E Health preface

Health services are concerned with promoting, restoring and maintaining a healthy society. They involve illness prevention, health promotion, the detection and treatment of illness and injury, and the rehabilitation and palliative care of individuals who experience illness and injury. Broadly defined, the health system includes a range of activities that raise awareness of health issues, thereby reducing the risk and onset of illness and injury.

Health services in Australia are delivered by a variety of government and non-government providers in a range of service settings (box E.1). The Report primarily concentrates on the performance of public hospitals (chapter 9), primary and community health services (including general practice) (chapter 10) and the interactions among different service mechanisms for dealing with two health management issues: mental health and breast cancer (chapter 11). These services are selected for reporting as they:

- make an important contribution to the health of the community
- are a priority of governments, for example, they fall within the National Health Priority Areas
- represent significant components of government recurrent expenditure on health care
- have common objectives across jurisdictions.

The Australian, State, Territory and local governments spent $33.1 billion on public (non-psychiatric) hospitals, medical services (including payments to general practitioners [GPs] and other specialist practitioners) and community and public health in 2003-04. These three areas of health care activity accounted for 65.4 per cent of government recurrent health expenditure in 2003-04 (table EA.4). There are no specific estimates of government expenditure on the detection and management of breast cancer. Government recurrent expenditure on specialist mental health services was estimated to be around $3.4 billion in 2003-04 (tables 11A.21 and 11A.22). Some of this expenditure was on psychiatric care provided by public (non-psychiatric) hospitals (chapters 9 and 11).

Estimates of government expenditure on health care provision commonly include (by definition) high level residential aged care services and patient transport services (ambulance services including pre-hospital care, treatment and transport services). These services are not covered in the health chapters in this Report, but are reported separately in chapters 8 (‘Emergency management’) and 12 (‘Aged care’).

Box E.1 Some common health terms

Community health services: health services for individuals and groups delivered in a community setting, rather than via hospitals or private facilities.

General practitioners: medical practitioners who, for the purposes of Medicare, are vocationally registered under s. 3F of the *Health Insurance Act 1973* (Cwlth), hold fellowship of the Royal Australian College of General Practitioners or equivalent, or hold a recognised training placement.

Medicare: covers Australian Government funding of private medical and optometrical services (the Medicare Benefits Schedule [MBS]). Some people use the term to include other forms of Australian Government funding — for example, funding of selected pharmaceuticals (under the Pharmaceutical Benefits Scheme [PBS]) and public hospital funding (under the Australian Health Care Agreements [AHCAs]) — aimed at providing public hospital services free of charge to public patients.

Primary health care: services that:

- provide the first point of contact with the health system
- have a particular focus on prevention of illness and/or early intervention
- are intended to maintain people’s independence and maximise their quality of life through care and support at home or in local community settings.

Public health: an organised social response to protect and promote health, and to prevent illness, injury and disability. The starting point for identifying public health issues, problems and priorities, and for designing and implementing medical interventions, is the population (or subgroups). Public health is characterised by a focus on the health of the population (and particular at-risk groups) and complements clinical provision of health care services.

Public hospital: a hospital that provides free treatment and accommodation to eligible admitted people who elect to be treated as public patients. It also provides free services to eligible non-admitted patients and may provide (and charge for) treatment and accommodation services to private patients. Charges to non-admitted patients and admitted patients on discharge may be levied in accordance with the AHCAs (for example, charges for aids and appliances).

Other major areas of government involvement in health provision not covered in the health chapters, or elsewhere in the Report, include:

- public health programs, other than those for breast cancer and mental health
- funding for specialist medical practitioners.

A range of government services — such as education, public housing, sanitation and water supply — also influence health outcomes. These are not formally part of Australia's health system and are not the subject of the health chapters. Education (chapters 3 and 4) and public housing (chapter 16), however, are included in other chapters of the Report.

Indigenous people and people in rural and remote areas often have different health care needs and may experience poorer health outcomes than those of the general community. It is a priority of the Review to improve reporting on the performance of government provided health care services for Indigenous people and for residents in regional Australia.

The remainder of this preface provides a summary of the nature of Australia's health care system, an overview of Indigenous health, and data on health outcomes. It also foreshadows future directions in reporting. A list of attachment tables for this preface is provided at the end of the preface. Supporting tables are identified in references throughout the chapter by an 'A' suffix (for example, table EA.3 is table 3 in the attachment). Supporting tables are provided on the CD‑ROM enclosed with the Report.

Profile of health services

This section provides a brief overview of Australian health services as a whole. More detailed descriptions of public hospitals, primary and community health services, and mental health and breast cancer services are provided in chapters 9, 10 and 11 respectively.

Roles and responsibilities

The Australian Government's health services activities include:

- funding public hospital services, GPs, some specialist medical services and public health programs
- funding the PBS
- funding high level residential aged care services
- funding private health insurance rebates
- funding Indigenous-specific primary health
- promulgating and coordinating health regulations

- undertaking health policy research and policy coordination across the Australian, State and Territory governments
- funding hospital services and the provision of other services through the Department of Veterans' Affairs.

State and Territory governments contribute funding for, and deliver a range of, health care services, such as:

- public hospital services
- public health programs (such as health promotion programs and disease prevention)
- community health services (including services specifically for Indigenous people)
- public dental services
- mental health programs
- patient transport
- the regulation, inspection, licensing and monitoring of premises, institutions and personnel
- health policy research and policy development
- specialist palliative care.

Local governments are generally involved in environmental control and a range of community-based and home care services, although the exact nature of their involvement varies across jurisdictions. The non-government sector too plays a significant role in the health system, delivering general practice and specialist medical and surgical services, dental services, a range of other allied health services (such as optometry and physiotherapy), private hospitals and high level residential aged care services.

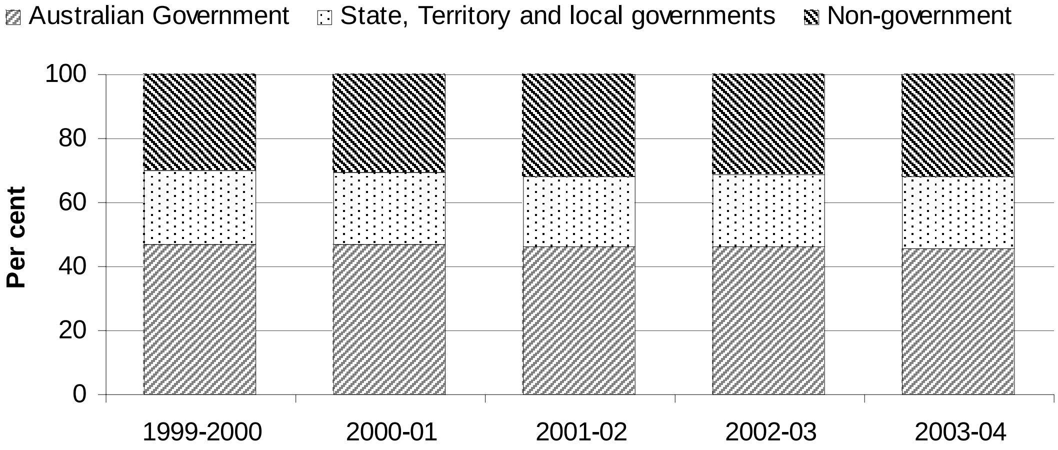
Funding

Funding the components of Australia's health care system is a complicated process. The Australian Government subsidises many of the services provided by the non-government sector (mostly through the MBS, the PBS and the private health insurance rebate) and contributes funding to a number of nationally coordinated public health programs. It also provides funding under the AHCAs to the states and territories for public hospital services.

State and Territory governments, through income raised by taxes and from both general and specific purpose grants received from the Australian Government, contribute funds to public health, community health services and public hospitals (through casemix and other payments), which in turn fund specialists (through limited fee-for-service or sessional arrangements). Private individuals, health insurance funds and other non-government institutions also contribute funding to a range of health care providers, both government and non-government.

The Australian, State, Territory and local governments spent $53.2 billion on health services (67.9 per cent of total health expenditure) in 2003-04. The Australian Government accounted for the largest proportion of health care expenditure in Australia — $35.7 billion (or 45.6 per cent of the total) in 2003-04. State, Territory and local governments contributed $17.5 billion (or 22.3 per cent of total health expenditure) in that year. These shares have remained relatively constant over the last five years. The remainder was paid by individuals, health insurance funds and workers compensation and compulsory motor vehicle third party insurance providers (figure E.1 and table EA.1).

Figure E.1 **Total health expenditure, current prices, by source of funds**[a, b, c, d, e]



[a] Includes recurrent and capital expenditure. [b] Includes expenditure on high level residential aged care (reported in chapter 12) and ambulance services (reported in chapter 8). [c] Expenditure by Australian Government and non-government sources has been adjusted for tax expenditure in relation to private health incentives claimed through the taxation system. [d] 'Non-government' includes expenditure by individuals, health insurance funds, workers compensation and compulsory motor vehicle third party insurers. [e] Expenditure for 2003-04 is based on preliminary estimates by the Australian Institute of Health and Welfare (AIHW) and the Australian Bureau of Statistics (ABS).

Source: AIHW (2005b); table EA.1.

