C Health preface

Health care services in Australia are delivered by a range of providers in a range of settings. State and Territory Governments are responsible for providing public hospital services. Most general practice and specialist medical and surgical services are provided by private practitioners who receive funding from the Commonwealth Government via the Medicare Benefits Schedule (box C.1). Local governments provide some community health services in some jurisdictions.

The first two editions of the *Report on Government Services* concentrated on the performance of public acute care hospitals and their delivery of inpatient services. Public acute care hospitals comprise the largest component of government spending on health care services. However, such a focus on one part of a much larger system ignores the links between service types. This Report and the previous Report have expanded the focus of health care services to include general practitioners (GPs) as another delivery mechanism and to examine the interactions between different service types in dealing with particular health issues (for example, mental health and breast cancer screening).

The Steering Committee worked with the National Health Ministers' Benchmarking Working Group to prepare the health section of this Report.

Profile of health services

According to the 1995 National Health Survey, most Australians took action for a health related concern in the two weeks before the survey — 79.9 per cent of females and 70.8 per cent of males. For some people, this constituted taking the day off work or school, or merely taking it easy for a day or so. However, the more common health related actions involved some contact with the Australian health care system. The most common action was taking medication (69 per cent of people), followed by consulting a doctor (23 per cent) and consulting another health care professional (13 per cent). Significantly fewer people visited a hospital either as an inpatient or an outpatient (only 2.1 per cent and 2.7 per cent respectively) (ABS 1997).

Box C.1 **Some common health terms used in this preface**

Acute care hospital: a hospital that provides at least minimum medical, surgical or obstetric services for inpatient treatment and/or care, and around-the-clock, comprehensive, qualified nursing services as well as other necessary professional services

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

General practice: a medical practice that offers primary, continuing, comprehensive, whole-person care for individuals, families and the community

Medicare: a program funded by the Commonwealth Government that subsidises private medical services

Pharmaceutical Benefits Scheme: a program funded by the Commonwealth Government that subsidises pharmaceuticals

Public health: the 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 interventions, is the population as a whole or population subgroups.

Public hospital: a hospital that provides free treatment and accommodation to eligible admitted persons who elect to be treated as public patients. It also provides free services to non-admitted patients and may provide (and charge for) treatment and accommodation services to private patients.

A complex system has evolved to meet the health care needs of Australians. The health system is considered here to refer to formal activities primarily directed at improving health or reducing the effects of illness and injury. It does not include other factors that can affect health, such as the standard of housing, sanitation, water supply or socioeconomic status.

The non-government sector plays a significant role in the health system, delivering general practice and specialist medical and surgical services, dental services, a range of other professional services (such as optometry, physiotherapy and so on) and private hospital and nursing home services. State and Territory Governments deliver services via public hospital and other public health programs.

Funding the various components of the health care system is a complicated process. The Commonwealth Government funds many of the services provided by the non-government sector (mostly through Medicare and the Pharmaceutical Benefits Scheme) and also provides funding for public hospitals via the Australian Healthcare Agreements with States and Territories. State and Territory Governments and local governments also contribute funds, as do private individuals, health insurance funds and other non-government institutions. The following section

outlines the contributions that various sectors make to the health care system; it also notes how that funding is allocated.

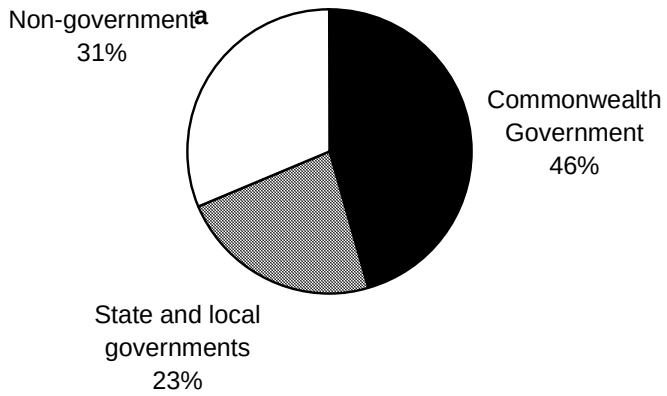
Expenditure on health care services in Australia

Expenditure on health care services in Australia was about $43.2 billion in 1996-97, accounting for 8.4 per cent of gross domestic product (AIHW 1998b). This makes health one of our largest industries: it accounted for less than wholesale and retail trade; manufacturing; finance, insurance, property and business; and dwelling rental but more than education; mining; agriculture and construction (AIHW 1998a).

