	233	248	142	194	302	163	379	268	<sup>(c)</sup> 269
1971–72	230	1972	310	262	279	162	210	322	179	421	298	<sup>(c)</sup> 297
1972–73	246	1973	337	292	326	177	247	349	198	464	334	293
1973–74	270	1974	368	331	384	208	311	401	244	521	381	338
1974–75	334	1975	435	398	458	256	364	470	271	592	442	397
1975–76	422	1976	483	448	510	280	365	522	297	672	498	444
1976–77	463	1977	528	483	562	318	389	605	315	753	554	491
1977–78	513	1978	591	558	627	368	449	667	353	839	622	552
1978–79	557	1979	653	630	714	428	496	740	394	932	698	616
1979–80	598	1980	743	713	811	517	562	855	456	1,063	774	630
1980–81	661	1981	854	815	925	587	615	952	525	1,222	918	795
1981–82	736	1982	964	929	958	660	638	1,035	551	1,359	1,015	870
1982–83	780	1983	1,050	991	1,008	708	658	1,084	612	1,480	1,097	930
1983–84	847	1984	1,148	1,064	1,107	742	673	1,152	648	1,592	1,179	997
1984–85	906	1985	1,244	1,106	1,175	792	747	1,150	683	1,711	1,260	1,057
1985–86	970	1986	1,364	1,164	1,235	839	801	1,165	741	1,822	1,341	1,122
1986–87	1,039	1987	1,461	1,191	1,287	916	869	1,240	798	1,961	1,437	1,196
1987–88	1,078	1988	1,558	1,286	1,409	992	898	1,303	853	2,146	1,563	1,280
1988–89	1,145	1989	1,666	1,401	1,412	1,092	940	1,390	914	2,351	1,696	1,368
1989–90	1,225	1990	1,811	1,509	1,522	1,175	970	1,455	988	2,600	1,856	1,473
1990–91	1,319	1991	1,915	1,650	1,659	1,267	1,050	1,443	1,051	2,867	2,027	1,580
Average annual growth rate (per cent) <sup>(d)</sup>												
1969–70 to 1974–75	12.2	1970–1975	10.6	13.8	16.1	14.4	15.6	11.1	13.1	11.2	12.5	11.3
1974–75 to 1979–80	11.6	1975–1980	11.1	12.4	12.0	15.2	9.7	12.5	10.7	12.2	12.4	11.9
1979–80 to 1984–85	8.6	1980–1985	10.7	9.1	7.2	8.7	5.0	6.2	8.2	9.8	9.2	8.3
1984–85 to 1990–91	6.2	1985–1991	7.4	6.9	5.7	8.4	5.4	4.5	7.4	9.1	8.3	7.0
1969–70 to 1990–91	10.0	1970–1991	10.5	10.5	10.0	11.9	8.7	8.8	9.9	10.7	10.8	9.9

Notes:

(a) There is a break in the series of population estimates at June 1971. Figures for 1969–70 and 1970–71 are scaled up by 2.29% and 2.44% respectively to adjust for this.

(b) Total health expenditure figures appearing here differ from those in Department of Health (1991) Health expenditure trends in New Zealand 1980–1991