Size and scope of sector

Total expenditure (recurrent and capital) on health care services in Australia was estimated to be $78.6 billion in 2003-04 (table EA.1). This total was estimated to account for 9.7 per cent of gross domestic product in 2003-04, up from 9.5 per cent in 2002-03 and 8.3 per cent in 1993-94 (AIHW 2005b). This indicates that health expenditure grew faster than the whole economy over the decade to 2003-04.

The growth of total health expenditure over the past decade was largely the result of an increase in expenditure by the Australian, State, Territory and local governments, which grew proportionally faster than expenditure by non-government sources. Between 1993-94 and 2003-04, the average annual rate of growth in real expenditure was 5.4 per cent for the Australian Government, 5.8 per cent for state, territory and local governments, and 2.8 per cent for non-government sources (AIHW 2005b).

The introduction of programs supporting private health insurance was a significant factor in the increase in expenditure by the Australian Government in the late 1990s. On 1 January 1999, the Australian Government replaced the Private Health Insurance Incentive Scheme with a 30 per cent rebate on private health insurance premiums. Australian Government expenditure on the rebate has increased each year from $1.6 billion in 1999-2000 to $2.5 billion in 2003-04 (AIHW 2005b).

Public hospitals were the single largest item of recurrent health care expenditure by government and non-government sources in 2003-04. Total real expenditure on public hospitals was $19.6 billion of which governments paid $18.2 billion (in 2002-03 dollars)[1] (figure E.2). Public hospitals accounted for 37.0 per cent of government recurrent expenditure on health care services in 2003-04. Medical services accounted for $9.8 billion of government expenditure (20.0 per cent of total health expenditure) and pharmaceuticals accounted for $5.7 billion (11.6 per cent) (table EA.2).

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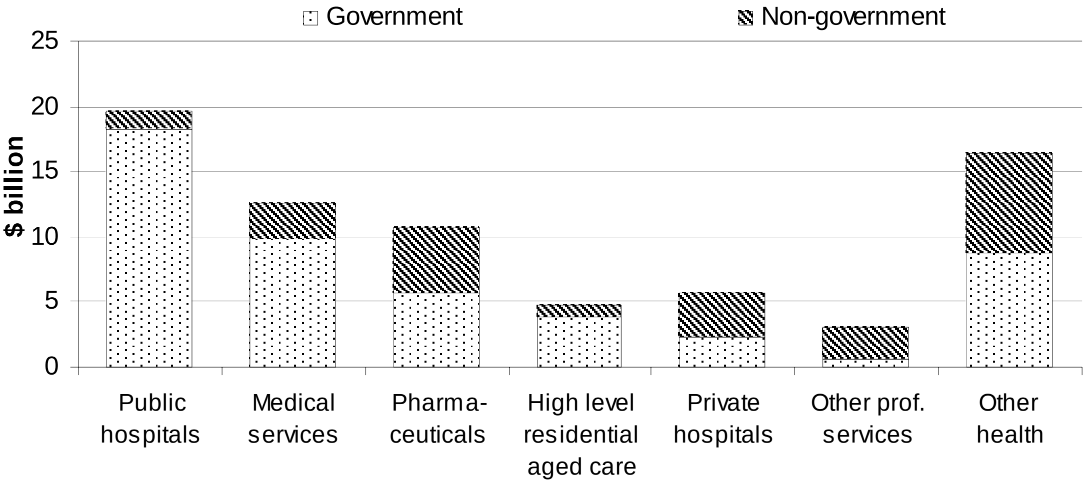
[1] The published source data from the AIHW use 2002-03 as the base year. The same base year is used here for consistency.

Figure E.2 **Recurrent health expenditure, by area of expenditure, 2003-04 (2002-03 dollars)**[a, b, c, d]



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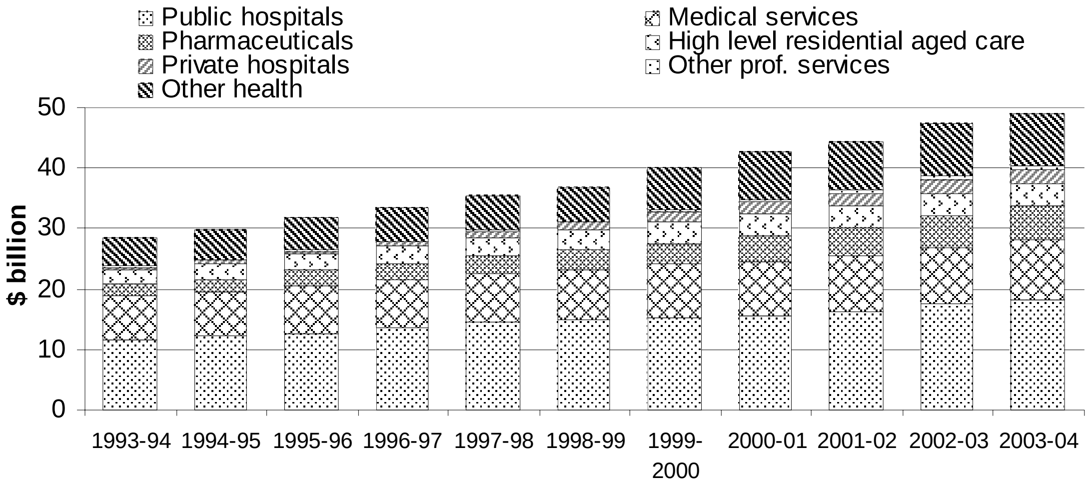
[a] Almost all expenditure on medical services relates to services provided by practitioners on a fee-for-service basis, including those provided to private patients in hospitals. Excluded are the medical component of hospital care provided to public hospital inpatients and the outpatient medical services provided at public hospitals. [b] Pharmaceuticals include (but are not limited to) those provided under the PBS. [c] High level residential aged care services cover services to those residents requiring and receiving a level of care that falls within one of the four highest levels of care. These services are commonly classified as health services expenditure, but are discussed separately in this Report (chapter 12). [d] Other health expenditure includes community and public health services, dental services, funding for aids and appliances, administration, ambulance services (reported in chapter 8), research and public psychiatric hospitals.

Source: AIHW (2005b); tables EA.2 and EA3.

The relative share of government recurrent health expenditure allocated to public hospitals has fallen since 1993-94, when it was 41.3 per cent, to 37.0 per cent in 2003-04. This decline reflects the more rapid growth over the decade of government expenditure on private hospitals and pharmaceuticals (figure E.3 and table EA.2). The average annual growth rate of government real recurrent expenditure on private hospitals was 22.4 per cent between 1993-94 and 2003-04, compared with 11.4 per cent for pharmaceuticals and 4.5 per cent for public hospitals (AIHW 2005b). Policy measures introduced over the decade that were aimed at restraining growth in government health expenditure included the restriction of Medicare provider numbers, initiatives to encourage the use of generic pharmaceutical brands, and increases in co-payments for pharmaceuticals.

The high annual growth in expenditures on pharmaceuticals and private hospitals meant they also grew as a proportion of government health care expenditure over the period 1993-94 to 2003-04. Government expenditure on pharmaceuticals increased from 6.8 per cent of government health expenditure in 1993-94 to 11.6 per cent in 2003-04, while expenditure on private hospitals increased from 1.1 per cent to 4.6 per cent over the same period (table EA.2).

Figure E.3 **Government recurrent expenditure, by area of expenditure (2002-03 dollars)**[a, b, c, d, e]



[a] Pharmaceuticals include (but are not limited to) those provided under the PBS. [b] Almost all expenditure on medical services relates to services provided by practitioners on a fee-for-service basis, including those provided to private patients in hospitals. Excluded are the medical component of hospital care provided to public hospital inpatients, and the outpatient medical services provided at public hospitals. [c] High level residential aged care is reported in chapter 12. [d] Other health expenditure includes community and public health services, funding for aids and appliances, administration, private hospitals, ambulance services (reported in chapter 8), research, dental services and public psychiatric hospitals. [e] Real (constant price) estimates have been calculated by applying the AIHW total health price index (table EA.8).

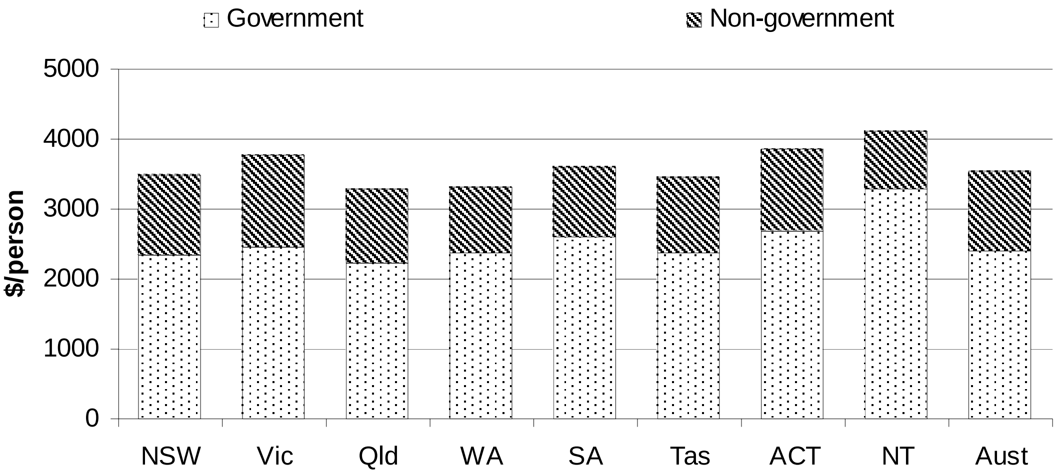
Source: AIHW (2005b); table EA.2.

