# Health Expenditure

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# Australia's health services expenditure, 1982–83 to 1994–95

This bulletin, the twelfth in the series of Health Expenditure Bulletins produced by the Australian Institute of Health and Welfare, provides estimates of total health services expenditure in Australia, at the aggregate level, on a per person basis and by source of funds, from 1982–83 to 1994–95. It also provides detailed information, by area of expenditure (e.g. hospitals, medical, dental etc.), for the period up to 1993–94.

The tables and figures in the bulletin provide details of expenditure in terms of both current and constant prices. The constant price estimates used are based on average 1989–90 prices.

Total expenditure on health services in 1994–95 was \$38,479 million. The rate of increase in total health services expenditure between 1993–94 and 1994–95 was 5.4% in terms of current prices and 4.0% in terms of constant prices. This was comparable with the average real increase in health services expenditure of 4.4% per year over the ten-year period from 1984–85 (Table 1).

Per person expenditure on health was \$2,145 in 1994–95—an increase of \$89 since 1993–94. The increase was similar to that experienced by other countries and maintained Australia's standing in relation to comparable OECD economies (Figure 1).

# Highlights

- Estimated total health services expenditure in 1994–95 was \$38.5 billion a 5.4% increase, in current prices, on the 1993–94 figure of \$36.5 billion.
- The increase in expenditure on health services in constant prices was 4.0% between 1993–94 and 1994–95. This was comparable with the average rate of growth over the ten years from 1984–85 of 4.4% per year.
- Increased per person use of health services continued to exert the greatest influence on growth in health services expenditure (2.9% between 1993–94 and 1994–95).



- The general level of prices in the health sector rose by 1.4% between 1993–94 and 1994–95, compared with a rise of 3.2% in the CPI.
- Health services expenditure as a proportion of gross domestic product (GDP) fell marginally, from 8.5% in 1993–94 to 8.4% in 1994–95, reflecting a higher growth in GDP compared with health services expenditure.
- Of the major areas of expenditure, pharmaceuticals and private hospitals had the fastest growth. Both experienced average growth rates of 8.2% per year between 1988–89 and 1993–94.

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- Control of prices in the health sector has been much more effective in Australia than in the United States of America. Between 1985 and 1994, the rate by which inflation in the health sector exceeded the general level of inflation (the 'excess health inflation rate') averaged 0.1% in Australia, compared with an average excess health inflation rate of 2.5% for the United States.
- As a proportion of GDP, Australia's expenditure on health was on a par with the experience of similarly situated countries. In 1995, Australia, with 8.4% of GDP devoted to health, was just below the average (8.5%) of eight comparable OECD economies, not including the United States of America. When the United States was included, the average for the OECD countries rose to 9.2%, placing Australia well below that average.

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## Total health services expenditure, 1982–83 to 1994–95

'Total health services expenditure' refers to the national aggregate of all expenditures on health services for both current and capital purposes. However, it does not include many forms of expenditure by non-health sectors, such as expenditure on production of more nutritious food, on road safety, and on law and order, that could legitimately be regarded as expenditures partly directed towards improving health. To that extent, examination of total health services expenditure

underestimates the extent of total national expenditure on health.

Estimated total health services expenditure in 1994–95 was \$38,479 million. This was an increase of 5.4%, in current prices, over the 1993–94 estimate of \$36,495 million. The real rate of increase between 1993–94 and 1994–95 was 4.0% (Table 1). The real increase in total health services expenditure (i.e. health services expenditure from which the effects of inflation have been removed) between 1982–83 and 1994–95 was 64.0%. This represented an average growth of 4.2% per year.

The annual rate of growth was lower during the second half of the period (1988-89 to 1994-95) than in the period from 1982-83 to 1988-89. The lowest rate of growth recorded was 2.2% in 1990-91, and the highest was 6.2% in the year Medicare was introduced-1983-84. The high growth rate in 1983–84 was largely a consequence of a substantial reduction in the lags between date of service and date of payment of claims for medical benefits. This meant that the claims paid during 1983-84, on which the 1983-84 expenditure was based, related to a longer servicing



period than did other years' claims data. With the exception of two years (1984–85 and 1987–88), increases in all years during the first half of the period were above the average rate of growth for the whole period (4.2%). On the other hand, increases in each of the years from 1988–89 to 1994–95 were below that rate.

# Health services expenditure per person

Health services expenditure per person in 1994-95 was \$2,145-an increase of \$89 (4.3%) in current prices on the 1993-94 level. Between 1982-83 and 1994-95, average health services expenditure per person increased, in real terms, by 39.8%, or an average rate of 2.8% per year. The growth in real expenditure per person was generally higher during the first half of the period (1982-83 to 1988-89). During that time, annual increases were at least equal to the average annual growth rate (2.8%) for the whole period, with the

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exception of 1987–88. On the other hand, growth was equal to or below the average for all years in the second half of the period, with the exception of 1994–95.

The rate of growth in per person real health services expenditure increased in each year between 1990–91 (0.8%) and 1992–93 (2.8%). Health services expenditure per person grew by an average of 2.7% per year between 1992–93 and 1994–95.

# Health services expenditure, by source of funds

Responsibility for the funding of health services in Australia is shared between all levels of government as well as the non-government sector. The sources of the funds provided by the different levels of government and by non-government sector bodies and individuals are quite diverse. The major sources of government funding are taxation and other general revenues of the Commonwealth Government and the State and Territory Governments. Small amounts of funding are also provided by local government authorities. Funding by the non-government sector came from registered health benefits organisations, workers' compensation and compulsory motor vehicle third party insurers and individuals.

In analysing health services expenditure by source of funds, adjustments have had to be made for funding transfers between different levels of government and between the government and the non-government sectors.

Of the total \$38,479 million spent on health services in Australia during 1994–95, the Commonwealth provided \$17,571 million (45.7%), State and Territory Governments and local government authorities provided \$8,768 million (22.8%), and a further \$12,140 million (31.6%) came from non-government sources (Table 3).

Table 1: Total health services expenditure, current and constant (average 1989–90) prices<sup>(a)</sup>, and annual growth rates, 1982–83 to 1994–95

	Amount (	\$ million)	Growth rate over previous year (%)		
Year	Current prices	Constant prices <sup>(a)</sup>	Current prices	Constant prices <sup>(a)</sup>	
1982–83	13,239	20,673			
1983–84	14,958	21,960	13.0	6.2	
1984–85	16,546	22,862	10.6	4.1	
1985–86	18,586	24,180	12.3	5.8	
1986–87	21,115	25,341	13.6	4.8	
1987–88	23,333	26,287	10.5	3.7	
1988–89	26,127	27,719	12.0	5.4	
1989–90	28,795	28,795	10.2	3.9	
1990–91	31,223	29,435	8.4	2.2	
1991–92	33,134	30,316	6.1	3.0	
1992–93	34,910	31,489	5.4	3.9	
1993–94	36,495	32,602	4.5	3.5	
1994–95 <sup>(b)</sup>	38,479	33,905	5.4	4.0	
Average annual growth rates					
1982–83 to 1994–95			9.3	4.2	
1982–83 to 1984–85			11.8	5.2	
1984–85 to 1994–95			9.9	4.4	
1982–83 to 1988–89			12.0	5.0	
1988–89 to 1994–95			6.7	3.4	

(a) Health services expenditure for 1982–83 to 1994–95 is deflated to average 1989–90 prices using specific health deflators (see Tables 12 and 14 for major deflators used).

(b) Based on preliminary AIHW and ABS estimates.

Source: AIHW health expenditure database.

	Expenditure p	er person (\$)	Rate of gr	Rate of growth (%)		
Year	Current prices	Constant prices <sup>(a)</sup>	Current prices	Constant prices <sup>(a)</sup>		
1982–83	866	1,352				
1983–84	966	1,418	11.6	4.9		
1984–85	1,055	1,458	9.2	2.8		
1985–86	1,169	1,521	10.8	4.3		
1986–87	1,309	1,571	12.0	3.3		
1987–88	1,423	1,603	8.7	2.1		
1988–89	1,566	1,661	10.1	3.6		
1989–90	1,700	1,700	8.6	2.3		
1990–91	1,818	1,714	6.9	0.8		
1991–92	1,905	1,743	4.8	1.7		
1992–93	1,986	1,791	4.2	2.8		
1993–94	2,056	1,837	3.5	2.6		
1994–95 <sup>(b)</sup>	2,145	1,890	4.3	2.9		
Average annual growth rates						
1982–83 to 1994–95			7.9	2.8		
1982–83 to 1984–85			10.4	3.8		
1984–85 to 1994–95			7.4	2.6		
1982–83 to 1988–89			10.4	3.5		
1988–89 to 1994–95			5.4	2.2		

Table 2: Health services expenditure per person, current and constant (average 1989-90) prices<sup>(a)</sup>, and annual growth rates, 1982-83 to 1994-95

(a) Health services expenditure for 1982-83 to 1994-95 is deflated to average 1989-90 prices using specific health deflators (see Tables 12 and 14 for major deflators used).

(b) Based on preliminary AIHW and ABS estimates.

Sources

Health services expenditure: AIHW.

Mean resident population:

1982-83 to 1983-84—ABS, Australian demographic statistics, December quarter 1986 and March and June quarters 1987 (Cat. No. 3101.0).

1984-85-ABS, Australian demographic statistics, December quarter 1990 (Cat. No. 3101.0).

1985–86 to 1986–87—ABS, Australian demographic statistics, December quarter 1991 (Cat. No. 3101.0). 1987–88—ABS, Australian demographic statistics, December quarter 1993 (Cat. No. 3101.0). 1988–89 to 1994–95—ABS, Australian demographic statistics, June quarter 1995 (Cat. No. 3101.0).

#### Table 3: Health services expenditure (current prices), by source of funds<sup>(a)</sup>, 1982-83 to 1994-95

	G	overnment sector		Non-government	
	Commonwealth	State & local <sup>(b)</sup>	Total	sector	Total
Year			\$ million		
1982–83	5,085	3,566	8,651	4,588	13,239
1983–84	5,727	3,957	9,684	5,274	14,958
1984–85	7,625	4,267	11,892	4,654	16,546
1985–86	8,507	4,815	13,322	5,264	18,586
1986–87	9,362	5,577	14,939	6,176	21,115
1987–88	10,275	6,077	16,352	6,981	23,333
1988–89	11,129	6,788	17,918	8,209	26,127
1989–90	12,165	7,570	19,735	9,060	28,795
1990–91	13,200	8,070	21,270	9,953	31,223
1991–92	14,161	8,298	22,459	10,675	33,134
1992–93	15,203	8,467	23,670	11,240	34,910
1993–94	16,530	8,255	24,785	11,710	36,495
1994–95 <sup>(c)</sup>	17,571	8,768	26,339	12,140	38,479

(a) Commonwealth and non-government sector expenditures adjusted for tax rebates on medical expenditures (Table 8).

(b) Expenditure by the ACT Government is included as 'State and local government' expenditure from 1989-90; for previous years it is included as part of 'Commonwealth Government' expenditure.

(c) Based on preliminary AIHW and ABS estimates.

Source: AIHW health expenditure database.

	G	overnment sector		Non-government	
	Commonwealth	State & local <sup>(b)</sup>	Total	sector	Total
Year		F	Percentage		
1982–83	38.4	26.9	65.3	34.7	100.0
1983–84	38.3	26.5	64.7	35.2	100.0
1984–85	46.1	25.8	71.9	28.1	100.0
1985–86	45.8	25.9	71.7	28.3	100.0
1986–87	44.3	26.4	70.8	29.2	100.0
1987–88	44.0	26.0	70.1	29.9	100.0
1988–89	42.6	26.0	68.6	31.6	100.0
1989–90	42.2	26.3	68.5	31.5	100.0
1990–91	42.3	25.8	68.1	31.9	100.0
1991–92	42.7	25.0	67.8	32.2	100.0
1992–93	43.6	24.3	67.8	32.2	100.0
1993–94	45.3	22.6	67.9	32.1	100.0
1994–95	45.7	22.8	68.4	31.6	100.0

 Table 4: Government and non-government sector expenditure (current prices) as a proportion of total health services expenditure<sup>(a)</sup>, 1982–83 to 1994–95

(a) Commonwealth and non-government sector expenditures adjusted for tax rebates on medical expenditures (Table 8).

(b) Expenditure by the ACT Government is included as 'State and local government' expenditure from 1989–90; for previous years it is included as part of 'Commonwealth Government' expenditure.

Two significant features stand out when comparing the different funding sources. One is the steady fall in the proportion funded by State and Territory Governments and local government authorities after 1989-90. It fell from an average of over 26.0% of total health services expenditure-a level that had been relatively constant since the introduction of Medicare in 1984-to less than 23.0% in 1994-95. The second feature is the relative stability of the non-government sector contribution since 1991-92. This followed a steady increase during the preceding seven years, from 28.1% in 1984-85 to 32.2% in 1991-92.