(c) Eight countries weighted mean

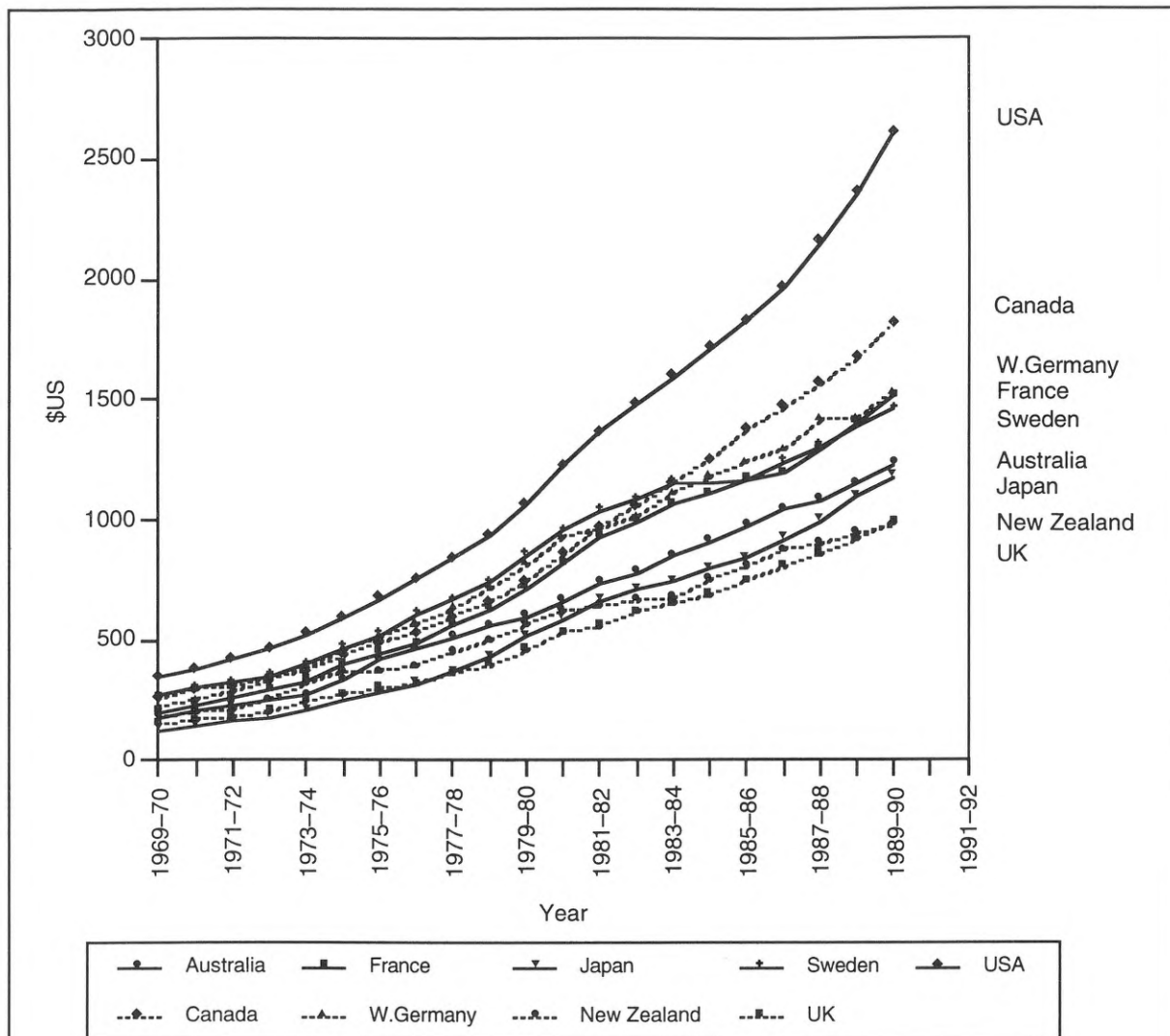
(d) Growth rates are calculated using log linear regression

Source: Australia: Total health expenditure—AIHW estimates

Population—For 1969–70 and 1970–71, figures from ABS. Australian Demographic Trends, 1986. 5102.0 but then scaled up (see footnote (a))—For 1971–72 to 1989–90 from ABS time series data provided to AIHW, which could also be extracted from ABS. Australian demographic statistics. Cat. No. 3101.0, various quarters.