The health sector is also one of the fastest growing areas of the Australian economy. Between 1975-76 and 1996-97, real expenditure on health care services grew by an average 3.5 per cent each year, taking health care expenditure as a share of gross domestic product from 7.5 per cent in 1975-76 to 8.4 per cent in 1995-96 (AIHW 1998b). This strong growth reflected greater general use of health care services by Australians as well as increased use caused by ageing of the population.

Government (at all levels) provides over two thirds of total expenditure on health care services, with the remainder coming from individuals, health insurance funds, and workers compensation and compulsory motor vehicle third party insurance providers (figure C.1).

Figure C.1 **Total health expenditure by source, 1996-97**



a Includes expenditure by individuals, health insurance funds, and workers compensation and compulsory motor vehicle third party insurers.

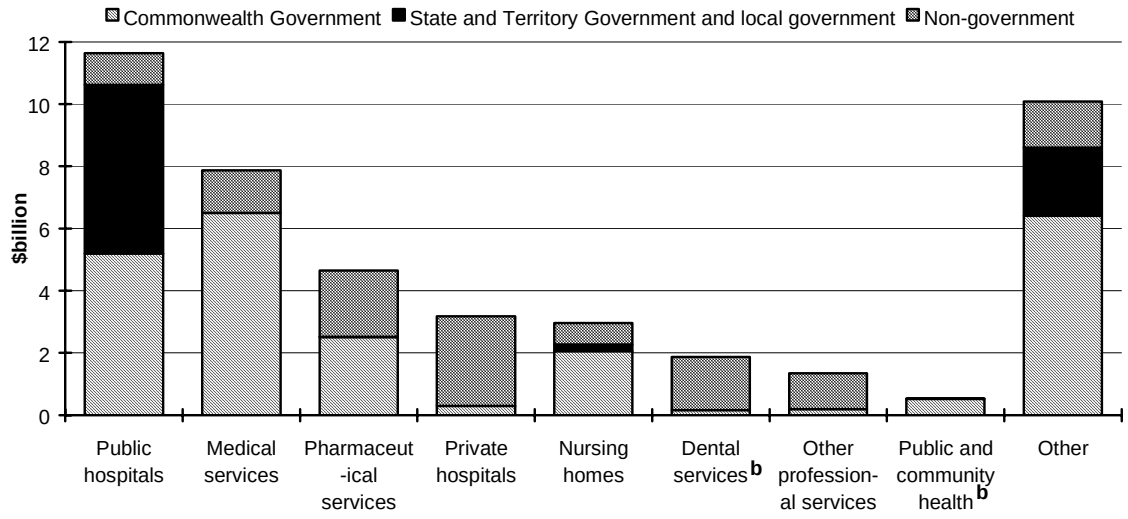
Data source: table 4A.48.

The Commonwealth Government accounted for the largest proportion of total health care expenditure in Australia (46 per cent) in 1996-97. The Department of Health and Aged Care, originally established to deal with quarantine issues and the health needs of veterans, is largely responsible for funding medical, hospital, pharmaceutical and nursing home services, which are delivered by State and Territory Governments and non-government providers (figure C.2).

State and Territory Governments are responsible for delivering a range of health care services such as:

- hospital services;
- mental health programs;
- home and community care;
- child, adolescent and family health services;
- patient transport (covered in chapter 9, 'Emergency management');
- health promotion; and
- regulation, inspection, licensing and monitoring of premises, institutions and personnel.

Figure C.2 **Total health services recurrent expenditure, 1995-96[a]**



a Detailed data on expenditure by service type were not available for 1996-97. **b** Although State and Territory Government and local government funded public and community health and dental services, it was not possible to identify these expenditures separately; they were included in 'Other expenditure'.

Data source: table 4A.49.