Following a year of decline (-3.2% between 1992-93 and 1993-94), funding of health services expenditure by the State and Territory Governments and local government authorities rose by 5.3% between 1993-94 and 1994-95. Expenditure by both the Commonwealth Government and the non-government sector also grew between 1993-94 and 1994-95. However, both had growth rates-4.8% and 1.9% respectively-that were lower than they had experienced in the previous year (Table 5 and Figure 2).

#### Government sector funding of health services

Identifying government sector funding sources for health services in Australia is complicated by the interactions that occur between the different levels of government in funding and providing many government services, including health services. This comes about because of the different revenue-raising capacities and expenditure responsibilities of the two major levels of government under the Australian federal system-the Commonwealth Government and the State and Territory Governments.

The Commonwealth Government provides financial assistance to the States in two broad formsgeneral-purpose payments and specific-purpose payments. In addition, the Commonwealth purchases or pays benefits in respect of services provided by the States and Territories and local government authorities (e.g. it pays nursing home benefits for patients cared for in government nursing homes). Between 1982-83 and 1994-95, more than half of the Commonwealth's financial assistance payments to the States and Territories each year were in the form of general-purpose payments.

However, the trend was towards increasing use of specific purpose funding in Commonwealth-State financial arrangements. For example, whereas in 1982-83, general revenue funding (excluding identified health grants) accounted for more than 62.3% of all the Commonwealth financial assistance payments to the States and Territories for 'non-capital purposes', this figure fell to 51.0% in 1994-95 (Budget Paper No. 4, Commonwealth Financial Relations with Other Levels of Government, various years).

The general-purpose payments are not tied to any specific purpose, such as health, and are able to be used by the recipient States and Territories according to their own priorities and policy requirements. Together with taxation and other revenues that the States and Territories raise, the payments make up the bulk of the consolidated revenues of the States and Territories out of which they fund their various activities, including health services. Therefore, although any health care services funded from State and Territory Governments' own revenue sources are partly funded from general-purpose payments provided by the Commonwealth, that funding is not shown as having come from the Commonwealth.



Figure 2: Annual changes in health services expenditure by the Commonwealth Government, State, Territory and local governments and the non-government sector, constant (average 1989–90) prices, by source of funds, 1982–83 to 1994–95

Specific-purpose payments vary in their nature, in the conditions that may apply to them and in their magnitude, from year to year. In 1994–95, the major specific-purpose health payments were aimed at funding State services, particularly hospital services, provided under the Commonwealth–State Medicare Agreements.

The size of the specific-purpose and other health services payments by the Commonwealth to other levels of government is shown in Table 6. While the Commonwealth Government consistently was the greatest provider of funding for health services, a large proportion of that funding (28.8%, on average, between 1984–85 and 1994–95) was in the form of payments to or through other levels of government.

These included both specific-purpose payments as well as purchase of, and benefits paid for, health services provided by other levels of government. In 1994–95, direct expenditure by the Commonwealth on its own programs (including direct benefit payments to individuals, such as Medicare benefit payments) was \$12,556 million or 71.5% of its total outlays on health, and 47.7% of total government sector health outlays. This represented a substantial increase on the 44.2% of government sector outlays attributable to direct Commonwealth expenditure during the first full year of Medicare (1984–85).

			Governme	ent sector			Non-gove	rnment <sup>(b)</sup>	All sectors		
	Common	wealth <sup>(b)</sup>	State &	local <sup>(c)</sup>	То	tal	sec	tor	tot	total	
Year	Amount (\$m)	Rate of growth (%)									
1982–83	7,909		5,467		13,376		7,297		20,673		
1983–84	8,398	6.2	5,692	4.1	14,090	5.3	7,870	7.9	21,960	6.2	
1984–85	10,507	25.1	5,797	1.8	16,304	15.7	6,558	-16.7	22,862	4.1	
1985–86	11,079	5.4	6,147	6.0	17,227	5.7	6,953	6.0	24,180	5.8	
1986–87	11,303	2.0	6,557	6.7	17,860	3.7	7,481	7.6	25,341	4.8	
1987–88	11,588	2.5	6,788	3.5	18,376	2.9	7,911	5.8	26,287	3.7	
1988–89	11,851	2.3	7,160	5.5	19,011	3.5	8,707	10.1	27,719	5.4	
1989–90	12,165	2.6	7,570	5.7	19,735	3.8	9,060	4.0	28,795	3.9	
1990–91	12,395	1.9	7,677	1.4	20,072	1.7	9,363	3.3	29,435	2.2	
1991–92	12,919	4.2	7,689	0.2	20,607	2.7	9,709	3.7	30,316	3.0	
1992–93	13,715	6.2	7,726	0.5	21,441	4.0	10,049	3.5	31,489	3.9	
1993–94	14,746	7.5	7,482	-3.2	22,228	3.7	10,374	3.2	32,602	3.5	
1994–95 <sup>(d)</sup>	15,450	4.8	7,880	5.3	23,330	5.0	10,575	1.9	33,905	4.0	
Average annual grow	wth rates										
1982-83 to 1994-95		5.7		3.1		4.7		3.1		4.2	
1982-83 to 1984-85		15.3		3.0		10.4		-5.2		5.2	
1984-85 to 1994-95		3.9		3.1		3.6		4.9		4.0	
1984-85 to 1988-89		3.1		5.4		3.9		7.3		4.9	
1988-89 to 1994-95		4.5		1.6		3.5		3.3		3.4	

Table 5: Total health services expenditure, constant (average 1989-90) prices<sup>(a)</sup>, and annual growth rates, by source of funds<sup>(b)</sup>, 1982-83 to 1994-95

(a) Health services expenditure for 1982-83 to 1994-95 is deflated to average 1989-90 prices using specific health deflators (see Tables 12 and 14 for major deflators used).

(b) Commonwealth and non-government sector expenditures adjusted for tax rebates on medical expenditures (Table 8).

(c) Expenditure by the ACT Government is included as 'State and local government' expenditure from 1989-90; for previous years it is included as part of 'Commonwealth Government' expenditure.

(d) Based on preliminary AIHW and ABS estimates.

Source: AIHW health expenditure database.

#### Table 6: Government sector outlays on health (current prices), by source of funds<sup>(a)</sup>, 1982–83 to 1994–95

	C	ommonwealth Gove	rnment outlay	S		
		Transfers and pa other levels of g	ayments to overnment	Funding by	Total	
	Commonwealth			Commonwealth	other levels of	government
	programs	State/Territory	Local	outlays	government <sup>(b)</sup>	sector outlays
Year			\$ mi	llion		
1982–83	3,788	1,293	4	5,085	3,566	8,651
1983–84	4,096	1,628	3	5,727	3,957	9,684
1984–85	5,259	2,364	3	7,625	4,267	11,892
1985–86	5,922	2,580	5	8,507	4,815	13,322
1986–87	6,579	2,776	7	9,362	5,577	14,939
1987–88	7,253	3,022	—	10,275	6,077	16,352
1988–89	7,950	3,179	—	11,129	6,788	17,918
1989–90	8,612	3,553	—	12,165	7,570	19,735
1990–91	9,373	3,827	—	13,200	8,070	21,270
1991–92	10,176	3,985	—	14,161	8,298	22,459
1992–93	10,976	4,227	—	15,203	8,467	23,670
1993–94	11,781	4,749	—	16,530	8,255	24,785
1994–95 <sup>(c)</sup>	12,556	5,014	_	17,571	8,768	26,339

(a) Commonwealth expenditures adjusted for tax rebates on medical expenditures (Table 8).

(b) Expenditure by the ACT Government is included as 'State and local government' expenditure from 1989-90; for previous years it is included as part of 'Commonwealth Government' expenditure.

(c) Based on preliminary AIHW and ABS estimates.

Sources

Health services expenditures: AIHW health expenditure database. Transfers: Unpublished ABS data.

In 1994-95, gross outlays on health services provided by, or on behalf of, the State and Territory Governments and local government authorities amounted to \$13,782 million, or 52.3% of all government sector health outlays, having fallen from 55.8% in 1984-85. Over one-third (36.4%) of that expenditure was funded through grants and payments from the Commonwealth to the States and Territories (\$5,014 million). The remaining \$8,768 million (63.6%) was funded from their own revenue sources (which included untied general-purpose payments from the Commonwealth as well as other forms of State, Territory and local government revenue).

In the last full year before the introduction of Medicare (1982-83), Commonwealth transfers and payments to the State and Territory Governments (\$1,293 million) and to local governments (\$4 million) accounted for 26.7% of the cost of health services provided by those other levels of government. In the first full year following Medicare's introduction (1984-85), the Commonwealth funded 35.7% of other governments' health services. Over

the next five years, the Commonwealth met a decreasing proportion of the cost of health services provided by State and Territory Governments and local government authorities, so that by 1989-90, it funded 31.8% of those health services. In each year from 1990-91 to 1993-94, the Commonwealth increased its funding of State and Territory health services so that by 1993-94, its funding of State and Territory health services had reached 36.5%-well above the 1984-85 level. The preliminary estimates for 1994-95 indicate that, although there was a slight decline in that proportion. it was still well above the 1984–85 level.

#### Non-government sector funding of health services

The non-government sector's contribution to health services expenditure in 1994-95 was estimated at \$12,140 million in current prices (Table 3), or 31.6% of total health services expenditure (Table 4). This was a fall from the proportion (32.1%) in 1993-94, and

resulted from the combined effects of a slow-down in non-government sector recurrent health services expenditure and a decrease in estimated outlays by the nongovernment sector on capital during 1994-95 (Figure 7). The result was a slowing of growth in total non-government sector expenditure (1.9% between 1993-94 and 1994-95, compared with 3.2% in the previous year).

From 1984-85 (the first full year following the introduction of Medicare) to 1988-89 non-government sector expenditure growth averaged 7.3% per year and was higher than the rate of growth in expenditure by governments (3.9%). After 1988-89, the situation changed in that average growth in expenditure by the non-government sector (3.3%) was similar to that of government sector expenditure (3.5%).

The largest source of nongovernment funding for health services was the Registered Health Benefits Organisations. In 1994-95, funding by Registered Health **Benefits Organisations accounted** for 10.9% of total health services expenditure in Australia (Table 7).

Table 7: Funding of total health services expenditure by Registered Health Benefits Organisations (current prices), 1982-83 to 1994-95

	Registered health		Proportion funded by registered health benefits
	benefits organisations	Total health expenditure	organisations
Year	(\$ mil	lion)	(%)
1982–83	2,666	13,239	20.1
1983–84	2,367	14,958	15.8
1984–85	1,456	16,546	8.8
1985–86	1,767	18,586	9.5
1986–87	2,178	21,115	10.3
1987–88	2,537	23,333	10.9
1988–89	2,783	26,127	10.7
1989–90	3,136	28,795	10.9
1990–91	3,491	31,223	11.2
1991–92	3,796	33,134	11.5
1992–93	3,979	34,910	11.4
1993–94	4,078	36,495	11.2
1994–95	4,201	38,479	10.9
Average annual growth rate			
1984–85 to 1994–95	11.2%	8.8%	

Private Health Insurance Administration Council.

AIHW health expenditure database.

#### Impact of tax expenditures on health services funding sources

Tax expenditures are not as easily identified as other forms of transfers. They are not a direct payment, but rather involve the reduction or removal of a nongovernment sector liability that would otherwise exist. They therefore require special treatment, to ensure that the appropriate funding source is identified.

In 1994–95, tax expenditure that related to the health sector was \$97 million. This meant that the Commonwealth forewent \$97 million in taxation revenue because of tax concessions in the health area. Therefore, the total funding of health services by the Commonwealth in 1994–95 consisted of its outlays on health, plus the \$97 million worth of tax expenditures. Because the non-government sector received the benefit of these tax expenditures, its total funding of health services was reduced by a similar amount (Table 8). The effect of tax expenditures on Commonwealth Government and non-government sector expenditure fluctuated from year to year. These were influenced by a number of factors, including the overall level of non-government sector health services expenditure, changes in health benefits policy and changes in taxation policy (see Technical notes for details of changes in taxation policy affecting tax expenditures).

Tax expenditure data allow adjustments to be made to aggregated Commonwealth Government and non-government sector health outlays. However, because the areas of health services expenditure to which the specific tax rebates apply are not separately identified, adjustment of individual areas of expenditure (e.g. hospital and medical expenditure) to account for tax expenditures is not possible.

## Health services expenditure, by type of expenditure, 1982–83 to 1994–95

Health services expenditure is analysed in two major categories. These are:

- · recurrent expenditure and
- capital outlays.

The first of these major categories relates, essentially, to operational expenditures of the health system. The second relates to outlays on fixed capital items (including land, plant and equipment).