Others: OECD (1993). OECD health systems: the socio-economic environment statistical references, Tables A1.1.1, A1.3.2 and 4.1.1





Note:

The Australian data is financial year data. For all other countries this figure refers to calendar year data

**Figure 6: Health expenditure per person for nine OECD countries, purchasing power parity conversion, 1969-70 to 1989-90**

A number of factors contribute to the growth of health expenditure. Broadly, these factors relate to 'inflation' and 'greater use of services'. Inflation consists of general inflation and any excess over general inflation of cost rises in the health sector. Greater use of services is a result of population growth and greater per person use of services.

Technically, the effect of inflation is summarised as a 'health care price deflator' (row 3 in Table 21), with the two component parts known as the 'GDP deflator' (row

4) and 'excess health care inflation' (row 5). The effect of the greater use of services is known as 'real expenditure growth' (row 6), with its component parts known as 'population growth' (row 7) and 'real health expenditure per person growth' (row 8).

A comparison of health expenditure growth in Australia with other countries reveals some interesting differences. Since the general inflation rate is not a characteristic over which the health system has control, the

most useful index of health inflationary pressures for international comparisons is the excess health care inflation rate. This rate varies greatly from country to country. The United States rate is high at an average annual rate of 2.7%, and the Australian rate is low at 0.1%. If Australia had experienced the same excess health care inflation rate as the United States in the period 1979-80 to 1989-90, Australian health expenditure in 1989-90 would have been \$7.9 billion dollars (28%) higher than

**Table 20: Health expenditure for Australia and selected OECD countries as a percentage of GDP, 1969–70 to 1991–92 for Australia, 1970 to 1991 for most other countries**

Year	Australia <sup>(a)</sup>	Canada	France	Germany <sup>(b)</sup>	Japan	New Zealand	Sweden	UK	USA	Nine-country mean <sup>(c)</sup>	Eight-country mean <sup>(d)</sup>
1970	5.2	7.1	5.8	5.9	4.6	5.2	7.2	4.5	7.4	5.9	5.7
1971	5.7	7.4	6.0	6.3	4.7	5.2	7.5	4.6	7.5	6.1	5.9
1972	5.9	7.2	6.1	6.5	4.8	5.3	7.5	4.7	7.6	6.2	6.0
1973	5.8	7.0	6.2	6.8	4.7	5.5	7.4	4.6	7.6	6.2	6.0
1974	5.9	6.8	6.3	7.4	5.1	6.1	7.6	5.3	7.9	6.5	6.3
1975	6.5	7.2	7.0	8.1	5.6	6.7	7.9	5.5	8.4	7.0	6.8
1976	7.5	7.2	7.0	8.1	5.6	6.3	8.2	5.5	8.6	7.1	6.9
1977	7.5	7.2	7.0	8.1	5.8	6.6	9.1	5.3	8.7	7.3	7.1
1978	7.8	7.2	7.3	8.1	6.0	7.1	9.2	5.3	8.7	7.4	7.2
1979	7.6	7.1	7.4	8.1	6.1	7.0	9.0	5.3	8.7	7.4	7.2
1980	7.4	7.4	7.6	8.4	6.6	7.2	9.4	5.8	9.2	7.7	7.5
1981	7.3	7.5	7.9	8.7	6.6	6.9	9.5	6.1	9.6	7.8	7.6
1982	7.5	8.4	8.0	8.6	6.8	6.6	9.7	5.9	10.3	8.0	7.7
1983	7.7	8.6	8.2	8.5	6.9	6.5	9.6	6.1	10.6	8.1	7.8
1984	7.7	8.5	8.5	8.7	6.7	6.1	9.4	6.1	10.4	8.0	7.7
1985	7.7	8.5	8.5	8.7	6.5	6.5	8.8	6.0	10.5	8.0	7.6
1986	7.7	8.8	8.5	8.7	6.6	6.7	8.5	6.1	10.8	8.0	7.7
1987	8.0	8.9	8.5	8.7	6.7	7.0	8.6	6.1	11.0	8.2	7.8
1988	7.8	8.8	8.6	8.8	6.6	7.1	8.6	6.1	11.3	8.2	7.8
1989	7.7	9.0	8.7	8.3	6.6	7.1	8.6	6.1	11.6	8.2	7.8
1990	7.8	9.5	8.8	8.3	6.5	7.2	8.6	6.2	12.4	8.4	7.9
1991	8.2	10.0	9.1	8.5	6.6	7.6	8.6	6.6	13.4	8.7	8.2
1992	8.5								14.0		
<b>Average</b>	<b>7.2</b>	<b>8.0</b>	<b>7.6</b>	<b>8.0</b>	<b>6.0</b>	<b>6.5</b>	<b>8.6</b>	<b>5.6</b>	<b>9.8</b>	<b>7.5</b>	<b>7.2</b>

