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## E Health preface

Health care services are concerned with promoting, restoring and maintaining a healthy society. They involve illness prevention, health promotion, detection and treatment of illness and injury, and the rehabilitation and palliative care of individuals who experience illness and injury. More 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 (box E.1).

Health care services in Australia are delivered by a variety of government and non-government providers in a range of service settings. The Report primarily concentrates on the performance of public hospitals (chapter 9) and general practitioners (GPs) (chapter 10) because these services represent a significant component of government recurrent expenditure on health care. Australian governments expended \$21.6 billion (1999-2000 dollars<sup>1</sup>) on public hospitals and medical services (which includes payments to GPs and other specialist practitioners) in 2000-01 — 56.7 per cent of government recurrent health expenditure (table EA.2). The Report also examines the interactions between different service mechanisms for dealing with two health management issues: mental health and breast cancer (chapter 11). While there are no specific estimates of government expenditure for the detection and management of breast cancer, government expenditure on specialist mental health services was estimated to be \$2.6 billion in 2000-01. Some of this expenditure was on psychiatric care provided by public (non-psychiatric) hospitals.

Estimates of government expenditure on health care provision commonly include (by definition) high level residential aged care services. These services are not covered in the health chapters in this Report but are reported separately in chapter 12 (Aged care services). Patient transport services are also included in estimates of government health expenditure. Ambulance services (defined as pre-hospital care, treatment and transport services) are reported in chapter 8 (Emergency management).

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

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<sup>1</sup> In real dollars (1999-2000). The published source data from the Australian Institute of Health and Welfare (AIHW) use this base year and the same base year is used here for consistency.

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- government support for pharmaceuticals;
  - community health services (although reporting on community health services for patients with mental disorders is increasing);
  - public health programs, other than those for breast cancer and mental health; and
  - 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) are, however, included in other chapters of the Report. A range of other factors, such as Indigenous status, socioeconomic status and residential location are also potential influences on health outcomes. It is a priority of the Review to improve the reporting of data on delivery of health care services for Indigenous people and residents in nonmetropolitan regions of Australia.

The remainder of this preface is a summary of the nature of Australia's health care system and health outcomes. It also foreshadows future directions in reporting.

Supporting tables for the Health preface are provided on the CD-ROM enclosed with the Report. The files are provided in Microsoft Excel 97 format at `\Publications\Reports\2003\AttachEA.xls` or in Adobe PDF format at `\Publications\Reports\2003\AttachEA.pdf`.

Supporting tables are identified in references throughout this chapter by an 'A' suffix (for example, table EA.3 is table 3 in the electronic files). These files can be found on the Review web page ([www.pc.gov.au/gsp](http://www.pc.gov.au/gsp)). Users without Internet access can contact the Secretariat to obtain these tables (see details on the inside front cover of the Report).

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

**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 as a whole or population 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. However, charges to non-admitted patients and admitted patients on discharge may be levied in accordance with the AHCA (for example, charges for aids and appliances).

*Source:* AIHW (2000); DHAC (1999).

## Profile of health services

### Roles and responsibilities

The Commonwealth 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 the Commonwealth private health insurance rebate;
- promulgating and coordinating health regulations; and

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- undertaking health policy research and policy coordination across the Commonwealth, States and Territories.

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);
- mental health programs;
- patient transport; and
- the regulation, inspection, licensing and monitoring of premises, institutions and personnel.

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 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 various components of the health care system is a complicated process. The Commonwealth 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 funds a number of nationally coordinated public health programs. It also provides funding to the States and Territories for public hospital services under the AHCA.

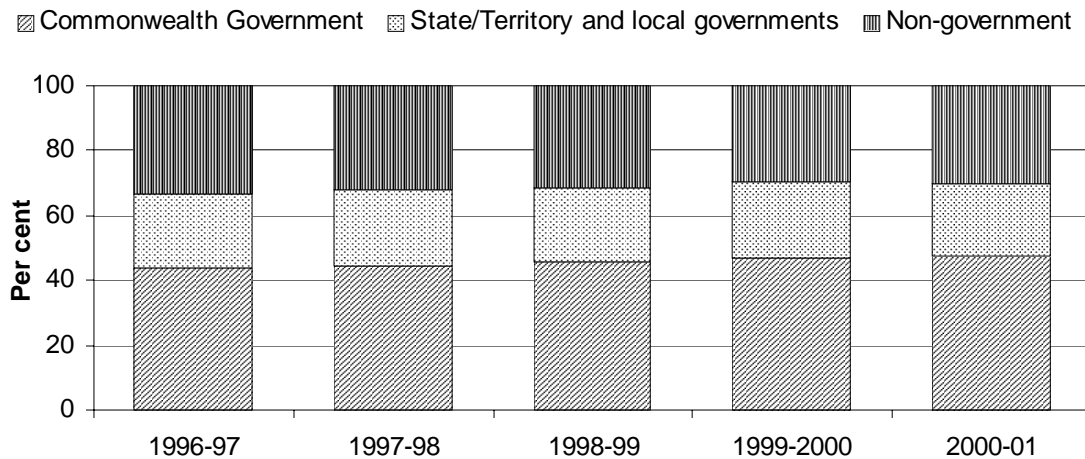
State and Territory governments, through income raised by taxes and from both general and specific-purpose grants received from the Commonwealth, contribute funds to community health services and public hospitals (through casemix and other payments), which in turn fund specialists (through limited fee-for-service 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.