Recurrent health services expenditure, as referred to in this publication, does not include one important form of operational expenditure—government sector capital consumption. This is an estimate of the value of that portion of the capital stock that is used up in the production process during a

	Expenditure for tax ex	unadjusted penditure	_	Expenditur for tax ex	e adjusted penditure
	Commonwealth	Non-government sector	 Tax expenditure	Commonwealth	Non-government sector
Year			\$ million		
1982–83	4,494	5,179	591	5,085	4,588
1983–84	5,706	5,295	21	5,727	5,274
1984–85	7,598	4,681	27	7,625	4,654
1985–86	8,479	5,292	28	8,507	5,264
1986–87	9,328	6,210	34	9,362	6,176
1987–88	10,238	7,018	37	10,275	6,981
1988–89	11,085	8,253	44	11,129	8,209
1989–90	12,104	9,120	61	12,165	9,060
1990–91	13,115	10,037	85	13,200	9,953
1991–92	14,085	10,751	76	14,161	10,675
1992–93	15,118	11,325	85	15,203	11,240
1993–94	16,435	11,805	95	16,530	11,710
1994–95 <sup>(b)</sup>	17,474	12,237	97	17,571	12,140

 Table 8: Commonwealth Government and non-government sector health services expenditure, before and after taxation expenditure adjustments<sup>(a)</sup> (current prices), 1982–83 to 1994–95

(a) Taxation adjustments after 1982–83 relate mainly to tax rebates allowed in respect of medical outlays by individuals in excess of \$1,000 in a taxation year. In 1982–83 they include rebates related to basic health insurance premiums paid to registered health benefits organisations.
 (b) Based on preliminary AIHW and ABS estimates.

Source: AIHW health expenditure database.

period. Capital consumption (also referred to as economic depreciation) is, in the case of the government sector, estimated and identified separately in Tables 23–25. In the case of the non-government sector, depreciation is an integral element in estimates of recurrent health services expenditure.

In 1994–95, recurrent health services expenditure was \$36,172 million (94.0%), capital expenditure was \$1,776 million (4.6%), and the remaining \$531 million (2.4%) was capital consumption by governments (Figure 3).

Recurrent health services expenditure is itself often divided, for purposes of analysis, into sub-categories, according to the general type of services and/or the setting in which the services are provided (Figure 4). The main sub-categories are: (a) institutional health services, which include hospital and hospital-based services as well as nursing home services; and (b) non-institutional health services, which includes health services provided in a non-institutional setting (e.g. private medical services, dental services and community health services) and other health services expenditures (e.g. research and

administration). This type of breakup of recurrent expenditure is only possible up to and including 1993–94, as detailed nongovernment data are not yet available. Therefore, the analysis of the detailed areas of expenditure that follows is undertaken up to 1993–94 only.

Between 1984–85 and 1993–94, total health services expenditure grew at an average rate of 3.9% per year. Because recurrent expenditure contributed the bulk of total health services expenditure, the growth rate for total health services expenditure was heavily influenced by the trends in recurrent expenditure, which grew at an annual rate of 4.0% over the period (Table 9).

# Recurrent expenditure

Growth in real recurrent expenditure on institutional care had been 'flattening out' since the mid-1980s (see *Health Expenditure Bulletin No. 11* for discussion). This trend continued between 1991–92 and 1993–94, with real expenditure growing by only 0.9% each year (Table 9). At the same time, there was a slowing in the rate of growth of real recurrent expenditure on



non-institutional health services. However, its annual growth of 5.7% between 1991–92 and 1992–93, and 5.1% between 1992–93 and 1993–94, was much higher than the growth in institutional expenditure.

Recurrent expenditure on health between 1984-85 and 1993-94 grew, in constant prices, at an average rate of 4.0% per year. Growth was higher during the first half of the period (i.e. before 1989–90) than it was in the second half. With the exception of 1987-88, the yearly increases in real recurrent expenditure during the first half were at least equal to the overall average for the period 1984-85 to 1993-94. After 1989-90, annual increases in real recurrent expenditure were below that average in all years.

Of the major areas of expenditure on institutional care, only real recurrent expenditure on private hospitals (6.6%) grew at a faster rate than total recurrent expenditure. At the other extreme. real expenditure on public psychiatric hospitals fell, with an average annual decline of 8.8% over the period. At the same time, real expenditure on all areas of noninstitutional health services grew faster than total recurrent health services expenditure, with the exception of dental services, which grew at an average rate of only 2.3% per year between 1984-85 and 1993-94.

The category 'other noninstitutional' is, essentially, a residual category. In all years, it contains very small expenditure values. In 1993-94, for example, total expenditure on 'other non-institutional' was \$109 million. or 0.3% of total recurrent expenditure. It is also the case that most of the expenditure in this category was funded by State and Territory Governments. Consequently, relatively small changes in coding practice by some States and/or Territories and the introduction or cessation of small-scale programs can bring about quite substantial changes in the percentage growth rates for this category of expenditure.



Similarly, the category 'other institutional (nec)' relates to small-scale programs-mostly Commonwealth programs-in which small annual changes often produce large percentage year-to-year variations. Again, their influence on total recurrent expenditure is very small (\$121 million, or 0.6%, in 1993-94). Much of the very large percentage increase in this category between 1992-93 and 1993-94 (66.5%) was the result of moving the operations of the Commonwealth Serum Laboratories to a fully costed commercial basis.

The contributions to recurrent health services expenditure made by most of the major areas of institutional recurrent expenditure fell between 1984–85 and 1993–94 (Table 10). The only exception was 'private hospitals', which rose from 5.6% to 6.8%. All the major areas of expenditure on noninstitutional health services experienced increases over the period, with the notable exception of 'administration', which fell from 3.6% in 1984–85 to 3.2% in 1993–94. Recurrent expenditure on hospitals as a proportion of total recurrent expenditure fell from 44.0% in 1984-85 to 37.1% in 1993-94. Much of this resulted from the lower rate of growth in expenditure on public hospitals, particularly recognised public hospitals, after 1988-89 (Table 9). As a result of the slow-down in growth after 1988-89, the contribution of recurrent expenditure on recognised public hospitals to total recurrent health services expenditure fell from 32.8% in 1984-85 to 27.9% in 1993–94. The other types of public hospitals (repatriation and psychiatric hospitals) also experienced falls as a proportion of total recurrent expenditure over the period.

The proportion of recurrent health services expenditure spent on repatriation hospitals fell substantially after 1991–92. In the preceding four years, expenditure on repatriation hospitals had consistently contributed about 1.7% of total recurrent health services expenditure. However, with the transfer to the Tasmanian State Government of the Repatriation General Hospital (RGH) Hobart at the end of 1992–93, the proportion fell from 1.7% to 1.5%. It fell a further 0.5% to 1.0% in 1993–94, following the transfer of RGH Concord to the NSW public hospital system. Almost all expenditure on repatriation hospitals was funded by the Commonwealth, through the Department of Veterans' Affairs (DVA).

The reduction in expenditure on repatriation hospitals does not necessarily reflect a fall in expenditure on the categories of patients cared for in those hospitals. DVA continues to fund hospital services for eligible veterans and their dependants. However, those services are now almost entirely provided in hospitals operated by, or on behalf of, State and Territory Governments and in private hospitals. As of July 1996, administration of all repatriation hospitals, other than the Lady Davidson auxiliary hospital in New South Wales. has been transferred from the Commonwealth to the States or to the non-government sector.

 Table 9: Changes in health services expenditure, constant (average 1989–90) prices<sup>(a)</sup>, by area of expenditure, 1984–85 to 1993–94

				An	nual chan	ige				Average	change <sup>(b)</sup>
	1984–85	1985–86	1986–87	1987–88	1988–89	1989–90	1990–91	1991–92	1992–93	1988-89	1984–85
	to 1985–86	to 1986–87	to 1987–88	to 1988–89	to 1989–90	to 1990–91	to 1991–92	to 1992–93	to 1993–94	to 1993–94	to 1993–94
Area of expenditure					I	Percentag	je				
Recognised public hospitals	3.2	4.1	4.0	4.5	1.5	1.1	0.4	1.2	1.0	1.0	2.3
Private hospitals	5.4	6.1	2.3	3.3	9.3	11.7	5.9	7.4	7.0	8.2	6.6
Repatriation hospitals	3.7	-0.5	11.4	13.2	5.4	6.0	-0.0	-7.8	-28.2	-4.4	2.4
Public psychiatric hospitals	-3.9	12.0	4.7	-19.6	-16.7	-12.8	-8.4	-15.6	-0.2	-11.2	-8.8
Total hospitals	2.9	4.8	4.1	2.5	1.4	2.0	0.8	1.1	0.8	1.2	2.3
Nursing homes	4.0	3.3	3.2	2.9	3.8	4.4	0.7	-0.3	-0.8	1.5	2.6
Ambulance	2.0	1.5	2.0	-1.4	9.1	-0.4	5.5	3.7	1.0	3.6	2.7
Other institutional (nec)	10.2	51.9	-23.4	34.3	-7.2	6.7	6.5	-0.5	66.5	9.6	9.2
Total institutional	3.0	4.6	3.7	2.6	2.0	2.3	1.0	0.9	0.9	1.4	2.4
Medical services	9.2	6.4	2.5	6.1	4.3	3.1	5.6	9.0	5.3	5.6	5.3
Dental services	11.1	2.1	0.9	3.2	0.6	4.9	0.4	-0.3	2.4	1.5	2.3
Other professional services	11.9	5.9	9.1	18.3	6.1	5.6	4.6	7.0	-11.6 (c	3.1	7.2
Community and public health	7.1	-0.4	9.2	26.3	16.1	-6.2	13.0	3.8	1.8	5.1	8.5
Benefits paid pharmaceuticals	3.9	1.7	4.0	3.5	9.3	-5.2	5.3	16.2	17.6	7.4	5.1
All other pharmaceuticals	11.6	12.4	-3.2	18.7	12.0	17.9	6.8	-3.7	20.8	9.3	9.9
Total pharmaceuticals	6.6	5.7	1.1	9.3	10.4	4.4	6.0	6.8	18.9	8.2	7.0
Aids and appliances	13.1	4.7	1.8	3.6	8.9	5.7	4.4	-0.3	7.7	4.7	5.0
Administration	-2.9	2.3	9.1	16.9	4.1	-2.5	12.4	-3.3	-2.4	1.9	4.8
Research	0.7	16.0	4.7	2.0	13.2	2.4	3.5	5.5	5.4	5.3	6.0
Other non-institutional	11.1	19.3	-5.4	44.7	-16.8	25.6	-21.2	24.9	-32.2	-3.9	4.6
Total non-institutional	8.0	5.2	3.4	9.7	6.4	2.7	5.8	5.7	5.1	5.1	5.7
Total recurrent expenditure	5.3	4.9	3.6	5.9	4.1	2.5	3.3	3.3	3.1	3.2	4.0
Capital expenditure	17.6	4.3	7.9	0.4	1.1	-2.5	-1.2	15.6	12.0	4.3	4.1
Capital consumption	0.5	2.5	-0.3	-1.5	-0.5	0.2	-4.1	1.3	3.1	-0.4	-0.3
Total health expenditure	5.8	4.8	3.7	5.4	3.9	2.2	3.0	3.9	3.5	3.2	3.9

(a) Health services expenditure 1984–85 to 1993–94 is deflated to average 1989–90 prices using specific health deflators (see Tables 12 and 14 for major deflators used).

(b) Average changes are average annual changes calculated using log linear regression.

(c) There is a discontinuity in the 'other professional services' series from 1993–94.

# Table 10: Proportion of recurrent health services expenditure (current prices), by area of expenditure, 1984–85 to1993–94

	1984-85	1985-86	1986-87	1987–88	1988-89	1989–90	1990–91	1991–92	1992–93	1993-94
Area of expenditure	Percentage									
Recognised public hospitals	32.8	32.1	32.3	32.0	31.6	30.7	30.1	29.1	28.5	27.9
Private hospitals	5.6	5.6	5.8	5.6	5.5	5.7	6.2	6.4	6.6	6.8
Repatriation hospitals	1.6	1.6	1.5	1.6	1.7	1.7	1.8	1.7	1.5	1.0
Public psychiatric hospitals	4.0	3.6	3.9	3.9	3.0	2.4	2.0	1.8	1.4	1.4
Total hospitals	44.0	42.9	43.4	43.2	41.8	40.5	40.1	38.9	38.0	37.1
Nursing homes	9.1	9.0	9.0	8.8	8.6	8.5	8.6	8.4	8.1	7.8
Ambulance	2.6	2.5	2.5	2.4	2.3	2.4	2.3	2.3	2.3	2.3
Other institutional (nec)	0.3	0.3	0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.6
Total institutional	54.9	53.7	54.2	53.7	52.0	50.7	50.3	49.0	47.8	46.7
Medical services	17.4	18.0	17.8	18.0	17.9	18.4	18.8	19.0	19.6	20.2
Dental services	4.6	5.1	5.1	5.1	5.2	5.1	5.3	5.3	5.2	5.4
Other professional services	3.1	3.3	3.4	3.5	4.0	4.0	4.1	4.1	4.3	3.6 <sup>(a</sup>
Community and public health	3.9	4.0	3.7	3.8	4.5	5.0	4.5	5.0	5.0	5.0
Benefits paid pharmaceuticals	5.5	5.4	5.2	5.4	5.2	5.4	5.0	5.2	6.0	6.7
All other pharmaceuticals	3.1	3.2	3.4	3.3	3.7	3.9	4.5	4.7	4.5	5.2
Total pharmaceuticals	8.6	8.7	8.7	8.6	8.9	9.3	9.5	9.9	10.5	11.8
Aids and appliances	2.0	2.1	2.1	2.1	2.0	2.1	2.2	2.2	2.2	2.3
Administration	3.6	3.3	3.1	3.2	3.5	3.5	3.3	3.6	3.4	3.2
Research	1.4	1.4	1.5	1.4	1.4	1.5	1.5	1.5	1.5	1.6
Other non-institutional	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.5	0.3
Total non-institutional	45.1	46.3	45.8	46.3	48.0	49.3	49.7	51.0	52.2	53.3
Total recurrent expenditure	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) There is a discontinuity in the 'other professional services' series from 1993–94.