Local governments are generally involved in environmental control and a range of community based and home care services, although the exact nature of their

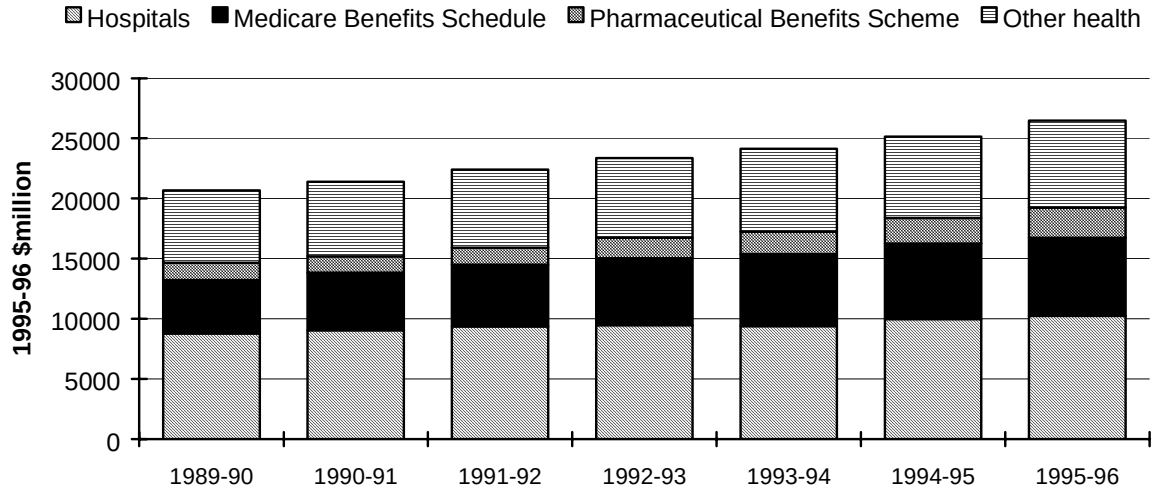
involvement varies across jurisdictions. Non-government expenditure was largely directed towards private hospitals, pharmaceuticals, dental services, medical and other professional services.

Between 1989-90 and 1995-96, total government recurrent expenditure on health care services grew by 28.2 per cent (in real terms) to $26.5 billion (figure C.3); that is, total government expenditure on health care increased by an average 4.2 per cent (in 1995-96 dollars) each year over the period. Recurrent expenditure per person increased by 3.0 per cent each year between 1989-90 and 1995-96.

Public hospitals comprised the single largest item of recurrent health care expenditure in 1995-96 — $10 billion, used to fund 3.6 million separations and 32.0 million non-admitted occasions of service. Public hospitals also accounted for the largest share (38.7 per cent) of government expenditure on health care services in that year, followed by medical services (24.5 per cent), pharmaceutical services (9.5 per cent) and nursing homes (8.6 per cent).[1]

Average annual growth in government expenditure on public hospitals was 2.6 per cent over the period (1.6 percentage points lower than that recorded for total expenditure), taking the public hospital share of total government expenditure from 42.5 per cent in 1989-90 to 38.7 per cent in 1995-96.

Figure C.3 **Government recurrent health expenditure**



Data source: table 4A.51.

[1] Nursing home services are discussed in chapter 10 of this Report.

Medical services and pharmaceutical services were the fastest growing areas of government health expenditure, growing by an average 6.5 per cent and 9.9 per cent respectively each year (in 1995-96 dollars). The growth in medical and pharmaceutical expenditure reflected the increased use of these services; the average number of Medicare services processed per person rose by 23.5 per cent between 1990 and 1996 to reach 10.5 per person. Similarly, increased government expenditure on pharmaceuticals reflected increased use of medications (such as by the elderly), as well as rising pharmaceutical prices and increases in the availability of new and more expensive pharmaceuticals.

Not surprisingly, the proportion of government health care expenditure devoted to medical services and pharmaceutical services rose over the period. Expenditure on medical services increased from 21.5 per cent of the total in 1989-90 to 24.5 per cent in 1995-96, while the share devoted to pharmaceutical services increased by 2.6 percentage points to 9.5 per cent over the same period.

This strong growth placed pressures on total government health care expenditure that prompted policy changes by the Commonwealth Government in 1996-97: the Government restricted the number of Medicare provider numbers and changed the Pharmaceutical Benefits Scheme to encourage the use of generic pharmaceutical brands.

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 (box C.2), and governments use a variety of services in a variety of settings to fulfil this objective.