Health expenditure per person

Health expenditure per person in each jurisdiction is affected by different policy initiatives and socioeconomic and demographic characteristics. Nationally, total health expenditure (recurrent and capital) per person in 2003-04 was $3777 (table EA.5). The average annual growth rate in average health expenditure per person (expressed in 2002-03 dollars) from 1999-2000 to 2003-04 was 3.9 per cent (table EA.5). Average health expenditure per person in Australia increased from $3243 in 1999-00 to $3777 in 2003-04 (in 2002-03 dollars) (table EA.5).

Government real recurrent health expenditure per person in Australia increased from $1988 in 1998-99 to $2387 in 2002-03 (in 2002-03 dollars). Non-government recurrent expenditure per person in Australia rose from $949 in 1998-99 to $1142 in 2002-03 (in 2002-03 dollars) (figure E.4 and table EA.6). Information on expenditure per person excluding high level residential aged care is available in table EA.7.

Figure E.4 **Recurrent health expenditure per person by source of funds, 2002-03[a, b, c]**



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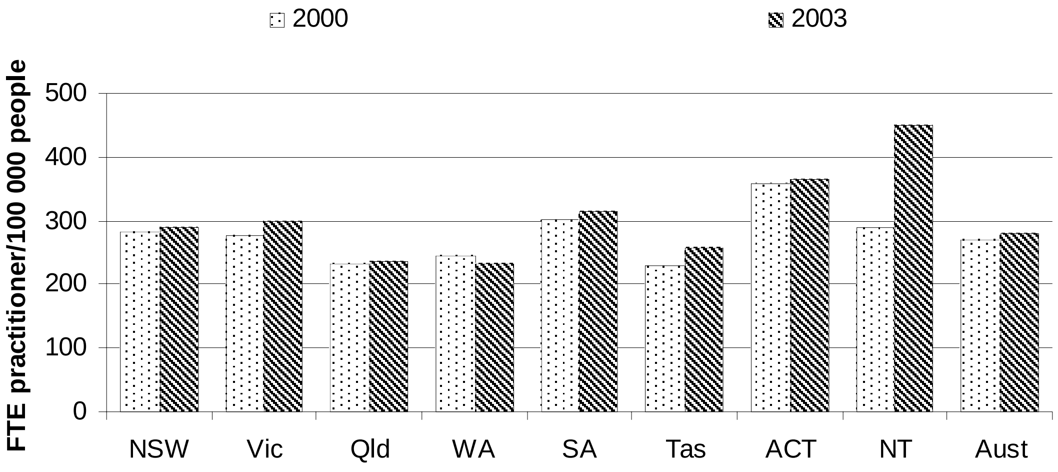
[a] Preliminary data. [b] Includes expenditure on high level residential aged care (reported in chapter 12) and ambulance services (reported in chapter 8). [c] Government expenditure includes expenditure by the Australian, State, Territory and local governments.

Source: AIHW (2005b); table EA.6.

Health workforce

In 2003, there were 56 207 registered medical practitioners in Australia currently working in medicine. A further 841 were in the medical labour force but on extended leave or looking for work in the medical labour force. The majority of employed practitioners working in medicine were clinicians (92.2 per cent), of whom 42.3 per cent were primary care practitioners (mainly general practitioners), 34.9 per cent were specialists and 22.8 were either specialists-in-training or hospital non-specialists (AIHW 2005c). The number of full time equivalent (FTE) practitioners per 100 000 people by jurisdiction is illustrated in figure E.5.

Figure E.5 **Employed medical practitioners**[a]

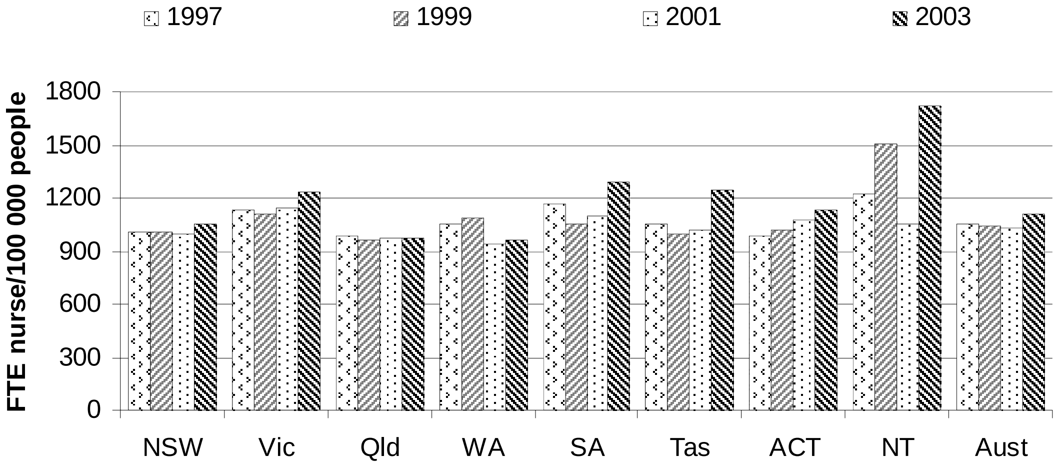


[a] FTE practitioner rate (per 100 000 people) based on a 45-hour week.

Source: AIHW (2005c); table EA.9.

The number of FTE nurses per 100 000 population by jurisdiction is illustrated in figure E.6. The increase in employed nurses in the NT arose from both an increase in the number of nurses employed and an increase in average hours worked (AIHW 2005d).

Figure E.6 **Employed nurses**[a]



[a] FTE nurse rate (per 100 000 people) based on a 35-hour week.

Source: AIHW (2005d); table EA.10.

Overview of Indigenous health

The Steering Committee has placed a high priority on reporting on government services to Indigenous people. Data on health outcomes and the provision of health services for Indigenous people are included where possible in this Report. This overview is designed to assist interpretation of these data and provide a broader understanding of Indigenous health issues.

Australian Indigenous people are more likely to experience disability and significantly lower quality of life due to poorer health, and to have shorter life expectancies than the rest of the Australian population (SCRGSP 2005). These patterns are reflected in Australian data on: mortality, life expectancy and birthweights (later in this preface); hospital separation rates; hospitalisation rates for diabetes, assault and infectious pneumonia; fetal, neonatal and perinatal death rates (chapter 9); and suicide (chapter 11).

Recent publications such as *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples* (ABS and AIHW 2005) and *Overcoming Indigenous Disadvantage: Key Indicators 2005* (SCRGSP 2005) include more comprehensive data on the health status of Indigenous people and Indigenous health-related factors.

Contributing factors

Many interrelated factors contribute to the poor health status of Indigenous people relative to that of other Australians, including cultural, socioeconomic, geographic and environmental health factors. Recent reports have highlighted:

- language and cultural barriers to accessing health and health-related services — in 2002 approximately 11 per cent of Indigenous people aged 18 years and over reported difficulties understanding or being understood by service providers. Indigenous people living in remote areas were more likely to report experiencing difficulties than those in non-remote areas (ABS and AIHW 2005)
- relatively low education levels — nationally in 2004, Indigenous students were around half as likely to continue to year 12 as non-Indigenous students (SCRGSP 2005)
- relatively low employment and income levels that lead to financial barriers to accessing health services — in 2002, the full time employment rate for Indigenous people was much lower than that for non-Indigenous people for both males and females. Both household and individual incomes were lower on average for Indigenous people than for non-Indigenous people (SCRGSP 2005)

- relatively high imprisonment rates — after adjusting for age differences, Indigenous people were 11 times more likely than other Australians to be imprisoned at 30 June 2004 (SCRGSP 2005)
- relatively high rates for health risk factors such as obesity, smoking, harmful alcohol use, substance abuse and violence — in 2002, 51 per cent of Indigenous people aged 15 years and over claimed to be cigarette smokers. Seventeen per cent of Indigenous men and 13 per cent of Indigenous women reported risky alcohol consumption. During 2002-03, Indigenous people were more than four times as likely to be in hospital for alcohol-related mental and behavioural disorders than other people (SCRGSP 2005)
- geographic distance to health services, particularly in remote and very remote areas — in 2001, 606 discrete Indigenous communities were located 25 kilometres or more from the nearest primary health care centre, and 943 communities were 50 kilometres or more from the nearest acute care hospital (ABS and AIHW 2005)
- inadequate and overcrowded housing, particularly in remote and very remote regions — in 2002, 26 per cent of Indigenous people aged 15 years and over (72 600 people) lived in overcrowded households (SCRGSP 2005).

