

Health Expenditure

HEALTH EXPENDITURE BULLETIN • NUMBER 7 • JULY 1992

Australian health expenditure to 1990–91

This bulletin is the seventh in a series and provides estimates of total Australian health expenditure by area of expenditure to 1988–89, together with estimates of total expenditure for 1989–90 and 1990–91. It also gives details of changes in inter-government funding arrangements, international health expenditure comparisons, the medical expenditure tax rebates, the Medicare levy and the Medicare Agreement price adjustment factor.

Health expenditure highlights

- Health expenditure by Australian governments and individuals in 1990–91 was \$30.9 billion or \$1,796 per person.
- Health expenditure by individuals and governments increased in real terms at an average annual rate of 3.8 per cent from 1984–85 to 1990–91, giving a total increase of 25 per cent.
- Health expenditure per person increased at an average annual rate of 2.2 per cent in real terms between 1984–85 and 1990–91.
- Health expenditure as a proportion of gross domestic product (GDP) was estimated to be 8.1 per cent in 1990–91. This increase from the

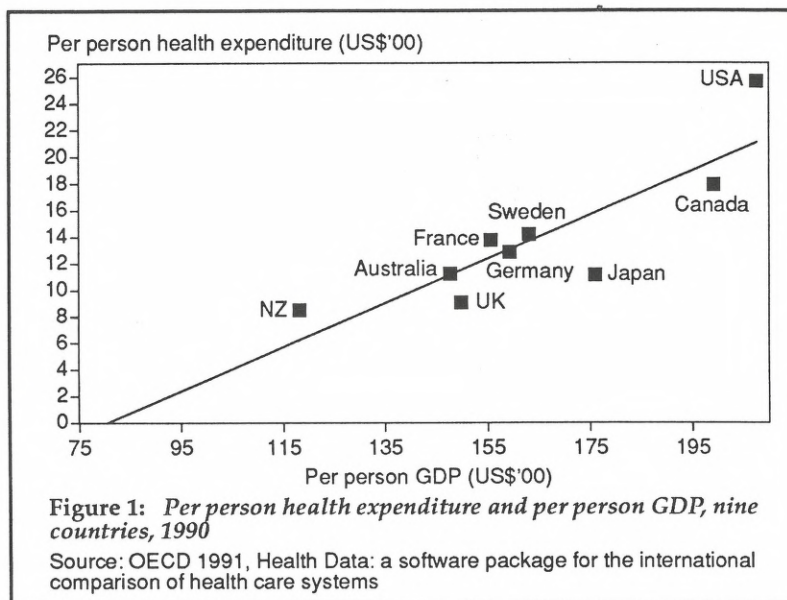


Figure 1: Per person health expenditure and per person GDP, nine countries, 1990

Source: OECD 1991, Health Data: a software package for the international comparison of health care systems

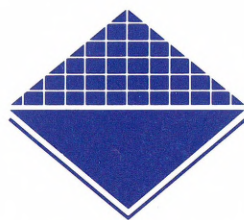
previous year's ratio of 7.6 per cent is the result of the fall in real GDP during the recession, rather than because of a large health expenditure increase. Real health expenditure grew by only 3.1 per cent in 1990–91. This was lower than the average of 4.0 per cent over the previous five years.

- Australia's per person health expenditure was in balance with per person GDP when Australia is compared with other major industrialised countries (Figure 1).

- In the period since Medicare was introduced in 1984, private sector health expenditure increased by an average annual rate of 5.3 per cent in real terms between 1984–85 and 1990–91, compared to a 3.3 per cent average annual increase in government funded expenditure.

- Government funding of health care fell from 71.7 per cent of total health expenditure in 1984–85 to 69.3 per cent in 1990–91 (Table 6).

- The fall in government spending on health since the introduction of Medicare in February 1984 has been due to a fall in the Commonwealth contribution, not to a fall in the State/Territory and local government contributions.



AUSTRALIAN INSTITUTE OF
HEALTH & WELFARE

- In 1989–90, Australia spent US\$1,127 on health per person, which was US\$556 below the average of nine OECD countries (Table 19).

- In 1989–90, total health expenditure as a proportion of GDP for Australia was 7.6 per cent, which is about half a percentage

point lower than the nine-country average (Table 21).

- Australia's health expenditure as a proportion of GDP continued to be much lower than the USA, with much lower growth.

- Australia had below average figures for excess health care

inflation as compared to the major industrialised countries (Table 22).

- Tax rebates per taxpayer claiming tax rebates for medical expenses for Australia as a whole ranged from \$431 in 1985–86 to a peak of \$534 in 1986–87. In 1988–89, it was \$483.

- NSW had the highest tax rebate at \$524 per person. The lowest was \$105 in the Northern Territory (Tables 24 to 28).

	1986	1987	1988	1989	1990
USA	10.9%	11.1%	11.4%	11.7%	12.4%
Australia	7.7%	8.0%	7.8%	7.7%	7.6%

General overview of the six years 1984–85 to 1990–91

After the introduction of Medicare in February 1984, in the period from 1984–85 to 1990–91, health expenditure grew in current prices at an average annual rate of 11.0 per cent. By comparison, Gross Domestic Product (GDP) grew at an annual average rate of 9.8 per cent.

The average annual growth rate in real health expenditure for the period was 3.8 per cent. The growth rate in the last three years has been lower than during the first three years of the period (Table 1).

For recurrent expenditure, average annual growth rates in current prices and constant prices for the period were 11.0 per cent and 3.8 per cent respectively (Table 2).

Average health expenditure per person in 1990–91 was \$1,796. The average annual rate of growth in health expenditure per person in real terms from 1984–85 to 1990–91 was 2.2 per cent per year. In the first three years the average annual growth per person was 2.7 per cent. In the three years from 1987–88 to 1990–91 it was 1.8 per cent (Table 3).

Table 1: Total health expenditure and rate of growth, 1982–83 to 1990–91 (current and constant 1984–85 prices)

Year	Amount (\$m)		Rate of growth (%)	
	Current prices	Constant 1984–85 prices ^(a)	Current prices	Constant 1984–85 prices ^(a)
1982–83	13,241	14,967		
1983–84	14,957	15,916	13.0	6.3
1984–85	16,541	16,541	10.6	3.9
1985–86	18,575	17,427	12.3	5.4
1986–87	21,091	18,124	13.5	4.0
1987–88	23,276	18,749	10.4	3.5
1988–89	26,145	19,677	12.3	4.9
1989–90 ^(b)	28,381	20,111	8.6	2.2
1990–91 ^(b)	30,923	20,729	9.0	3.1

(a) Health expenditure 1982–83 to 1990–91 deflated to constant prices using specific health deflators (AIHW 1991, *Health Expenditure Information Bulletin no. 6*: Table 16, and AIHW unpublished data).

(b) Based on preliminary ABS estimates (see Table 18).

HealthExpenditure

Table 2: Recurrent health expenditure and rate of growth, 1982–83 to 1990–91 (current and constant 1984–85 prices)^(a)

Year	Amount (\$m)		Rate of growth (%)	
	Current prices	Constant 1984–85 prices ^(b)	Current prices	Constant 1984–85 prices ^(b)
1982–83	12,777	14,449		
1983–84	14,354	15,282	12.3	5.8
1984–85	15,772	15,772	9.9	3.2
1985–86	17,577	16,516	11.4	4.7
1986–87	19,958	17,156	13.5	3.9
1987–88	21,993	17,714	10.2	3.3
1988–89	24,780	18,638	12.7	5.2
1989–90 ^(c)	26,896	19,052	8.5	2.2
1990–91 ^(c)	29,442	19,696	9.5	3.4

(a) Government capital consumption included in recurrent expenditure.

(b) Health expenditure 1982–83 to 1990–91 deflated to constant prices using specific health deflators (AIHW 1991, *Health Expenditure Information Bulletin no. 6*: Table 16, and AIHW unpublished data).

(c) Based on preliminary ABS estimates (see Table 18).

Table 3: Health expenditure per person and rate of growth, 1982–83 to 1990–91 (current and constant 1984–85 prices)

Year	Per person (\$)		Rate of growth (%)	
	Current prices	Constant 1984–85 prices ^(a)	Current prices	Constant 1984–85 prices ^(a)
1982–83	866	979		
1983–84	966	1,028	11.5	5.0
1984–85	1,055	1,055	9.2	2.6
1985–86	1,168	1,096	10.7	3.9
1986–87	1,307	1,123	11.9	2.5
1987–88	1,419	1,143	8.6	1.8
1988–89	1,566	1,178	10.3	3.1
1989–90 ^(b)	1,674	1,186	6.9	0.6
1990–91 ^(b)	1,796	1,204	7.3	1.6

(a) Health expenditure 1982–83 to 1990–91 deflated to constant prices using specific health deflators (AIHW 1991, *Health Expenditure Information Bulletin no. 6*: Table 16, and AIHW unpublished data).

(b) Based on preliminary ABS estimates (see Table 18).

Sources: Health expenditure—AIHW estimates

Population—1982–83 : ABS. *Australian demographic statistics March quarter 1989*. Cat. No. 3101.0

1983–84 to 1989–90 : ABS. *Australian demographic statistics December quarter 1990*. Cat. No. 3101.0

1990–91 is estimated assuming a 1.5 per cent growth since 1989–90.

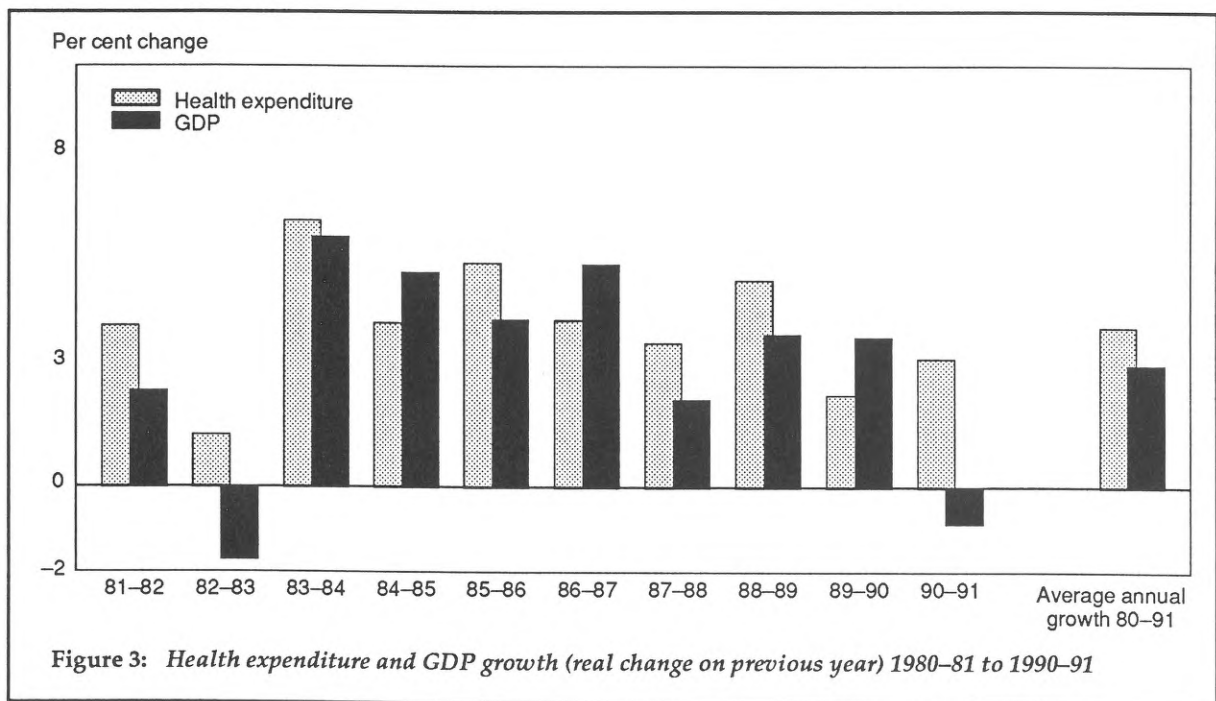
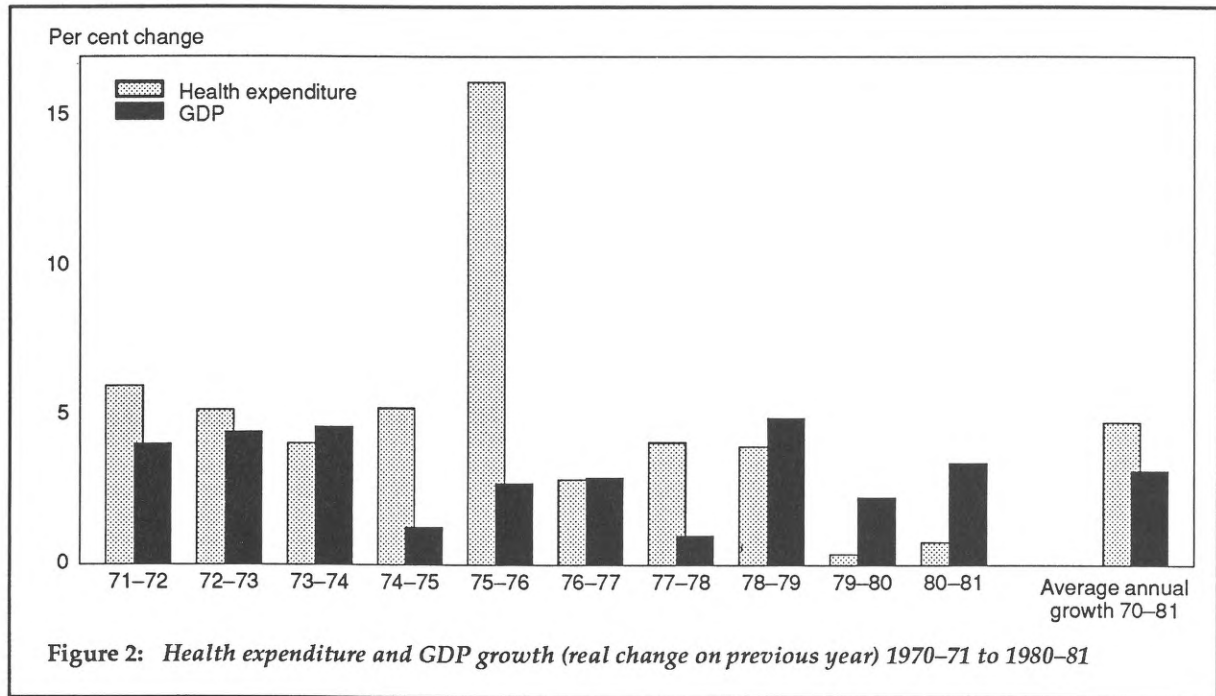
General overview of the period 1970–71 to 1990–91

Health expenditure and GDP generally move in step, but, over time, health expenditure has grown at a somewhat faster rate than GDP. Figure 2 shows that in the period 1970–71 to 1980–81, real

health expenditure grew at an average annual rate of 4.8 per cent, while real GDP grew at an annual average rate of 3.2 per cent. This period was affected by structural changes in the period 1974–75 and 1975–76 (for example, changes in accounting conventions by the States, and payment by sessional

fees for services previously provided on an honorary basis).

Figure 3 shows that in the period from 1980–81 to 1990–91, real health expenditure grew at average annual rate of 3.8 per cent, while real GDP grew at an annual average rate of 3.0 per cent.



Health expenditure as a proportion of GDP

Total health expenditure as a proportion of GDP in the period from 1975–76 to 1990–91, whether measured in current prices or constant prices, ranged between 7.5 and 8.1 per cent. The preliminary estimate for 1990–91 is 8.1 per cent of GDP (Table 4).

The change in health expenditure as a proportion of GDP from 7.6 per cent in 1989–90 to 8.1 per cent in 1990–91 (preliminary estimate) is a large increase and seems to be against the trend for the last 14 years of approximate stability in health expenditure as a proportion of GDP.