Measuring the success of this system is a complex task; success requires offering the appropriate mix of service types (such as prevention and intervention services) by the appropriate mix of service providers (such as hospital based and community based providers) and that all service provision is efficient and effective. It is difficult to develop a set of indicators that captures all these aspects of performance. There are some broad level indicators of health (such as life expectancy, mortality rates and cause of death), but these say as much about the income levels of a population, the level of education and the standard of housing, for example, as they do about the performance of the health care system.

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

Broadly, the government health system aims to protect and restore the health of the community in a cost effective manner. Governments fulfil this objective by:

- preventing people from becoming sick, or detecting illness at an early stage when treatment is at a lower cost or health outcomes are better (prevention/early detection services); or
- caring for people when they become sick (intervention services).

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; and
- delay the onset of illness.

Intervention strategies are implemented after a diagnosis.

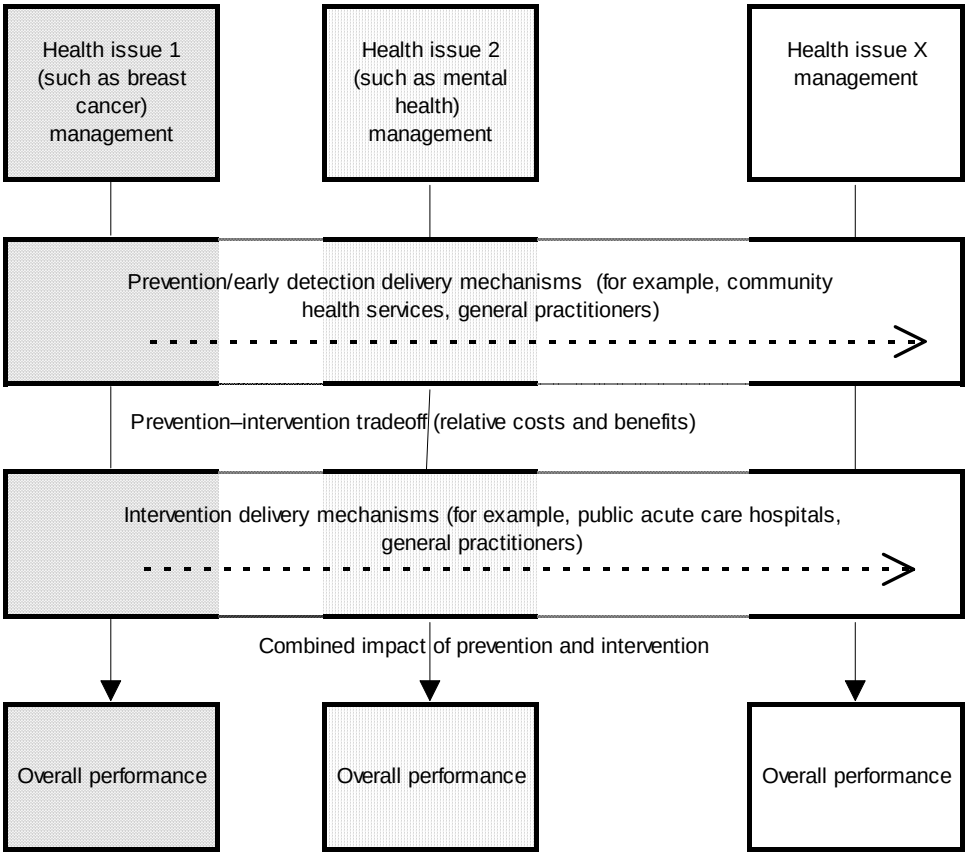
The measurement approach adopted in this Report is to break the health system into smaller components and measure their performance. This can be represented diagrammatically (figure C.4).

Frameworks of indicators measuring the performance of those delivering services across a range of health care issues (represented by the horizontal arrows) are presented for two service delivery mechanisms used in Australia — public acute care hospitals and GPs. Data on the former have been presented in all four Reports on government services; a framework for GPs is presented for the first time in this Report.

The appropriate mix of services (prevention versus intervention) and the appropriate mix of service delivery mechanisms (hospital based versus community based) are measured by focusing on a health management issue, such as breast cancer and mental health (represented by the vertical arrows). The breast cancer management framework integrates the prevention/early detection and intervention strategies, providing information on the tradeoff between the two; the mental health framework provides information on the choice between community based and hospital based providers in meeting the needs of Australians with mental illnesses.