*Notes:*

(a) This table follows the Australian convention of labelling Australian data for a financial year by the second year (that is, 1974–75 data are labelled 1975), whereas data for Australia in OECD publications are labelled by the first year (that is, 1974–75 data are labelled 1974).

(b) West Germany only.

(c) Unweighted means.

(d) Unweighted means. Excludes USA.

*Sources:* OECD 1993. OECD health systems: facts and trends 1960–1991.

**Table 21: Comparison of health expenditure growth in Australia and selected OECD countries, 1980 to 1990 (per cent)**

Growth components <sup>(a)</sup>	Australia	Canada	France	<sup>(b)</sup> Germany	New Zealand	Sweden	UK	USA	Unweighted mean
(1) Share of health expenditure in GDP 1980 <sup>(c)</sup>	7.4	7.5	7.5	8.4	7.2	9.2	5.9	9.2	7.8
(2) Nominal health expenditure growth	12.2	10.7	10.4	5.0	12.3	8.9	9.8	10.4	10.0
(3) Health care price deflator	8.2	6.9	5.2	3.4	11.5	7.1	7.6	6.9	7.1
(4) Of which GDP deflator	8.1	5.1	6.2	2.6	9.8	7.6	6.1	4.1	6.2
(5) Of which excess health care inflation	0.1	1.8	-0.9	0.7	1.6	-0.6	1.3	2.7	0.8
(6) Real expenditure growth	3.7	3.5	5.0	1.5	0.6	1.7	2.1	3.3	2.7
(7) Of which population growth	1.5	1.0	0.5	0.3	0.7	0.3	0.2	1.0	0.7
(8) Of which per person real expenditure growth	2.2	2.5	4.5	1.2	-0.1	1.4	1.9	2.3	2.0
(9) Share of health expenditure in GDP 1990 <sup>(c)</sup>	7.8	9.5	8.8	8.3	7.3	8.6	6.0	12.2	8.6