A number of factors must be kept in mind when interpreting these figures:

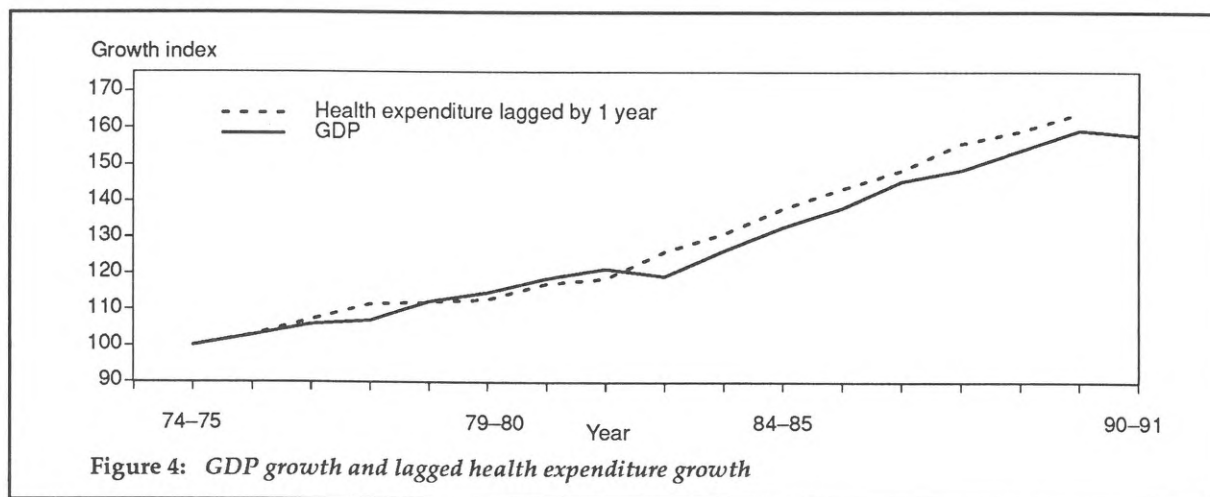
1. The rise in the health expenditure/GDP ratio is due to a fall in real GDP of 0.9 per cent, rather than an abnormally high increase in health expenditure. The estimated increase in real health expenditure for 1990–91 is 3.1 per cent, which is below the annual average increase of 4.0 per cent for the Medicare years 1984–85 to 1989–90.
2. The figures for GDP and health expenditure for the years

1989–90 and 1990–91 are preliminary, and could be revised as better data becomes available. For example, in the last *Health Expenditure Information Bulletin*, health expenditure as a proportion of GDP for 1986–87 was stated to be 8.1 per cent. Due to a revision downwards of health expenditure of 0.1 per cent and a revision upwards of GDP of 1.1 per cent the latest figure is 8.0 per cent. For 1987–88 health expenditure was revised down 0.2 per cent and GDP was revised upwards 1.0 per cent, and for 1988–89 health expenditure was revised upwards 0.9 per cent and GDP revised upwards 0.9 per cent.

3. GDP fluctuates according to the economic cycle, so its growth rate is more variable than that for health expenditure. Thus the ratio of health expenditure to GDP will not be a constant, but will fluctuate somewhat even if health expenditure growth is constant. In 1987–88, health expenditure as a proportion of GDP increased to 8.0 per cent as compared to the 7.7 per cent recorded for 1985–86. This sharp increase in the proportion did not herald a long term increase in health expenditure as a proportion of GDP, because in the

following three years the proportion fell gradually to 7.6 per cent. In the last ten years, health expenditure growth was lower than GDP growth for six of those years, and higher for the other four (Figure 3).

4. The evidence of the last 14 years indicates that there tends to be a lag of one year or longer before changes in GDP are translated into changes in health expenditure. In figure 4, real GDP and real health expenditure are plotted to indicate the relationship between the two variables. GDP is plotted with the base year of 1974–75 set equal to 100, while health expenditure for 1975–76 is set equal to 100. Thus the GDP growth index of one year is juxtaposed with the health expenditure growth index of the following year. Although GDP and lagged health expenditure moved together in the period from 1974–75 to 1981–82, there was an interesting change in 1982–83. Real GDP fell in 1982–83 but that did not lead to a fall in real health expenditure in the following year, 1983–84. (This indicates health expenditure may be 'sticky' downwards).



After the fall in real GDP in 1982–83, real GDP and lagged real health expenditure returned to moving in step with each other. This is shown by the steadiness of the gap between the health expenditure and GDP lines. From 1983–84 to 1989–90 real GDP grew 26 per cent and from 1984–85 to 1990–91 real health expenditure grew 25 per cent.

This relationship between GDP growth and the following year's health expenditure growth is not simple. One important factor is the link between GDP growth and tax revenue growth. If GDP growth is high, then tax revenue is higher in the following year. Thus there is more money to allocate to the budget

for spending on health services in following years. The reverse is true when GDP growth slows.

5. A reduction in real GDP does not lead to a reduced need for health services. In fact, higher unemployment may lead to poorer health which increases the demand for health services. (Power et alia 1991) Thus health expenditure acts in a similar way to unemployment benefits—as an automatic stabiliser for the recessed economy. It is not unexpected therefore that health expenditure continues to increase during a recession.

In conclusion, there is nothing in the last year's health expenditure figures to indicate that the

underlying dynamics of the relationship between the health system and the economy as a whole have changed. GDP will no doubt continue to experience quite wide fluctuations, while health expenditure growth will be more steady. As the economy recovers from recession, it is to be expected that there will be some years in which the GDP growth will be higher than health expenditure growth. Therefore, during that time, the health expenditure GDP ratio will sometimes decline. However, it is probable that the current drawn out recession will lead to the ratio fluctuating around a higher level in future than the average level of 7.7 per cent experienced in the period from 1982–83 to 1989–90.

Table 4: Total health expenditure and GDP, 1982–83 to 1990–91 (current and constant 1984–85 prices)

Year	Current prices			Constant 1984–85 prices ^(a)		
	Total health expenditure (\$m)	GDP (\$m)	Health expenditure as % of GDP	Total health expenditure (\$m)	GDP (\$m)	Health expenditure as % of GDP
1982–83	13,241	171,626	7.7	14,967	193,928	7.7
1983–84	14,957	194,617	7.7	15,916	205,509	7.7
1984–85	16,541	216,059	7.7	16,541	216,059	7.7
1985–86	18,575	240,091	7.7	17,427	224,804	7.8
1986–87	21,091	264,627	8.0	18,124	230,712	7.9
1987–88	23,276	299,429	7.8	18,749	241,670	7.8
1988–89	26,145	339,834	7.7	19,677	250,430	7.9
1989–90 ^(b)	28,381	371,930	7.6	20,111	259,546	7.7
1990–91 ^(b)	30,923	379,580	8.1	20,729	257,168	8.1

(a) Health expenditure 1982–83 to 1990–91 deflated to constant prices using specific health deflators (AIHW 1991, *Health Expenditure Information Bulletin no. 6*: Table 16, and AIHW unpublished data).

(b) Total health expenditure figures are based on preliminary ABS estimates (see Table 18).

Source: GDP figures: ABS. *Australian national accounts, national income and expenditure June quarter 1991*. Cat. No. 5206.6

Changes in inter-government funding arrangements

In funding arrangements prior to 1 July 1981, the Commonwealth shared the funding of some costly health programs with the States—the Hospital Cost Sharing Scheme, the School Dental Scheme

and the Community Health Program Grants. From 1 July 1981 until 30 June 1988, Identified Health Grants (IHGs) replaced these arrangements. (South Australia and Tasmania did not join the IHG arrangements until 1 February 1984, but the other States joined on 1 July 1981).

IHGs were general purpose grants to the States. The change in funding arrangements allowed the States more flexibility in their decisions to allocate resources to and between their own health services.

From 1981–82 to 1984–85, IHGs for each State were increased in accor-

dance with the increase in total Commonwealth tax collections in the preceding year. For the triennium 1985–86 to 1987–88, these grants were distributed on the basis of the per capita relativities implicit in their distribution in 1984–85. The States with the fastest population growth and those most likely to experience the fastest growth in demand for their health services received an increasing share of the grants.

From 1983–84 to 1987–88, Medicare compensation grants were also provided to the States and Northern Territory to compensate them for revenue losses associated with the abolition of both the accommodation charges for public patients in public hospitals and charges for public hospital outpatient care, and the reduction to \$80 per day for those seeking private treatment in public hospitals. These grants also compensated for costs arising from the increased number of patients with public rather than private status. The Medicare compensation grants were in addition to and independent of the IHGs.

From 1 July 1988, a new specific purpose Hospital Funding Grant

was introduced. It absorbed the 1988–89 forward estimate of the identified health grant component of financial assistance grants to the six States, an equivalent component of the Northern Territory general revenue grant and the Medicare compensation grants.

The Hospital Funding Grant consists of a base level of funding for each State and an incentive package offset by a public provision adjustment involving penalties. The total of the base funding and the incentives package are indexed by the growth in award rates of pay and the CPI, plus an age-sex weighted population factor (see the section on Hospital Funding Grant price adjustment factor in this bulletin).

Table 5 shows various Commonwealth grants to the States and the Northern Territory from 1981–82 to 1990–91 in the health area.

In the Commonwealth Government Budget Papers, Identified Health Grants (IHGs) are not classified as direct Commonwealth expenditure on health. They are classified to the general category 'assistance to other Governments'

rather than to the health category. Thus the apparent Commonwealth contribution to health grants to the States fell when IHGs were introduced and the general grants to the States increased substantially. In consequence, the State and local governments' share of health expenditure apparently increased. The reverse happened when IHGs were replaced by the Hospital Funding Grants. The Commonwealth specific purpose health grants to the States increased substantially, and the State and local governments' share of health expenditure apparently decreased.

Table 8 shows the percentage of health expenditure and rate of growth of health expenditure by source of funds when IHGs are classified as general Commonwealth expenditure rather than as Commonwealth health expenditure. Tables 6 and 7 show the percentage of health expenditure and rate of growth of health expenditure by source of funds when IHGs are classified as Commonwealth health expenditure. Figure 5 displays the differences pictorially.

Table 5: Selected Commonwealth grants to States and the Northern Territory 1980–81 to 1990–91 (\$ million)

Year	School Dental Scheme	Community Health Program Grants	Hospital Cost Sharing Scheme	Medicare compensation grants	Special revenue assistance	Identified Health Grants	Hospital Funding Grants ^(a)
1980–81	20.4	57.8	1,296.7	—	—	—	—
1981–82	0.2	0.3	173.3	—	—	1,163.3	—
1982–83	0.4	—	220.3	—	—	1,040.8	—
1983–84	0.2	7.2	127.3	267.5	—	1,194.2	—
1984–85	0.8	17.7	—	906.8	—	1,400.8	—
1985–86	—	^(b)	—	996.3	56.1	1,513.5	—
1986–87	—	—	—	1,017.9	33.9	1,684.8	—
1987–88	—	—	—	1,095.0	33.1	1,819.8	—
1988–89	—	—	—	—	33.1	—	^(c) 3,026
1989–90	—	—	—	—	30.2	—	^(c) 3,327
1990–91	—	—	—	—	—	—	^(c) 3,883

(a) Grants quarantined from Commonwealth Grants Commission determinations are included. The quarantined amounts are comprised from the 1989–90 AIDS component, the incentives package and public provision adjustments.

(b) Community Health Grants were incorporated into Medicare compensation grants.

(c) ACT grants from Commonwealth excluded from this table as ACT was not self-governing for most of the period. Self-government was granted in 1989–90. Hospital funding grants to ACT in 1989–90 totalled \$42.9m and in 1990–91 totalled \$47.4m.

Sources: See pages 41–43 for further details of these grants/schemes and for sources of data in this table.

Tables 6 and 7 give a better picture than Table 8 of the contribution of governments to health care spending since 1979–80. They show that the fall in Government spending on health since the introduction of Medicare in February 1984 has been due to a fall in the Commonwealth contribution, not to a fall in the State and local government contribution. The Commonwealth share fell 2.5 percentage points from 1984–85 to 1990–91, and in that period the State and local government share was stable at 25.8 per cent. (These numbers differ from the main body of Table 6 because they make adjustment for the movement of ACT Government expenditures from the Commonwealth to the State and local government column of Table 6 as explained in footnote (b)). The

State governments have in some years buffered a large fall in the Commonwealth share by increasing their contributions, but then in the following year their contributions have fallen. The fall in the Commonwealth share has been due to a number of factors including :

- (a) reductions in Identified Health Grants as a proportion of total health expenditure
- (b) abolition of the private hospital bed day subsidy in October 1986
- (c) increasing the gap between the Schedule fee and the medical benefit paid from 15 per cent to 25 per cent for medical services undertaken in hospital from 1 August 1987. (This gap

was covered by private insurance from 1 September 1985)

- (d) changing of the Medicare Benefits Schedule and changes in how much doctors billed above the Schedule Fee, so that the proportion of total fee charged which is covered by Medicare benefits fell from 90.0 per cent in 1984–85 to 83.7 per cent in 1990–91. (Part of the fall was due to the change mentioned in (c))
- (e) reducing the proportion of the cost of pharmaceuticals subsidised by the Commonwealth.

The fall in the government share of health spending is reflected in the increase in the private share of health spending from 28.3 per cent of the total in 1984–85 to 30.7 per cent of the total in 1990–91.

Table 6: Percentage of total health expenditure by source of funds 1970–71 to 1990–91 with Identified Health Grants (IHGs) treated as Commonwealth health outlays (current prices)

Year	Source of funds				Total
	Commonwealth Government	State and local governments ^(a)	Total government	Private	
1970–71	28.2	28.5	56.7	43.3	100
1971–72	29.9	28.2	58.1	41.9	100
1972–73	30.0	28.4	58.4	41.6	100
1973–74	30.1	30.6	60.6	39.4	100
1974–75	30.1	33.8	63.9	36.1	100
1975–76	47.6	25.3	72.8	27.2	100
1976–77	41.7	25.2	66.9	33.1	100
1977–78	36.3	25.6	61.9	38.1	100
1978–79	35.6	26.9	62.5	37.5	100
1979–80	34.9	26.7	61.6	38.4	100
1980–81	35.6	27.2	62.8	37.2	100
1981–82	35.0	27.4	62.4	37.6	100
1982–83	33.9	26.9	60.9	39.1	100
1983–84	38.2	26.5	64.6	35.4	100
1984–85	46.0	25.8	71.7	28.3	100
1985–86	45.7	25.9	71.5	28.5	100
1986–87	44.2	26.3	70.6	29.4	100
1987–88	44.0	25.9	69.9	30.1	100
1988–89	42.3	26.7	69.0	31.0	100
1989–90	43.1 ^(b)	26.9 ^(b)	70.0	30.0	100
1990–91	43.0 ^(b)	26.3 ^(b)	69.3	30.7	100

(a) Includes Northern Territory.

(b) Commonwealth Government estimates include ACT up to and including 1988–89. State and local government estimates include ACT from 1989–90. In 1989–90 this represents \$153m less in the Commonwealth column (0.54 per cent of total health expenditure) and \$153m more in the State and local government column. If 1989–90 and 1990–91 figures were adjusted for this change the Commonwealth share of outlays would be 43.5 and 43.5 per cent instead of 43.1 and 43.0 per cent respectively and the State and local share of outlays would be 26.4 and 25.8 per cent instead of 26.9 and 26.3 per cent respectively.