These influences on the health status of Indigenous people vary across regions and across urban, rural and remote areas. Geographic and environmental health factors, for example, are less relevant in urban areas (ABS and AIHW 2005). The extent to which differences across jurisdictions in the reported health outcomes for Indigenous people can be attributed to the performance of government funded health services alone is limited, given the complexity of these other influences on Indigenous health, and ongoing data quality problems (discussed below).

In addition, a wide range of government provided or funded services (other than health services) seek to address the environmental, socioeconomic and other factors that affect Indigenous health. These services include government schools, housing, justice and correctional services, which are discussed elsewhere in this Report. The Steering Committee publication, *Overcoming Indigenous Disadvantage: Key Indicators 2005* (SCRGSP 2005), examines these and other multiple contributors (and their complex cross-links) to health outcomes for Indigenous people.

Government policy and programs

The majority of government expenditure on Indigenous health is made through mainstream health programs (AIHW 2005a). In addition, the Australian, State and Territory governments fund Indigenous-specific health programs and undertake coordination and research activities. Most Australian Government expenditure on Indigenous-specific health programs is directed to Indigenous-specific primary health. State and Territory governments fund a range of community and public health programs that specifically target Indigenous people within their jurisdictions (chapter 10).

Agreements on Aboriginal and Torres Strait Islander Health (framework agreements) have been established in each State and Territory between the Australian, State and Territory governments and the community sector. The agreements promote a partnership approach and commit signatories to work together to:

- increase the level of resources allocated to reflect the level of need
- plan jointly
- improve access to both mainstream and Indigenous-specific health and health related services
- improve Indigenous health data collection and evaluation.

At the national level, the National Aboriginal and Torres Strait Islander Health Council provides policy advice to the Australian Government Minister for Health on Indigenous health issues. The Council has overseen the development of the National Strategic Framework for Aboriginal and Torres Strait Islander Health, which all health ministers endorsed at the July 2003 Australian Health Ministers Conference. This framework outlines agreed principles and the following nine key result areas for jurisdictions and Indigenous-specific primary health:

- community controlled primary health care
- a health system delivery framework to improve the responsiveness of both mainstream and Indigenous-specific health services to Indigenous health needs
- a competent health workforce with appropriate skills and training in both mainstream and Indigenous-specific health services
- emotional and social wellbeing, focusing on mental health, suicide, family violence, substance misuse and male health
- environmental health, including safe housing, water, sewerage and waste disposal
- wider strategies that have an impact on health in portfolios outside the health sector, such as education, employment and transport
- data, research and evidence to improve information on health service effectiveness in meeting the needs of Indigenous Australians

- resources and finances commensurate with Indigenous health needs, the cost of delivering services and community capacity to deliver health outcomes
- accountability of health services to communities and governments.

Each State and Territory is developing an implementation plan under the framework. These plans detail information on existing and planned action by each government to improve health outcomes for Indigenous people over the next five years. The plans describe programs and policy approaches which are the primary responsibility of each government as well as their contributions to multilateral effort. Each jurisdiction will report to health ministers on progress under the plan every year and on the contribution to multilateral effort every two years.

The National Strategic Framework is complemented by a National Strategic Framework for Aboriginal and Torres Strait Islander Mental Health and Social and Emotional Wellbeing 2004–2009 (SEWB Framework), which was agreed by the Australian Health Ministers Advisory Council in March 2004. The SEWB Framework sits within the context of the National Strategic Framework for Aboriginal and Torres Strait Islander Health and the Third National Mental Health Plan. For a discussion of the Third National Mental Health Plan see chapter 11.

Expenditure

It is not always possible to make accurate estimations of health expenditure for Indigenous people and their corresponding service use. For example, Indigenous status is not always clearly stated or recorded. Data on Indigenous status is often unavailable for privately funded services (although it is available for many publicly funded health services). The scope and definition of health expenditures also have some limitations. Other (non-health) agency contributions to health expenditure, such as those incurred within education departments and prisons are not included. There may also be some inconsistencies across data providers resulting from limitations of financial reporting systems and different reporting mechanisms (AIHW 2005a).

The most recent estimates of health services expenditure for Aboriginal and Torres Strait Islander peoples are for 2001-02 (AIHW 2005a). Total recurrent government and non-government expenditure on health services for Indigenous people was estimated at $1788.6 million in 2001-02. This was equivalent to $3901 per Indigenous person compared with $3308 per non-Indigenous person (table E.1). Because Indigenous people relied heavily on publicly funded health care providers, government expenditures were much higher for them than for other people — $3614 per person compared with $2225 (AIHW 2005a). Expenditure per person was higher for Indigenous people than non-Indigenous people for admitted patient services in public hospitals and for non-admitted patient services in hospitals. It was also higher for community health services. Expenditure per person was lower for Indigenous people than non-Indigenous people for admitted patient services in private hospitals, medical services, dental and other professional services, pharmaceuticals, aids and appliances and for services for older people (table E.1).

Table E.1 **Total expenditure on health, Indigenous and non-Indigenous people, by type of health good or service, current prices, Australia, 2001-02[a]**

	Total expenditure ($ million)			*Expenditure per person ($)*		
Health good or service type	Indigenous	Non-Indigenous	Indigenous share (%)	Indigenous	Non-Indigenous	Ratio
Hospitals	849.5	21 456.9	3.8	1 852.75	1 132.01	1.64
Admitted patient services	682.5	17 927.4	3.7	1 488.38	945.80	1.57
Private hospital	11.5	5 057.1	0.2	25.08	266.80	0.09
Public hospital	671.0	12 870.2	5.0	1 463.30	679.00	2.16
Non-admitted patient services	142.4	3 116.5	4.4	310.57	164.42	1.89
Emergency departments	34.6	615.7	5.3	75.51	32.48	2.32
Other services	107.8	2 500.8	4.1	235.06	131.94	1.78
Public (psychiatric) hospitals	24.7	413.0	5.6	53.80	21.79	2.47
Medical services	99.6	11 112.5	0.9	217.19	586.27	0.37
Medicare benefit items	75.9	9 185.4	0.8	165.47	484.60	0.34
Other	23.7	1 927.2	1.2	51.72	101.67	0.51
Community health services[b, c]	439.9	2 810.5	13.5	959.30	148.27	6.47
Dental services[b]	21.8	3 734.2	0.6	47.59	197.01	0.24
Other professional services	16.9	2 252.4	0.7	36.76	118.83	0.31
Pharmaceuticals	66.2	9 011.6	0.7	144.36	475.43	0.30
Benefit-paid[d]	42.3	5 471.8	0.8	92.20	288.68	0.32
Other pharmaceuticals	23.9	3 539.8	0.7	52.16	186.75	0.28
Aids and appliances	15.8	2 474.0	0.6	34.51	130.52	0.26
Services for older people	49.9	4 591.6	1.1	108.83	242.24	0.45
Patient transport	62.8	892.7	6.6	136.95	47.09	2.91
Public health activities	72.5	1 029.9	6.6	158.15	54.33	2.91
Other health services (nec)	50.6	1 458.9	3.4	110.44	76.97	1.43
Health administration (nec)	43.1	1 883.6	2.2	93.99	99.37	0.95
Total	**1 788.6**	**62 708.9**	**2.8**	**3 900.83**	**3 308.35**	**1.18**

[a] Total expenditure by type of health good or service is the same as total funding. [b] Community health services include State and Territory government expenditure on dental services. [c] Includes $186.3 million in OATSIH expenditure through Indigenous-specific primary health care services. The Indigenous ratio for the non-Indigenous-specific primary health care services component of community health is estimated at 4.06:1 and for the non-Indigenous-specific primary health care services component it is estimated at 1.07:1. [d] Includes estimates of benefits through the PBS and RPBS.

Source: AIHW (2005a).

In 2001-02, governments are estimated to have provided 92.7 per cent of the funding for expenditure on health goods and services for Indigenous people. States and territories contributed 49.5 per cent and the Australian Government, an estimated 43.1 per cent. Non-government sources such as injury compensation insurers, private health insurers and out-of-pocket payments supported the remaining funding by users of services (AIHW 2005a).

The vast majority of health expenditure on Indigenous people was allocated through mainstream health programs — admitted and non-admitted patient services, community health services, medical and pharmaceutical health services, and public health services. A small proportion of health expenditure was allocated through programs directly targeting Indigenous people, the most significant being the Indigenous-specific primary health care services (formerly known as Aboriginal Community Controlled Health Services [ACCHSs]).

About 70.5 per cent of expenditure on health goods and services for Indigenous people were provided through State and Territory and local government programs (table E.2). Almost half (47.5 per cent or $849.5 million) was allocated to services provided by hospitals (AIHW 2005a). Programs managed by the Australian Government, including Medicare and the PBS, accounted for nearly a quarter of expenditure (23.4 per cent). Non-government health services accounted for 6.2 per cent of expenditure (table E.2), which comprised principally dental services, non-benefit pharmaceuticals, and aids and appliances (AIHW 2005a).

Indigenous people’s use of primary, secondary and tertiary health services differed from that of non-Indigenous people. Primary health services are those provided to entire populations (community health services and public health activities) and also those provided in, or flowing from, a patient-initiated contact with a health service. Secondary and tertiary services are those generated within the system by, for example, referral or hospital admission (AIHW 2005a). Average expenditure per person for Indigenous Australians was higher for both primary and secondary/tertiary care services than it was for non-Indigenous Australians. Higher Indigenous spending on primary care services came from a much higher use of community health services by Indigenous people. The higher Indigenous spending on secondary/tertiary services was largely in hospitals (AIHW 2005a).