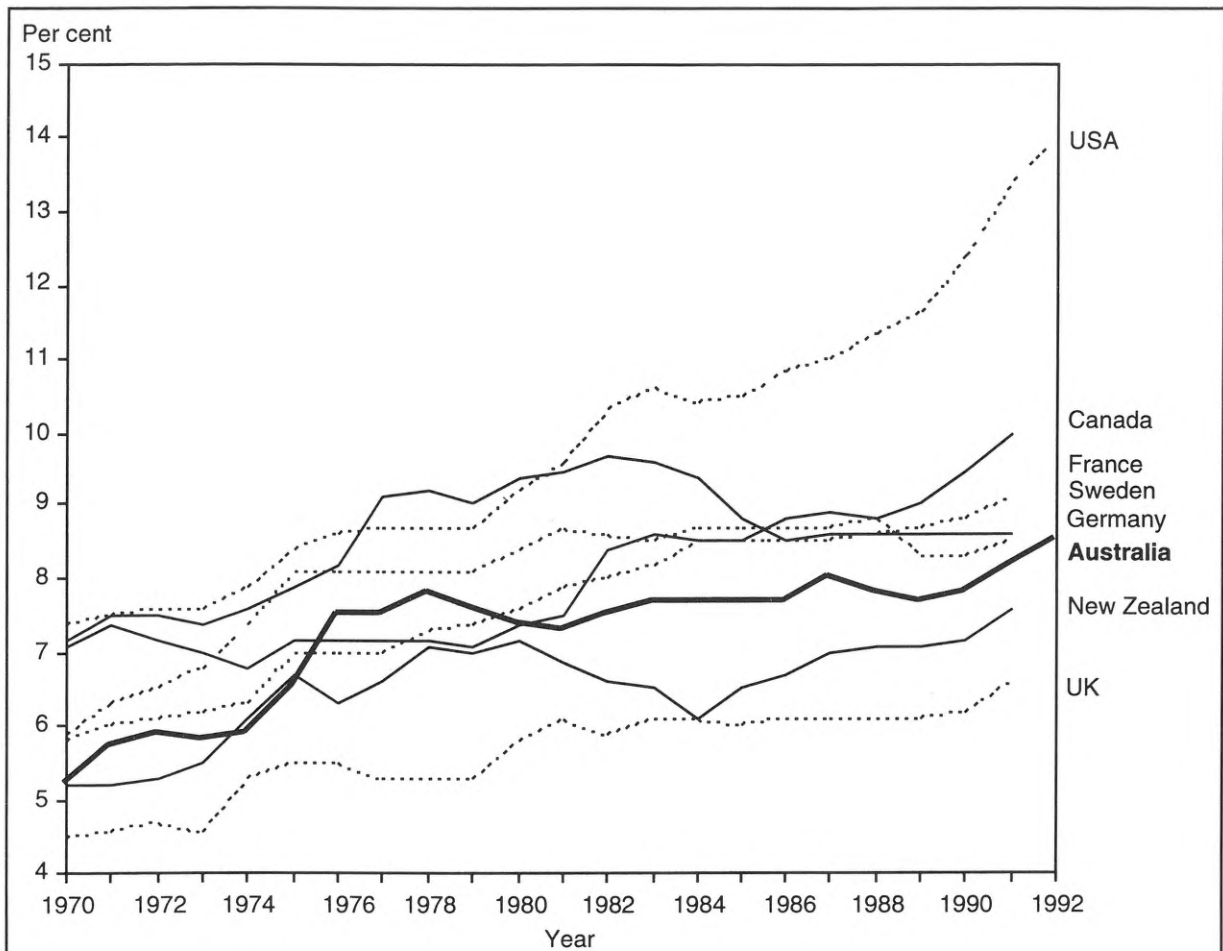
*Notes:*

(a) See text for details.

(b) West Germany only.

(c) This table follows the Australian convention of labelling Australian data for a financial year by the second year (that is, 1974–75 data are labelled 1975), whereas data for Australia in OECD publications are labelled by the first year (that is, 1974–75 data are labelled 1974).

Sources: OECD 1993; AIHW health expenditure database.



Source: OECD 1993b

Figure 7: Health expenditure for Australia and selected OECD countries as a percentage of GDP, 1970 to 1992

it was. An extra \$7.9 billion would have lifted health expenditure in 1989–90 from 7.8% to 10.0% of GDP. This indicates that a major contributor to the control of growth in the health-expenditure–GDP ratio is the control of price rises in the health sector.

Compared with the other OECD countries considered, the higher population growth in Australia, Canada and the United States means that these countries need a higher growth in health expenditure just to keep up with population rise. The other component of real expenditure growth, the real expenditure growth per person, is the best measure of the rise in provision of

health service inputs. The real expenditure growth per person in Australia of 2.2% per year over the period 1979–80 to 1989–90 is slightly higher than the 2.0% per year for seven selected OECD countries and greater than the UK, West Germany, New Zealand and Sweden (Table 21).