Table 7: Percentage rate of growth of total health expenditure by source of funds 1970–71 to 1990–91 with Identified Health Grants (IHGs) treated as Commonwealth health outlays (current prices)

	Source of funds				Total
	Commonwealth Government	State and local governments ^(a)	Total government	Private	
1970–71 to 1971–72	22.8	15.0	18.9	12.2	16.0
1971–72 to 1972–73	13.9	14.1	14.0	12.5	13.4
1972–73 to 1973–74	20.5	29.3	24.8	13.8	20.2
1973–74 to 1974–75	34.5	48.5	41.6	23.4	34.4
1974–75 to 1975–76	113.5	1.2	54.1	1.6	35.1
1975–76 to 1976–77	1.2	15.1	6.0	40.9	15.5
1976–77 to 1977–78	-1.5	15.0	4.7	30.0	13.1
1977–78 to 1978–79	8.2	15.8	11.3	8.7	10.3
1978–79 to 1979–80	8.1	9.5	8.7	12.6	10.2
1979–80 to 1980–81	14.9	14.7	14.8	9.1	12.6
1980–81 to 1981–82	13.3	16.4	14.6	16.7	15.4
1981–82 to 1982–83	8.9	10.2	9.5	16.8	12.2
1982–83 to 1983–84	27.0	11.0	19.9	2.2	13.0
1983–84 to 1984–85	33.2	7.7	22.7	-11.6	10.6
1984–85 to 1985–86	11.6	12.7	12.0	13.0	12.3
1985–86 to 1986–87	10.0	15.6	12.0	17.4	13.5
1986–87 to 1987–88	9.7	8.6	9.3	12.9	10.4
1987–88 to 1988–89	8.1	15.6	10.9	15.7	12.3
1988–89 to 1989–90	10.6 ^(b)	9.5 ^(b)	10.1	5.0	8.6
1989–90 to 1990–91	8.7	6.4	7.8	11.6	9.0
Average annual growth rate					
1970–71 to 1975–76	37.1	20.6	29.8	12.5	23.5
1975–76 to 1979–80	7.6	17.8	11.4	25.1	15.6
1979–80 to 1982–83	12.3	13.7	12.9	14.2	13.4
1982–83 to 1984–85	30.0	9.3	21.3	-5.0	11.8
1984–85 to 1990–91	9.8	11.4	10.4	12.5	11.0
1970–71 to 1990–91	17.1	14.2	15.9	12.7	14.7
1975–76 to 1990–91	11.2	12.2	11.5	12.8	11.9

(a) Includes Northern Territory.

(b) Commonwealth Government estimates include ACT up to and including 1988–89. If an adjustment were made to put ACT back in the Commonwealth column, the growth rate of Commonwealth health outlays from 1988–89 to 1989–90 would be 12.0 per cent instead of 10.6 per cent. The growth rate of State and local government health outlays would be 7.3 per cent instead of 9.5 per cent. The 1989–90 to 1990–91 growth rates do not change, but some of the average annual growth rates change slightly.

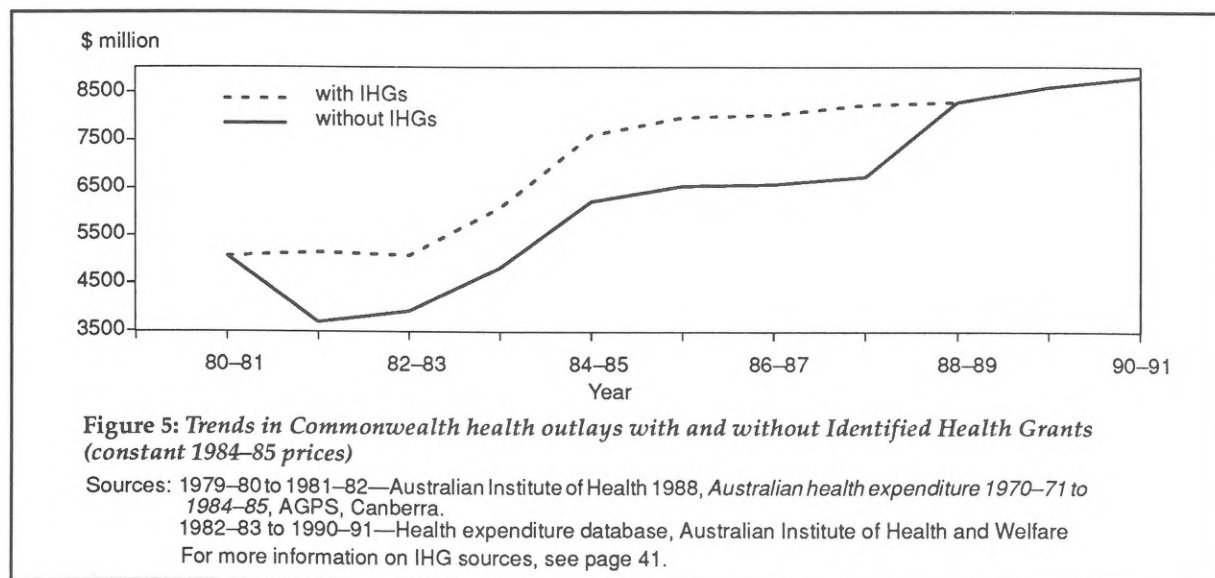
Table 8: Percentage of total health expenditure and rate of growth of total health expenditure by source of funds 1979–80 to 1990–91 with Identified Health Grants (IHGs) not treated as Commonwealth health outlays (current prices)

Year	Source of funds				
	Commonwealth Government ^(a)	State and local governments ^(b)	Total Government	Private	Total
Percentage of total health expenditure					
1979–80	34.9	26.7	61.6	38.4	100
1980–81	35.6	27.2	62.8	37.2	100
1981–82	25.1	37.3	62.4	37.6	100
1982–83	26.1	34.8	60.9	39.1	100
1983–84	30.2	34.4	64.6	35.4	100
1984–85	37.5	34.2	71.7	28.3	100
1985–86	37.5	34.0	71.5	28.5	100
1986–87	36.2	34.3	70.6	29.4	100
1987–88	36.1	33.7	69.9	30.1	100
1988–89	42.3	26.7	69.0	31.0	100
1989–90	43.1	26.9	70.0	30.0	100
1990–91	43.0	26.3	69.3	30.7	100
Percentage rate of growth					
1979–80 to 1980–81	14.9	14.7	14.8	9.1	12.6
1980–81 to 1981–82	-18.7	58.2	14.6	16.7	15.4
1981–82 to 1982–83	16.5	4.7	9.5	16.8	12.2
1982–83 to 1983–84	30.7	11.8	19.9	2.2	13.0
1983–84 to 1984–85	37.4	9.9	22.7	-11.6	10.6
1984–85 to 1985–86	12.4	11.6	12.0	13.0	12.3
1985–86 to 1986–87	9.7	14.6	12.0	17.4	13.5
1986–87 to 1987–88	10.1	8.5	9.3	12.9	10.4
1987–88 to 1988–89	31.5	-11.2	10.9	15.7	12.3
1988–89 to 1989–90	10.6	9.5	10.1	5.0	8.6
1989–90 to 1990–91	8.7	6.4	7.8	11.6	9.0
Average annual growth rate					
1979–80 to 1982–83	2.9	23.8	12.9	14.2	13.4
1982–83 to 1984–85	34.0	10.9	21.3	-5.0	11.8
1984–85 to 1990–91	13.6	6.2	10.4	12.5	11.0
1979–80 to 1990–91	13.9	11.6	13.0	9.6	11.8

(a) Includes ACT up to and including 1988–89.

(b) Includes Northern Territory. Includes ACT from 1989–90.

Sources: 1979–80 to 1981–82—Australian Institute of Health 1988, *Australian health expenditure 1970–71 to 1984–85*, AGPS, Canberra.
1982–83 to 1990–91—Health expenditure database, Australian Institute of Health and Welfare



Changes in distribution of health expenditure from 1982–83 to 1988–89

Over the six-year period, institutional expenditure as a proportion of total recurrent health expenditure fell by 3.8 per cent from 56.8 per cent to 53.0 per cent, while non-institutional expenditure increased. The fall in the proportion of expenditure on institutional services was mainly due to a fall in the expenditure share of hospitals. Specifically, the decrease was in the expenditure share of recognised public hospitals, where the decline was 2.8 per cent (from 34.7 per cent to 31.9 per cent, see Tables 9 to 15).

The proportion of recurrent expenditure spent on nursing homes increased from 8.6 per cent in 1982–83 to the peak of 9.1 per cent in 1984–85, then declined gradually to 8.6 per cent in 1988–89. As there was a methodological change in 1987–88 the nursing home figures must be interpreted with care (see technical notes on page 17 of *Health Expenditure Information Bulletin* no. 6, May 1991).

Areas where proportions of recurrent expenditure increased significantly over the six-year period included dental services—from 4.2 per cent to 5.2 per cent; medical services—from 17.0 per cent to 17.9 per cent; and other professional services—from 2.7 per cent to 3.5 per cent.

In current prices, the average annual growth rate of recurrent expenditure on institutional services for the six-year period was 10.5 per cent as against 13.4 per cent for non-institutional services (Table 16).

Within institutional services, recurrent expenditure on private hospitals had an average annual growth rate of 10.9 per cent for the six-year period, which was higher than the growth rate in recognised public hospitals of 10.2 per cent.

Non-institutional services areas with higher than average annual growth rates of recurrent expenditure included other professional services at 17.1 per cent and dental services at 15.5 per cent.

Health promotion and illness prevention had the highest average annual growth rate at 26.7 per cent. The Commonwealth increased its contribution from \$2 million in 1982–83 to \$67 million in 1988–89, resulting in an average annual growth rate of 80 per cent over the period. State and local governments also substantially increased their contributions. They spent \$65 million in 1982–83 and the amount increased to \$213 million in 1988–89, which gave an average annual growth rate of 21.9 per cent.

The picture was slightly different when adjusted for inflation (Table 17). Though the non-institutional average annual health price growth rate was still higher than that of the institutional sector, the difference was less (2.9 per cent in current prices compared with 1.5 per cent in constant prices). This is because the inflation rate was higher in the non-institutional sector, with dental and medical services showing the highest inflation rates.

TABLES 9–17 FOLLOW, FROM NEXT PAGE

Table 9: Total health expenditure by area of expenditure and source of funds^(a) 1982–83^(b)

	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 ^(c) (\$m)			
Total health expenditure	4,495	3,566	8,061	na	na	na	5,180	13,241	
Capital expenditure	25	244	269	na	na	na	^(d) 195	464	
Capital consumption	22	319	341	(e)	(e)	(e)	(e)	341	
Total recurrent expenditure	4,448	3,003	7,451	2,666	1,805	514	4,985	12,436	100.0
<i>Total institutional</i>	2,595	2,483	5,079	1,259	381	343	1,983	7,062	56.8
Total hospital	1,753	2,327	4,080	1,249	92	328	1,670	5,750	46.2
Recognised public	^(f) 1,428	1,879	3,307	733	—	281	1,013	4,320	34.7
Private	113	—	113	509	55	40	603	716	5.8
Repatriation	191	—	191	8	—	—	8	199	1.6
Public psychiatric	22	448	469	—	37	8	45	515	4.1
Total nursing homes	788	70	858	2	211	2	216	1,073	8.6
Government and other	566	70	635	2	145	2	149	784	6.3
Deficit financed	222	—	222	—	67	1	67	289	2.3
Other institutional services	55	86	141	7	78	13	98	239	1.9
Ambulance	32	86	118	7	78	13	98	216	1.7
Other institutional (nec)	23	—	23	—	—	—	—	23	0.2
<i>Total non-institutional</i>	1,853	520	2,373	1,407	1,424	171	3,002	5,374	43.2
Medical services	959	—	959	854	187	118	1,159	2,118	17.0
Dental services	16	52	67	175	275	11	461	528	4.2
Other professional services	25	—	25	54	224	27	305	330	2.7
Community health services	96	257	353	1	3	2	6	359	2.9
Total pharmaceuticals	483	—	483	13	555	5	573	1,056	8.5
Benefit paid items	483	—	483	—	177	—	177	659	5.3
All other items	—	—	—	13	379	5	397	397	3.2
Aids and appliances	38	1	39	44	157	6	207	246	2.0
Health promotion and illness prevention	2	65	68	—	—	—	—	68	0.5
Administration	118	95	212	265	—	—	265	477	3.8
Research	116	13	129	—	23	—	23	152	1.2
Other non-institutional	1	37	38	2	—	—	2	40	0.3

See footnotes (a)–(f) next page

- (a) This table records the amounts provided by the Commonwealth, State and local government and private sectors to fund expenditure on health, so the Commonwealth column, for example, includes transfers to other sectors as well as the amount spent directly on health goods and services by the Commonwealth sector.
- (b) Details of revisions to these figures since *Health Expenditure Information Bulletin no. 6* are provided on pages 42–43.
- (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 Bulletin no. 7* onward, identified health grants (IHGs) of \$1,041 million have been included as part of Commonwealth outlays on health, even though they are classified as part of general revenue grants from the Commonwealth to the States in the Commonwealth Government Budget Papers. State and local government outlays on health have consequently been reduced by the amount of IHGs. (*Payment to or for the States, the Northern Territory and Local Government authorities 1986–87. 1986–87 Budget Paper no. 7. AGPS, Canberra : 29, and Payments to or for the States, the Northern Territory and Local Government authorities 1984–85. 1984–85 Budget Paper no. 7. AGPS, Canberra: 234.*)

Table 10: Total health expenditure by area of expenditure and source of funds^(a) 1983–84^(b)

	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 ^(c) (\$m)			
Total health expenditure	5,708	3,957	9,664	na	na	na	5,293	14,957	
Capital expenditure	69	308	378	na	na	na	^(d) 226	604	
Capital consumption	26	332	358	^(e)	^(e)	^(e)	^(e)	358	
Total recurrent expenditure	5,612	3,316	8,929	2,367	2,196	504	5,067	13,996	100.0
<i>Total institutional</i>	3,052	3,730	5,782	1,216	424	339	1,978	7,760	55.4
Total hospital	2,086	2,524	4,610	1,127	180	327	1,635	6,245	44.6
Recognised public	^(f) 1,717	2,033	3,750	614	—	287	901	4,651	33.2
Private	123	—	123	505	142	32	680	803	5.7
Repatriation	220	—	220	7	—	—	7	227	1.6
Public psychiatric	25	492	517	—	38	8	47	564	4.0
Total nursing homes	905	107	1,012	—	243	3	246	1,257	9.0
Government and other	657	107	763	—	168	2	170	933	6.7
Deficit financed	248	—	248	—	75	1	76	324	2.3
Other institutional services	61	99	160	89	—	8	98	258	1.8
Ambulance	37	99	136	89	—	8	98	234	1.7
Other institutional (nec)	24	—	24	—	—	—	—	24	0.2
<i>Total non-institutional</i>	2,561	586	3,147	1,151	1,772	165	3,089	6,236	44.6
Medical services	1,458	—	1,458	614	230	114	958	2,416	17.3
Dental services	19	53	72	174	376	—	550	622	4.4
Other professional services	39	—	39	53	294	46	394	433	3.1
Community health services	113	291	404	—	—	—	—	404	2.9
Total pharmaceuticals	546	—	546	18	654	4	675	1,221	8.7
Benefit paid items	546	—	546	—	186	—	186	732	5.2
All other items	—	—	—	18	468	4	489	489	3.5
Aids and appliances	38	4	42	50	188	1	240	282	2.0
Health promotion and illness prevention	4	79	82	—	—	—	—	82	0.6
Administration	203	95	298	241	—	—	241	539	3.9
Research	135	17	152	—	30	—	30	182	1.3
Other non-institutional	6	47	54	—	—	—	—	54	0.4

See footnotes (a)–(f) next page

- (a) This table records the amounts provided by the Commonwealth, State and local government and private sectors to fund expenditure on health, so the Commonwealth column, for example, includes transfers to other sectors as well as the amount spent directly on health goods and services by the Commonwealth sector.
- (b) Details of revisions to these figures since *Health Expenditure Information Bulletin no. 6* are provided on pages 42–43.
- (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 Bulletin no. 7* onward, identified health grants (IHGs) of \$1,194 million have been included as part of Commonwealth outlays on health, even though they are classified as part of general revenue grants from the Commonwealth to the States in the Commonwealth Government Budget Papers. State and local government outlays on health have consequently been reduced by the amount of IHGs. (*Payment to or for the States, the Northern Territory and Local Government authorities 1986–87. 1986–87 Budget Paper no. 7.* AGPS, Canberra : 29, and *Payments to or for the States, the Northern Territory and Local Government authorities 1984–85. 1984–85 Budget Paper no. 7.* AGPS, Canberra: 234.)

