

Even in countries with fairly similar approaches to health services provision, rates of health inflation can vary markedly. At one end is New Zealand with a very high excess health inflation rate—averaging 3.6% between 1968 and 1996. At the other extreme is France, which had a negative excess health inflation rate of -0.5% (Table S46, page 408). Australia had an excess health inflation rate of 0.5%, the third lowest for the group.

In order to compare the level of expenditure without the complication of different rates of population growth, it is useful to examine real growth in per person health services expenditure. Australia and the United Kingdom (0.9%) had the second lowest average real growth in per person expenditure between 1960 and 1997. Japan experienced the highest growth of 5.3% per year, and New Zealand's per person health expenditure fell dramatically—a drop of 4.2% in real terms.

5.2 Cost of diseases

This section describes the way total direct healthcare expenditure is distributed among specific disease and injury groups, and by age groups and sex. The AIHW has analysed direct health system costs of disease and injury in Australia for 1993–94, using disease and injury groups defined according to the International Classification of Diseases, 9th Revision (see Box 5.7, page 274). The estimates were derived using a methodology that ensures that they add across disease, age and sex groups to the total Australian health system expenditure by health sector for 1993–94. They provide a description of the utilisation and costs of health services in Australia, as well as a reference source for planners and researchers interested in the costs and utilisation patterns for a particular disease group.

The disease cost estimates allocate over 90% of the total recurrent health expenditure in 1993–94, or just over \$31 billion in total. The main components of health expenditure not yet included in the disease cost estimates are capital expenditure, community health services (apart from specialised mental health services) and public health programs (apart from four cancer public health programs). The estimates have been revised since their inclusion in *Australia's Health 1998*.

The six disease groups that account for the most health expenditure in Australia, in descending order, are:

- cardiovascular diseases \$3.7 billion (11.8% of total health system costs)
- digestive system diseases \$3.7 billion (11.8%)
- mental disorders \$3.0 billion (9.6%)
- musculoskeletal problems \$3.0 billion (9.6%)
- injury and poisoning \$2.6 billion (8.3%)
- respiratory diseases \$2.5 billion (8.0%).

Digestive system diseases are the second most expensive group in part because of the large expenditure on dental services (\$1.8 billion).

The AIHW has published detailed estimates of costs for specific diseases and injuries within four of the six national health priority areas: cardiovascular diseases, cancer, injury and diabetes (AIHW: Mathers et al. 1998, 1999a, 1999b).

Health system costs for mental disorders in 1993–94 are shown in Table 5.10. Including specialised community mental health services, drug and alcohol residential centres and public health expenditure under the National Campaign Against Drug Abuse, the total health system costs of mental disorders are estimated at \$3.0 billion or 9.6% of total health expenditure.

Table 5.10: Mental health: health system costs by health sector, 1993–94 (\$ million)

	Hospital ^(a)	Medical ^(b)	Pharma- ceuticals	Other health services ^(c)	Other ^(d)	All sectors	Per cent of total
Dementia	110	11	2	9	582	714	23.6
Substance abuse disorders	136	46	12	18	136	348	11.5
Schizophrenia	275	26	8	106	40	454	15.0
Other non-drug psychoses	63	5	1	6	53	128	4.2
Affective disorders	217	141	68	70	148	644	21.3
Anxiety disorders	24	102	51	25	37	239	7.9
Personality disorders	24	7	1	12	9	53	1.8
Stress and adjustment disorders	28	27	7	31	19	112	3.7
Mental retardation	16	1	0	3	5	26	0.9
Disorders of psychological development	2	2	0	3	10	16	0.5
Eating disorders	14	3	0	1	4	22	0.7
Disorders of childhood and adolescence	10	9	1	19	16	55	1.8
Behavioural syndromes and other mental disorders	17	53	45	9	50	174	5.8
Unspecified mental disorders, prevention and screening	5	6	2	23	1	37	1.2
Total	941	438	199	334	1,110	3,022	100.0

(a) Public and private acute hospitals, repatriation hospitals and psychiatric hospitals. Excludes public hospital non-admitted services.

(b) Medical services for private patients in hospitals are included under Hospitals.

(c) Includes hospital non-inpatient services, specialised community mental health services, residential and non-residential treatment services run by non-government organisations, and allied health services.

(d) Includes National Drug Strategy funding for prevention, research expenditure and other institutional, non-institutional and administration expenditure. Does not include expenditure for other public health services, non-specialised community health services, ambulances, or medical aids and appliances.

Source: AIHW analysis of health expenditure data.

Asthma is the most recent addition to the list of national health priority areas. Provisional analysis of health system costs for asthma in 1993–94 indicate that it cost \$478 million, of which \$199 million was for pharmaceuticals.