For Australia, the 2.2% annual average growth compounds over the ten-year period to a 24% rise in health expenditure per person. Whether this substantial rise in health expenditure translated sufficiently into improvements in outcomes of treatment is difficult to answer, and depends on how effectively and wisely health professionals and health

authorities used these extra resources.

## Technical notes

### 1. Definitions, sources and notes—general

The AIHW collects information for its estimates of health expenditure from a wide range of sources, with the Australian Bureau of Statistics (ABS), the Commonwealth Department of Human Services and Health (DHS) and State and Territory health authorities providing most of the basic data.

The 'Medical services' category in Tables 8–13 includes expenditure on medical services provided on a

fee-for-service basis, and includes medical services provided to private patients in public and private hospitals. It does not include the cost of salaried medical practitioners or of visiting medical officers at recognised public hospitals.

The Commonwealth Government column in Tables 8–13 includes expenditure by the Department of Veterans' Affairs on behalf of veterans, and, until 1988–89, expenditure by ACT Government health services. Thus the \$86 million spent by the Commonwealth on private hospitals in 1990–91 does not represent subsidies to private hospitals, but payments by the Department of Veterans' Affairs for veterans using private hospitals.

The health expenditure figures shown in Tables 8–13 do not include expenditure which is primarily of a welfare nature, even if it has a health component. Also excluded are most costs associated with the training of health personnel in universities. But in some cases, such as hospital-based nursing training, the cost of training cannot be separated from the operational costs of health services. Further details of the sources and definitions of the health expenditure categories used in this Bulletin are contained in Appendices A and B of *Australian health expenditure 1970–71 to 1984–85*.

## 2. Definitions, sources and notes—price indices

An Implicit Price Deflator (IPD) is an index obtained by dividing a current price value by its corresponding constant price value. Thus implicit price deflators are derived measures and are not normally the direct measures of price change by which current price estimates are

converted to estimates at constant prices.

Implicit Price Deflator 1 (IPD1) is the implicit price deflator for government final consumption expenditure on health, social security and welfare. Estimates of real health expenditure in AIHW publications produced since 1989 use health deflators which are more specific for the different types of expenditure, whereas in publications produced before 1989, IPD1 was the main deflator used.

Implicit Price Deflator 2 (IPD2) is the implicit price deflator for general government public gross fixed capital expenditure and is used to deflate government capital health expenditure and government capital consumption.

Implicit Price Deflator 3 (IPD3) is the implicit price deflator for private capital expenditure on non-dwelling construction and is used to deflate private capital health expenditure.

Implicit Price Deflator for the Gross Domestic Product (GDP-IPD). The IPD of expenditure on gross domestic product is the broadest measure of price change available in the national accounts. It provides an indication of the overall changes in the prices of goods and services produced in Australia, whether for use in the domestic economy or for export.

The hospital and clinical index from the government final consumption expenditure (GFCE) deflators is derived from changes in wage costs, visiting medical officer payments and other costs in the hospital area. Other costs include drug costs, medical and surgery costs, food costs, domestic service costs, repairs and maintenance, patient transport, fuel, light and power, and other non-salary costs.

The State and local government 'total health and welfare' and Commonwealth Government 'other health and welfare' deflators are price indices derived from changes in public sector wages and administrative costs. These deflators are no longer produced by the ABS, so instead the government final consumption expenditure deflator from the National Accounts has been used from 1984–85.

The private final consumption expenditure (PFCE) deflators measure changes in the price of services of private doctors, dentists, chemists and other private health professionals.

The total health expenditure in constant prices therefore is obtained by adding up individual expenditures in constant prices. The total health expenditure price index is the ratio of total health expenditure in current prices to total health expenditure in constant prices for its corresponding year. The total health expenditure price index therefore reflects the growth of various health deflators shown in Table 22.

The average weekly earnings (AWE) index in Table 17 is the index for all male employees average weekly total gross earnings. Earnings comprise overtime earnings, ordinary time earnings, shift allowances, penalty rates, commissions and similar payments. Included are paid annual leave, paid sick leave, long service leave and paid holidays taken during the reference period.