Source: AIHW health expenditure database.

The fall in expenditure on public psychiatric hospitals continued over the whole period. This fall reflects the trend, commenced in the 1960s, towards concentrating mental health services in general hospitals or in community settings, reducing the emphasis on large mental health institutions. The increased emphasis on providing mental health services in community settings is also reflected, to some extent, in the increased expenditure on community and public health, which rose from 3.9% of total recurrent health services expenditure in 1984-85 to 5.0% in 1993–94. The rise in community and public health expenditure as a proportion of total recurrent health services expenditure also reflects an increased emphasis on preventive and educative health services.

Expenditure on medical, dental and other professional services, as proportions of total recurrent health services expenditure, all increased between 1984-85 and 1993-94. Medical services expenditure increased from 17.4% in 1984-85 to 20.2% in 1993-94-a difference of 2.8%. Dental services expenditure increased over the period, from 4.6% to 5.4%, despite having a lower average real growth rate than total recurrent health services expenditure. This is due to the higher inflation rate for dental services (Table 13). Expenditure on other professional services rose from 3.1% in 1984-85 to 4.3% in 1992-93. However, there was discontinuity in the other professional services series after 1992-93.

The way in which the increases in expenditure on medical and dental services occurred was quite different for each of the areas. The proportion of expenditure on medical services, which has always had the greatest impact on noninstitutional health services expenditure, began to grow in 1989–90 and continued to grow up until the end of the period. Growth in dental services expenditure, on the other hand, occurred in two stages. Dental services expenditure contributed 4.6% of total recurrent expenditure in 1984–85, rising to 5.1% in 1985–86. It remained at that general level until 1990–91, when it rose to 5.3%.

Expenditure on pharmaceuticals, as a proportion of recurrent health services expenditure, increased from 8.6% in 1984–85 to 11.8% in 1993–94. This was largely due to very large real increases in expenditure on 'benefit paid pharmaceuticals' in each of the years between 1991–92 and 1993–94 (16.2% and 17.6%), and to high real growth rates in most years for 'all other pharmaceuticals', which averaged 9.9% per year between 1984–85 and 1993–94.

The real increases in expenditure on 'benefit paid pharmaceuticals' were, themselves, partly a result of changes to the types of therapeutic substances covered under the pharmaceutical benefit scheme (PBS). Over recent years, these have included a higher proportion of very high-cost therapeutic substances, and this has greatly influenced the level of expenditure on this category. There has also been increased use of existing PBS items. However, it is not possible to identify the relative effects of these two elements of the expenditure increases. Similarly, the high growth in 'all other pharmaceuticals' expenditure was partly due to policy changes made under the PBS and partly to increased use of existing goods. The PBS policy changes increased the level of co-payment for general beneficiaries, so that some lower-cost drugs that had previously been included in the 'benefit paid pharmaceuticals' category were transferred to the 'all other pharmaceuticals' category.

# Recurrent health services expenditure, 1993–94

In the latest year for which detailed expenditure data were available (1993–94), expenditure on public acute care hospitals and medical services—\$9,869 million and \$6,884 million, respectively—were the dominant areas so far as recurrent expenditure was concerned (Figure 5).

The Commonwealth was dominant in the funding of medical services and nursing homes. The funding contributions of State and Territory Governments and local governments were greatest in the areas of community and public health. Non-government sector sources dominated in the funding of dental services, other professional services and private hospitals. There were also a number of areas in which funding responsibility was largely shared. These included pharmaceuticals (Commonwealth Government and the nongovernment sector) and public acute hospitals (Commonwealth Government and State and Territory Governments, with a small nongovernment sector involvement). In the case of pharmaceuticals, the Commonwealth's involvement was essentially directed to funding items prescribed by medical practitioners under the Pharmaceutical Benefits Scheme and the Veterans Pharmaceutical Benefits Scheme. Non-government sector funding was largely in respect of non-benefit items.

While the provision of public hospital care is essentially a responsibility of State and Territory Governments, the Commonwealth Government also had significant policy initiatives in that area. The Commonwealth's policy interests are reflected in the levels of funding it provided to recognised public hospitals and to repatriation general hospitals. In 1993-94, the **Commonwealth Government** provided almost half (49.0%) of the funding for recognised public hospitals in Australia (Table 25). When expenditure on the repatriation general hospitals that were still operated by the Commonwealth Department of Veterans' Affairs in 1993-94 is included, the Commonwealth provided more than half (50.8%) of funds spent on public acute care hospitals.



Figure 5: Australian recurrent health services expenditure (current prices), 1993-94

# Capital expenditure

Outlays on capital is an important, although smaller, aspect of total health services expenditure. Because capital outlays often relate to relatively high-cost items that have useful lives extending over many years, growth often tends to be 'lumpy', failing to produce consistent trends, particularly when viewed over relatively short time periods.

Total capital expenditure includes outlays on gross fixed capital and increases in stocks. It does not include estimates of depreciation which, in the case of nongovernment sector expenditure, form part of recurrent expenditure

and, for government sector expenditure, are shown separately as 'capital consumption' in Tables 23-25. As with recurrent expenditure, the estimates of capital expenditure by source of funds, depicted in Figure 6, reflect net outlays by the different levels of government and by the nongovernment sector, i.e. outlays by each level of government are net of transfers and payments from other levels of government and, in the case of the non-government sector. outlays are net of payments from the government sector.

In 1993–94, capital outlays accounted for \$1,833 million—5.0% of total health services expenditure (Table 25). Estimates of capital expenditure for 1992–93 and 1993–94 have been revised since the publication of *Health Expenditure Bulletin No. 11* and *Australia's Health 1996*, due to changes in the ABS estimates of non-government sector capital outlays.

Total capital expenditure grew consistently from 1982–83 to 1989–90. There were then two years—1990–91 and 1991–92—in which capital outlays fell, before expenditure increased in both 1992–93 and 1993–94 (Figure 5). Estimated capital outlays on health in 1994–95 were lower than in the previous two years, and represented a substantial decrease in expenditure in that year, particularly by the Commonwealth Government, whose receipts from the disposal of capital (in particular, the sale of Repatriation Hospitals) actually exceeded its expenditure on new capital by \$17 million. There was also a substantial fall in non-government sector capital outlays between 1993-94 and 1994-95, from \$854 million to \$813 million. Capital expenditure by State and Territory Governments and by local government authorities continued to grow, from \$899 million in 1993–94 to \$980 million in 1994–95 (Figure 6). With the exception of two years (from 1986-87 to 1987-88 and from 1990-91 to 1991-92), net capital outlays by State and Territory Governments and local government authorities grew continuously over the period from 1982-83 to 1994-95. Capital outlays by the Commonwealth. on the other hand, fluctuated between 1982-83 and 1990-91, and Commonwealth capital expenditure fell consistently each year from 1990-91, to 1994-95.

Capital expenditure by the nongovernment sector fluctuates from year to year. After having risen each year between 1982–83 and 1987–88, real private capital expenditure fell in successive years—1988–89 and 1990–91. There was some growth between 1990–91 and 1991–92, and even faster growth between 1991–92 and 1993–94, before falling substantially again in 1994–95.

Responsibility for funding capital outlays over the period from 1982–83 to 1994–95 was largely shared between the State and Territory Governments and the nongovernment sector (Figure 7). The Commonwealth Government's contribution to capital expenditure between 1985–86 and 1992–93 was substantially influenced by the Teaching Hospitals Enhancement funding it provided to the States and, from 1987–88 to 1994–95, by the variations in its direct capital funding to nursing homes (Table 11).

# **Health prices**

A major influence on health services expenditure is the relationship between the general level of inflation in the economy as a whole—usually measured by reference to either the Consumer Price Index (CPI) or the implicit price deflator for Gross Domestic Product (GDP)—and the level of inflation in the health industry indicated by changes in the 'total health prices index'.

Between 1984–85 and 1994–95, inflation in the health industry averaged 4.6% per year (Table 13). Changes in the CPI over that same period averaged 5.4% per year (Table 15). After 1988–89, both the rate of increase in prices within the health industry (3.1% per year, on average) and the CPI (3.5%) slowed considerably, compared with the period up to 1988–89.

The indexes for the health services subgroup of the CPI and the components of that subgroup (Table 14) indicate changes in the 'out-of-pocket' prices faced by households in purchasing private health services and private health insurance cover. These health CPI indexes do not reflect changes in the overall prices of goods and services covered by the different components, as they exclude government subsidies, benefit payments, and services provided directly by governments.



		Teaching hospitals/		
	Total capital outlays	enhancement program	Nursing homes capital funding	Other capital expenditure
Year		\$ millio	n	
1985–86	93	48		45
1986–87	117	48		69
1987–88	157	48	22	87
1988–89	92	24	19	49
1989–90	138	49	25	64
1990–91	181	50	26	105
1991–92	182	23	44	115
1992–93	144	21	38	85
1993–94	80		25	55
1994–95	-17 <sup>(a)</sup>		16	-33

#### Table 11: Capital outlays by the Commonwealth Government (current prices), 1985–86 to 1994–95

(a) Negative capital expenditures occurred when sales of capital and land exceeded expenditure on assets.

Source: AIHW health expenditure database.



Between 1988–89 and 1994–95, the health services subgroup of the CPI increased at an annual rate of 8.1% (Table 15). As a result, despite overall price increases in the health industry being less than the total CPI, the prices that households actually faced in purchasing health care services were increasing at more than three times the rate of increase for the CPI as a whole. The bulk of the increase over and above the general CPI was due to increasing private health insurance premiums.

The price index for government final consumption expenditure on hospital and clinical—the 'hospital and clinical price index', which is the major indicator of price changes in government sector hospital and related areas of expenditure—grew at an average of 4.7% per year between 1982–83 and 1994–95. However, during the latter part of that period, i.e. between 1988–89 and 1994–95, its average annual rate of growth was only 2.9%.

		Gove	ernment fin expend	al consumpt liture	ion				
	-	State and	llocal	Common	wealth	Implicit	price deflato	ors	
Year	Total health prices <sup>(a)</sup>	Hospital and clinical	Total <sup>(b)</sup>	Other health and welfare <sup>(b)</sup>	Total GFCE	Public gross fixed capital expenditure	Health, social security and welfare	Total GDP	Index of AWE
1975–76	32.3	32.1	34.7	33.6	34.5	32.7	33.3	32.5	29.1
1976–77	36.6	36.7	39.4	40.4	38.7	36.3	37.6	36.1	32.7
1977–78	39.6	39.8	42.7	43.4	41.9	39.4	40.6	38.9	36.1
1978–79	42.2	42.1	45.4	45.8	44.6	42.1	43.2	41.9	38.7
1979–80	46.6	46.5	49.3	50.0	49.0	47.4	47.0	46.5	42.6
1980–81	51.9	51.9	55.2	55.9	54.9	53.3	52.6	51.2	48.5
1981–82	57.9	58.0	61.6	64.0	62.2	60.0	58.7	56.5	54.8
1982–83	64.0	64.5	68.3	69.4	68.7	68.5	65.1	62.4	62.5
1983–84	68.1	68.5	72.6	73.2	72.8	72.8	69.1	66.8	67.0
1984–85	72.4	72.8	na	na	77.2	76.0	73.3	70.4	72.1
1985–86	76.9	77.0	na	na	82.2	82.8	77.7	75.4	76.6
1986–87	83.3	84.5	na	na	86.9	87.7	84.4	80.9	82.6
1987–88	88.8	89.1	na	na	90.3	91.5	89.1	87.0	87.0
1988–89	94.3	94.7	na	na	95.4	95.2	94.9	94.5	93.6
1989–90	100.0	100.0	na	na	100.0	100.0	100.0	100.0	100.0
1990–91	106.1	106.1	na	na	105.2	102.0	105.1	103.2	107.1
1991–92	109.3	108.8	na	na	109.5	101.5	na	104.9	109.2
1992–93	110.9	110.4	na	na	112.0	102.4	na	106.0	111.0
1993–94	111.9	111.4	na	na	113.3	102.3	na	107.4	113.0
1994–95	113.5 <sup>(c)</sup>	112.4	na	na	113.5	103.6	na	109.6	115.8

 Table 12: Total health price index and industry-wide price indexes (base year 1989–90=100), 1975–76 to 1994–95

(a) Total health expenditure price index derived from AIHW estimates.