Performance indicator frameworks are discussed in more detail in chapters 4 and 5.

Figure C.4 **Australian health system — measurement diagram**



Aggregate health outcomes

It is difficult to isolate the effect that health care services have on the general health of the population. Socioeconomic factors (such as income levels, education standards, employment rates and housing standards) and access to services such as clean water, sewerage and a safe food supply significantly influence overall health outcomes.

Life expectancy and mortality rates (both of which are indicators of improvements in the health of Australians) are used in this Report as aggregate measures of health outcomes. However, it is important to remember the limitations of these measures given the effects of other non-health related factors.

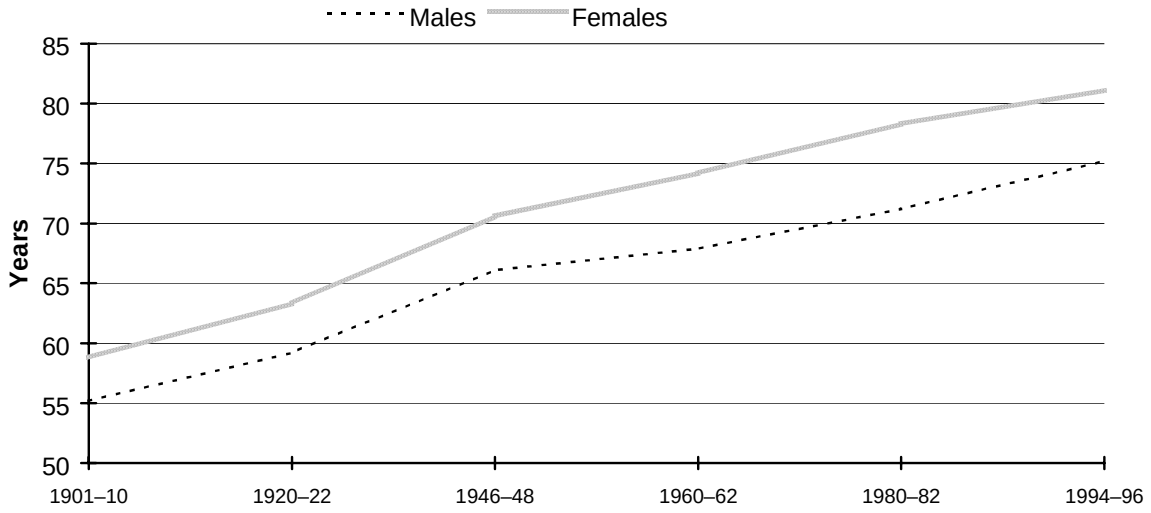
There were 128 719 deaths in Australia in 1996 — 68 206 males and 60 513 females. This translated into death rates (standardised for age differences across jurisdictions) of 820 deaths per 100 000 males and 501 deaths per 100 000 females. Age-standardised deaths rates fell for both males and females between 1991 and

1996 — down 7.3 per cent and 6.5 per cent respectively. It is expected that future death rates will increase with the rising age of the population.

The main causes of death in 1996 were circulatory diseases (326 deaths per 100 000 males and 211 per 100 000 females), cancers (234 per 100 000 males and 141 per 100 000 females) and respiratory diseases (71 per 100 000 males and 38 per 100 000 females). There was no change in the major cause of death for Australians in over 80 years, with circulatory diseases also being the major cause of death for Australians in 1921.

However, the life expectancy of Australians has improved dramatically over this period. The average life expectancy at birth was 55.2 years for males and 58.8 years for females from 1901 to 1910, but had increased to 75.2 years for males and 81.1 years for females for the years 1994–96 (figure C.5).