Table 5.11: Diseases and injuries in NHPAs^(a) and musculoskeletal disorders: health system costs^(b) by health sector, 1993–94 (\$ million)

	Hospital ^(c)	Medical ^(d)	Pharma- ceuticals	Other	All sectors
Ischaemic heart disease	574	88	105	127	894
Hypertension ^(e)	55	217	476	84	831
Accidental falls	501	112	32	166	810
Dementia	119	11	2	582	714
Back problems	239	133	62	266	700
Diabetes mellitus ^(f)	201	98	136	247	681
Affective disorders	287	141	68	148	644
Stroke	283	31	13	303	630
Osteoarthritis	301	80	58	185	624
Disorders of muscles, tendons and soft tissue	165	127	60	167	519
Asthma	94	102	199	82	478
Schizophrenia	381	26	8	40	454
Heart failure	157	47	45	162	411
Adverse effects of medical treatment ^(g)	300	38	23	43	403
Road traffic accidents	232	56	16	68	372
Substance abuse disorders	154	46	12	136	348
Chronic obstructive pulmonary disease ^(h)	112	61	66	61	300
Skin cancers	141	112	5	41	298
Anxiety disorders	49	102	51	37	239
Cardiac dysrhythmias ⁽ⁱ⁾	114	36	31	43	224
Peripheral arterial disease	134	17	9	49	209
Colorectal cancer	171	11	3	19	205
High serum cholesterol	6	42	135	16	199
Breast cancer	80	11	16	77	184
Neck problems	54	25	18	62	160
Lung cancer	81	7	3	17	107
Prostate cancer	66	14	8	13	101
All causes	14,062	5,640	4,042	7,653	31,397

- (a) The six National Health Priority Areas are cardiovascular disease, cancer, mental health, injury, diabetes mellitus and asthma.
- (b) Diseases and injuries with health system costs of less than \$150 million not included in this table.
- (c) Public and private acute hospitals, repatriation hospitals and psychiatric hospitals. Includes public hospital non-admitted services. For mental health services, also includes specialised community mental health services and drug and alcohol residential treatment services.
- (d) Medical services for private patients in hospitals are included under Hospitals.
- (e) Hypertension comprises high blood pressure and hypertensive heart and renal disease.
- (f) Includes health system costs of cardiovascular disease and complications due to diabetes.
- (g) Part of the injury priority area; includes surgical and medical misadventure, and adverse effects of drugs in therapeutic use.
- (h) Chronic bronchitis and emphysema.
- (i) Inflammatory heart disease comprises cardiomyopathy, myocarditis, endocarditis, pericarditis and other diseases of the pericardium and endocardium.

Source: AIHW unpublished analysis of disease costs.

Table 5.11 ranks the health system costs of diseases and injuries in the six National Health Priority Areas, together with musculoskeletal disorders. Other diseases have not been included in this table. Ischaemic heart disease and hypertension are the leading causes of health system expenditure, together accounting for 5.5% of total health expenditure. Following these are accidental falls, dementia and back problems, then diabetes, affective disorders and stroke. The majority of health system costs for dementia are for nursing home patients. Osteoarthritis costs the Australian health system almost as much as stroke.

Total health system costs for females are 32% higher than those for males: \$17.9 billion compared with \$13.5 billion. Costs are higher for females than males for all disease groups apart from injury and congenital anomalies. Total health system costs per person in 1993–94 ranged from a minimum of around \$800 for boys aged 5–14 years to \$7,500 for women aged 75 years and over. The male–female difference in per person costs is greatest in the peak reproductive years, where average annual costs for women aged 25–34 years were \$1,716, almost double the average cost of \$888 for men of the same age.

It should be emphasised that this analysis does not attempt to estimate the total economic impact of diseases in the Australian community and that, as well as the health system costs described here, there are substantial costs relating to absenteeism, lost productivity, the burden on carers and family, and lost quality and quantity of life.

5.3 Private health insurance

Funding of health services by health insurance funds

The introduction of the Private Health Insurance Incentives Scheme (PHIIS) and its replacement by the 30% rebate on premiums substantially altered the role of the health insurance funds in the funding of health services after 1996–97. Total recurrent health expenditure in 1997–98 was \$43,994 million. Of this, \$4,685 million was directed through private health insurance funds. However, the Commonwealth Government subsidised \$459 million of that expenditure through the PHIIS.

The PHIIS was paid in two ways—either as a direct subsidy (in which case the private health insurance fund would charge the contributor a reduced premium and claim the subsidy from the Commonwealth) or as a rebate through the taxation system (in which case the contributor would be charged the full premium and would be reimbursed when he or she lodged a taxation return). A total of \$252 million was paid through the direct subsidy during 1997–98 and \$207 million was claimed through the taxation system.

As a result of the PHIIS, the amount paid from non-government sources through the health insurance funds was \$4,434 million. The \$207 million claimed through the taxation system meant that the net, unsubsidised amount paid by health insurance funds was \$4,226 million. This represented 9.6% of recurrent health expenditure in 1997–98. By 1998–99, total expenditure through private health insurers had increased to \$4,840 million. The net expenditure by the funds (after deduction of Commonwealth subsidies) was \$3,785 million (Table 5.12, page 253).