Table 11: Total health expenditure by area of expenditure and source of funds^(a) 1984–85^(b)

	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 ^(c) (\$m)			
Total health expenditure	7,601	4,262	11,862	na	na	na	4,679	16,541	
Capital expenditure	35	403	437	na	na	na	^(d) 332	769	
Capital consumption	30	350	380	^(e)	^(e)	^(e)	^(e)	380	
Total recurrent expenditure	7,536	3,509	11,045	1,456	2,323	569	4,347	15,392	100.0
<i>Total institutional</i>	3,939	2,803	6,742	863	508	346	1,717	8,459	55.0
Total hospital	2,869	2,566	5,435	828	178	335	1,341	6,775	44.0
Recognised public	^(f) 2,444	2,026	4,470	291	—	293	584	5,054	32.8
Private	166	—	166	533	136	33	703	869	5.6
Repatriation	233	6	239	4	—	—	4	243	1.6
Public psychiatric	25	534	559	—	42	8	50	609	4.0
Total nursing homes	1,005	126	1,131	—	270	3	273	1,404	9.1
Government and other	722	126	848	—	188	2	190	1,038	6.7
Deficit financed	283	—	283	—	83	1	83	367	2.4
Other institutional services	66	111	176	34	60	8	103	279	1.8
Ambulance	39	111	150	34	60	8	103	253	1.6
Other institutional (nec)	26	—	26	—	—	—	—	26	0.2
<i>Total non-institutional</i>	3,596	707	4,303	593	1,814	223	2,630	6,933	45.0
Medical services	2,308	—	2,308	—	249	130	378	2,686	17.4
Dental services	22	64	86	229	400	—	629	716	4.7
Other professional services	63	—	63	70	268	85	422	485	3.2
Community health services	129	351	480	1	3	3	7	487	3.2
Total pharmaceuticals	629	—	629	24	664	4	691	1,320	8.6
Benefit paid items	629	—	629	—	221	—	221	850	5.5
All other items	—	—	—	24	442	4	470	470	3.1
Aids and appliances	41	2	42	66	192	2	259	301	2.0
Health promotion and illness prevention	9	110	119	—	—	—	—	119	0.8
Administration	231	107	339	204	—	—	204	543	3.5
Research	157	22	179	—	39	—	39	219	1.4
Other non-institutional	9	50	59	—	—	—	—	59	0.4

See footnotes (a)–(f) next page

- (a) This table records the amounts provided by the Commonwealth, State and local government and private sectors to fund expenditure on health, so the Commonwealth column, for example, includes transfers to other sectors as well as the amount spent directly on health goods and services by the Commonwealth sector.
- (b) Details of revisions to these figures since *Health Expenditure Information Bulletin no. 6* are provided on pages 42–43.
- (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 Bulletin no. 7* onward, identified health grants (IHGs) of \$1,401 million have been included as part of Commonwealth outlays on health, even though they are classified as part of general revenue grants from the Commonwealth to the States in the Commonwealth Budget Papers. State and local government outlays on health have consequently been reduced by the amount of IHGs. (*Payment to or for the States, the Northern Territory and Local Government authorities 1986–87. 1986–87 Budget Paper no. 7.* AGPS, Canberra : 29, and *Payments to or for the States, the Northern Territory and Local Government authorities 1984–85. 1984–85 Budget Paper no. 7.* AGPS, Canberra: 234.)

Table 12: Total health expenditure by area of expenditure and source of funds^(a) 1985–86^(b)

	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 ^(c) (\$m)			
Total health expenditure	8,481	4,805	13,286	na	na	na	5,289	18,575	
Capital expenditure	93	460	553	na	na	na	^(d) 445	998	
Capital consumption	35	381	416	^(e)	^(e)	^(e)	^(e)	416	
Total recurrent expenditure	8,353	3,964	12,317	1,767	2,665	413	4,844	17,161	100.0
<i>Total institutional</i>	4,251	3,203	7,454	1,017	541	202	1,761	9,215	53.7
Total hospital	3,095	2,930	6,025	977	175	188	1,341	7,366	42.9
Recognised public	^(f) 2,651	2,373	5,024	340	—	153	493	5,518	32.2
Private	168	—	168	634	132	34	800	969	5.6
Repatriation	257	6	263	4	—	—	4	266	1.6
Public psychiatric	18	551	570	—	43	1	44	613	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>	4,101	761	4,863	750	2,123	210	3,083	7,946	46.3
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 health services	121	403	524	1	—	—	1	525	3.1
Total pharmaceuticals	693	—	693	31	763	5	798	1,491	8.7
Benefit paid items	693	—	693	—	243	—	243	936	5.5
All other items	—	—	—	31	520	5	555	555	3.2
Aids and appliances	43	2	45	84	229	2	315	361	2.1
Health promotion and illness prevention	30	134	164	—	—	—	—	164	1.0
Administration	258	69	327	233	—	—	233	561	3.3
Research	166	25	191	—	43	—	43	234	1.4
Other non-institutional	9	59	69	—	—	—	—	69	0.4

See footnotes (a)–(f) next page

- (a) This table records the amounts provided by the Commonwealth, State and local government and private sectors to fund expenditure on health, so the Commonwealth column, for example, includes transfers to other sectors as well as the amount spent directly on health goods and services by the Commonwealth sector.
- (b) Details of revisions to these figures since *Health Expenditure Information Bulletin no. 6* are provided on pages 42–43.
- (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 Bulletin no. 7* onward, identified health grants (IHGs) of \$1,483 million have been included as part of Commonwealth outlays on health, even though they are classified as part of general revenue grants from the Commonwealth to the States in the Commonwealth Budget Papers. State and local government outlays on health have consequently been reduced by the amount of IHGs. (*Budget Statements 1987–88. Budget Paper no. 1.* AGPS, Canberra:279.)

Table 13: Total health expenditure by area of expenditure and source of funds^(a) 1986–87^(b)

	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 ^(c) (\$m)			
Total health expenditure	9,328	5,554	14,882	na	na	na	6,209	21,091	
Capital expenditure	117	518	635	na	na	na	^(d) 499	1,133	
Capital consumption	41	413	454	^(e)	^(e)	^(e)	^(e)	454	
Total recurrent expenditure	9,170	4,623	13,793	2,181	3,011	518	5,710	19,503	100.0
<i>Total institutional</i>	4,557	3,836	8,393	1,281	629	268	2,178	10,571	54.2
Total hospital	3,245	3,514	6,759	1,237	225	254	1,715	8,474	43.4
Recognised public	^(f) 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	7	—	—	7	291	1.5
Public psychiatric	20	679	699	—	53	2	55	754	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	127	224	45	66	11	121	345	1.8
Ambulance	46	127	173	45	66	11	121	294	1.5
Other institutional (nec)	51	—	51	—	—	—	—	51	0.3
<i>Total non-institutional</i>	4,614	787	5,400	900	2,382	250	3,532	8,932	45.8
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 health services	153	376	528	1	—	—	1	529	2.7
Total pharmaceuticals	833	—	833	30	823	7	860	1,693	8.7
Benefit paid items	833	—	833	—	189	—	189	1,022	5.2
All other items	—	—	—	30	634	7	670	670	3.4
Aids and appliances	40	1	41	98	266	2	365	406	2.1
Health promotion and illness prevention	39	155	194	1	—	—	1	195	1.0
Administration	246	77	323	282	—	—	282	605	3.1
Research	215	29	243	—	44	—	44	287	1.5
Other non-institutional	10	77	87	—	—	—	—	87	0.4

See footnotes (a)–(f) next page

- (a) This table records the amounts provided by the Commonwealth, State and local government and private sectors to fund expenditure on health, so the Commonwealth column, for example, includes transfers to other sectors as well as the amount spent directly on health goods and services by the Commonwealth sector.
- (b) Details of revisions to these figures since *Health Expenditure Information Bulletin no. 6* are provided on pages 42–43.
- (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 Bulletin no. 7* onward, identified health grants (IHGs) of \$1,651 million have been included as part of Commonwealth outlays on health, even though they are classified as part of general revenue grants from the Commonwealth to the States in the Commonwealth Budget Papers. State and local government outlays on health have consequently been reduced by the amount of IHGs. (*Budget Statements 1987–88. Budget Paper no. 1. AGPS, Canberra:279.*)

Table 14: Total health expenditure by area of expenditure and source of funds^(a) 1987–88^(b)

	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 ^(c) (\$m)			
Total health expenditure	10,233	6,033	16,266	na	na	na	7,010	23,276	
Capital expenditure	157	496	654	na	na	na	^(d) 629	1,282	
Capital consumption	46	430	476	^(e)	^(e)	^(e)	^(e)	476	
Total recurrent expenditure	10,029	5,107	15,136	2,540	3,370	471	6,381	21,517	100.0
<i>Total institutional</i>	4,866	4,280	9,147	1,490	698	204	2,391	11,538	53.6
Total hospital	3,520	3,927	7,447	1,439	210	190	1,839	9,286	43.2
Recognised public	^(f) 3,123	3,180	6,302	469	—	136	605	6,908	32.1
Private	^(g) 49	—	49	962	152	53	1,167	1,216	5.7
Repatriation	327	6	333	8	—	—	8	341	1.6
Public psychiatric	21	741	762	—	58	1	59	821	3.8
Total nursing homes ^(h)	1,271	213	1,485	—	416	4	420	1,905	8.9
Other institutional services	75	140	215	51	71	10	132	347	1.6
Ambulance	34	140	174	51	71	10	132	306	1.4
Other institutional (nec)	41	—	41	—	—	—	—	41	0.2
<i>Total non-institutional</i>	5,163	827	5,990	1,050	2,672	267	3,990	9,979	46.4
Medical services	3,187	—	3,187	104	440	156	700	3,887	18.1
Dental services	26	74	101	379	627	2	1,006	1,107	5.1
Other professional services	84	—	84	118	464	90	672	756	3.5
Community health services	187	407	594	1	—	5	6	600	2.8
Total pharmaceuticals	1,021	—	1,021	27	806	11	843	1,864	8.7
Benefit paid items	1,021	—	1,021	—	137	—	137	1,158	5.4
All other items	—	—	—	27	669	11	706	706	3.3
Aids and appliances	45	2	47	108	291	5	403	450	2.1
Health promotion and illness prevention	61	162	223	—	—	—	—	223	1.0
Administration	307	70	378	314	—	—	314	692	3.2
Research	233	35	268	—	45	—	45	313	1.5
Other non-institutional	11	75	86	—	—	—	—	86	0.4

See footnotes (a)–(h) next page

- (a) This table records the amounts provided by the Commonwealth, State and local government and private sectors to fund expenditure on health, so the Commonwealth column, for example, includes transfers to other sectors as well as the amount spent directly on health goods and services by the Commonwealth sector.
- (b) Details of revisions to these figures since *Health Expenditure Information Bulletin no. 6* are provided on pages 42–43.
- (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 Bulletin no. 7* onward, identified health grants (IHGs) of \$1,820 million have been included as part of Commonwealth outlays on health, even though they are classified as part of general revenue grants from the Commonwealth to the States in the Commonwealth Budget Papers. 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: 62.)
- (g) This \$49m is payment by the Department of Veterans' Affairs for the use of private hospitals by veterans. It is not a Commonwealth Government subsidy.
- (h) 1987–88 and 1988–89 nursing home expenditure is not comparable with earlier years because, from 1987–88, non-aged nursing homes expenditure was not included and the methodology for calculating individual contributions changed (see technical notes of *Health Expenditure Information Bulletin no. 6* for further details).

Table 15: Total health expenditure by area of expenditure and source of funds^(a) 1988–89

	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 ^(b) (\$m)			
Total health expenditure	11,062	6,976	18,038	na	na	na	8,107	26,145	
Capital expenditure	92	599	691	na	na	na	^(c) 674	1,365	
Capital consumption	44	443	487	^(d)	^(d)	^(d)	^(d)	487	
Total recurrent expenditure	10,926	5,934	16,860	2,774	3,906	753	7,433	24,293	100.0
<i>Total institutional</i>	5,202	4,908	10,110	1,595	736	423	2,754	12,864	53.0
Total hospital	3,717	4,477	8,194	1,542	224	408	2,173	10,367	42.7
Recognised public	3,280	3,662	6,942	484	—	332	816	7,758	31.9
Private	^(e) 52	—	52	1,046	161	75	1,281	1,334	5.5
Repatriation	374	6	381	11	—	—	11	392	1.6
Public psychiatric	10	809	819	—	63	1	64	884	3.6
Total nursing homes ^(f)	1,390	254	1,644	—	437	5	442	2,086	8.6
Other institutional services	95	177	272	54	75	11	139	411	1.7
Ambulance	36	177	214	54	75	11	139	353	1.5
Other institutional (nec)	59	—	59	—	—	—	—	59	0.2
<i>Total non-institutional</i>	5,724	1,026	6,750	1,179	3,171	330	4,679	11,429	47.0
Medical services	3,516	—	3,516	136	516	192	844	4,359	17.9
Dental services	27	76	103	418	731	3	1,152	1,255	5.2
Other professional services	93	—	93	126	549	84	760	852	3.5
Community health services	202	494	696	1	—	19	20	716	2.9
Total pharmaceuticals	1,106	—	1,106	30	1,025	9	1,064	2,170	8.9
Benefit paid items	1,106	—	1,106	—	168	—	168	1,275	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
Health promotion and illness prevention	67	213	280	—	—	—	—	280	1.2
Administration	408	99	507	348	—	—	348	855	3.5
Research	248	44	292	—	45	—	45	337	1.4
Other non-institutional	12	99	110	—	—	—	—	110	0.5

(a) This table records the amounts provided by the Commonwealth, State and Local Government and private sectors to fund expenditure on health, so the Commonwealth column, for example, includes transfers to other sectors as well as the amount spent directly on health goods and services by the Commonwealth 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.

See also footnotes (e) and (f) next page

(e) Same as footnote (g) of Table 14 but \$52m replaces \$49m.

(f) 1987–88 and 1988–89 nursing home expenditure is not comparable with earlier years because, from 1987–88, non-aged nursing homes expenditure was not included and the methodology for calculating individual contributions changed (see Technical notes of *Health Expenditure Information Bulletin no. 6* for further details).