Table E.2 Expenditure on health for Indigenous people, by program, 2001-02

Program responsibility	*Total expenditure ($ million)*	*Per cent of total*
Through State and Territory and local government programs[a]	1 260.5	70.5
Through Australian Government programs[b]	418.1	23.4
Australian Government Health and Ageing portfolio programs	408.8	22.9
Medicare and PBS[b]	118.4	6.6
Indigenous-specific programs[c]	218.3	12.2
Other Health and Ageing portfolio programs	72.1	4.0
Department of Veterans' Affairs programs	9.3	0.5
RPBS	1.3	0.1
Other DVA programs	8.1	0.5
Non-government health services[d]	110.0	6.2
Total	**1 788.6**	**100.0**

[a] Includes Australian Government direct expenditure of $9.1 million on public hospitals. [b] Patient co-payments of $10.8 million under Medicare and PBS are included. [c] Excludes benefits paid for medical services under exclusions from Section 19(2) of the *Health Insurance Act 1973* and for pharmaceuticals under Section 100 of the *National Health Act 1953* in respect of remote area AHSs. [d] Includes private hospital services, dental services, other professional services and health aids and appliances.

Source: AIHW (2005a).

Self-assessed health

In the 2002 ABS National Aboriginal and Torres Strait Islander Social Survey (NATSISS), around 42 per cent of Indigenous people aged 18 years or over reported their health as very good or excellent, 33 per cent reported their health as good and 25 per cent reported their health as fair or poor. Taking into account differences in age structure, Indigenous people were twice as likely to report their health as fair or poor, than non-Indigenous Australians (ABS and AIHW 2005).

Data quality

Good quality data are needed to assess the effectiveness of programs and to evaluate policies designed to improve health services and outcomes for Indigenous people. Despite recent improvements, the quality of the information and estimates on Indigenous health expenditures is limited by underlying data and the calculation methodology. Some of the problems associated with Indigenous health data are outlined in ABS (2004a), and ABS and AIHW (2005) including:

- Indigenous people are not always accurately or consistently identified in administrative health data collections (such as hospital records and birth and death registrations), given variation in definitions, different data collection methods and inaccurate or incomplete recording of Indigenous status.

- The ABS has introduced a program of three yearly Indigenous household surveys with sample sizes designed to support the production of reliable state and territory level data, so every three years, some health status and health risk factors are measured. Every six years, more detailed health status information is collected, together with health service use, health actions, health related aspects of lifestyle and other health risks. Other health related surveys, which may include an Indigenous identifier, do not necessarily provide reliable data on Indigenous people, because of small sample size, geographic coverage or survey design (although considerable improvement has been made in these areas in recent years).
- Inconsistent data definitions and differences in the accuracy of identifying Indigenous status have lead to problems making comparisons between jurisdictions, and comparisons over time.
- Experimental estimates of the Indigenous population are re-based by the ABS every five years to take account of unexplained population growth (that is, other than natural increase). This requires re-estimation of various rates and rate ratios.

The Aboriginal and Torres Strait Islander Health Performance Framework has been developed to support the implementation of the National Strategic Framework for Aboriginal and Torres Strait Islander Health (see above). It will provide the basis for measurement of the impact of the National Strategic Framework. As part of the development of the health performance framework, key priorities for data development will be identified to support an ongoing work program of data improvements.

In existing data collections, agencies such as the ABS and the AIHW have identified jurisdictions with acceptable Indigenous data quality for particular data collections. These judgments have informed the presentation of Indigenous health data in this Report.

Framework for measuring the performance of the health system

Government involvement in health services is predicated on the desire to improve the health of all Australians and to ensure equity of access (box E.2). Governments use a variety of services in different settings to fulfil these objectives.

Measuring the effectiveness, equity and efficiency of Australia’s health system is a complex task. It must account for the performance of a range of services delivered (such as prevention and medical intervention) and of service providers (such as community health centres, GPs and public hospitals, and account for the overall outcomes generated by the health system. The appropriate mix of services — including the prevention of illness and injury, and medical treatment (prevention versus medical intervention) — and the appropriate mix of service delivery mechanisms (community-based versus hospital-based) play an important role in determining outcomes. Also relevant are factors external to the health system, such as the socioeconomic and demographic characteristics of the population, infrastructure and the environment.

Box E.2 **Overall objectives of the health system**

Government involvement in the health system is aimed at efficiently and effectively protecting and restoring the health of the community by:

- preventing or detecting illness through the provision of services that can achieve improved health outcomes at relatively low cost
- caring for ill people through the use of appropriate health and medical intervention services
- providing appropriate health care services that recognise cultural differences among people
- providing equitable access to these services
- achieving equity in terms of health outcomes.

Primary prevention strategies are implemented before the diagnosis of an illness and generally aim to:

- reduce a person’s risk of getting a disease or illness by increasing protective factors
- delay the onset of illness.

Medical intervention strategies are implemented after a diagnosis.

As discussed in previous reports, the National Health Performance Committee has developed the National Health Performance Framework to guide the reporting and measurement of health service performance in Australia. A number of other groups involved in health performance indicator development have adopted this framework and adapted it for use within specific project areas and in publications. These groups include the National Health Priority Performance Advisory Group, the National Public Health Partnership, the Australian Council for Safety and Quality in Health Care, the National Mental Health Working Group, the Australian Council on Healthcare Standards, and the Aboriginal and Torres Strait Islander Technical

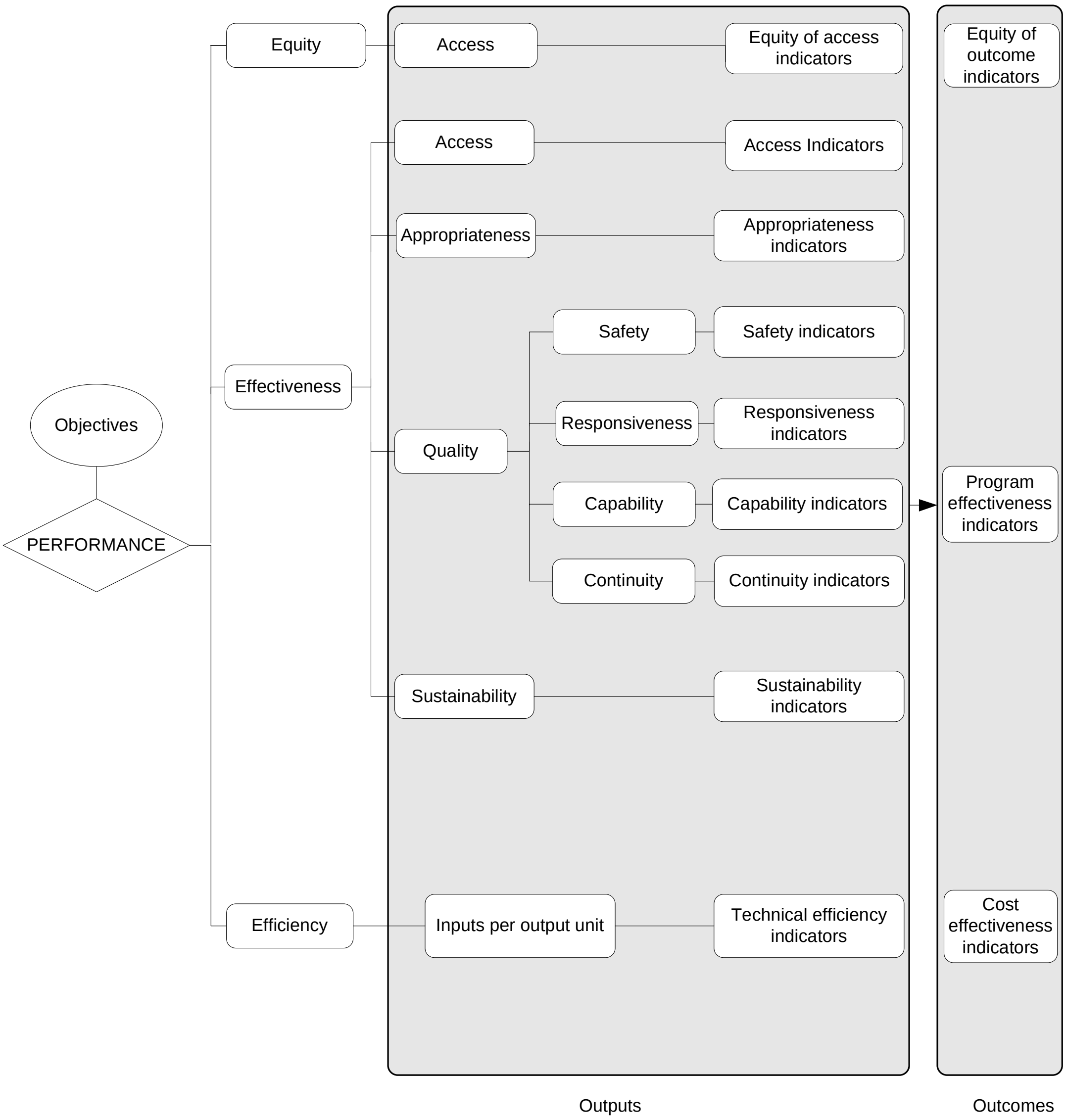
Advisory Group on Health Performance (established by the Office for Aboriginal and Torres Strait Islander Health [OATSIH]).