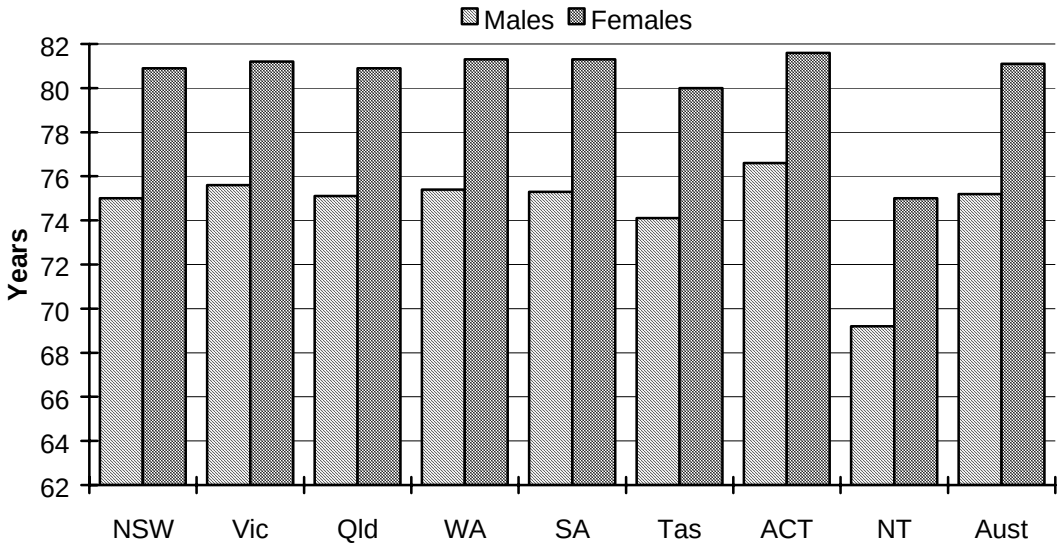
Figure C.5 **Average life expectancy at birth — time series**



Data source: table 4A.53.

Life expectancy at birth varied across jurisdictions. Average life expectancy at birth was 76.6 years for males in the ACT in 1996, compared with 69.2 years for males in the NT (figure C.6). Similarly, the average for females in the ACT was 81.6 years in 1996, almost seven years longer than that of females in the NT. This largely reflects the high large number of Aboriginal and Torres Strait Islander people living in the NT compared with other jurisdictions.

Figure C.6 **Average life expectancy at birth, by jurisdiction, 1996**

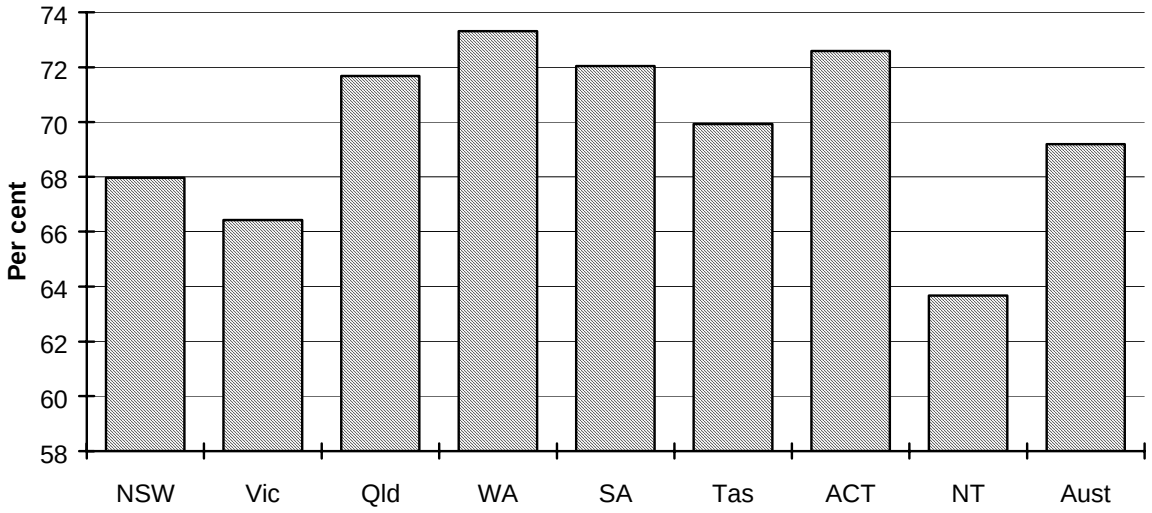


Data source: table 4A.54.

The National Health Survey conducted in 1995 showed that most Australians considered themselves to be in good health. Fifty-five per cent of people aged 15 years or more reported their overall health as very good or excellent, and a further 28 per cent reported good health. The remaining 17 per cent of the population regarded their health as being fair or poor. Not surprisingly, self assessed health status is strongly related to age; in the 1995 survey, the proportion of the population reporting very good or excellent health declined with age while the proportion reporting fair or poor health rose.