(b) Indexes for 'Commonwealth other health and welfare GFCE' and 'State and local total GFCE' not produced after 1983-84.

(c) Total health expenditure price index for 1994–95 derived from preliminary AIHW and ABS estimates.

Source: see technical notes.

	Table 13:	Annual char	nge in health	services ex	penditure <b>p</b>	orice indexes.	1982-83 to 1994-	-95
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		Government se	ector pric	e indexes	Non-g	overnmer	t sector pri	ce indexes	
		Recurrent exp	enditure		Privat	e final con	sumption e	xpenditure	
	Total health prices index	Hospital and clinical	Total GFCE	Capital index	Doctors	Dentists	Chemists	Other professional	Total PFCE
Year					Percentag	ge			
1982-83 to 1983-8	6.4	6.2	6.0	6.3	7.2	8.6	3.8	6.3	6.1
1983-84 to 1984-8	35 6.3	6.2	6.0	4.4	8.5	9.0	4.7	6.3	7.1
1984-85 to 1985-8	36 6.2	5.8	6.5	8.9	5.4	10.6	6.0	5.4	5.9
1985-86 to 1986-8	87 8.4	9.7	5.7	5.9	5.6	11.0	7.5	9.4	7.7
1986-87 to 1987-8	38 6.5	5.4	3.9	4.3	9.3	10.1	8.8	5.5	8.0
1987-88 to 1988-8	<u> </u>	6.3	5.6	4.0	5.5	9.7	6.2	6.5	6.3
1988-89 to 1989-9	90 6.1	5.6	4.8	5.0	9.0	9.0	4.1	5.4	6.7
1989–90 to 1990–9	91 6.1	6.1	5.2	2.0	7.7	8.0	7.0	5.9	7.0
1990–91 to 1991–9	92 3.0	2.6	4.1	-0.5	2.2	5.8	5.2	2.7	3.3
1991-92 to 1992-9	93 1.4	1.5	2.3	0.9	-0.6	3.8	3.7	1.1	1.2
1992-93 to 1993-9	94 1.0	0.9	1.2	-0.0	1.8	4.6	-1.0	0.7	1.1
1993–94 to 1994–9	95 1.4	0.9	0.2	1.3	2.8	4.9	0.5	1.5	2.0
Average inflation	rates								
1982-83 to 1994-9	95 4.9	4.7	4.3	3.5	5.3	7.9	4.7	4.7	5.2
1982-83 to 1984-8	35 6.3	6.2	6.0	5.3	7.8	8.8	4.2	6.3	6.6
1984-85 to 1994-9	95 4.6	4.4	3.9	3.1	4.8	7.7	4.8	4.4	4.9
1984-85 to 1988-8	39 6.8	6.8	5.4	5.8	6.4	10.3	7.1	6.7	7.0
1988-89 to 1994-9	95 3.1	2.9	2.9	1.4	3.8	6.0	3.2	2.9	3.5

			Priva	te final co	nsumption			C	onsumer p	rice index (	(CPI)	
			exp	penditure (	PFCE)			Healt	h services	sub-group	and comp	onents
Year	Total health prices <sup>(a)</sup>	Total health PFCE	Doctors	Dentists	Chemists	Other profess- ional	- All groups	Sub- group total	Hospital & medical services	Dental services	Optical services	Pharma- ceutical services
1975–76	32.3	32.6	32.0	24.0	37.7	32.9	30.4	14.6	na	na	na	na
1976–77	36.6	36.8	36.2	28.0	40.8	37.4	34.6	40.0	na	na	na	na
1977–78	39.6	40.1	39.4	32.0	44.3	40.5	37.9	50.5	na	na	na	na
1978–79	42.2	42.5	41.2	35.7	47.6	43.1	41.0	43.9	na	na	na	na
1979–80	46.6	46.5	45.9	39.3	50.9	46.8	45.2	48.0	na	na	na	na
1980–81	51.9	51.8	51.1	43.2	56.2	52.4	49.4	51.4	50.7	43.1	na	43.2
1981–82	57.9	57.1	56.0	47.4	61.9	58.4	54.6	69.7	71.7	47.3	na	47.9
1982–83	64.0	62.9	61.5	52.3	67.1	64.8	60.8	89.9	94.5	52.1	na	55.7
1983–84	68.1	66.8	65.9	56.8	69.7	68.9	65.0	79.4	81.6	56.4	na	61.7
1984–85	72.4	71.5	71.5	61.9	72.9	73.2	67.8	53.3	50.7	61.7	na	65.2
1985–86	76.9	75.7	75.4	68.5	77.3	77.2	73.5	58.1	55.1	68.1	na	73.6
1986–87	83.3	81.6	79.6	76.0	83.1	84.5	80.4	71.5	69.2	75.7	na	85.2
1987–88	88.8	88.1	87.0	83.7	90.4	89.1	86.3	83.1	82.4	83.4	91.7	88.2
1988–89	94.3	93.7	91.8	91.8	96.0	94.9	92.6	92.4	92.4	91.5	96.6	94.4
1989–90	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1990–91	106.1	107.0	107.7	108.0	107.0	105.9	105.3	111.8	113.4	108.3	103.8	106.7
1991–92	109.3	110.6	110.1	114.2	112.6	108.7	107.3	128.8	135.0	114.9	106.2	112.0
1992–93	110.9	111.9	109.4	118.5	116.7	109.9	108.4	132.3	138.1	118.8	111.0	112.7
1993–94	111.9	113.1	111.4	124.0	115.6	110.7	110.4	139.0	145.6	123.5	113.6	115.1
1994–95	113.5 <sup>(b)</sup>	115.4	114.5	130.1	116.1	112.4	113.9	147.7	155.6	128.9	115.7	120.2

#### Table 14: Total and non-government sector health price indexes (base year 1989–90=100), 1975–76 to 1994–95

(a) Total health expenditure price index derived from AIHW estimates.

(b) Total health expenditure price index for 1994–95 derived from preliminary AIHW and ABS estimates.

Source: see technical notes.

			Consumer price	e index		
_		Health services	Hospital and	Dental	Optical	Pharmaceutica
	All groups	subgroup	medical services	services	services	services
Year			Percentag	le		
1982-83 to 1983-84	6.9	-11.7	-13.6	8.2	na	10.8
1983–84 to 1984–85	4.3	-32.8	-37.9	9.5	na	5.7
1984-85 to 1985-86	8.4	9.0	8.7	10.3	na	12.8
1985–86 to 1986–87	9.3	23.0	25.6	11.1	na	15.8
1986-87 to 1987-88	7.3	16.2	19.0	10.2	na	3.4
1987-88 to 1988-89	7.3	11.3	12.1	9.8	5.4	7.0
1988–89 to 1989–90	8.0	8.2	8.3	9.3	3.5	6.0
1989–90 to 1990–91	5.3	11.8	13.4	8.3	3.8	6.6
1990–91 to 1991–92	1.9	15.3	19.0	6.1	2.3	5.0
1991–92 to 1992–93	1.0	2.7	2.3	3.4	4.5	0.6
1992–93 to 1993–94	1.8	5.1	5.5	4.0	2.3	2.2
1993–94 to 1994–95	3.2	6.3	6.9	4.4	1.8	4.4
Average inflation rates	;					
1982-83 to 1994-95	5.4	4.2	4.2	7.8	na	6.6
1982-83 to 1984-85	5.6	-23.0	-26.8	8.8	na	8.2
1984–85 to 1994–95	5.3	10.7	11.9	7.6	na	6.3
1984–85 to 1988–89	8.1	14.7	16.2	10.3	na	9.7
1988–89 to 1994–95	3.5	8.1	9.1	5.9	3.0	4.1

# Table 15: Annual change in the total consumer price index and the CPI health services subgroup and itscomponents, 1982–83 to 1994–95

# Excess health inflation

Over the longer period 1975-76 to 1994-95, health inflationmeasured by reference to the price index for total health services expenditure-was slightly higher (6.8% per year, on average) than the general level of inflation indicated by changes in the implicit price deflator for GDP (6.6% per year) (Table 12). A similar pattern applied over the period from 1984-85 to 1994–95, when health inflation averaged 4.6% compared with 4.5% for the general economy. The difference between health inflation and the general level of inflation is referred to as the rate of 'excess health inflation'.

However, the average health inflation rate for Australia in the first five years following the introduction of Medicare was lower (6.8%) than the general rate of inflation (7.6%). This resulted in negative excess health inflation (-0.8%) between 1984–85 and 1988–89. From 1988–89 to 1994–95, on the other hand, excess health inflation was positive, averaging 0.6%. This gave a ten-year average excess health inflation rate, following the introduction of Medicare, of 0.1%.

Much of the excess health inflation after 1988-89 occurred in one year, between 1989-90 and 1990-91. In that year, even as the Australian economy went into recession (Figure 9), health prices increased by 6.1%. This was almost double the general inflation rate of 3.2%, and resulted in an excess health inflation rate of 2.8% for that one year. From 1990-91 to 1994-95, increases in health prices (1.7% per year, on average) and the general rate of inflation (1.5% per year, on average) both slowed considerably. This resulted in an excess health inflation rate of 0.1% over that fouryear period. In the last two years of the period, 1993–94 and 1994–95, health prices grew at a slower rate than the general rate of inflation, giving negative rates of excess health inflation of -0.4% and -0.6% respectively.

Excess health inflation rates are useful when comparing the effectiveness of different national health financing structures in controlling health prices.

## Australia's health services expenditure and gross domestic product

Health services expenditure, expressed as a percentage of GDP, fell from 8.5% to 8.4% between 1993–94 and 1994–95 (Table 17). This was the second consecutive year in which health services expenditure as a percentage of GDP had fallen, and occurred despite a slight increase in the rate of growth in health services expenditure. The fall was due to growth in GDP being higher than growth in health services expenditure between 1993–94 and 1994–95 (Table 18).

Preliminary indications are that maintenance of real growth in GDP (estimated to be 3.8% in 1995–96), combined with continued moderate growth in health services expenditure, is likely to produce stability in health services expenditure as a percentage of GDP during 1995–96.

Table 16: Health prices index and GDP deflator (base year 1989–90=100) and excess health inflation rate, 1982–83 to 1994–95<sup>(a)</sup>

			Excess health
Year	Health price index	GDP deflator	inflation rate (%)
1982–83	64.0	62.4	
1983–84	68.1	66.8	-0.6
1984–85	72.4	70.4	0.8
1985–86	76.9	75.4	-0.8
1986–87	83.3	80.9	1.0
1987–88	88.8	87.0	-0.9
1988–89	94.3	94.5	-2.2
1989–90	100.0	100.0	0.3
1990–91	106.1	103.2	2.8
1991–92	109.3	104.9	1.4
1992–93	110.9	106.0	0.4
1993–94	111.9	107.4	-0.4
1994–95	113.5 <sup>(a)</sup>	109.6	-0.6
Average inflation rates		Percentage	
1982–83 to 1994–95	4.9	4.8	0.0
1982–83 to 1984–85	6.3	6.2	0.0
1984–85 to 1988–89	6.8	7.6	-0.8
1984–85 to 1994–95	4.6	4.5	0.0
1982–83 to 1988–89	6.7	7.2	-0.5
1988–89 to 1994–95	3.1	2.5	0.6

(a) Total health expenditure price index for 1994–95 derived from preliminary AIHW and ABS estimates.

Source: see technical notes.

	Total health expenditure	GDP	Total health
Year			expenditure as % of GDP
1982–83	13,239	172,476	7.7
1983–84	14,958	195,830	7.6
1984–85	16,546	217,129	7.6
1985–86	18,586	241,034	7.7
1986–87	21,115	264,007	8.0
1987–88	23,333	298,395	7.8
1988–89	26,127	339,068	7.7
1989–90	28,795	370,070	7.8
1990–91	31,223	378,964	8.2
1991–92	33,134	387,164	8.6
1992–93	34,910	405,764	8.6
1993–94	36,495	430,424	8.5
1994–95 <sup>(a)</sup>	38,479	455,616	8.4

#### Table 17: Total health services expenditure and GDP (current prices), 1982-83 to 1994-95

(a) Health services expenditure for 1994–95 is based on preliminary AIHW and ABS estimates.

Sources

GDP(I) figures: 1982–83 to 1985–86—ABS, Australian national accounts—national income, expenditure and product, 1993–94 (Cat. No. 5204.0). 1986–87 to 1994–95—ABS, National income, expenditure and product, June quarter 1996 (Cat. No. 5206.0).

Health services expenditure: AIHW health expenditure database.





Over the period from 1984-85 to 1994-95, real growth in GDP averaged 3.0% per year, compared with a 4.0% real growth for total health services expenditure (Table 18). Growth in both GDP and health services expenditure was more rapid before 1988-89. Real GDP grew at an average of 3.9% per year, and health at 4.9%, between 1984-85 and 1988-89. Between 1988-89 and 1994-95, real GDP grew at an average rate of only 2.5% per year and real health services expenditure at 3.4% per year. In the last year of the period (1994-95), health services expenditure growth continued to increase while real GDP growth, although higher than that of real health services expenditure, was lower than it had been in the previous year.