In the 2004 Report, the Steering Committee sought to align the general Review framework with the National Health Performance Framework as far as possible, for application to government health services. Complete alignment was not possible, given the different terms of reference of the two committees. The performance framework for health services in this Report thus reflects and concords with both the general Review framework and the National Health Performance Framework. It differs from the general Review framework (chapter 1) in two respects. First, it includes four subdimensions of quality — safety, responsiveness, capability and continuity — and, second, it includes an extra dimension of effectiveness — sustainability (figure E.7). These additions are intended to address the following key performance dimensions of the health system in the National Health Performance Framework that were not explicitly covered in the general Review framework:

- *safety*: the avoidance, or reduction to acceptable levels, of actual or potential harm from health care services, management or environments, and the prevention or minimisation of adverse events associated with health care delivery
- *responsiveness*: the provision of services that are client oriented and respectful of clients' dignity, autonomy, confidentiality, amenity, choices, and social and cultural needs
- *capability*: the capacity of an organisation, program or individual to provide health care services based on appropriate skills and knowledge
- *continuity*: the provision of uninterrupted, timely, coordinated healthcare, interventions and actions across programs, practitioners and organisations
- *sustainability*: the capacity to provide infrastructure (such as workforce, facilities and equipment), be innovative and respond to emerging needs (NHPC 2001).

Other aspects and dimensions of the Steering Committee's framework of performance indicators are defined in chapter 1. The Steering Committee has applied this performance framework to health services in two ways. It has developed, first, detailed performance indicator frameworks for significant providers (public hospitals, and primary and community health services) and second, separate frameworks to examine the appropriate mix of services (including the prevention of illness and injury, and medical treatment) and the appropriate mix of service delivery mechanisms. The latter are measured by focusing on two health management issues: breast cancer and mental health. These performance indicator frameworks are discussed in chapters 9, 10 and 11.

Figure E.7 **Performance indicator framework for health services**



Selected indicators of health outcomes

It is difficult to isolate the effect of health care services on the general health of the population. Socioeconomic factors (such as residential location, income levels and employment rates) and the provision of non-health care government services (such as clean water, sewerage, nutrition, education and public housing) each contribute to overall health outcomes. The outcomes and effectiveness of health services are also influenced by population factors external to governments' control, including geographic dispersion, age and ethnicity profiles, and socioeconomic status.

Appendix A summarises some of the demographic and socioeconomic factors that can influence health outcomes and government expenditure.

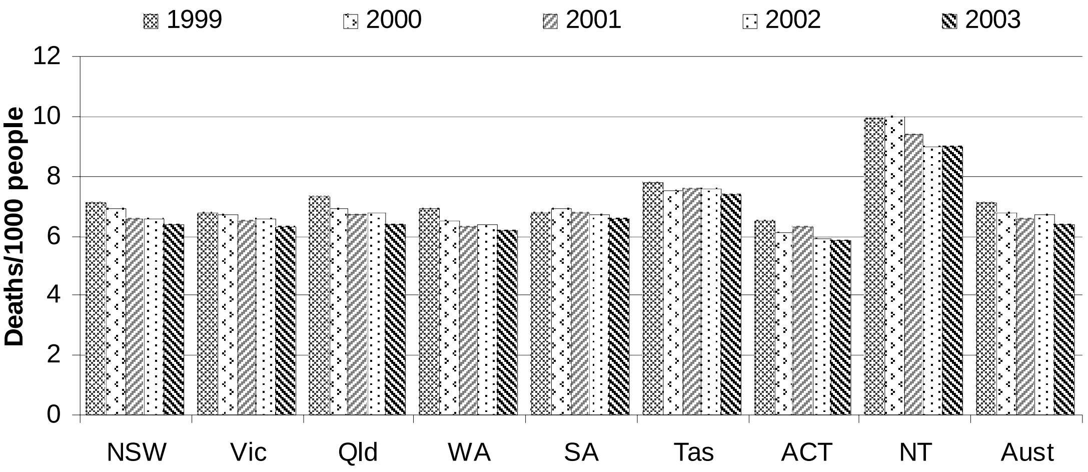
Data on health outcomes presented in this preface include self-assessed health status, mortality rates (for infants and all people), causes of death, life expectancy at birth, median age at death and birthweight. Where possible, data are presented for Indigenous people as well as the Australian population as a whole.

Mortality rates

Most components of the health system can influence mortality rates, although there may be a lag of decades between the action and the effect. A public health campaign to reduce smoking by young people, for example, may reduce premature deaths due to smoking-related conditions some years in the future. Factors external to the health system also have a strong influence on mortality rates.

There were 132 292 deaths in Australia in 2003 (ABS 2005a), which translated into an age standardised mortality rate of 6.4 per 1000 people (figure E.8). Death rates over the last 20 years have declined for all states and territories (ABS 2005a).

Figure E.8 **Mortality rates, age standardised**[a]



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[a] Calculated using direct methods of age standardisation, based on the 2001 Census standard population.

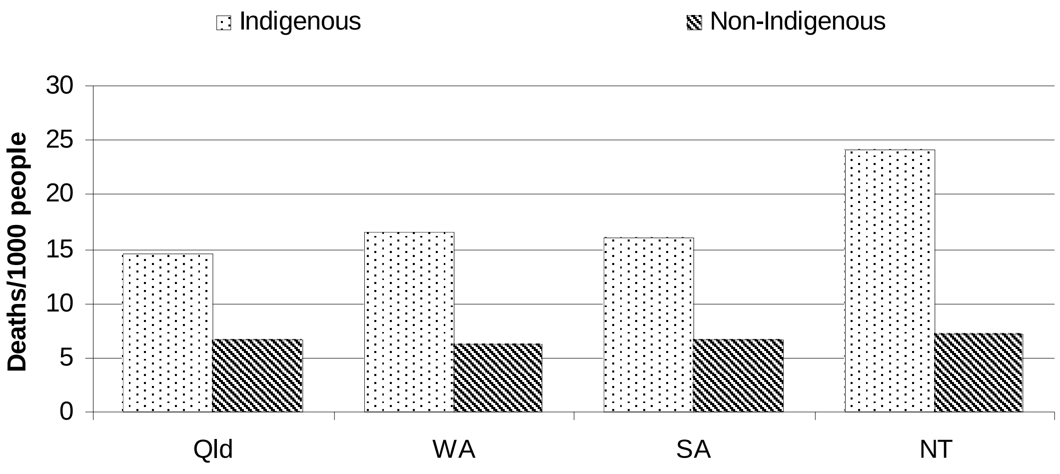
Source: ABS (2005a); table EA.11.

Indigenous mortality rates

Data on Indigenous mortality are collected through State and Territory death registrations. The completeness of the identification of Indigenous Australians in these collections varies significantly across states and territories. Because of this variation, care is required in making comparisons on the data. The NT, WA, SA and Queensland in that order are generally considered to have the best coverage of death registrations for Indigenous people.[2] For these four jurisdictions combined, the overall rates of mortality for Indigenous people were almost three times higher than mortality rates for non-Indigenous people in 1999–2003 (figure E.9 and table EA.11). The exact magnitude of this difference cannot be established at this time due to poor identification of Indigenous Australians in death records. Reported mortality rates under estimate the true difference (ABS and AIHW 2005).

Due to the relatively small number of Indigenous deaths and the consequent volatility in annual mortality rates, the data are presented for the five year period 1999–2003. To improve the comparability of age-related mortality rates, indirect age standardisation methods have been used for both the Indigenous and total population rates.

Figure E.9 **Mortality rates, age standardised, by Indigenous status, five year average, 1999–2003[a, b, c]**



[a] Calculated using indirect methods of age standardisation, based on the 2001 Census, for Queensland, WA, SA and the NT. Rates are not adjusted for differences across jurisdictions in the extent of identification of Indigenous deaths. [b] Rates are calculated per 1000 Indigenous people. [c] Data for Queensland, WA, SA and the NT are considered to have the highest level of accuracy of Indigenous identification in mortality data. They do not represent a quasi-Australian figure.

Source: ABS Deaths Australia (unpublished); table EA.11.