Table 16: Changes in health expenditure (current prices) 1982–83 to 1988–89

Area of expenditure	Annual change (per cent)						Average annual change 1982–83 to 1988–89
	1982–83 to 1983–84	1983–84 to 1984–85	1984–85 to 1985–86	1985–86 to 1986–87	1986–87 to 1987–88	1987–88 to 1988–89	
Total health expenditure	13.0	10.6	12.3	13.5	10.4	12.3	12.0
Capital expenditure	30.1	27.4	29.7	13.6	13.2	6.4	19.7
Capital consumption	5.0	6.1	9.5	9.1	4.8	2.3	6.1
Total recurrent expenditure	12.5	10.0	11.5	13.6	10.3	12.9	11.8
<i>Total institutional</i>	9.9	9.0	8.9	14.7	9.1	11.5	10.5
Total hospital	8.6	8.5	8.7	15.0	9.6	11.6	10.3
Recognised public	7.7	8.7	9.2	14.2	9.6	12.3	10.2
Private	12.1	8.2	11.5	16.4	7.9	9.7	10.9
Repatriation	14.3	7.0	9.7	9.1	17.4	14.8	12.0
Public psychiatric	9.5	8.1	0.6	22.9	8.9	7.7	9.4
Total nursing homes	17.1	11.7	10.1	13.3	8.8	9.5	11.7
Other institutional services	7.8	8.3	8.7	13.7	0.6	18.4	9.5
Ambulance	8.0	8.4	7.9	7.8	4.1	15.1	8.5
Other institutional (nec)	6.4	7.9	16.6	66.6	-19.2	42.8	17.1
<i>Total non-institutional</i>	16.1	11.4	15.4	12.3	11.5	13.8	13.4
Medical services	14.1	11.2	15.1	12.3	12.0	12.1	12.8
Dental services	17.8	15.0	22.8	13.3	11.1	13.4	15.5
Other professional services	31.2	12.0	17.9	15.9	14.1	12.7	17.1
Community health services	12.7	20.4	7.8	0.9	13.3	19.3	12.2
Total pharmaceuticals	15.6	8.1	13.0	13.5	10.1	16.4	12.8
Benefit paid items	10.9	16.2	10.1	9.2	13.2	10.1	11.6
All other items	23.4	-4.0	18.2	20.7	5.3	26.8	14.6
Aids and appliances	14.4	6.9	19.9	12.5	10.9	10.1	12.4
Health promotion and illness prevention	22.0	44.0	38.2	18.9	14.4	25.4	26.7
Administration	12.9	0.6	3.3	8.0	14.4	23.5	10.2
Research	19.9	20.0	6.9	22.7	9.0	7.6	14.2
<i>Other non-institutional</i>	32.9	9.5	16.9	26.2	-0.8	27.7	18.2

Table 17: Changes in real health expenditure (constant 1984–85 prices) 1982–83 to 1988–89^(a)

Area of expenditure	Annual change (per cent)						Average annual change 1982–83 to 1988–89
	1982–83 to 1983–84	1983–84 to 1984–85	1984–85 to 1985–86	1985–86 to 1986–87	1986–87 to 1987–88	1987–88 to 1988–89	
Total health expenditure	6.3	3.9	5.4	4.0	3.5	4.9	4.7
Capital expenditure	22.5	21.3	18.5	6.2	7.0	0.3	12.3
Capital consumption	-1.3	1.5	1.2	2.5	0.2	-2.5	0.2
Total recurrent expenditure	6.0	3.2	4.8	3.9	3.3	5.4	4.4
<i>Total institutional</i>	3.5	2.7	2.9	4.5	3.5	4.7	3.6
Total hospital	2.3	2.2	2.7	4.8	3.9	4.9	3.5
Recognised public	1.4	2.4	3.2	4.1	3.9	5.5	3.4
Private	5.6	1.9	5.4	6.1	2.3	3.0	4.0
Repatriation	7.6	0.8	3.6	-0.5	11.3	7.8	5.0
Public psychiatric	3.2	1.8	-4.9	12.0	3.2	1.1	2.6
Total nursing homes	10.3	5.2	4.0	3.3	3.1	2.8	4.8
Other institutional services	1.5	2.0	2.7	3.7	-4.6	11.2	2.6
Ambulance	1.7	2.1	1.9	-1.7	-1.4	8.1	1.7
Other institutional (nec)	0.2	1.6	10.2	51.9	-23.4	34.1	9.8
<i>Total non-institutional</i>	9.3	4.0	7.7	2.8	2.6	5.2	5.2
Medical services	6.4	2.5	6.9	2.4	2.2	2.0	3.7
Dental services	8.5	5.5	11.3	1.9	0.9	3.3	5.2
Other professional services	23.4	5.4	11.8	5.7	8.1	6.0	9.9
Community health services	6.2	13.6	1.8	-6.6	7.5	12.1	5.5
Total pharmaceuticals	11.4	3.2	6.7	5.5	1.2	9.8	6.2
Benefit paid items	6.9	11.0	4.0	1.5	4.0	3.8	5.2
All other items	18.9	-8.3	11.7	12.2	-3.2	19.6	7.9
Aids and appliances	10.2	2.1	13.2	4.5	1.9	3.7	5.9
Health promotion and illness prevention	14.8	35.5	30.6	9.7	8.7	17.7	19.1
Administration	6.3	-5.0	-2.6	0.4	8.6	16.5	3.8
Research	13.4	13.6	0.7	15.4	3.5	1.6	7.9
Other non-institutional	24.9	3.2	10.4	16.1	-5.8	19.9	11.0

(a) Health expenditure 1982–83 to 1988–89 deflated to constant prices using specific health deflators (AIH 1991, *Health Expenditure Information Bulletin no. 6*: Table 16).

Total health expenditure in 1989–90 and 1990–91

The preliminary estimate for total health expenditure in 1989–90 is \$28.4 billion, and for 1990–91 is \$30.9 billion. The estimate is made by applying the ABS estimated health expenditure growth rates

for 1988–89 to 1989–90 and for 1989–90 to 1990–91 to the relevant AIHW estimates of health expenditure. These estimates are preliminary and will be revised.

The AIHW figures are higher than the ABS figures (Table 18) partly

because AIHW includes health research funded by universities as health expenditure (\$138 million in 1987–88), whereas the ABS counts it as an education expenditure. The disparity is also partly the result of methodological differences.

Table 18: ABS and AIHW estimates of health expenditure 1982–83 to 1990–91

	1982 –83	1983 –84	1984 –85	1985 –86	1986 –87	1987 –88	1988 –89	1989 –90	1990 –91
ABS estimates of health expenditure (\$m)									
Commonwealth Government final consumption	709	885	987	974	1,064	1,162	1,595	1,441	1,556
State and Local Government final consumption	4,506	5,156	6,089	6,772	7,655	8,378	9,162	9,937	10,574
Private final consumption	7,102	7,898	8,328	9,250	10,631	12,065	13,558	15,019	16,765
Total final consumption expenditure	12,317	13,939	15,404	16,996	19,350	21,605	24,315	26,397	28,895
Commonwealth Government gross fixed capital	20	65	37	41	58	71	45	51	110
State and Local Government gross fixed capital	245	303	394	497	550	547	624	775	828
Total government fixed capital expenditure	265	368	431	538	608	618	669	826	938
Total health expenditure (excluding private capital)	12,582	14,307	15,835	17,534	19,958	22,223	24,984	27,223	29,833
Change (%)		13.7	10.7	10.7	13.8	11.3	12.4	9.0	9.6
AIHW estimates of health expenditure (\$m)									
Total health expenditure (excluding private capital)	13,044	14,731	16,199	18,123	20,574	22,617	25,442	^(a) 27,722	^(b) 30,380
Change (%)		12.9	10.0	11.9	13.5	9.9	12.5	9.0	9.6
Total health expenditure (including private capital)	13,241	14,957	16,541	18,575	21,091	23,276	26,145	^(c) 28,381	^(c) 30,923
Change (%)		13.0	10.6	12.3	13.5	10.4	12.3	8.6	9.0

(a) The 1989–90 AIHW estimate of total health expenditure (excluding private capital) is obtained by applying the ABS 1988–89 to 1989–90 growth rate of health expenditure (excluding private capital) of 8.962 per cent to the AIH 1988–89 estimate.

(b) The 1990–91 AIHW estimate of total health expenditure (excluding private capital) is obtained by applying the ABS 1989–90 to 1990–91 growth rate in an equivalent way to note (a). In this case the ABS growth rate is 9.587 per cent.

(c) Estimates of total health expenditure are made by adding unpublished estimates of private capital expenditure to the estimates which exclude private capital.

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

ABS health expenditure data for 1987–88 to 1990–91: ABS. *Australian national accounts: national income and expenditure June quarter 1991*. Cat. No. 5206.0

International comparisons of health expenditure

Is Australia spending too much or too little on health services, and is the present health status of the Australian population satisfactory given the level of expenditure?

There have never been easy or straightforward answers to these questions, as the amount spent on health is determined by a complex of social, political and economic factors.

Looking at Australian expenditure on health services over a period of time is of some help in answering these questions. For the fifteen years from 1975–76 to 1990–91, health expenditure as a proportion of gross domestic product (GDP) was fairly stable in the range 7.4 to 8.1 per cent. During a similar period, expectation of life at birth improved from 68.4 years in 1974 to 73.3 years in 1988 for males, and from 75.4 to 79.6 years for females. Deaths from heart disease declined 43 per cent in the period 1974 to 1988.

This does not necessarily mean that Australia has spent the most appropriate proportion of GDP on health. But it does indicate it is not necessary to have increasing health services expenditure as a proportion of GDP in order to have improved life expectancy.

It should also be noted that life expectancy is only one measure of the health of a nation. Better health status measures are needed to know whether we are spending our 31 billion health service dollars wisely. At this stage that data is not good enough to evaluate whether there is a strong connection between expenditure on

health services and overall health status. Other factors such as expenditure on transport, housing, education and social security, and changes in nutrition and smoking may be as relevant to health status as expenditure on health services.

Australia does not exist in isolation from the rest of the world. Health care technology is constantly progressing, especially in the developed countries, and there is a desire that Australia keep up with the best of overseas practices and technology. Comparison of Australian expenditure on health with that of other countries, taking account of changes over a period of time, may serve as a guide to answering questions about the adequacy or otherwise of health expenditure. In this *Bulletin*, Australian expenditure on health is compared with that of eight other OECD countries.

Comparison can only be made if the national currencies are converted to a common unit. Conventionally, exchange rates have been used to convert the national currencies into the same nominal unit of account (usually US dollars). But exchange rates are deficient for this purpose for three reasons:

- Firstly, exchange rates can only reflect the prices of traded goods and services, but there are many items which are not traded internationally and hence are not taken into account.
- Secondly, the exchange rates are influenced not only by the supply and demand of those currencies needed for the ex-

change of goods and services between countries, but also by a wide variety of other financial, political, economic and institutional factors.

- Thirdly, exchange rates reflect the perceived relative value of the financial assets and prospects of a country rather than its actual production of goods and services. These perceptions can be very volatile and unrelated to real international transactions in goods and services. Exchange rates are not, therefore, appropriate for international comparisons of the volume of goods and services⁽¹⁾.

For these reasons, the expenditure on health of the nine OECD countries shown in this section of the *Bulletin* was converted using purchasing power parities (PPPs) instead of exchange rates. PPPs show the rate at which a given amount of one currency can be converted into the other in order to purchase the same quantity of a particular item in both countries. (For instance, if the price of a dozen eggs in Australia was two Australian dollars, and the price in the USA was one USA dollar, then, in terms of the amount of eggs that can be bought, the Australian dollar would have half the value of the USA dollar. The egg-specific PPP ratio between Australia and USA would be 0.5.)

A health specific purchasing power parity is but one among other kinds of PPPs, the weighted index of which becomes the general PPP. The rate of increase in the prices of the non-health goods and services may differ from that of health prices, which affect the PPP for any particular year.

1. For the differences in the values obtained by applying the exchange rates and the PPPs to the national currencies, see AIH 1988, *Australian health expenditure 1970–71 to 1984–85* AGPS, Canberra, Chapter 2.

It would be ideal to use health PPPs, but due to unavailability of a time-series for the health PPPs, and due to their unreliability, general PPPs are used in the conversion of national currencies into a common unit. The use of PPPs also has the advantage of eliminating general inflation differences between countries. The data still incorporates an inflationary component but this component is constant for all countries. Thus if Australia and France both show a 10 per cent growth in GDP using a PPP conversion, then this indicates the real growth in GDP was the same for both countries. Except for the Australian data, the data in Tables 19 to 22 and Figures 6 and 7 come from OECD. Since OECD data are being updated continually, these must be treated with a degree of caution, particularly for recent years.

Data on health expenditure per person of selected OECD countries depicted in Table 19 and Figure 6 illustrate that, since 1969–70, Australia has always spent less than the nine-country average on health per person, with the United States spending

most. Countries with generally lower health expenditure per person than Australia were Japan, New Zealand and the United Kingdom. In 1989–90, Australia spent US\$1127 per person, while the weighted average of the nine OECD countries in 1990 was US\$1,782. The weighted average weights the average according to the population of each country. The large population of the USA significantly affects the weighted average. Australia spent \$655 below the weighted average of health expenditures per person for the nine OECD countries and \$556 per person below the unweighted average health expenditure.

The long-term growth rate in health expenditure per person for Australia from 1969–70 to 1989–90 was lower than that of both the weighted and the unweighted averages of the nine OECD countries. Breaking the period into four shows that for two periods, from 1974–75 to 1979–80 and from 1979–80 to 1984–85, Australia had higher growth rates than the average of the nine OECD countries. The two periods with Australia showing lower growth rates were 1969–70 to 1974–75 and 1984–85 to

1989–90. For the most recent period, 1984–85 to 1989–90, the growth rate of health expenditure for Australia at 5.5 per cent per year was significantly lower than the average for the nine OECD countries.

The growth rate of GDP per person in Australia from 1969–70 to 1979–80 was lower than both the weighted and unweighted average of the nine OECD countries (Table 20).

Since 1979–80, however, the GDP per person growth rate for Australia has been higher than or similar to the weighted and the unweighted average of the nine OECD countries.

Health expenditure as a proportion of GDP for Australia increased from 5.4 per cent in 1969–70 to 8.0 per cent in 1986–87 and then declined slightly to 7.6 per cent in 1989–90. Throughout the twenty year period USA, Sweden, Canada, France and Germany spent a higher proportion of GDP on health than Australia. New Zealand, Japan and the UK spent a lower proportion than Australia (Table 21 and Figure 7).

TABLES 19–22 AND FIGURES 6–7 FOLLOW, FROM NEXT PAGE

Table 19: Health expenditure per person for nine OECD countries, purchasing power parity conversion, 1969–70 to 1989–90

Financial year	Australia ^(a)	Calendar year	Canada	France	Germany ^(b)	Japan	New Zealand ^(c)	Sweden	UK	USA	Nine countries weighted-mean ^(d)	Nine countries unweighted mean ^(e)
	(\$US)		(\$US)	(\$US)	(\$US)	(\$US)	(\$US)	(\$US)	(\$US)	(\$US)	(\$US)	(\$US)
1969–70	179	1970	274	192	199	128	174	274	144	346	241	212
1970–71	201	1971	314	217	226	140	—	303	157	379	263 ^(f)	242 ^(f)
1971–72	224	1972	337	240	254	159	—	324	173	421	292 ^(f)	267 ^(f)
1972–73	241	1973	365	269	298	176	237	351	198	464	329	289
1973–74	267	1974	404	303	351	205	302	405	237	521	375	333
1974–75	331	1975	478	365	420	252	354	475	271	592	436	393
1975–76	418	1976	529	406	468	278	357	528	297	672	491	439
1976–77	459	1977	579	448	516	317	382	612	315	753	547	487
1977–78	505	1978	643	513	572	366	431	671	353	839	614	544
1978–79	521	1979	710	585	651	425	459	745	386	932	687	602
1979–80	536	1980	806	656	740	515	523	859	445	1,063	788	683
1980–81	588	1981	927	753	839	589	565	951	504	1,222	902	771
1981–82	656	1982	1,044	826	871	660	624	1,037	529	1,359	995	845
1982–83	710	1983	1,127	876	913	708	596	1,080	588	1,480	1,075	897
1983–84	789	1984	1,224	957	996	742	599	1,137	621	1,592	1,156	962
1984–85	858	1985	1,315	991	1,047	785	661	1,125	642	1,711	1,232	1,015
1985–86	920	1986	1,431	1,036	1,097	828	715	1,134	695	1,822	1,309	1,075
1986–87	983	1987	1,507	1,088	1,137	907	787	1,205	733	1,961	1,404	1,145
1987–88	1,017	1988	1,585	1,174	1,243	978	800	1,258	781	2,145	1,525	1,220
1988–89	1,073	1989	1,683	1,276	1,223	1,030	840	1,343	844	2,345	1,641	1,295
1989–90	1,127	1990	1,795	1,379	1,287	1,113	853	1,421	909	2,566	1,782	1,683
Average annual growth rate (per cent)^(g)												
1969–70 to 1974–75	12.2	1970–1975	10.9	13.2	16.0	14.4	26.8	11.2	13.8	11.2	12.6	12.5
1974–75 to 1979–80	19.5	1975–1980	10.9	12.6	11.9	15.3	8.4	12.4	10.2	12.2	12.4	11.5
1979–80 to 1984–85	9.9	1980–1985	10.1	8.4	6.8	8.5	3.8	5.6	7.6	9.8	9.1	8.0
1984–85 to 1989–90	5.5	1985–1990	6.2	7.0	4.2	7.3	5.2	5.1	7.1	8.6	7.7	6.4
1969–70 to 1989–90 ¹²⁰	9.8	1970–1990	10.3	10.5	10.0	12.1	7.9	8.9	9.7	10.8	10.8	10.0

See footnotes (a)–(g) next page

- (a) There is a break in the series of population estimates at June 1971. Population figures for 1969–70 and 1970–71 are estimated so that they are consistent with the post-1971 series. The estimation uses the growth rates from the old series of 2.29 per cent for 1969–70 to 1970–71, and 2.44 per cent for 1970–71 to 1971–72.
- (b) West Germany figures only.
- (c) Health expenditure figures appearing here differ from those in Department of Health (1991) *Health expenditure trends in New Zealand 1980–1991*.
- (d) It is the sum of total health expenditure of the nine countries converted into the USA currency and divided by the sum of the nine countries' populations.
- (e) It is the simple average of the nine countries' health expenditure per person.
- (f) Eight-countries mean.
- (g) Growth rates are found from log linear regression.