Growth in GDP has been shown to exert a 'lagged' influence on health services expenditure growth (see *Health Expenditure Bulletin No. 7* and *Health Expenditure Bulletin No. 11* for discussion of lags). However, although a lower GDP growth generally leads to lower growth in health services expenditure during the ensuing year, there appear to be limits to this process. It seems that there is a 'floor' to health services expenditure growth, which means that when GDP growth is very low, or negative, health services expenditure does not continue to follow GDP downwards. This is demonstrated in Figures 8 and 9. which depict annual GDP, in both current and constant prices, aligned with current and constant price health services expenditure in the ensuing years. In both those figures, the years shown on the lower horizontal axis relate to the GDP year and those on the top axis to the health services expenditure vear.

## International comparison of health services expenditure

This section compares health services expenditure in Australia with eight selected member nations of the Organisation for Economic Cooperation and Development (OECD). The countries used in the comparison were Canada, France, Germany, Japan, New Zealand, Sweden, the United Kingdom and the United States of America. International comparisons of this type are only meaningful if they are made in terms of a common unit of value. Historically, exchange rates have been used to convert the different national currencies to a common currency unit (usually \$US). However, exchange rates have a number of deficiencies as far as deriving a common measure of expenditure on health is concerned. Consequently, the expenditure on health by the eight OECD countries included in this section was converted to Australian currency (\$A) using purchasing power parities (see Health Expenditure Bulletin No. 7 for an explanation of purchasing power parity comparisons).

The years shown in Figures 1 and 9, and Tables 19, 21 and 22 are, for Australian data, Australian financial years (i.e. year ending 30 June), and, for most other OECD member countries, calendar years (i.e. year ending 31 December).

	Total health service	es expenditure	GDP	
-	Amount (\$m)	Growth rate (%)	Amount (\$m)	Growth rate (%)
1982–83	20,673		276,235	
1983–84	21,960	6.2	293,003	6.1
1984–85	22,862	4.1	307,904	5.1
1985–86	24,180	5.8	319,924	3.9
1986–87	25,341	4.8	327,084	2.2
1987–88	26,287	3.7	343,936	5.2
1988–89	27,719	5.4	359,082	4.4
1989–90	28,795	3.9	370,070	3.1
1990–91	29,435	2.2	367,448	-0.7
1991–92	30,316	3.0	368,721	0.3
1992–93	31,489	3.9	381,684	3.5
1993–94	32,602	3.5	400,431	4.9
1994–95 <sup>(b)</sup>	33,905	4.0	415,710	3.8
Average annual growth rate	tes			
1982–83 to 1994–95		4.2		3.5
1982–83 to 1984–85		5.2		5.6
1984–85 to 1988–89		4.9		3.9
1984–85 to 1994–95		4.0		3.0
1982–83 to 1988–89		5.0		4.5
1988–89 to 1994–95		3.4		2.5

Table 18: Total health services expenditure and GDP, constant (average 1989–90) prices<sup>(a)</sup>, and annual growth rates, 1982–83 to 1994–95

(a) Health services expenditure is deflated to average 1989-90 prices using specific health deflators (Tables 12 and 14).

(b) Health services expenditure for 1994–95 is based on preliminary AIHW and ABS estimates.

Sources

GDP(I) figures:

1982–83 to 1985–86—ABS, Australian national accounts—national income, expenditure and product, 1993–94 (Cat. No. 5204.0).

1986–87 to 1994–95—ABS, National income, expenditure and product, June quarter 1996, (Cat. No. 5206.0).

Health services expenditure: AIHW health expenditure database.

		Gross domestic pro	duct per person		
	Current	prices	Constant	prices <sup>(a)</sup>	Mean resident
Year	Amount (\$ million)	Growth rate (%)	Amount (\$ million)	Growth rate (%)	population ('000) <sup>(b)</sup>
1982–83	11,410		18,065		15,291
1983–84	12,646	10.8	18,922	4.7	15,485
1984–85	13,846	9.5	19,634	3.8	15,682
1985–86	15,159	9.5	20,120	2.5	15,901
1986–87	16,362	7.9	20,272	0.8	16,135
1987–88	18,196	11.2	20,973	3.5	16,399
1988–89	20,321	11.7	21,520	2.6	16,686
1989–90	21,848	7.5	21,848	1.5	16,939
1990–91	22,046	0.9	21,392	-2.1	17,177
1991–92	22,223	0.8	21,164	-1.2	17,392
1992–93	22,998	3.5	21,712	2.6	17,579
1993–94	24,164	5.1	22,556	3.9	17,753
1994–95	25,399	5.1	23,170	2.7	17,942

#### Table 19: GDP per person, current and constant (average 1989-90) prices<sup>(a)</sup>, and population, 1982-83 to 1994-95

(a) Health services expenditure is deflated to average 1989-90 prices using specific health deflators (Tables 12 and 14).

(b) Mean resident population for the year ended 30 June.

Sources

GDP(I) figures:

1982–83 to 1984–85—ABS, Australian national accounts—national income, expenditure and product, 1993–94 (Cat. No. 5204.0).

1985-86 to 1994-95-ABS, National income, expenditure and product, June quarter 1996 (Cat. No. 5206.0).

Population:

1982-83 to 1983-84—ABS, Australian demographic statistics, December quarter 1986 and March and June quarters 1987, (Cat. No. 3101.0).

1984–85—ABS, Australian demographic statistics, December quarter 1990 (Cat. No. 3101.0). 1985–86 to 1986–87—ABS, Australian demographic statistics, December quarter 1990 (Cat. No. 3101.0).

1987–88—ABS, Australian demographic statistics, December quarter 1993 (Cat. No. 3101.0).

1988-89 to 1994-95-ABS, Australian demographic statistics, March quarter 1996 (Cat. No. 3101.0).

Throughout most of the period from 1971 to 1994, Australia was ranked sixth among the group of nine countries, in terms of health services expenditure per person (Table 20). The United States consistently spent the most on health per person over the period, increasing seventeen-fold from \$A280 in 1971 to \$A4,782 in 1994. This represented an average annual growth rate of 13.1%-the second highest growth rate of all the listed countries, behind Japan (13.5%). However, Japan's expenditure was coming from a very low base (\$108 per person in 1971) while the United States already had the highest level of expenditure in 1971, at \$280 per person. New Zealand and the United Kingdom consistently had the lowest levels of per person spending on health between 1982 and 1994. In 1994, the United Kingdom had the lowest health services expenditure per person of all countries, at \$A1,647. However, the expenditure data provided in

respect of the United Kingdom do not include expenditure on nursing home care.

There were some substantial changes, from 1971 to 1994, in the way Japan's per person expenditure on health compared with the other countries. Japan, which had the ninth highest level of expenditure in 1971, was the sixth highest per person spender on health in 1994. Sweden too, which had the second highest per person expenditure behind the United States of America in 1971, had moved to third by 1990. Unfortunately, because of a discontinuity in Swedish data after 1990, that country's data for the years 1991 to 1994, although included in Tables 21 and 22, cannot be used in the analysis. Australia's health services expenditure per person was lower than the United States, Canada and Germany and higher than Japan, New Zealand and the United Kingdom for the whole

period from 1971 to 1994. It was also lower than that of France in all years except for the period from 1975 to 1979.

Most of the selected countries experienced their highest growth rates during the 1970s, particularly between 1971 and 1976. After 1976, growth slowed in all countries. However, in Canada, there was a second period of accelerated growth between 1979 and 1983. In this four-year period, Canada's expenditure per person grew at an average of 15.3% per annum, compared with 11.2% in the previous three years (1976 to 1979).

In terms of the proportion of GDP spent on health, Table 21 and Figure 10 reveal similar rankings to those for per person expenditure. By 1995, Australia had the fifth highest proportion of GDP devoted to health (8.4%). Australia's ranking was little changed from the early 1970s, when it had the sixth highest percentage of GDP spent on health.



# Table 20: Health services expenditure per person, Australia and selected OECD countries, purchasing power parity conversions, 1971 to 1994<sup>(a)</sup>

	Australia(b)	Canada	Franco	Gormany	lanan	New	Swodon	United	United
Year	Australia	Canaua	France	Germany	(\$A)	Zealallu	Sweden	Kinguoin	States
1971	154	215	155	159	108	144	229	123	280
1972	175	238	180	187	126	162	251	138	320
1973	195	269	210	223	146	198	286	161	370
1974	231	322	255	281	185	273	358	214	451
1975	306	405	304	352	242	333	443	259	541
1976	410	483	390	448	282	357	526	302	655
1977	468	535	444	511	328	389	621	326	753
1978	523	595	488	562	378	449	683	357	835
1979	571	665	569	632	445	500	767	403	945
1980	622	762	656	732	541	577	899	470	1.090
1981	690	879	736	830	617	631	997	531	1,250
1982	784	1,038	887	991	721	679	1,133	583	1,459
1983	866	1,176	1,010	1,074	808	722	1,236	689	1,657
1984	966	1,291	1,101	1,160	859	748	1,337	731	1,840
1985	1,055	1,437	1,236	1,298	968	845	1,371	793	2,050
1986	1,169	1,615	1,347	1,438	1,050	951	1,447	889	2,280
1987	1,309	1,770	1,469	1,560	1,170	1,075	1,610	999	2,557
1988	1,423	1,949	1,611	1,724	1,293	1,158	1,762	1,130	2,958
1989	1,566	2,154	1,801	1,940	1,414	1,294	1,931	1,228	3,358
1990	1,700	2,344	1,972	1,968	1,513	1,381	2,029	1,327	3,730
1991	1,818	2,503	2,107	2,080	1,615	1,454	1,944 <sup>(c)</sup>	1,377	3,974
1992	1,905	2,691	2,289	2,129	1,800	1,550	1,811	1,624	4,364
1993	1,986	2,720	2,482	2,403	1,866	1,539	1,773	1,600	4,571
1994	2,056	2,734	2,500	2,347	2,003	1,667	1,833	1,647	4,782

(a) Data shown for most OECD countries relates to the calendar years (i.e. years ending 31 December) and for Australia to the Australian financial year (i.e. years ending 30 June), 1971 to 1994.

(b) Australian data calculated from AIHW health services expenditure estimates.

(c) There is a discontinuity in the Swedish data between 1990 and 1991. Therefore, data from 1991 cannot be compared with data to 1990.

Sources Australia: AIHW health expenditure database.

Other countries: Unpublished OECD health expenditure data.

The United States recorded the highest level of health services expenditure during the period, except for 1971 and the period from 1977 to 1981, when Sweden spent a greater proportion of its GDP on health. In 1995, the United States spent 14.5% of its GDP on health almost double the 7.4% that it spent in 1971.

The United Kingdom and Japan consistently had the lowest levels of health services expenditure throughout the period, in terms of the proportion of GDP spent on health. The UK spent 4.6% of GDP on health in 1971 and 6.9% in 1995. Japan, which spent less (4.5%) than the UK in 1971, devoted a higher percentage of GDP to health in 1995 (7.2%) than did the UK. However, the relative increases in health services expenditure were quite different. The strength of Japan's economic growth throughout the period meant that its health services expenditure as a proportion of GDP remained low, despite substantial increases in the level of health services expenditure per person. The UK, on the other hand, despite a much lower rate of growth in health services expenditure per person, continued to lead Japan in terms of the proportion of GDP devoted to health, until well into the 1990s.

The unweighted average proportion of GDP spent on health services for the whole group of countries increased from 6.1% in 1971 to 9.0% in 1994. The 1995 figures, which do not include data for New Zealand, indicate that the average continued to grow in that year. However, increases in health services expenditure per person or the proportion of GDP devoted to health do not necessarily indicate improvement to the overall health status of those countries in the comparison. That status depends on the manner in which the relevant changes were made, and the effectiveness of the allocation of the increased expenditure in the respective countries.