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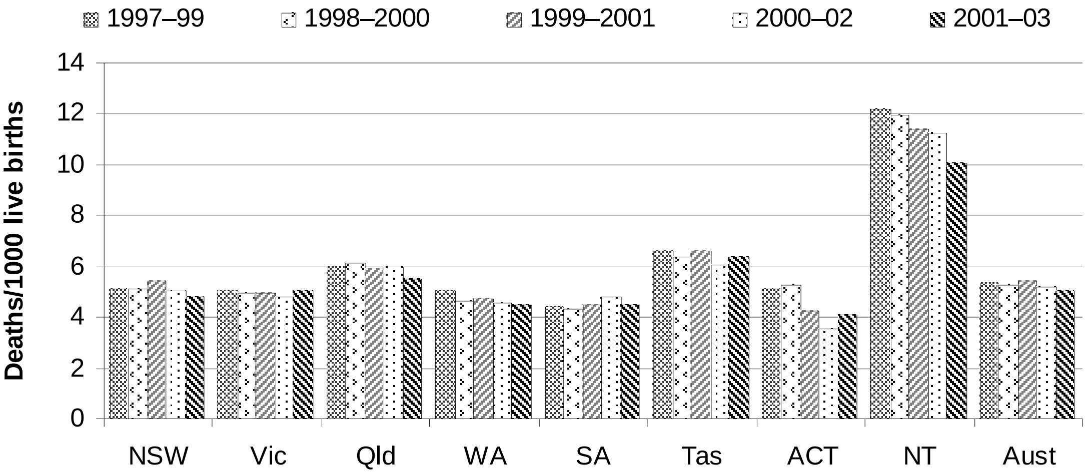
[2] The term ‘coverage’ refers to the number of Indigenous deaths registered as a percentage of the number of expected deaths based on Census population data.

Infant mortality rates

The infant mortality rate is defined as the number of deaths of children under 1 year of age in a calendar year per 1000 live births in the same year. Infant mortality rates are presented in this Report as an average over three years to reduce the volatility inherent in the annual rates due to small numbers and annual fluctuations (figure E.10). The infant mortality rate in Australia declined from 5.9 deaths per 1000 live births each year between 1993–95 to an average of 5 deaths per 1000 live births each year between 2001–03, although the rate has been relatively static in recent years (figure E.10).

Figure E.10 **Infant mortality rate, three year average**



Source: ABS (2004b); table EA.12.

Indigenous infant mortality rates

For the period 2001–03, the average infant mortality rate for Indigenous children is publishable for NSW, Queensland, WA, SA and the NT. The accuracy of Indigenous mortality data is variable, however, due to varying rates of coverage across jurisdictions and over time. While a high level of coverage is estimated in the NT and to a lesser extent in WA and SA, substantial undercoverage appears in NSW and Queensland. Further, the ability to detect significant changes in Indigenous infant mortality is affected by the small numbers involved. Indigenous infant mortality rates remain markedly higher than the national average for all Australians (tables EA.12 and EA.13).

Principal causes of death

The most common causes of death among Australians in 2003 were: diseases of the circulatory system (including heart disease, heart attack and stroke), cancers, and diseases of the respiratory system (including influenza, pneumonia and chronic lower respiratory diseases) (tables E.3 and EA.14). Malignant neoplasms were the main underlying cause of 28.4 per cent of all deaths in 2003 (ABS 2005a) and ischaemic heart disease was the primary cause of a further 19.5 per cent (ABS 2005a).

Table E.3 **Cause of death, age standardised death rates, 2003**[a]

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*
Cancers[b]	179	187	183	182	186	201	165	198
Lung cancer[c]	33	35	35	36	33	40	28	32
Diabetes mellitus	14	20	15	16	16	29	15	37
Mental and behavioural disorders	15	17	14	15	17	19	22	26
Diseases of the nervous system	21	21	19	26	16	29	25	16
Diseases of the circulatory system	243	223	242	210	247	253	213	265
Heart disease[d]	123	116	133	109	131	138	99	122
Heart attack[e]	64	62	73	58	74	63	44	56
Stroke[f]	65	53	62	52	58	51	51	55
Diseases of the respiratory system	58	54	56	55	69	63	46	97
Influenza and pneumonia	17	16	17	16	28	11	10	31
Chronic lower respiratory diseases	28	29	30	28	26	43	26	56
Diseases of the digestive system	22	22	22	20	22	28	20	41
Accidents	23	22	27	27	23	29	19	58
Transport accidents	8	8	10	11	12	12	4	28
Suicide[g]	10	11	12	12	13	15	10	24
All causes	**643**	**627**	**640**	**623**	**662**	**739**	**582**	**892**

[a] Age standardised death rates per 100 000 people, based on the mid-year 2001 population. Rounded to whole numbers. [b] Malignant neoplasms. [c] Cancer of the trachea, bronchus and lung. [d] Ischaemic heart disease and heart attacks. [e] Acute myocardial infarction. [f] Cerebrovascular diseases. [g] Intentional self-harm.

Source: ABS (2005a); table EA.14.

Causes of death for Indigenous people

In the jurisdictions for which age standardised death rates are available by Indigenous status (Queensland, WA, SA and the NT), death rates were far higher for Indigenous people than for non-Indigenous people during the period 1999–2001. In particular, Indigenous people died from rheumatic heart disease at a rate that was up to 19.4 times that for non-Indigenous people. They died from diabetes at a rate that was up to 15.9 times higher than that for non-Indigenous people; from pneumonia at a rate that was up to 14.3 times that for non-Indigenous people; and from assault at a rate that was up to 12.6 times that for non-Indigenous people (tables EA.15 and E.4).[3]

Table E.4 **Cause of death, age standardised Indigenous mortality ratios, 1999–2001[a, b, c]**

	Qld	*WA*	*SA*	*NT*
Lung cancer	2.7	1.1	2.0	1.7
Diabetes[d]	13.2	15.9	12.2	9.2
Circulatory diseases[e]	4.1	5.4	4.7	5.0
Coronary heart disease	4.3	4.9	4.9	4.0
Rheumatic heart disease	19.4	10.4	np	np
Respiratory diseases	4.8	5.8	7.8	6.2
Pneumonia	9.4	13.0	14.3	10.4
Injury and poisoning[f]	2.0	3.5	3.7	2.2
Road vehicle accidents	1.1	3.5	3.6	1.6
Other accidents	1.9	3.9	6.0	1.7
Self-harm	3.9	3.2	4.3	3.1
Assault	5.4	12.6	5.0	10.3

a Age standardised mortality rate for Indigenous people divided by the age standardised mortality rate for non-Indigenous people. Calculated from death rates per 100 000 people aged less than 75 years. **b** Indigenous deaths data reported in SIMC 2004 and quoted in this table do not reflect ABS revised Indigenous population estimates for 1999 and 2000, nor are they adjusted for differences in the extent of Indigenous identification across jurisdictions or across causes of death. **c** Excludes deaths for which Indigenous status was not stated. **d** Diabetes as an underlying cause or part of a multiple cause. **e** Includes all heart disease, acute myocardial infarction (heart attack) and cerebrovascular diseases (stroke). **f** External causes of death such as land and water transport accidents, falls, poisonings, drownings, other accidents, self-harm and assault. **np** Not published.

Source: SIMC (2004); table EA.15.

In 1999–2003, 58 per cent of deaths of Indigenous people resident in Queensland, WA, SA and the NT were caused by diseases of the circulatory system, external causes and cancer. By way of contrast these caused 78 per cent of deaths in the non-Indigenous population (ABS and AIHW 2005).

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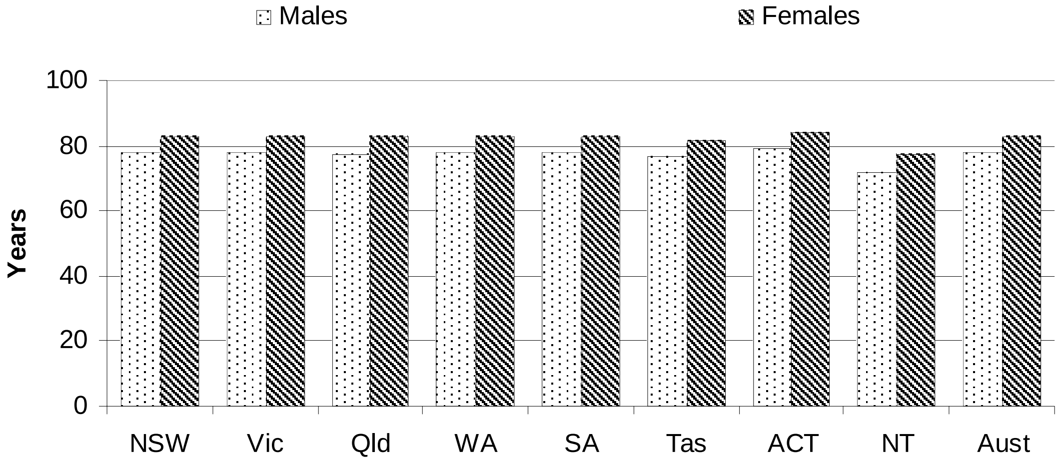
[3] Indigenous deaths data reported in SIMC 2004 and quoted in this Report do not reflect ABS revised Indigenous population estimates for 1999 and 2000, nor are they adjusted for differences in the extent of Indigenous identification across jurisdictions or across causes of death.

Life expectancy

The life expectancy of Australians improved dramatically during the twentieth century. The average life expectancy at birth in the period 1901–10 was 55.2 years for males and 58.8 years for females (ABS 2004d). It has risen steadily in each decade since, reaching 77.8 years for males and 82.8 years for females in 2001–03 (figure E.11).

Figure E.11 **Average life expectancy at birth, by sex, three year average, 2001–2003**



Source: ABS (2004b); table EA.16.