Almost 70 per cent of Australians reported experiencing an illness in the two weeks before being interviewed for the 1995 National Health Survey. The most common illnesses were diseases of the respiratory system (such as bronchitis/emphysema, the common cold, hayfever, asthma and coughing or a sore throat) — which accounted for 31.1 per cent of the total — and 'symptoms, signs and ill defined conditions' (such as allergies, headaches, heartburn and hangover) — which accounted for 28.5 per cent (ABS 1997). The proportion of the population reporting a recent illness ranged from 73.3 per cent in WA to 63.7 per cent in the NT (figure C.7).

Figure C.7 **Persons reporting a recent illness, 1995[a, b, c]**



a Illness refers to a medical condition experienced in the two weeks before interview. It may include long term conditions experienced in the period. **b** Data were standardised for age and sex differences across jurisdictions. **c** Estimates relate to predominantly urban areas only.

Data source: table 4A.56.

Future directions

The key challenges for improving reporting for the health sector include:

- filling gaps in reporting for existing frameworks;
- developing indicators that assess Aboriginal and Torres Strait Islander access to mainstream health care services;
- improving knowledge about people's health; and
- assessing the appropriateness of health care services.

Issues for filling reporting gaps that are specific to particular frameworks are discussed in detail in the relevant chapters. Improving data on emergency waiting times, for example, is specific to the reporting framework for public acute care hospitals and is discussed in chapter 4. Similarly, issues specific to the breast cancer control and mental illness are discussed in chapter 5.

The other three issues are discussed below.

Aboriginal and Torres Strait Islander access to mainstream health care services

In May 1997, the Prime Minister requested that the Steering Committee give priority to developing indicators that measured the performance of mainstream services in meeting the needs of indigenous Australians.

This is an important, but difficult, task. Most data on health care services are obtained via administrative collections, of which few distinguish between indigenous and non-indigenous users. Further, the definition of indigenous people varies across jurisdictions, as does the approach to self identification. The Report has not been able to include any health service performance indicators for indigenous Australians to date.

The health of indigenous Australians is considerably worse than that of non-indigenous Australians and this is an ongoing concern for health policy makers. The mortality rate for indigenous Australians is three times that for the non-indigenous inhabitants, for example. Similarly, life expectancy for Aboriginal males is 17 years less than that of non-Aboriginal men; the gap for females is slightly wider (Deeble *et al.* 1998).

An investigation of health care expenditure on indigenous and non-indigenous Australians revealed that expenditure through publicly subsidised programs was $2235 per person for Aboriginal and Torres Strait Islander people in 1995-96, compared with $1554 for non-indigenous Australians. Expenditure through mainstream health care services accounted for 89 per cent of the total, with expenditure on Aboriginal Medical Services accounting for the remaining 11 per cent (Deeble *et al.* 1998).

Closer inspection of mainstream health care expenditure data revealed that expenditure on State and Territory Government funded services (such as public acute care hospitals and community health services) accounted for almost 80 per cent of government health care expenditure for indigenous people, compared with around 50 per cent for non-indigenous Australians (table C.1). This reliance of indigenous Australians on State and Territory Government funded services means that their access to these services is an important issue.

Health care expenditure via the Commonwealth Government Medicare and Pharmaceutical Benefits Scheme programs accounted for 6 per cent of the total for indigenous Australians, compared with more than 35 per cent for other Australians.

Table C.1 **Gross expenditure on health care services for indigenous Australians via publicly subsidised programs, 1995-96 ($ per person)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Total local expenditure	na	na	na	na	na	na	na	na	10
Acute care hospitals	1 042	1 095	1 120	1 487	964	868	492	1 607	1 191
• admitted patients	874	806	837	1 147	760	524	361	1 237	924
• non-admitted patients	168	288	283	339	204	343	132	371	267
Mental health institutions	20	**a**	29	60	55	59	0	0	28
Nursing homes	16	69	41	58	0	98	0	4	33
Community health services	174	31	243	431	301	96	76	669	291
Patient transport	35	50	45	78	15	33	16	316	81
Public health services	15	46	23	21	35	52	5	272	57
Administration and research	32	35	17	19	129	22	70	353	74
Total State and Territory expenditure	*1 334*	*1 326*	*1 518*	*2 152*	*1 500*	*1 227*	*659*	*3 221*	*1 753*
Medicare and Pharmaceutical Benefits Scheme	na	na	na	na	na	na	na	na	128
Aboriginal health units and other Commonwealth programs	na	na	na	na	na	na	na	na	344
Total government expenditure	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**2 235**

a Included in acute care hospital expenditure. **na** Not available.