Sources: Australian total health expenditure—AIHW estimates.

Australian population—For 1969–70 and 1970–71, figures from ABS, *Australian demographic trends, 1986*. Cat. No. 5102.0.

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 years).

Others—OECD (1991) *Health Data: A software package for the international comparison of health care systems*.

Table 20: *Gross domestic product per person for nine OECD countries, purchasing power parity conversion, 1969–70 to 1989–90*

Financial year	Australia	Calendar year	Canada ^(a)	France	Germany ^(b)	Japan	New Zealand	Sweden	UK	USA	Nine countries weighted mean ^(c)	Nine countries unweighted mean ^(d)
	(\$US)		(\$US)	(\$US)	(\$US)	(\$US)	(\$US)	(\$US)	(\$US)	(\$US)		
1969–70	3,322	1970	3,877	3,297	3,384	2,836	3,330	3,819	3,199	4,695	3,805	3,529
1970–71	3,540	1971	4,258	3,594	3,618	3,079	3,615	4,023	3,433	5,043	4,099	3,800
1971–72	3,819	1972	4,660	3,923	3,914	3,476	3,885	4,292	3,707	5,490	4,477	4,129
1972–73	4,124	1973	5,219	4,327	4,353	3,920	4,328	4,751	4,250	6,082	5,988	4,595
1973–74	4,551	1974	5,965	4,813	4,747	4,134	4,903	5,334	4,511	6,531	5,383	5,055
1974–75	5,059	1975	6,624	5,255	5,157	4,585	5,255	5,987	5,943	7,044	5,864	5,545
1975–76	5,600	1976	7,379	5,802	5,799	5,063	5,663	6,404	5,425	8,783	6,485	6,099
1976–77	6,089	1977	8,066	6,387	6,383	5,602	5,731	6,703	5,896	8,601	7,142	6,606
1977–78	6,447	1978	8,930	7,050	7,071	6,238	6,053	7,299	6,653	9,609	7,952	7,261
1978–79	6,861	1979	10,028	7,885	7,996	7,068	6,535	8,234	7,331	10,571	8,836	8,057
1979–80	7,258	1980	10,927	8,667	8,790	8,024	7,226	9,119	7,915	11,419	9,663	8,818
1980–81	8,055	1981	12,293	9,576	9,645	8,975	8,137	9,964	8,529	12,658	10,699	9,759
1981–82	8,789	1982	12,463	10,367	10,184	9,777	8,645	10,718	9,168	12,995	11,239	10,345
1982–83	9,200	1983	13,131	10,750	10,737	10,412	9,030	11,288	9,814	13,819	11,918	10,909
1983–84	10,260	1984	14,472	11,260	11,494	11,300	9,761	12,137	10,464	15,193	12,963	11,816
1984–85	11,201	1985	15,440	11,719	12,061	12,135	10,124	12,722	11,034	16,038	13,722	12,497
1985–86	11,889	1986	16,198	12,218	12,611	12,602	10,519	13,268	11,836	16,731	14,352	13,097
1986–87	12,328	1987	17,187	12,770	13,141	13,549	10,838	14,021	12,540	16,760	15,181	13,783
1987–88	13,086	1988	18,302	13,600	13,960	14,768	10,962	14,754	13,441	18,896	16,273	14,641
1988–89	13,941	1989	19,371	14,572	14,838	15,958	11,501	15,478	14,412	19,969	17,321	15,560
1989–90	14,769	1990	19,925	15,568	15,943	17,598	11,822	16,320	14,986	20,774	18,311	16,412
Average annual growth rate (per cent)^(e)												
1969–70 to 1974–75	8.8	1970–1975	11.5	9.9	9.0	10.2	9.9	9.6	9.4	8.7	9.2	9.6
1974–75 to 1979–80	7.3	1975–1980	10.6	10.6	11.3	11.8	6.1	8.8	10.1	10.3	10.6	9.7
1979–80 to 1984–85	8.8	1980–1985	6.7	5.9	6.4	8.4	6.7	6.8	6.9	6.8	7.1	7.0
1984–85 to 1989–90	5.6	1985–1990	5.5	5.9	5.7	7.9	3.1	5.2	6.5	5.6	6.1	5.7
1969–90 to 1989–90	8.0	1970–1990	8.8	8.2	8.3	9.7	6.7	7.9	8.2	8.0	8.4	8.2

(a) GDP figures here differ from those in Health and Welfare Canada (1990) *National Health Expenditure in Canada 1975–1987*.

(b) West Germany figures only. (c) It is the sum of total GDP of the nine countries converted into the USA currency and divided by the sum of the nine countries' population.

(d) It is the simple average of the nine countries' health expenditure per person. (e) Growth rates are found from log linear regression.

Sources: Australia—ABS. *Australian national accounts—national income and expenditure June quarter 1991*. Cat. No. 5206.0.

Others—OECD (1991) *Health Data: A software package for the international comparison of health care systems*.

Table 21: Total health expenditure as a percentage of gross domestic product, nine countries, 1970 to 1990

(Per cent)											
Year	Australia ^(a)	Canada	France	Germany ^(b)	Japan	NZ	Swe	UK ^(c)	USA	Nine country mean	Eight country mean ^(d)
1970	5.4	7.1	5.8	5.9	4.4	5.2	7.2	4.5	7.4	5.9	5.7
1971	5.7	7.4	6.0	6.3	4.5	na	7.5	4.6	7.5	5.5	5.3
1972	5.9	7.2	6.1	6.5	4.6	na	7.5	4.7	7.7	5.6	5.3
1973	5.8	7.0	6.2	6.8	4.5	5.5	7.4	4.6	7.6	6.2	6.0
1974	5.9	6.8	6.3	7.4	5.0	6.2	7.6	5.3	8.0	6.5	6.3
1975	6.5	7.2	7.0	8.1	5.5	6.7	7.9	5.5	8.4	7.0	6.8
1976	7.5	7.2	7.0	8.1	5.5	6.3	8.2	5.5	8.6	7.1	6.9
1977	7.5	7.2	7.0	8.1	5.7	6.7	9.1	5.3	8.8	7.3	7.1
1978	7.8	7.2	7.3	8.1	5.9	7.1	9.2	5.3	8.7	7.4	7.2
1979	7.6	7.1	7.4	8.1	6.0	7.0	9.0	5.3	8.8	7.4	7.2
1980	7.4	7.4	7.6	8.4	6.4	7.2	9.4	5.6	9.3	7.6	7.4
1981	7.3	7.5	7.9	8.7	6.6	6.9	9.5	5.9	9.7	7.8	7.5
1982	7.5	8.4	8.0	8.6	6.8	7.2	9.7	5.8	10.5	8.0	7.7
1983	7.7	8.6	8.2	8.5	6.8	6.6	9.6	6.0	10.7	8.1	7.7
1984	7.7	8.5	8.5	8.7	6.6	6.1	9.4	5.9	10.5	8.0	7.7
1985	7.7	8.5	8.5	8.7	6.5	6.5	8.8	5.8	10.7	8.0	7.6
1986	7.7	8.8	8.5	8.7	6.6	6.8	8.5	5.9	10.9	8.0	7.7
1987	8.0	8.8	8.5	8.7	6.7	7.3	8.6	5.8	11.1	8.2	7.8
1988	7.8	8.7	8.6	8.9	6.6	7.3	8.5	5.8	11.4	8.2	7.8
1989	7.7	8.7	8.8	8.2	6.5	7.3	8.7	5.9	11.7	8.2	7.7
1990	7.6	9.0	8.9	8.1	6.3	7.2	8.7	6.1	12.4	8.2	7.7
Average	7.1	7.8	7.5	8.0	5.9	6.1	8.6	5.5	9.5	7.3	7.1

(a) Due to differences between OECD and Australian labelling conventions, caution needs to be exercised in comparing data presented here with those published by OECD. This table follows the Australian convention of labelling data for a financial year by the second year (that is, 1969–70 data are labelled 1970), whereas OECD would label the data by the first year (that is, 1969–70 data would be labelled 1969).

(b) West Germany figures only.

(c) United Kingdom health expenditure does not include nursing home expenditure. 1988 data indicate this omission is about 0.7 per cent of GDP.

(d) Excluding USA.

Sources: Australia—Australian Institute of Health and Welfare estimates.

Other data—OECD (1991) *Health data: a software package for the international comparison of health care systems*.

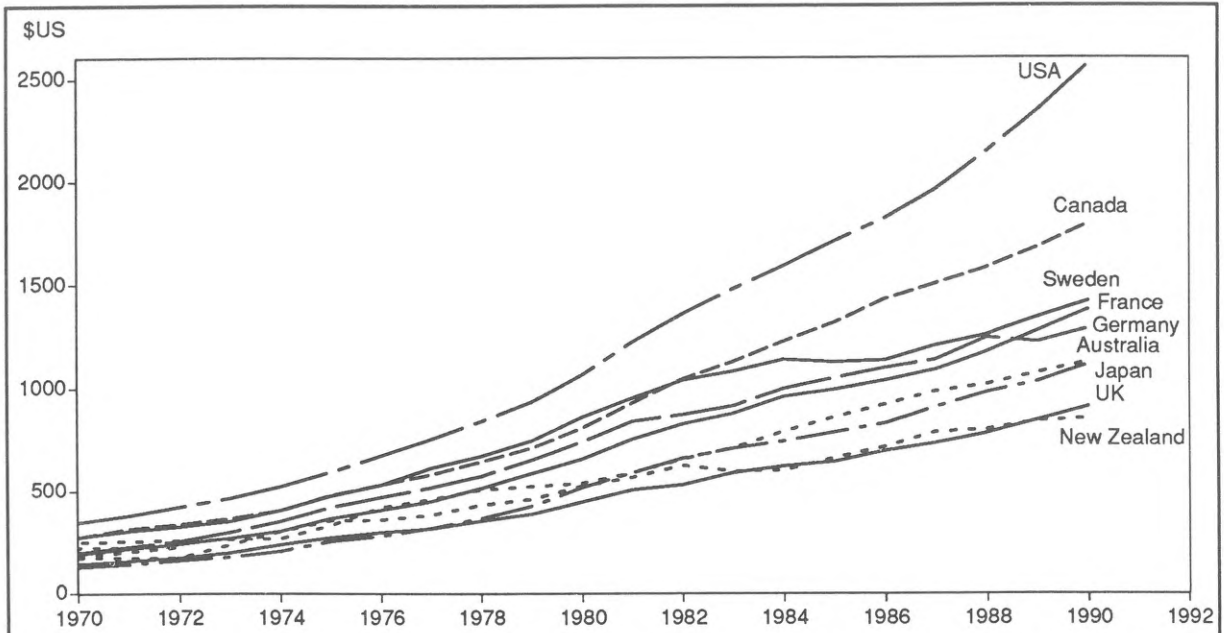


Figure 6: Health expenditure per person: nine countries, US dollars, Purchasing Power Parity conversion, 1970 to 1990

Source: OECD (1991) Health Data: a software package for the international comparison of health care systems

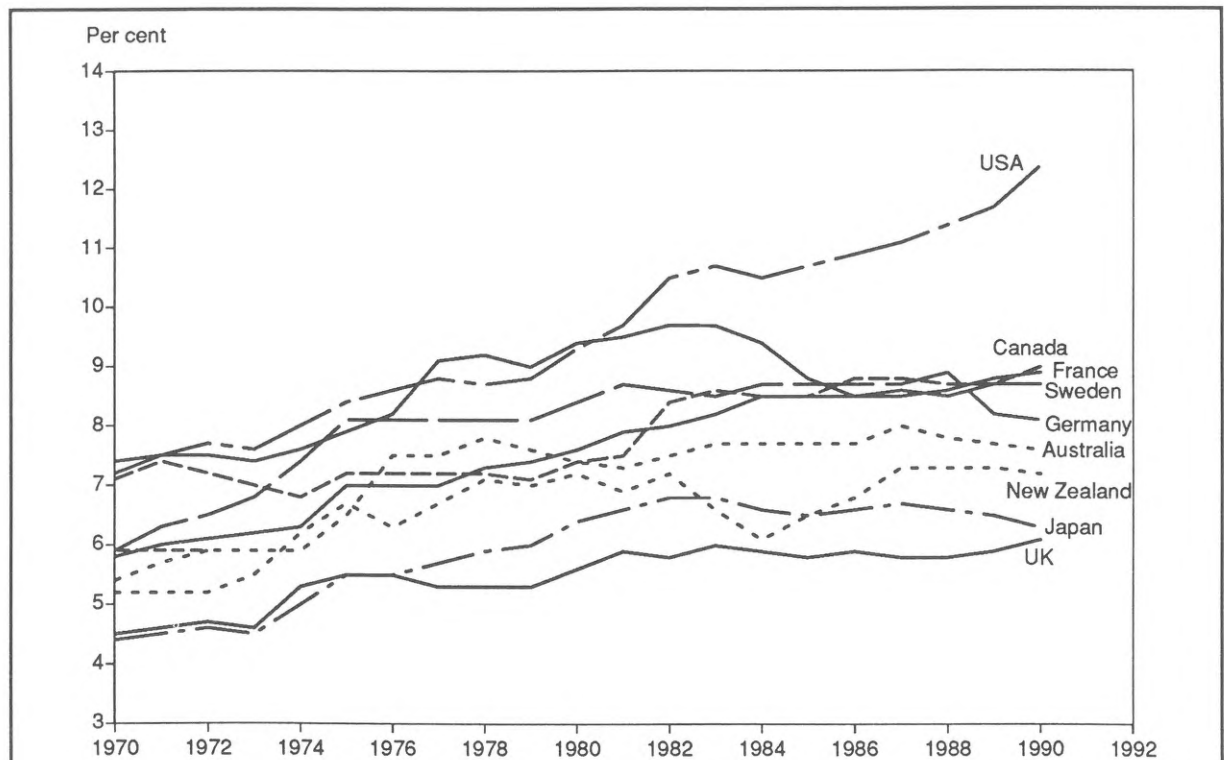


Figure 7: Total health expenditure for nine countries as a percentage of gross domestic product, 1970 to 1990

Source: OECD (1991) Health Data: a software package for the international comparison of health care systems

Components of changes in health expenditure in selected OECD countries 1975 to 1981

Table 22 compares health expenditure growth in Australia and seven major OECD countries. Except for Australia, the figures are from Schieber GJ and Poullier JP (1989) 'Health care expenditure and other data' *Health Care Financing Review 1989 Annual Supplement*: 6.