The male index is used as this gives a longer time series.

The Consumer Price Index (CPI) for the health and personal care group consists of the indices for the health services subgroup, the

**Table 22: Area of health expenditure and corresponding economy-wide deflators**

<b>Type of deflator</b>	<b>Area of expenditure</b>
Government final consumption expenditure (GFCE) deflators	
Hospital and clinical	Hospital, nursing homes, ambulance and other institutional (government, private)
State and local government total health and welfare	Community and public health, other non-inst., admin., research (State & local government, private) 1970–71 to 1983–84
Commonwealth Government other health and welfare	Community and public health, other non-inst, admin., research (Commonwealth Government, private) 1970–71 to 1983–84
Implicit price deflator for GFCE for health, social security and welfare (IPD1)	Used for recurrent health expenditure in publications prior to 1989
Total Government final consumption expenditure deflator	1984–85 to 1992–93, Community and public health, other non-inst., admin., research
Implicit price deflator for general government public gross fixed capital expenditure (IPD2)	Capital expenditure and capital consumption (government)
Implicit price deflator for gross domestic product (GDP-IPD)	
Average weekly earnings	
Private final consumption expenditure deflators	
Doctor	Medical services
Dentists	Dental services
Chemists	Pharmaceuticals, aids and appliances
Other medical	Other professionals
Implicit price deflator for private gross fixed capital expenditure on non-dwelling construction (IPD3)	Capital expenditure in private sector
Consumer Price Index (CPI)	
Total health and personal care group (not included in Table 17b)**	
Health services subgroup (included in Table 17b)	
Hospital & medical services subcomponent (included in Table 17b)	
Dental services subcomponent (included in Table 17b)	
Optical services subcomponent (included in Table 17b)	
Personal products subgroup (not included in Table 17b)	
Pharmaceutical services subcomponent (included in Table 17b)	

\*\* Health and personal care group consists of the Health services subgroup, Personal care products subgroup and Hairdressing services subgroup.

**Table 23: Gross domestic product per person (current and constant 1989–90 prices), and population 1982–83 to 1992–93**

Year	Gross domestic product per person				Mean resident population year ended 30 June '000
	Current prices (\$)	Growth rate (%)	Constant 1989–90 prices (\$)	Growth rate (%)	
1982–83	11,233		18,013		15,292
1983–84	12,582	12.0	18,851	4.7	15,485
1984–85	13,790	9.6	19,554	3.7	15,682
1985–86	15,107	9.6	20,040	2.5	15,901
1986–87	16,394	8.5	20,236	1.0	16,135
1987–88	18,211	11.1	20,923	3.4	16,387
1988–89	20,377	11.9	21,564	3.1	16,672
1989–90	21,864	7.3	21,864	1.4	16,923
1990–91	22,124	1.2	21,461	-1.8	17,172
1991–92	22,280	0.7	21,292	-0.8	17,418
1992–93	22,860	2.6	21,660	1.7	17,572

*Source:* GDP figures: ABS. Australian national accounts—national income and expenditure, June quarter and December 1992 and September quarter 1993, Cat. No. 5206.0

Mean resident population—1982–83 to 1985–86: ABS. Australian demographic statistics, December quarter, 1990. Cat. No.3101.0

1986–87 to 1991–92: ABS. Australian demographic statistics, December quarter 1991. Cat.No.3101.0

1992–93: ABS. Preliminary June 1992 and June 1993 estimated resident population by sex and age States and Territories of Australia. Cat. No. 3201.0. The figure is calculated by averaging June 1992 and June 1993 resident populations.

personal care products subgroup and the hairdressing services subgroup. The health services subgroup includes hospital and medical services, optical services and dental services. The personal care products subgroup includes pharmaceuticals, toiletries and personal products.