Source: Deeble *et al.* (1998).

All States and Territories are working toward developing indicators for indigenous Australians under the auspices of the Australian Health Ministers' Advisory Council. Suggested indicators monitor all aspects of health of indigenous Australians. Many aspects are beyond the scope of this Report, although some would provide valuable insights into the performance of particular providers in meeting the needs of indigenous clients — for example, distance to a hospital that provides inpatient care, access to hospital care, time required to reach primary health care services, hospital outpatient activity and service deficiencies, and racism in health services. Other proposed indicators cover health outcomes for indigenous Australians — child immunisation rates, life expectancy, standardised mortality rates, low birthweight infants and main causes of death.

The Australian Health Ministers' Advisory Council approved a list of proposed indicators in March 1998. The process of evaluating and refining the indicators is expected to be finalised by 2000, after which reporting will commence.

Population health monitoring

The NSW Health Survey aims to improve knowledge about people's health and the factors that affect health and people's attitudes to health services and policies. Survey workers conducted telephone interviews during 1998 with approximately 17 000 people from around NSW, covering a wide range of health topics such as:

- physical and emotional health;
- health conditions, such as asthma and diabetes;
- factors that affect health, such as eating habits, smoking, alcohol consumption and physical activity;
- use of health services such as hospitals, emergency departments and general practitioners;
- satisfaction with health services; and
- individual characteristics such as age, occupation and languages spoken at home.

Results from the survey will be released in June 1999.

Appropriateness of health care

The term 'appropriateness' typically refers to an assessment of the 'worth, value or utility' of a service. Common applications in health care include:

- the appropriate sequence of events in treating an individual patient;
- the appropriate level and mix of treatments (for example, the level and mix of separations);
- the appropriate mix of service types (for example, prevention versus intervention); and
- the appropriate mix of service providers (for example, community based services versus hospital based services).

The first of these involves assessing the care provided to an individual patient against a normative standard of care or clinical pathway. Unexplained variations from the clinical pathway are sometimes measured, largely as an indicator of the quality of care provided to the patient. Information on clinical pathways is not yet available on a national basis as a quality of care indicator. However, this is an option for future years.

The second interpretation is used in this Report in relation to the appropriateness of care provided by public acute care hospitals. Two indicators, separations per 1000

people and the separation rate for certain procedures, focus on geographical variations to highlight differences that may require further investigation.

The third and fourth interpretations of appropriateness are the focus of chapter 5 of this Report. The framework of performance indicators for breast cancer control focuses on the tradeoff between prevention (or early detection in this case) of a disease and intervention. The framework for mental illness management, on the other hand, looks at the choice between community based and hospital based providers in meeting the needs of Australians with mental illness.

Despite these efforts, three factors continue to hinder assessments of the appropriateness of the care provided by Australia's health care system:

- there are no measurable standards of service against which current levels can be assessed. Proxy standards have been developed for housing, for example, where a three bedroom house is considered the appropriate size for a couple with two or three children; larger (smaller) houses are considered underused (overcrowded). Such standards have not been established for health care services. The appropriate level of separations is not known, for example;
- the Review covers only parts of the whole health care system. It is not possible to capture the entire system, but the coverage could be extended to include a framework for community health services (similar to that presented for public acute care hospitals and GPs), and reporting on health management could be extended to other health issues (such as the remaining National Health Priority Areas — that is, cardiovascular health, diabetes mellitus and injury prevention and control). A brief discussion of each option is outlined in the relevant chapters; and
- the links between frameworks are not yet identified. Information is not available, for example, to aid assessments of whether governments should focus more efforts on one type of illness prevention/intervention than another. Similarly, data on the performance of individual public acute care hospitals and general practitioners provide little insight into the appropriateness of the current mix of service delivery modes. Ideally, this information would be available.

A robust examination of all aspects of appropriateness of health care would assist in improving overall health outcomes in Australia. The challenge of understanding the links between services is not confined to the health sector; it is particularly pertinent to the justice sector, for example. The Steering Committee will continue to work towards developing tools to address this challenge in future years.