Where does Australia stand among these eight countries? From the period 1975 to 1987, nominal average annual health expenditure increases ranged from 6.2 per cent for Germany to 17.6 per cent for Italy and the nine-country average was 12.1 per cent. Australia had an average annual growth of 14.3 per cent which was 2.2 per cent above the eight-country average.

Annual average health care price increases ranged from 3.9 per cent in Germany to 14.9 per cent in Italy. Australian health care prices increased by an annual average of 9.7 per cent, which was 1.2 per cent above the eight-country average.

Excess health care inflation, which is the amount health price increases exceeded general economy-wide inflation, ranged from -1.1 per cent in France to 2.2 per cent in the United States of America. Australia showed a below average excess health care inflation figure of 0.4 per cent.

Increases in volume-intensity per person ranged from 1.9 per cent in Canada and the United Kingdom to 4.9 per cent in France. Australia had a 2.9 per cent increase, which was average.

The four factors driving health expenditure upward are general

inflation, excess health care inflation, real increases in the volume-intensity of services per person, and population growth. But the factors which are important from a health policy perspective are the excess health care inflation and the real increases in the volume-intensity of services per person. Because Australia has a below average figure of excess health care inflation, it is able to have a slightly above average increase in the volume-intensity of services per person without having a large growth in health expenditure as a proportion of GDP.

Figure 8 shows the decomposition of expenditure growth into the three components of health price inflation, population growth and changes in volume intensity per person for Australia for the period 1982-83 to 1988-89—the period for which health expenditure figures are most reliable.

Table 22: Comparison of health expenditure growth in Australia and selected OECD countries, 1975 to 1987

Growth components ^(a)	(Per cent)								Unweighted mean
	Aust	Can	Fra	FRG	Ita	Jpn	UK	USA	
(1) Share of health expenditure in GDP 1975 ^(b)	6.5	7.3	6.8	7.8	5.8	5.5	5.5	8.4	6.7
(2) Nominal health expenditure growth	14.3	11.8	13.4	6.2	17.6	9.1	13.0	11.7	12.1
(3) Health care price deflator	9.7	8.6	7.6	3.9	14.9	4.1	10.8	8.1	8.5
(4) Of which GDP deflator	9.2	6.5	8.8	3.4	14.1	2.9	9.7	5.8	7.6
(5) Of which excess health care inflation	0.4	2.0	-1.1	0.4	0.7	1.2	1.0	2.2	0.9
(6) Real expenditure growth	4.3	2.9	5.4	2.2	2.3	4.8	2.0	3.3	3.4
(7) Of which population growth	1.3	1.0	0.5	-0.1	0.3	0.8	0.1	1.0	0.6
(8) Of which per person volume intensity growth	2.9	1.9	4.9	2.3	2.0	4.0	1.9	2.3	2.8
(9) Share of health expenditure in GDP 1987 ^(b)	8.0	8.6	8.6	8.2	6.9	6.8	6.1	11.2	8.1

(a) See text for details.

(b) Due to differences between OECD and Australian labelling conventions, caution needs to be exercised in comparing Australian data presented here with those published by OECD. This table follows the Australian convention of labelling data for a financial year by the second year (that is, 1974-75 data are labelled 1975), whereas OECD would label the data by the first year (that is, 1974-75 data would be labelled 1974).

Sources: Australian Institute of Health and Welfare
Schieber, Poullier (1989)—see text.

The change in total health expenditure is shown as line AE. Total health expenditure in real prices is plotted as line AD. The area ADE indicates the price effect. Population growth makes only a small contribution to the growth in total health expenditure as shown by

the area ABC. The effect of changes in volume intensity per person is shown as the area ACD.

Over time, health price inflation explains most of the increase in expenditure. From 1982-83 to 1988-89, health expenditure in-

creased by 94.9 per cent, of which 64 per cent was due to health price inflation, 24.2 per cent to changes in intensity and 11.8 per cent to population growth. The interaction between these three factors has been distributed according to the weight of each factor.

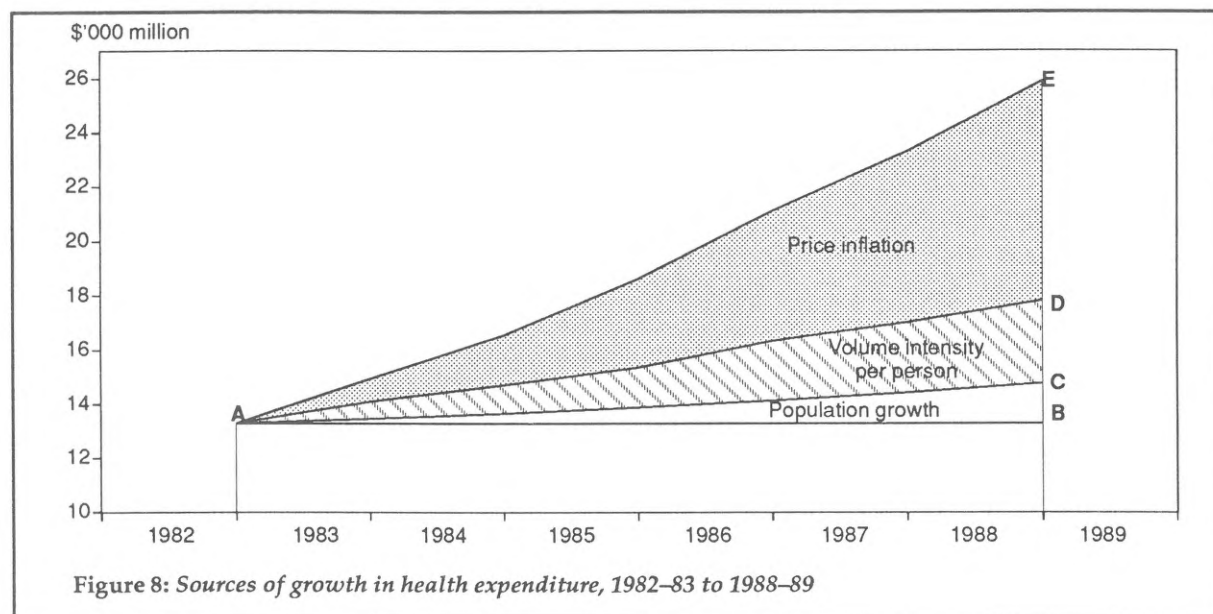


Figure 8: Sources of growth in health expenditure, 1982-83 to 1988-89

Health prices

Health prices in Australia continue to increase at about the same rate as general inflation. In 1990-91 the health price deflator increased by 5.7 per cent, the CPI increased by 5.3 per cent, the GDP deflator increased by 3.0 per cent and Average Weekly Earnings (AWE) increased by 7.1 per cent.

The hospital and clinical deflator increased by 5.2 per cent in 1990-91. The 'total health and welfare' deflator, which is a measure of inflation in the non-hospital areas of State Government health expenditure, increased by 5.1 per cent and the 'other health and welfare' deflator, which is a measure of inflation in the non-hospital areas of Commonwealth Government

health expenditure, increased by 4.0 per cent. The medium term changes from 1982-91 were 6.8 per cent for health expenditure, 7.1 per cent for the CPI, and 6.9 per cent for AWE.

These figures update Table 17 in *Health Expenditure Information Bulletin no. 6*.

Medicare levy

The Medicare levy was introduced on 1 February 1984 at an annual rate of one per cent of taxable income (0.416 per cent for the partial year in 1983-84). The levy applies to all residents whose incomes are above specified thresholds, except for veterans, war widows, and defence force personnel entitled to free medical and hospital care for all disabilities. In 1984-85, the low income thresholds were \$7,110 for

single persons and \$11,803 for married couples and sole parents, with a \$1,330 addition to the threshold for each dependent child or student.

The levy was increased from one per cent of taxable income to 1.25 per cent from 1 December 1986. The low income thresholds have been regularly increased. In 1990-91 they were increased to \$11,745 for individual taxpayers and \$19,045 for married couples and sole parents. The additional threshold for each dependent child or student is \$2,100.

Table 23 shows the amount of the Medicare levy by State/Territory from 1983-84 to 1989-90. The average annual nominal growth rate from 1984-85, the first full

year of Medicare, to 1989–90 was 18 per cent for Australia, with Western Australia having the highest average annual nominal

growth rate of 19 per cent, and the Northern Territory having the lowest average annual growth rate of 15 per cent. These different

rates of growths in the Medicare levy reflect different rates of growth in taxable incomes in these States.

Table 23: Medicare levy by State/Territory 1983–84 to 1990–91 (\$m)

Year	Taxation statistics									Budget Paper statistics
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia	Australia
1983–84	124	101	52	33	32	10	10	3	366	365
1984–85	330	270	136	89	84	26	29	9	972	1,154
1985–86	390	319	158	105	95	30	33	10	1,139	1,335
1986–87	502	433	208	142	122	38	43	13	1,500	1,715
1987–88	623	544	258	177	150	45	53	14	1,865	2,080
1988–89	714	613	305	205	169	50	59	15	2,130	2,320
1989–90	755	640	322	214	117	52	62	18	2,242	2,545
1990–91	na	na	na	na	na	na	na	na	na	2,480

Note: The taxation statistics are recorded by the State office that processes each tax return, which is not necessarily the State where the taxpayer resides. The figures published in the Australian Taxation Office, *Taxation statistics* are lower than the figures published in the Budget Statements, because the taxation statistics exclude the provisional debit component of the Medicare levy paid by provisional income earners. Further information on these differences is available from the Revenue Analysis Branch of the Australian Taxation Office.

Sources: *Budget Statements. Budget paper no. 1.* AGPS, Canberra (various years)
Australian Taxation Office. *Taxation statistics.* AGPS, Canberra (various years): Table 1.12

Tax rebates for medical expenses

A tax rebate for net medical expenses exceeding \$1,000 has been claimable since 1985–86. The tax rebate rate was 30 per cent in 1985–86. In 1988–89, it was 29 per cent.

Net medical expenses are medical expenses actually paid less any refunds received from Medicare, a health fund or any other insurer. Tables 24 and 25 show net medical expenses and net medical expenses per person respectively by State and Territory from 1985–86 to 1988–89.

For the expenses to be classified as medical, they must have some connection to an illness or an operation. Eligible expenses include

artificial limbs, contact lenses, wheel chairs, hearing aids, guide dog costs, manual car controls for a disabled driver, kidney dialysis and nursing fees.

In some cases, such as expenditure on massage or chiropractic treatment, the treatment must be at the direction of a legally qualified medical practitioner to qualify for a tax rebate.

The cost of the rebates in 1988–89 was \$50.5 million and was divided between 104,586 people (Tables 26 and 27). The average size of the rebate in that year was \$483 (Table 28). The average rebate was \$431 in 1985–86, \$534 in 1986–87 and \$512 in 1987–88.

The decrease in tax rebate per person claiming since 1986–87 seems to be due to the greater number applying for the rebate. The number applying increased by 38 per cent in the three years to 1988–89, but the total tax rebate paid increased only 25 per cent in that three years. There is no evidence as to what proportion of those spending over \$1000 on net medical expenses actually apply for the tax rebate, but it is likely that those with very high net medical expenses were the first to hear about and apply for the rebate. Then as the existence of the rebate became more widely known, those with lower expenses also applied.

Table 24: Total net medical expenditure by those paying in excess of \$1,000, by State/Territory, 1985–86 to 1988–89 (\$'000)

Year	Taxable								Non-taxable	Australia
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT		
1985–86	45,286	49,340	17,803	10,364	10,675	1,573	4,127	337	20,129	159,634
1986–87	58,360	65,758	22,189	18,818	13,408	1,901	4,540	451	28,297	213,722
1987–88	65,008	73,054	34,980	15,395	14,709	2,545	5,069	686	41,344	252,790
1988–89	82,821	79,291	43,454	17,132	18,369	1,439	8,121	497	27,559	278,683

Source: Australian Taxation Office. *Taxation statistics*. AGPS, Canberra (various years): Table 1.17

Table 25: Average net medical expenditure per person by those paying in excess of \$1,000, by State/Territory, 1985–86 to 1988–89 (\$)

Year	Taxable								Non-taxable	Australia
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT		
1985–86	2,337	2,291	2,071	2,321	2,795	2,263	2,029	1,737	4,163	2,435
1986–87	2,695	2,593	2,331	3,473	2,954	2,518	2,082	2,013	4,499	2,814
1987–88	2,690	2,476	2,515	2,469	2,910	2,093	1,793	1,386	5,155	2,765
1988–89	2,807	2,481	2,519	2,130	2,729	2,151	2,150	1,362	4,389	2,665

Note: Calculated from Tables 24 and 27 using the formula:

$$(\text{Total net medical expenditure} \times 1000) / \text{Number claiming tax rebates}$$

Table 26: Total tax rebates for net medical expenditures in excess of \$1,000, by State/Territory, 1985–86 to 1988–89 (\$)

Year	Taxable								Non-taxable	Australia
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT		
1985–86	7,772	8,341	2,762	1,769	2,057	263	628	43	4,588	28,223
1986–87	10,798	11,885	3,728	3,942	2,609	337	694	67	6,474	40,535
1987–88	11,843	12,631	6,111	2,656	2,800	385	650	55	9,664	46,795
1988–89	15,461	13,725	7,599	2,636	3,375	223	1,260	38	6,171	50,488

Note: Calculated using the data from Tables 27 and 28 in the following formula:

$$\text{Total tax rebates} = \text{Number claiming tax rebates} \times (\text{tax rebate per person}/1000)$$

Table 27: Number of persons claiming tax rebates for medical expenses, by State/Territory, 1985–86 to 1988–89

Year	Taxable								Non-taxable	Australia
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT		
1985–86	19,379	21,538	8,595	4,466	3,820	695	2,034	194	4,835	65,556
1986–87	21,656	25,360	9,519	5,419	4,539	755	2,181	224	6,290	75,943
1987–88	24,171	29,499	13,908	6,236	5,055	1,216	2,827	495	8,020	91,427
1988–89	29,508	31,964	17,251	8,043	6,730	669	3,777	365	6,279	104,586

Sources: 1985–86: Australian Taxation Office. *Taxation statistics 1985–86*. AGPS, Canberra: Table 1.18

1986–87 to 1988–89: Australian Taxation Office. *Taxation statistics*. AGPS, Canberra (various years): Table 1.17

Table 28: Tax rebates per person claiming for medical expenses, by State/Territory, 1985–86 to 1988–89 (\$)

Year	Taxable								Non-taxable	Australia
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT		
1985–86	401	387	321	396	538	379	309	221	949	431
1986–87	499	469	392	727	575	447	318	298	1,029	534
1987–88	490	428	439	426	554	317	230	112	1,205	512
1988–89	524	429	440	328	502	334	334	105	983	483

Note: Tax rebates per person are found from the formula:

$$\text{Tax rebate per person} = (\text{Net medical expenditure per person} - 1000) \times \text{tax rebate rate}$$

Since it is the Commonwealth Government which pays the cost of tax rebates to individuals, the amount should be included as Commonwealth funded expenditure and deducted from expenditure funded by individuals. For 1988–89 this adjustment would increase the Commonwealth share of total health expenditure from 42.0 per cent to 42.1 per cent and reduce the private sector share accordingly.

In future it is proposed to incorporate estimates of tax expenditure in tables which detail sources of funds for health expenditure (Tables 6 to 8 in this *Bulletin*).

Detailed information about tax expenditures on health and the effects they have on the actual proportion of health expenditure borne by the Commonwealth Government are contained in a 58-page publication by Dr Jim Butler and JP Smith, *Tax expenditures on health in Australia: 1960–61 to 1988–89*, Working Paper no. 26 from the National Centre for Epidemiology and Population Health, ANU, GPO Box 4, Canberra.