### Sources:

IPD1 is from the ABS Australian national accounts—national income and expenditure.

IPD2 and IPD3 are from the ABS Australian national accounts—national income and expenditure June quarter 1993, cat. no. 5206.

GDP implicit price deflators are from the ABS Australian national accounts 1991–92—national income, expenditure and product.

Total government final consumption expenditure (GFCE) deflators are from the ABS Australian national accounts

1991–92—national income, expenditure and product.

Hospital and clinical, other health and welfare, total health and welfare indices are GFCE deflators from ABS unpublished data.

The doctors, dentists, chemists and other medical professionals indices are PFCE deflators from ABS unpublished data.

Total CPI is from the ABS Consumer price index, cat. no. 6401.0.

CPI figures for the health and personal care group for each of the subgroups and subcomponents are from ABS unpublished data.

AWE are from the ABS Average weekly earnings, States and Australia, various issues, cat. no. 6302.0.

Table 22 lists the areas of health expenditure where the

corresponding deflators are applied.

### 3. Revisions of definitions and estimates

Some of the figures included in this bulletin have been revised since *Health Expenditure Bulletin* no.8 was published in April 1993. The major changes are as outlined in the following sections.

#### ABS data

##### Gross domestic product (GDP)

There were upward revisions to current prices GDP (income approach). The figures published in the ABS Australian national accounts—national income and expenditure, September quarter 1993, cat. no. 5206.0, show an average rise of 0.18% compared with the figures published in the June quarter 1992 bulletin.

### State and local government expenditure on health

The Public Finance Section of the ABS revised its estimate of State and local government expenditure generally upward, except for 1988–89, where it was revised downward by 0.6%. The average difference between the earlier version and the December 1991 version for the period 1984–85 to 1988–89 was 0.18%.

Areas with substantial revision were administration, ambulance, home nursing and domiciliary care, community and public health, and other non-institutional services.

### AIHW data

Since *Health Expenditure Bulletin* no.7, the previous categories of 'community health services' and 'health promotion and illness prevention' have been combined into a single category entitled 'community and public health'. Community health services encompassed community health (including Aboriginal health), domiciliary care, home nursing, and infant health. Health promotion and illness prevention included expenditure through the National Diseases Control Program, general (human) quarantine, the National Health Promotion Program, National

Drug Education program, TB control, and all prevention services such as immunisation and inoculation, disease detection services, occupational health services and nutrition services. The two categories have been combined because many services of a preventive nature are rendered by community health centres and it is practically impossible to disaggregate them.

### 4. Abbreviations and symbols used in tables

na	not available
nec	not elsewhere classified
–	nil or rounded down to zero
∴	not applicable

### 5. Other notes

Figures in the tables in this Bulletin may not add exactly due to rounding.

Average annual growth rates are calculated as an exponential average, not the arithmetic average, with the exception of Tables 14, 15, 18 and 19, where the average annual growth rates are derived from log linear regression using the LOGEST function in the EXCEL program.

The total CPI number in Table 17 for the period 1970–71 to 1990–91 are re-referenced figures from

those in 1984–85 prices of the 11th series. The new 12th series CPI with weights based on household expenditure in 1988–89 was introduced since the September quarter 1992 and linked to the 11th series CPI at the June quarter 1992. The figures for 1991–92 and 1992–93 were from the ABS Consumer price index, September quarter 1993, cat. no. 6401.0.

Figures for the health and personal care group of the CPI for each of the subgroups and subcomponents for each of the capital cities are available on request.

### References

Commonwealth of Australia. Budget statements 1993–1994. Canberra: AGPS, 1993 (Budget paper no.1).

Harvey, R. Making it better: Strategies for improving the effectiveness and quality of health services in Australia National Health Strategy, 1991 (Background paper no. 8).

Private Health Insurance Administration Council. Annual report 1992–1994. Canberra: AGPS, 1993.

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