Austr 3ar(a) Austr 771 772 373 374 375 375 375 376	(d)eiler									- J - J - manner	
sar(a) 171 172 173 174 175 176 176	alla	Canada	France	Germany	Japan	New Zealand	Sweden	United Kingdom	United States	Nine countries <sup>(c)</sup>	Eigh countries <sup>(c</sup>
77 172 173 174 175 176 177						Percentage					
172 173 174 175 176	5.7	7.4	6.0	6.3	4.5	5.2	7.5	4.6	7.4	6.1	5.9
173 174 175 176 177	5.9	7.2	6.2	6.5	4.6	5.3	7.5	4.7	7.5	6.2	6.0
174 175 376 377	5.8	6.9	6.2	6.8	4.5	5.5	7.3	4.6	7.5	6.1	6.0
175 176 177	5.9	6.8	6.3	7.4	5.0	6.1	7.6	5.3	7.8	6.5	6.3
176 177	6.5	7.3	7.0	8.1	5.5	6.7	7.9	5.5	8.2	7.0	6.9
776	7.4	7.2	7.0	8.1	5.5	6.3	8.2	5.5	8.5	7.1	6.9
	7.5	7.2	7.0	8.1	5.7	6.6	9.1	5.3	8.6	7.2	7.1
178	7.8	7.2	7.3	8.1	5.9	7.1	9.1	5.3	8.5	7.4	7.2
62(	7.6	7.1	7.4	8.1	6.0	7.0	9.0	5.3	8.7	7.4	7.2
980	7.4	7.3	7.6	8.4	6.4	7.2	9.4	5.6	9.1	7.6	7.4
381	7.3	7.5	7.9	8.7	6.5	6.9	9.5	5.9	9.4	7.7	7.5
182	7.5	8.4	8.0	8.6	6.7	6.6	9.6	5.8	10.2	7.9	7.7
983	7.7	8.6	8.2	8.5	6.8	6.4	9.5	6.0	10.5	8.0	7.7
)84	7.6	8.4	8.5	8.7	6.5	6.0	9.3	5.9	10.4	7.9	7.6
985	7.6	8.5	8.5	8.7	6.7	6.4	8.9	5.9	10.7	8.0	7.7
986	7.7	8.8	8.5	8.6	6.6	6.6	8.6	5.9	10.9	8.0	7.7
187	8.0	8.7	8.5	8.7	6.6	6.9	8.6	5.9	11.1	8.1	7.7
988	7.8	8.5	8.6	8.8	6.3	6.9	8.6	5.8	11.5	8.1	7.7
989	7.7	8.7	8.7	8.3	6.2	7.1	8.6	5.8	12.0	8.1	7.6
06(	7.8	9.2	8.9	8.3	6.0	7.4	8.6	6.0	12.7	8.3	7.8
91	8.2	9.9	9.1	9.0	6.1	7.8	8.4 (e)	6.5	13.5	8.7	8.1
92	8.6	10.3	9.4	9.3	6.4	7.8	7.6	7.0	14.0	8.9	8.3
93	8.6	10.2	9.8	9.3	6.6	7.3	7.6	6.9	14.3	9.0	8.3
)94	8.5	9.8	9.7	9.5	6.9	7.5	7.7	6.9	14.3	9.0	8.3
J95	8.4	9.5	9.9	9.6	7.2	na	7.7	6.9	14.5	9.2	8.5
venty-five	7.5	8.3	8.0	8.3	6.1	6.7	8.5	5.8	10.5	7.7	7.4
ear average <sup>(1)</sup>											
Data shown for most OECD c	countries rela	ttes to the calence	dar years (i.e. ye	ending 31 De	cember) and fo	or Australia to the	Australian financia	l year (i.e. years end	ling 30 June), 1:	971 to 1995.	
Australian data calculated fro	om ainvv nea	nin expenditure (	estimates.								
Unweighted means, excludes	s United State	SS.				-					
I here is a discontinuity in the Unweighted means, for all cou	e Swedish dat untries, are b	ta between 1990 ìased on a 25-y∈	) and 1991. Ther ar average, exc	refore, data from 1 ept for New Zeala	1991 cannot be ind which is ba	e compared with ( ised on a 24-year	data to 1990. r average.				
urces	e sectore e										
er countries: Unpublished OEC	re uatavase. CD health exp	oenditure data.									

While Australia's record in controlling the general level of inflation was, until recently, less impressive than that of many comparable economies, it has consistently had a very good record in controlling prices in the area of health. Excess health inflation in Australia was low, throughout the 1970s and 1980s, compared with other countries (see *Australia's Health 1994*, p. 129, for discussion of excess health inflation on an international basis).

In the United States, health inflation averaged 7.1% between 1975 and 1994 (Table 22). At the same time, the United States'

general inflation rate averaged only 4.9%, giving an excess health inflation rate of 2.0%. In Australia, on the other hand, despite an average general inflation rate of 7.3% over that same period, the excess health inflation rate averaged only 0.3%. In more recent times, Australia's record was even more impressive, in that it was able to combine very low general levels of inflation with continued low rates of excess health inflation. For example, between 1990 and 1994, Australia's general inflation rate averaged only 1.8%, compared with 2.6% in the United States. Australia's health inflation

averaged 2.9%, giving an excess health inflation rate of just over 1.0%. Health inflation in the United States averaged 5.2% between 1990 and 1994, giving an excess health inflation rate for the United States of 2.5%.

This ability of the Australian health system to control health prices has been attributed to central controls on health services expenditure, directly through allocations to States for hospital services, and through regulating the level of feerebates to patients through centralised control of the Medical Benefits Fee Schedule (Taylor & Salkeld, 1996).

Table 22: Relative	price indexes,	Australia and	United States	s of America,	, 1975 to 1994 <sup>(a)</sup>
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		Australia			United State	S
	Health		Relative health	Health		Relative health
Year	deflator	GDP deflator	price index	deflator	GDP deflator	price index
1975	27.8	28.2	98.5	33.4	44.3	75.4
1976	32.3	32.5	99.5	36.3	47.1	77.1
1977	36.6	36.1	101.5	39.3	50.3	78.1
1978	39.6	38.9	101.9	42.3	54.1	78.2
1979	42.2	41.9	100.8	46.1	58.9	78.3
1980	46.6	46.5	100.1	51.2	64.4	79.5
1981	51.9	51.2	101.4	56.8	70.6	80.5
1982	57.9	56.5	102.4	62.1	75.0	82.8
1983	64.0	62.4	102.6	66.5	77.9	85.4
1984	68.1	66.8	102.0	70.6	81.0	87.2
1985	72.4	70.4	102.8	74.4	83.8	88.8
1986	76.9	75.4	101.9	78.1	85.9	90.9
1987	83.3	80.9	103.0	82.5	88.5	93.2
1988	88.8	87.0	102.0	88.0	92.0	95.7
1989	94.3	94.5	99.7	93.9	96.0	97.8
1990	100.0	100.0	100.0	100.0	100.0	100.0
1991	106.1	103.2	102.8	106.2	103.6	102.5
1992	109.3	104.9	104.2	112.2	106.3	105.6
1993	110.9	106.0	104.6	117.5	108.6	108.2
1994	111.9	107.4	104.2	122.4	110.8	110.5
			Average inf	lation rates (%)		
	Health	General	Excess health	Health	General	Excess health
1975–76	16.5	15.2	1.1	8.7	6.3	2.2
1976–85	9.4	9.0	0.4	8.3	6.6	1.6
1985–90	6.7	7.3	-0.6	6.1	3.6	2.4
1990–94	2.9	1.8	1.0	5.2	2.6	2.5
1975–94	7.6	7.3	0.3	7.1	4.9	2.0
1976–94	6.4	6.2	0.1	6.5	4.5	1.9
1985–94	5.0	4.8	0.1	5.7	3.2	2.5

(a) Index numbers for the United States relate to the calendar year ending 31 December, Australian index numbers relate to the Australian fiscal year ending 30 June.

Sources

Australia: derived from AIHW estimates.

United States: unpublished OECD data.

Detailed health services expenditure tables, 1991–92 to 1993–94 Table 23: Total health services expenditure (current prices), by area of expenditure and source of funds, 1991–92<sup>(a)</sup>

	Gov	ernment sector		No	n-government so	ector		
	Common-	State and		Health				Total
	wealth	local	Total	insurance funds	Individuals	Other <sup>(b)</sup>	Total	expenditure
Area of expenditure				\$ million				
Recognised public hospitals	3,866	4,366	8,232	553	1	305	858	060'6
Private hospitals	107	Ι	107	1,635	98	143	1,876	1,983
Repatriation hospitals	499	Ι	499	12	I	16	28	527
Public psychiatric hospitals	15	513	528	Ι	20	-	21	549
Total hospitals	4,487	4,879	9,366	2,200	117	465	2,782	12,149
Nursing homes	1,707	301	2,009	Ι	601	С	605	2,613
Ambulance	43	220	263	71	100	18	189	452
Other institutional (nec)	20	Ι	71	Ι	I	Ι	I	71
Total institutional	6,308	5,401	11,709	2,271	819	486	3,576	15,285
Medical services	4,781	Ι	4,781	190	693	263	1,146	5,928
Dental services	37	127	164	528	957	4	1,488	1,652
Other professional services	151	Ι	151	168	840	132	1,140	1,291
Community and public health	368	1,184	1,552	-	Ι	7	ო	1,555
Benefit paid pharmaceuticals	1,319	Ι	1,319	Ι	308	I	308	1,627
All other pharmaceuticals	Ι	Ι	Ι	37	1,423	14	1,474	1,474
Total pharmaceuticals	1,319	Ι	1,319	37	1,731	14	1,782	3,101
Aids and appliances	06	-	91	162	427	18	607	698
Administration	480	205	685	439	I	Ι	439	1,125
Research <sup>(c)</sup>	310	98	409	Ι	55		55	464
Other non-institutional	14	110	124	Ι	Ι	Ι	I	124
Total non-institutional	7,551	1,726	9,277	1,525	4,704	432	6,661	15,938
Total recurrent expenditure	13,859	7,127	20,986	3,796	5,522	918	10,236	31,222
Capital expenditure	182	718	006	na	na	na	515 (d)	1,415
Capital consumption	44	453	497	Ι	Ι	Ι	(e) —	497
Total health expenditure	14,085	8,298	22,383	na	na	na	10,751	33,134
<ul> <li>(a) This table records the amounts provided .</li> <li>(b) The 'other' column includes health servics</li> </ul>	by Commonwealth, State a	ind local governmen compensation and c	its and the non-gove	ernment sector to fund expend	iture on health. It do	es not record gros kpenditures under	s outlays on healt government sche	hy the various sectors mes such as WorkCove
(New South Wales, Victoria, South Austra	alia, Western Australia, and	d Australian Capital <sup>-</sup>	Territory) and Work	Health Northern Territory, as v	vell as commercial ir	Aperiaria araa		

Capital outlays for the non-government sector cannot be allocated according to 'source of funds'. Private capital consumption (depreciation) expenditure is included as part of recurrent expenditure.

(p) (e)

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enditure and source of funds, 1992–93 <sup>(a)</sup>	
nt prices), by area of expe	
srvices expenditure (curre	
Table 24: Total health se	

	Gove	ernment sector		z	on-governmen	t sector		
	Common- wealth	State and local	Total	Health insurance funds	Individuals	Other <sup>(b)</sup>	Total	Total expenditure
Area of expenditure				\$ million				
Recognised public hospitals	4,076	4,393	8,469	548	1	321	869	9,338
Private hospitals	122	Ι	122	1,764	126	150	2,040	2,163
Repatriation hospitals	474	Ι	474	7	I	12	19	493
Public psychiatric hospitals	14	439	453	Ι	16	-	17	470
Total hospitals	4,686	4,831	9,518	2,320	142	485	2,946	12,464
Nursing homes	1,788	284	2,072	Ι	569	4	573	2,644
Ambulance	38	236	274	75	107	19	201	475
Other institutional (nec)	71	-	72	Ι	I	Ι	Ι	72
Total institutional	6,584	5,352	11,936	2,395	817	507	3,720	15,655
Medical services	5,241	Ι	5,241	202	692	287	1,181	6,422
Dental services	38	146	184	535	984	9	1,525	1,709
Other professional services	160	Ι	160	178	918	141	1,237	1,397
Community and public health	381	1,267	1,648	-	Ι	7	с	1,651
Benefit paid pharmaceuticals	1,601	Ι	1,601	Ι	360	Ĩ	360	1,960
All other pharmaceuticals	Ι	Ι	Ι	39	1,415	18	1,471	1,471
Total pharmaceuticals	1,601	Ι	1,601	39	1,774	18	1,831	3,432
Aids and appliances	97	2	66	166	430	27	623	721
Administration	472	180	652	461	Ι	Ι	461	1,113
Research <sup>(c)</sup>	345	66	444	Ι	57	Ι	57	500
Other non-institutional	14	145	159	Ι	I	Ι	Ι	159
Total non-institutional	8,348	1,838	10,186	1,583	4,855	479	6,917	17,104
Total recurrent expenditure	14,932	7,190	22,122	3,979	5,672	987	10,637	32,759
Capital expenditure	144	811	955	na	na	na	688 <sup>(d)</sup>	1,643
Capital consumption	42	466	508	Ι	I	Ι	(e)	508
Total health expenditure	15,118	8,467	23,585	na	na	na	11,325	34,910

(c) Health research expenditure is allocated according to the sectors that actually undertake the research activity, not according to the source of funds.
 (d) Capital outlays for the non-government sector cannot be allocated according to 'source of funds'. ABS estimates of outlays have been revised because of use of building completion data rather than building approval data (used in previous publications).
 (e) Private capital consumption (depreciation) expenditure is included as part of recurrent expenditure.