Hospital Funding Grant Price Adjustment Factor

The first hospital funding grants under the revised Medicare Agreements were made in 1988–89. The base grant for assistance in meeting the costs of recognised hospitals was determined based on the population and age distribution of each State and Territory. The formula used was:

$$\text{Base Grants}_{1988-89} = \frac{A_i \$3042.88 \text{ m}}{B_i}$$

where A_i is the weighted population for the State for the relevant grant year; and

B_i is the total of the weighted population for all States, the Northern Territory and the Australian Capital Territory for the relevant grant year.

For each succeeding year, the amount of the grant is found by the following formula :

$$\begin{aligned} \text{Grant}_i &= \frac{A_i}{B_i} \times \frac{C_{i-1} G_i B_i}{B_{i-1}} \\ &= \frac{A_i C_{i-1} G_i}{B_{i-1}} \end{aligned}$$

where C_{i-1} is the Base Grant for the grant year previous to the relevant grant year;

B_{i-1} is the total of the weighted population for all States, the Northern Territory and the Australian Capital Territory for the grant year previous to the relevant grant year; and

G_i is the percentage change of the Hospital Funding Grant Price Adjustment factor and derives from the following formula:

$$G_i = \frac{0.75P_i}{P_{i-1}} + \frac{0.25Q_i}{Q_{i-1}}$$

where P_i is the Award Rates of Pay Index for adult wage and salary earners in Australia for the quarter ending 31 March of the relevant grant year (from ABS's *Award rates of pay indexes, Australia*. Cat. No. 6312.0);

P_{i-1} is this index for the quarter ending 31 March of the year previous to the relevant grant year;

Q_i is the weighted average of the all groups Consumer Price Index of the eight capital cities for the quarter ending 31 March of the relevant grant year (from ABS's *Consumer Price Index*. Cat. no. 6401.0; and

Q_{i-1} is this index for the quarter ending 31 March of the year previous to the relevant grant year.

Hence, G_i is the weighted percentage change of the Award Rates of Pay Index and the Consumer Price Index, with a weight of 75 per cent and 25 per cent given to the change of the Award Rates of Pay Index and of the Consumer Price Index respectively.

Table 31 shows the percentage change of Hospital Funding Grants Price Adjustment factor (G_i) which are derived from Tables 29 and 30. Setting June quarter 1985 as the base year, Hospital Funding Grants Price Adjustment factors from March 1981 to March 1990 are then constructed as displayed in Table 32.

In the Medicare Agreements, a national price adjustment factor rather than a State factor is used in the updating of the base hospital funding grants, the incentives package and AIDS funding. However, Tables 31 and 32 calculate this factor for all the States and Territories.

Table 29: Award rates of pay index (ARPI) by State, March quarter 1981 to March quarter 1990 (June quarter 1985 = 100)

Year	NSW	Vic	Qld	WA	SA	Tas	Australia
1981	72.7	71.6	71.8	72.1	72.1	72.9	72.1
1982	82.4	81.3	80.8	81.0	80.2	81.2	81.5
1983	88.6	88.1	89.2	88.2	88.0	87.3	88.5
1984	93.2	93.4	93.3	93.2	93.2	93.2	93.3
1985	97.2	97.2	97.6	97.5	97.4	97.1	97.3
1986	103.9	103.8	103.8	103.9	103.9	103.7	103.8
1987	106.7	106.9	106.2	106.6	106.3	106.4	106.6
1988	112.9	113.7	113.2	112.1	113.2	112.9	113.1
1989	118.8	119.8	119.8	118.2	119.7	118.9	119.2
1990	126.4	128.2	127.1	125.1	127.8	127.2	127.0

Sources:

ABS. Award rates of pay indexes, Australia. Cat. No. 6312.0 (various issues)

Table 30: Consumer Price Index (CPI) by State, March quarter 1981 to March quarter 1990 (June quarter 1985 = 100)

Year	NSW	Vic	Qld	WA	SA	Tas	Australia
1981	72.5	70.9	71.5	72.1	70.8	72.0	71.7
1982	79.8	78.4	79.7	80.3	78.1	79.4	79.2
1983	89.5	87.1	88.6	88.4	87.6	88.1	88.3
1984	93.9	93.1	93.8	93.7	92.9	93.2	93.6
1985	97.9	97.1	98.3	97.7	97.5	97.8	97.7
1986	106.9	106.6	107.0	106.1	105.9	106.3	106.7
1987	117.0	116.6	116.3	117.1	115.9	117.5	116.7
1988	125.7	124.4	123.7	124.8	123.3	125.4	124.7
1989	134.4	132.5	132.1	133.7	132.5	133.2	133.2
1990	146.7	144.0	142.4	145.9	141.6	142.8	144.6

Sources: ABS. Award rates of pay indexes, Australia. Cat. No. 6312.0 (various issues)

Table 31: Percentage change in hospital funding grant price adjustment factor by State, March quarter 1981 to March quarter 1990

Year	NSW	Vic	Qld	WA	SA	Tas	Australia
1981 to 82	12.6	12.9	12.3	12.1	11.0	11.0	12.4
1982 to 83	8.7	9.0	10.6	9.2	10.3	8.4	9.3
1983 to 84	5.1	6.2	4.9	5.8	6.0	6.5	5.6
1984 to 85	4.3	4.1	4.7	4.5	4.6	4.3	4.3
1985 to 86	7.5	7.6	7.0	7.1	7.1	7.3	7.4
1986 to 87	4.4	4.5	3.9	4.5	4.1	4.6	4.4
1987 to 88	6.2	6.4	6.5	5.5	6.5	6.3	6.2
1988 to 89	5.7	5.7	6.0	5.9	6.2	5.5	5.8
1989 to 90	7.1	7.4	6.6	6.7	6.7	7.1	7.1

Note: Calculated by the Australian Institute of Health and Welfare using the formula:

$$G_i = \frac{0.75P_i}{P_{i-1}} + \frac{0.25Q_i}{Q_{i-1}}$$

Table 32: Hospital funding grant price adjustment factor by State, March quarter 1981 to March quarter 1990 (June quarter 1985 = 100)

Year	NSW	Vic	Qld	WA	SA	Tas	Australia
1981	72.6	71.4	71.7	72.1	71.8	72.7	72.0
1982	81.8	80.6	80.5	80.8	79.7	80.7	81.0
1983	88.9	87.9	89.1	88.2	87.9	87.5	88.5
1984	93.4	93.3	93.4	93.4	93.1	93.2	93.4
1985	97.4	97.2	97.8	97.6	97.4	97.3	97.4
1986	104.7	104.5	104.6	104.5	104.4	104.4	104.6
1987	109.3	109.3	108.7	109.2	108.7	109.2	109.2
1988	116.1	116.3	115.8	115.2	115.7	116.0	116.0
1989	122.6	122.9	122.8	122.0	122.9	122.4	122.6
1990	131.3	132.1	130.9	130.1	131.2	131.1	131.3

Technical notes

Definitions, sources and notes

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 Health, Housing and Community Services (HHCS) and State health authorities providing most of the basic data.

The 'medical services' category in Tables 9–15 includes expenditure on medical services provided on a fee for service basis, and includes medical services provided to private patients in 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 9–15 includes expenditure by the Department of Veterans' Affairs on behalf of veterans, and until 1988–89, expenditure by the ACT Government on health services. Thus the \$52 million spent by the Commonwealth on private hospitals in 1988–89 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 9–15 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 and colleges of advanced education. 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 Appendixes A and B of the AIH publication *Australian Health Expenditure 1970–71 to 1984–85*. Also, data for years prior to 1982–83 can be obtained from that publication.

Sources for Table 5: Selected Commonwealth grants to States and NT, 1980–81 to 1990–91

Identified Health Grants

Six State data for 1981–82 to 1983–84: 1984–85 Budget Paper no. 7. *Payments to or for the States, the Northern Territory and Local Government authorities 1984–85*: 22.

Six State data for 1984–85 to 1986–87: Budget Paper no. 4. *Commonwealth financial relations with other levels of government 1987–88*: 39.

Six State data for 1987–88: Budget Paper no. 4, 1989–90: 36.

Northern Territory data for 1981–82 to 1984–85: 1984–85 Budget Paper no. 7: 234.

Northern Territory data for 1987–88: Budget Paper no. 4, 1988–89: 62.

Northern Territory data for 1985–86 and 1986–87 estimated by AIHW by interpolation.

Medicare compensation grants

Six States and Northern Territory data for 1983–84 to 1986–87: Budget Paper no. 4, 1987–88: 63.

Six States and Northern Territory data for 1987–88: Budget Paper no. 4, 1988–89: 125.

Special revenue assistance

1985–86 Special revenue assistance for health purposes was granted to three States. Queensland received \$10m in recognition of the Grants Commission conclusion that financial relativities were disturbed upon the introduction of Medicare. South Australia and Tasmania received \$34.2m and \$11.9m respectively, which represented two-thirds of the health grants advantage the two States would have received in 1985–86 if the hospital cost-sharing agreements had continued. (Data from Budget Paper no. 4, 1987–88: 35. Further details of these arrangements are in 1985–86 Budget Paper no. 7: 26–28.)

1986–87 In 1986–87, South Australia and Tasmania received \$17.1m and \$6.0m respectively, which represented one-third of the health grants advantage the two States would have enjoyed in 1986–87. (Data from Budget Paper no. 4, 1987–88: 35. Further details of these arrangements in 1986–87 Budget Paper no. 7: 25, 29.)

The States also received grants totalling \$9.6m from the Commonwealth Government in 1986–87 to allow them to take responsibility for the Isolated Patients Travel and Accommodation Assistance Scheme (IPTAAS) (Budget Paper no. 4, 1987–88: 35). The Northern Territory received a grant of \$1.2m to cover the costs of taking over IPTAAS (Budget Paper no. 4, 1987–88: 37).

1987–88 The States received grants totalling \$20.7m to cover the cost of IPTAAS in 1987–88, and \$9.6m to take over the Commonwealth Program of Aids for Disabled People (PADP) (Budget Paper no. 4, 1987–88: 35). The Northern Territory received grants of \$2.8m for

IPTAAS and PADP (Budget Paper no. 4, 1988-89: 32).

1988-89 The following Commonwealth health programs were transferred to the States and the Northern Territory with effect from 1 July 1988:

- Vaccination program
- Royal Far West Children's Health Scheme
- Royal Queensland Bush Children's Health Scheme
- Miscellaneous Pharmaceutical Benefits
- Associated administrative costs.

The extra special grants budgeted by the Commonwealth to cover the costs of these programs totalled \$30.167m (Budget Paper no. 4, 1988-89: 32, 37, 38).

1989-90 The special grants for the vaccination program, the Royal Far West Children's Health Scheme and the Royal Queensland Bush Children's Health Scheme were absorbed into Commonwealth financial assistance grants from 1989-90, and the Miscellaneous Pharmaceutical Benefits were absorbed into Hospital Funding Grants from 1989-90 (Budget Paper no. 4, 1989-90: 36).

Other grants

Numerous other specific purpose health grants from the Commonwealth to the States were made in the period described above for various purposes, including pathology laboratories, hospital waiting list reductions, hospital enhancement, teaching hospitals capital equipment, nurse education, Home and Community Care, blood transfusion services, drug education campaigns, combating AIDS and the National Better Health Program. Details of these are contained in various Commonwealth Budget Papers. The grants listed in Table 5 are either

general purpose grants or major specific purpose health grants. The exceptions are the School Dental Scheme and Community Health Grants, which were grants that became incorporated into Identified Health Grants, or at a later stage, Medicare compensation grants.

Revisions of definitions and estimates

Some of the figures included in this *Bulletin* have been revised since *Health expenditure information bulletin no. 6* was published in May 1991. The major changes are as outlined in the following sections.

ABS data

Gross domestic product (GDP)

The ABS revised GDP upward for all years for two reasons:

- as a result of the revision of the estimates of gross operating surplus of private corporate trading enterprises due to improved estimates of interest becoming available; and
- data from the survey of international trade in services as well as those from the international visitors survey have been incorporated in the latest GDP estimates. GDP figures for the financial years 1982-83 to 1989-90 published in the ABS *Australian national accounts: national income and expenditure June quarter 1991* (Cat. No. 5206.0), show an average increase of 0.85 per cent in the figures published as compared to the figures published in the June quarter 1990 national accounts bulletin.

Private final consumption expenditure (PFCE)

Revised figures for expenditure on dental and other professional

services for the years 1982-83 to 1984-85 were obtained from ABS and are set out below.

	(\$m)	
	Previous figure	Revised figure
Dental		
1982-83	512	475
1983-84	588	567
1984-85	692	649
Other professional		
1982-83	339	330
1983-84	434	433
1984-85	504	485

State and local government expenditure on health

The Public Finance Section of ABS revised their estimate of State and local government expenditure slightly downward from 1982-83 to 1986-87 and slightly upward for 1987-88. The differences between the 1990 and the 1991 versions were, for example, 0.05 per cent for 1983-84, 0.09 per cent for 1985-86, 0.05 per cent for 1986-87 and an increase of 0.36 per cent for 1987-88. The average difference for the period 1982-83 to 1987-88 was 0.04 per cent.

Expenditure on research

For 1987-88, ABS revised Commonwealth research expenditure downward from \$236.9 million to \$232.8 million. For State and local governments, it was revised upward from \$30.6 million to \$35.4 million. Private expenditure was slightly revised upward from \$44.4 million to \$44.6 million.

AIHW

Department of Veterans' Affairs (DVA) expenditure

Three major changes have been made to DVA expenditure. In areas where an overseas component is present, the amount spent on overseas was subtracted from total expenditure, thus resulting in lower overall DVA expenditure.

For repatriation hospitals, different estimating techniques were used for 1982–83 to 1986–87 and 1987–88 onward. This was prompted by the establishment of repatriation hospital trust funds in December 1987. The 1983–84 medical services expenditure on veterans was revised downward by \$38.9 million on the basis of more consistent data from DVA.

Commonwealth administration

Administration costs for 1987–88 incurred by the then Department of Community Services and Health were revised upward from \$268 million to \$307 million. Administrative expenses in subprogram 9.2 in the Department of Community Services and Health Explanatory Notes 1988–89 were allocated to health in propor-

tion to the expenditure on health by the Department. This overestimates health administration expenditure, because the staff per dollar spent ratio is lower in the health side of the Department than the welfare side. Data are being collected on numbers of staff in the various health and welfare areas, so in future a more accurate estimation of health administration costs can be made.

Table 33: *Gross domestic product (current and constant 1984–85 prices) 1982–83 to 1990–91*

Year	Gross domestic product			
	Current prices (\$m)	Growth rate (%)	Constant 1984–85 prices (\$m)	Growth rate (%)
1982–83	171,626		193,949	
1983–84	194,617	13.4	205,511	6.0
1984–85	216,059	11.0	216,059	5.1
1985–86	240,091	11.1	224,728	4.0
1986–87	264,627	10.2	236,693	5.3
1987–88	299,429	13.2	241,669	2.1
1988–89	339,834	13.5	250,501	3.7
1989–90	371,930	9.4	259,469	3.6
1990–91	379,580	2.1	257,236	-0.9

Sources: ABS. *Australian national accounts: national income and expenditure June quarter 1991*. Cat. No. 5206.0

Reference

Power C., Manor O., and Fox J. (1991) *Health and class: The early years*, Chapman and Hall, London.

Abbreviations and symbols used in tables

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

Other notes

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

Average annual growth rates are calculated as the geometric average, not the arithmetic average, with the exception of Tables 19 and 20 where the average annual growth rates are calculated using log linear regression.

Further copies of this bulletin may be obtained by writing to the Publications Officer, Australian Institute of Health and Welfare, GPO Box 570, Canberra ACT 2601, or by telephoning the Publications Unit on (06) 243 5037. Further inquiries, comments or feedback on the content of this publication may be directed to John Goss on (06) 243 5028 or Maneerat Pinyopusarerk on (06) 243 5079.

Issued July 1992