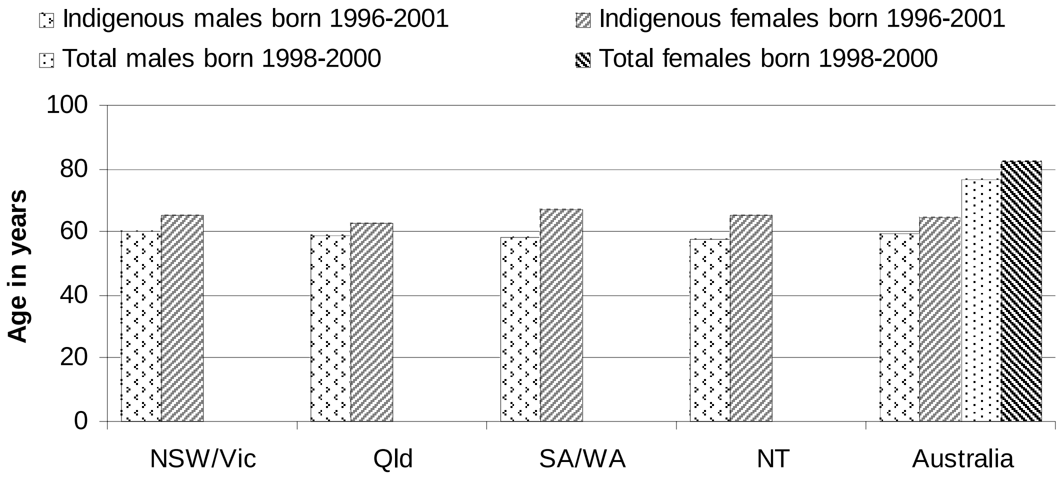
Indigenous life expectancy

The ABS noted that, due to incomplete identification of Indigenous deaths in the underlying source data, changes over time in mortality rates for Indigenous people cannot be determined. ABS Indigenous population estimates and projections assume, for each jurisdiction, constant age specific mortality rates across the period 1991–2009. These data are not comparable to — and replace — life expectancy estimates for Indigenous people previously published by the ABS. They should not be subjected to 'over-precise analysis … as measures of Indigenous health outcomes' (ABS 2004a).

The life expectancies of Indigenous Australians are considerably lower than those of non-Indigenous Australians. ABS experimental population estimates indicate a life expectancy at birth of 59.4 years for Indigenous males and 64.8 years for Indigenous females born from 1996 to 2001 (figure E.12 and table EA.17). In a similar, but not directly comparable time period (1998–2000) the rates for all

Australians were 76.6 years for all males and 82.0 years for females. Variations in life expectancy between Indigenous males and females and for Indigenous Australians in different states and territories should be interpreted with care as they are sensitive to the demographic assumptions and differences in data quality across jurisdictions.

Figure E.12 **Life expectancy at birth, Indigenous 1996–2001, total population 1998–2000**[a, b, c]



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[a] Indigenous data are for the Aboriginal and Torres Strait Islander population, and include an adjustment for undercoverage of Indigenous deaths. [b] Indigenous life expectancy excludes Tasmania and the ACT. For Tasmania and the ACT, use data for Victoria and NSW respectively. [c] Life expectancy data for Indigenous males and Indigenous females are for the period 1996–2001. Data for total males and females cover the period 1998–2000, the approximate mid-point of the Indigenous data.

Source: ABS (2004a); table EA.17.

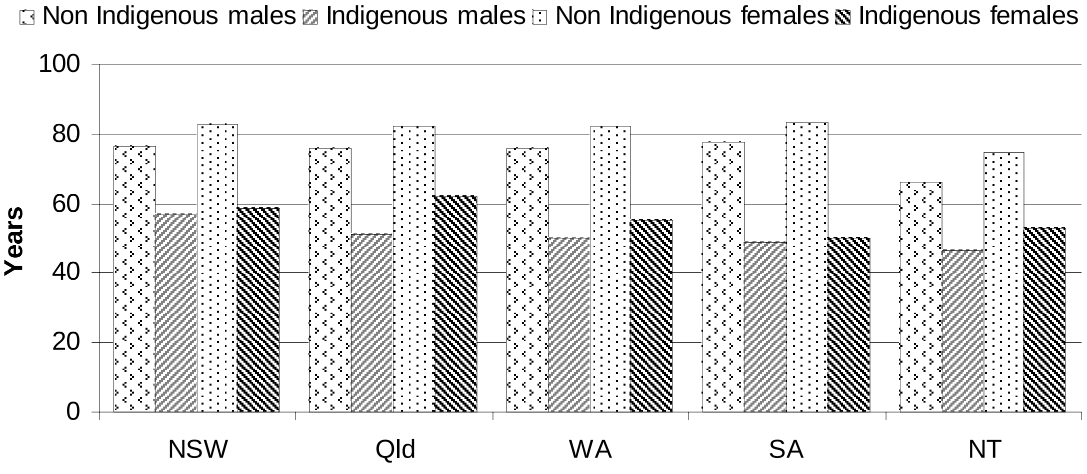
Median age at death

The median age at death is a measure of the distribution of deaths by age. Comparisons of the median age at death for Indigenous and non-Indigenous people are affected by different age structures in the populations and by differences in the extent of identification of Indigenous deaths across jurisdictions and across age groups. Identification of Indigenous status for infant deaths is high, but it falls significantly in older age groups. The median age of death for Indigenous people is therefore an underestimate.

For all Australian males and females in 2003, the median age at death was 76.4 years and 82.5 years respectively (figure E.13 and table EA.18). In the jurisdictions for which the data were available for Indigenous people in 2003 the median age at death for male Indigenous Australians varied between 56.8 and

46.3 years. The median age at death for female Indigenous Australians varied between 62.1 years and 50.0 years (figure E.13 and table EA.18).

Figure E.13 **Median age at death, by sex and Indigenous status, 2003[a]**



[a] Median age at death by Indigenous status is available in NSW, Queensland, WA, SA and the NT only. The accuracy of Indigenous mortality data is variable as a result of varying rates of coverage across jurisdictions and age groups, and of changes in the estimated Indigenous population caused by changing rates of identification in the Census and births data.

Source: ABS (2004c); table EA.18.

Birthweight of babies

The birthweight of a baby is an important indicator of its health status and future wellbeing. In 2002, 91.8 per cent of liveborn babies in Australia weighed between 2500 and 4499 grams (Laws and Sullivan 2004). The average birthweight for all live births was 3371 grams. In 2002, the average birthweight of liveborn babies of Indigenous mothers was 3165 grams (tables EA.19 and EA.20). This was 213 grams lighter than the average of 3378 grams for liveborn babies of non-Indigenous mothers[4] (Laws and Sullivan 2004).

Babies are defined as low birthweight if they weigh less than 2500 grams, very low birthweight if they weigh less than 1500 grams and extremely low birthweight if they weigh less than 1000 grams (Laws and Sullivan 2004). In 2002, 6.4 per cent of all liveborn babies in Australia weighed less than 2500 grams (figure E.14). They included 1.1 per cent of babies who weighed less than 1500 grams and 0.5 per cent of babies who weighed less than 1000 grams (table EA.19).

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[4] Figures for births to Indigenous mothers exclude Tasmania.

Among live babies born to Indigenous mothers in 2002, the proportions with low and very low birthweights were around twice the proportions born to all Australian mothers, with 12.9 per cent weighing less than 2500 grams and 2.2 per cent weighing less than 1500 grams (figure E.14 and table EA.20).

Figure E.14 **Babies with birthweights under 2500 grams, by Indigenous status, 2002[a, b, c, d]**

[a] Proportion of live births with birthweights under 2500 grams. [b] Babies with Indigenous fathers and non-Indigenous mothers are not included as Indigenous. [c] The ACT data for births to Indigenous mothers may vary from year to year as a result of small numbers. Some low birthweight babies born to Indigenous mothers in the ACT might have been born to women from NSW, so the proportion of such births may not reflect the health status of Indigenous mothers and babies who are residents of the ACT. [d] Data for births to Indigenous mothers are not available for Tasmania. Totals for Australia for Indigenous mothers exclude Tasmania.

Source: Laws and Sullivan (2004); tables EA.19 and EA.20.

Future directions

Each of the health chapters has a section that covers the future directions for reporting. New features and developments in this Report are listed in chapter 2.

Improving reporting on Indigenous health is a common priority across all of the health chapters. Performance indicators for health services used by Indigenous Australians were first published in the 2000 Report. A strategy to improve reporting on Indigenous health was developed in 2003, and improvements have since been made where possible.

Supporting tables

Supporting tables are identified in references throughout this preface by an ‘A’ suffix (for example, table EA.3 is table 3 in the attachment). Supporting tables are provided on the CD-ROM enclosed with the Report. The files containing the supporting tables are provided in Microsoft Excel format as \Publications\Reports\2006\AttachEA.xls and in Adobe PDF format as \Publications\Reports\2006\AttachEA.pdf. The files containing the supporting tables can also be found on the Review web page (www.pc.gov.au/gsp). Users without access to the CD-ROM or Internet can contact the Secretariat to obtain the supporting tables (see contact details on the inside front cover of the Report).

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