Table 25: Total health services expenditure (current prices), by area of expenditure and source of funds,  $1993-94^{(a)}$ 

	Gove	ernment sector			Non-governmen	t sector		
	Common- wealth	State and local	Total	Health insurance funds	Individuals	Other <sup>(b)</sup>	Total	Total expenditure
Area of expenditure				\$ mil	lion			
Recognised public hospitals	4,661	4,169	8,830	493		189	682	9,512
Private hospitals	168	I	168	1,867	140	159	2,165	2,333
Repatriation hospitals	352	Ι	352	5	Ι	Ι	5	357
Public psychiatric hospitals	11	443	453	Ι	18	2	20	473
Total hospitals	5,191	4,612	9,803	2,365	158	350	2,872	12,675
Nursing homes	1,783	237	2,020	Ι	627	Ι	627	2,647
Ambulance	37	226	263	84	118	19	221	484
Other institutional (nec)	120	~	121	Ι	I	I	Ι	121
Total institutional	7,131	5,075	12,206	2,449	903	369	3,720	15,927
Medical services	5,700	I	5,700	208	683	294	1,185	6,884
Dental services	58	139	197	539	1,089	9	1,634	1,831
Other professional services	165	I	165	188	754	137	1,079 <sup>(c)</sup>	1,244
Community and public health	410	1,287	1,697	-	Ι	7	က	1,701
Benefit paid pharmaceuticals	1,887	I	1,887	Ι	396	I	396	2,282
All other pharmaceuticals	Ι	I	Ι	42	1,698	19	1,760	1,760
Total pharmaceuticals	1,887	I	1,887	42	2,094	19	2,156	4,042
Aids and appliances	138	-	139	168	433	29	630	770
Administration	444	172	616	483	Ι	I	483	1,099
Research <sup>(d)</sup>	368	105	473	Ι	61	I	61	534
Other non-institutional	14	95	109	Ι	Ι	Ι	Ι	109
Total non-institutional	9,183	1,800	10,983	1,629	5,114	487	7,230	18,213
Total recurrent expenditure	16,314	6,875	23,189	4,078	6,017	856	10,951	34,140
Capital expenditure	80	899	979	na	na	na	854 <sup>(e)</sup>	1,833
Capital consumption	42	481	523	Ι	I	I	(ŧ)	523
Total health expenditure	16,435	8,255	24,691	na	na	na	11,805	36,495

(new sourn wates, victoria, sourn Australia, western Australia, and Australian Capital 1 erritory) and Work Health Northern 1 erritory, as well as commercial insurers. There is a discontinuity in the private expenditure data for 'other professional services' after 1992–93. Health research expenditure is allocated according to the sectors that actually undertake the research activity, not according to the source of funds. Capital outlays for the non-government sector cannot be allocated according to 'source of funds'. ABS estimates of outlays have been revised because of use of building completion data rather than building approval data (used in previous publications). Private capital consumption (depreciation) expenditure is included as part of recurrent expenditure. (c) (c) (c)

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# **Technical notes**

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

The Australian Institute of Health and Welfare collects information for its estimates of health services expenditure from a wide range of sources. The Australian Bureau of Statistics (ABS), the Commonwealth Department of Health and Family Services (HFS) and State and Territory health authorities provided most of the basic data used in this bulletin.

The term 'recognised public hospital' is used in this bulletin to refer to those acute care hospitals operated by, or on behalf of, State and Territory Governments that are recognised for the purposes of the Commonwealth and State Medicare Agreements.

The 'Medical services' category in Tables 23–25 is expenditure on medical services provided on a fee-for-service basis, and includes medical services provided to private patients in public and private hospitals. It does not include payments made to salaried medical practitioners or visiting medical officers at recognised public hospitals.

The 'Benefit paid pharmaceuticals' sub-category in Tables 23–25 is expenditure on pharmaceuticals for which benefits were paid or payable under the Pharmaceutical Benefits Scheme (PBS) or the Repatriation Pharmaceutical Benefits Scheme (RPBS). It does not include expenditure on similar pharmaceutical items that were dispensed through public hospitals as part of hospital treatment.

The 'All other pharmaceuticals' sub-category in Tables 23–25 is expenditure on pharmaceuticals, other than pharmaceuticals included in the 'Benefit paid pharmaceuticals' sub-category and pharmaceuticals dispensed through public hospitals as part of hospital treatment. The 'Commonwealth' column in Tables 23–25 includes expenditure by the Department of Veterans' Affairs (DVA) on behalf of eligible veterans and their dependents. It also includes, up until 1988–89, expenditure by ACT health services.

The health services expenditure figures shown in Tables 23-25 do not include any parts of expenditure that are primarily of a welfare nature, even where that expenditure has a health component. Also excluded are most costs associated with the training of health personnel in universities. However, in some cases, such as hospital-based nursing training, where the cost of training cannot be separated from the operational costs of the health services concerned, those training costs would be included as part of the operational costs. Further details of the sources and definitions of the health services expenditure categories used in this bulletin are contained in Appendixes A and B of the AIHW publication Australian Health Expenditure 1970-71 to 1984-85 (out of print).

#### **Constant prices**

Constant price values have been calculated using 'average prices' applying in respect of each particular expenditure item in 1989-90. Expenditure values, generally, may be thought of as being derived by expressing the current price value of each component transaction as the product of a price and a quantity. Constant price values, therefore, are derived by substituting for each current price the corresponding price in the base year (1989-90). For the purposes of this analysis, the average prices applying in the base year in respect of each expenditure item have been used, i.e. the proportions and prices of each expenditure item's components have been held constant. Therefore, the term 'constant (average 1989-90) prices' is used to indicate that the constant price measures applied are not the actual prices of the individual component transactions in the base year, but the average prices for the whole expenditure item, based on the mix of component quantities that applied in the base year. In this way, changes in expenditure have been assumed to reflect changes in the quantum of outputs only. (This also assumes that any change in the quality of an output is a component of the quantum change.)

To the extent that changes in the mix of inputs to the different items of expenditure do occur over time, a method of estimating constant price expenditure using fixed weights (such as is adopted in this bulletin) cannot accurately reflect quantum changes. This is particularly important as the time difference between the analysis period and the base year increases. However, the difficulties associated with annual measurement of individual quantum changes means that this is not a feasible alternative and, therefore, fixed weighted deflators provide the best available method of estimating such quantum changes.

#### **Tax expenditures**

Tax expenditures relate to 'those provisions of the Australian taxation law which effectively tax certain classes of taxpayers or particular types of activity differently from the chosen benchmark. These provisions may take the form of tax exemptions, deductions, deferrals, rebates or special rate relief' (Department of the Treasury, 1995).

In the case of health services expenditure, the most important source of tax expenditure since 1983 was the tax rebate in respect of 'medical' expenditure by individuals. Prior to 1983, another important form of tax expenditure was the tax rebate payable in respect of amounts paid to registered health funds for basic hospital and/or medical insurance cover.

The treatment adopted in this bulletin with regard to tax expenditures is to show them in the year in which the related outlays were incurred, rather than the year in which they actually affected taxation revenue. For example, claimed rebatable medical expenditures incurred by taxpayers during 1992-93 result in tax expenditures by the Commonwealth in the 1993-94 tax vear. However, because the health services expenditure that resulted in the liability for the tax expenditures occurred in 1992-93, the related tax expenditures have been included as Commonwealth expenditure and deducted from private expenditure during 1992-93.

Changes in tax expenditures do not necessarily result simply from changes in outlays on health by the recipients of the services-they can also come about because of changes in the tax policy in force at the time. For example, before 1983, a rebate of 30.67 cents in the dollar was allowed for amounts paid to a registered health fund for basic medical and/or hospital insurance cover. That form of rebate, which accounted for tax expenditures of \$547 million in 1982-83, was discontinued in 1983. At the same time, taxpayers who incurred allowable expenditure on a range of concessional expenditure items were able to claim a rebate of 30.67 cents in the dollar for such expenditures where they, in aggregate, exceeded \$1,590 in a year. (In later years this threshold increased to \$2,000 before it was abolished on 1 July, 1985.) Included in those concessional expenditure items were medical expenditures (i.e. the net of any amount recouped or recoverable from any private health insurance or other benefits fund, government body, public authority, society or association); education (subject to a maximum allowable expenditure of \$250 per child); self-education (maximum \$250); rates and land

taxes (maximum \$300); life insurance and superannuation (maximum \$1,200); adoption expenses; and calls paid to afforestation companies.

As well as the substantial fall in tax expenditures on health between 1982-83 and 1983-84, which was directly related to the removal of the tax rebate on registered health fund premiums, the introduction of Medicare also had an effect on tax expenditures through the concessional rebate arrangements. In 1982–83, tax expenditures related to concessional medical expenditure were estimated at \$44 million. In 1983-84, medical-related tax expenditures had fallen to \$21 million. This came about largely due to the reduction of the 'out-of-pocket' medical expenditures incurred by those people who had previously been uninsured and who would have been eligible to claim a concessional rebate, and due to the

re-establishment of the principle of universal access to 'free' public hospital care. Medicare's introduction, therefore, substantially reduced the overall level of non-government sector concessional expenditure, so that the level of tax rebates payable were also reduced from 1983–84 onwards.

In 1985, the concessional expenditure rebates were abolished and a new form of 'medical expenses rebate' introduced. The medical expenses rebate was payable only where an individual taxpayer's net medical expenses, by themselves, exceeded \$1,000. The rate of rebate was initially set at 30 cents in the dollar, and from 1985 gradually fell to its 1994–95 level of 20 cents in the dollar (see *Health Expenditure Bulletin No. 7* for details of rebatable expenditure categories).

#### 2. Definitions, sources and notes price indexes

An implicit price deflator (IPD) is an index obtained by dividing a current price value by its corresponding constant price value. Thus implicit price deflators are derived measures, and are not normally the direct measures of price change by which current price estimates are converted to estimates in constant prices.

See Health Expenditure Bulletin No. 11 for definitions for the various deflators used, other than the relative price index.

The **relative price index** for health is an index of variations in health prices compared with variations in total production prices. The index is calculated by dividing the 'health values' by the 'GDP values', and is expressed as an index with a base year 1990=100.

#### Sources

Implicit price deflator for government final consumption expenditure (GFCE) on health, social security and welfare: ABS, *Australian national accounts: national income and expenditure* (Cat. No. 5206.0).

Implicit price deflator for general government public gross fixed capital expenditure: ABS, Australian national accounts: national income, expenditure and product, June quarter 1994 (Cat. No. 5206.0).

Implicit price deflator for private capital expenditure on nondwelling construction: ABS, *Australian national accounts: national income, expenditure and product* (Cat. No. 5206.0).

Implicit price deflator for the gross domestic product: ABS, Australian national accounts: national income, expenditure and product (Cat. No. 5206.0).

GFCE for hospital and clinical, other health and welfare, total health and welfare indexes: ABS unpublished data. PFCE for doctors, dentists, chemists and other medical professionals indexes: ABS unpublished data. Total CPI: ABS, *Consumer price index* (Cat. No. 6401.0). CPI for the health and personal care

cPI for the health and personal care group for each of the subgroups and sub-components: ABS unpublished data.

AWE: ABS, Average weekly earnings, States and Australia, various issues (Cat. No. 6302.0).

Table 22 in *Health Expenditure Bulletin No.11* lists the areas within the health services expenditure matrix where particular deflators are applied.

# 3. Revisions of definitions and estimates

Estimates of private capital expenditure for 1992–93 and 1993–94 have been revised since the publication of *Health Expenditure Bulletin No.11* because of changes in ABS estimates.

Because of the lack of expenditure data for private hospitals, past estimates of expenditure on private hospitals (particularly expenditure by private individuals) have been based on calculations that use other data, including hospital morbidity data and average private hospital bed-day fee charges for insured persons. With the completion by the ABS, in 1993–94, of the third in a series of annual private hospital surveys, the Institute has begun revising its method of estimating private hospital expenditure.

# 4. Abbreviations and symbols used in tables

na not available

- nec not elsewhere classified
- nil or rounded down to zero
- . not applicable

### 5. Other notes

Figures in the tables in this bulletin may not add up exactly, due to rounding.

Average annual growth rates are calculated as an exponential mean, with the exception of Table 9, where the average annual growth rates are derived from logarithmic regression.

The total CPI number in Table 12 for the period 1974–75 to 1990–91 is re-referenced from the 1984-85 base used in the eleventh series. The new twelfth series CPI, with weights based on household expenditure in 1988-89, was introduced in the September quarter 1992 and linked to the eleventh series CPI at June quarter 1992 (ABS, 1992). The index numbers for 1991-92 to 1994-95 were from ABS Consumer Price Index, September quarter 1993 and March quarter 1996, Cat. No. 6401.0.

### References

Australian Bureau of Statistics. The Australian Consumer Price Index, 12th series review, information paper. Canberra: ABS, September 1992.

Department of the Treasury. Tax expenditures statement. Canberra: AGPS, November 1995.

Taylor R, Salkeld G. Health care expenditure and life expectancy in Australia: how well do we perform? Aust NZ J Public Health Vol. 20, No. 3: 233–40, 1996.

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