Governments (at all levels) funded \$42.5 billion (70.0 per cent) of total health expenditure in 2000-01, with the remainder coming from individuals, health insurance funds, and workers compensation and compulsory motor vehicle third party insurance providers (the latter two are treated as non-government funding because funds are obtained on the basis of fee-for-service). The Commonwealth Government accounted for the largest proportion of total health care expenditure in Australia — \$28.8 billion or 47.5 per cent in 2000-01 (figure E.1). State, Territory and local governments contributed \$13.7 billion or 22.5 per cent of total health care expenditure.

### Size and scope of sector

Total expenditure (recurrent and capital) on health care services in Australia was estimated to be \$60.8 billion in 2000-01. This was equivalent to 9.0 per cent of gross domestic product, up from 7.9 per cent in 1990-91 (AIHW 2002a). This implies that health care expenditure grew faster than the economy over the last decade.

Figure E.1 **Total health expenditure by source, 1996-97 to 2000-01**<sup>a, b, c, d, e</sup>



<sup>a</sup> Includes recurrent and capital expenditure. <sup>b</sup> Includes expenditure on high level residential aged care which is reported in chapter 12. <sup>c</sup> Expenditure by the Commonwealth Government and the non-government sector has been adjusted for tax expenditures. <sup>d</sup> 'Non-government' includes expenditure by individuals, health insurance funds, workers compensation and compulsory motor vehicle third party insurers. <sup>e</sup> Expenditure for 2000-01 based on preliminary estimates by the AIHW and the Australian Bureau of Statistics (ABS).

Source: AIHW (2002a); table EA.1.

The growth of total health expenditure over the last decade was partly the result of an increase in expenditure by the Commonwealth Government. Expenditure by the Commonwealth grew proportionally faster than expenditure by State and Territory

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governments and non-government sources. Between 1990-91 and 2000-01 the real average annual rate of growth in expenditure was 5.7 per cent for the Commonwealth Government, 3.2 per cent for State, Territory and local governments and 3.5 per cent for non-government sources (AIHW 2002a). A significant factor in the latter part of the decade was the introduction of Commonwealth programs supporting private health insurance.

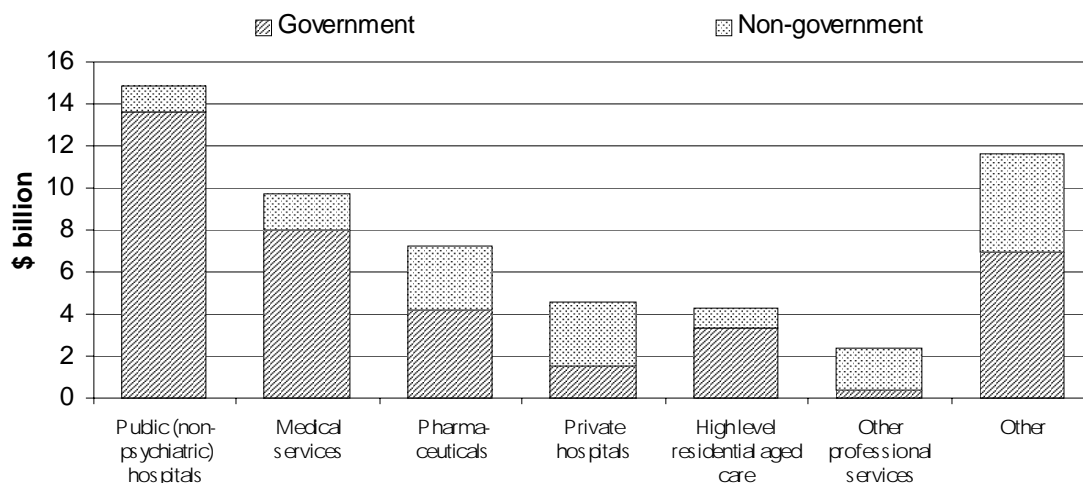
On 1 January 1998, the Commonwealth Government replaced the Private Health Insurance Incentive Scheme with a 30 per cent rebate on private health insurance premiums. Total expenditure on the rebate was \$1.6 billion for 1999-2000 and increased to \$2.1 billion for 2000-01 (AIHW 2002a).

The single largest item of recurrent health care expenditure by government and non-government sources in 2000-01 was public (non-psychiatric) hospitals. Total expenditure on these services was \$14.8 billion, of which governments contributed \$13.6 billion (1999-2000 dollars<sup>2</sup>) (tables EA.2 and EA.3). Public (non-psychiatric) hospitals accounted for 35.7 per cent of government recurrent expenditure on health care services in 2000-01. Medical services accounted for \$8.0 billion of government expenditure (21.0 per cent) and pharmaceutical services accounted for \$4.2 billion (11.0 per cent) (figure E.2). More information on health expenditure by area of expenditure and source of funds is included in table EA.14.

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<sup>2</sup> In real dollars (1999-2000). The published source data from the AIHW use this base year and the same base year is used here for consistency.

Figure E.2 **Total health services recurrent expenditure, 2000-01 (1999-2000 dollars)<sup>a, b, c, d</sup>**

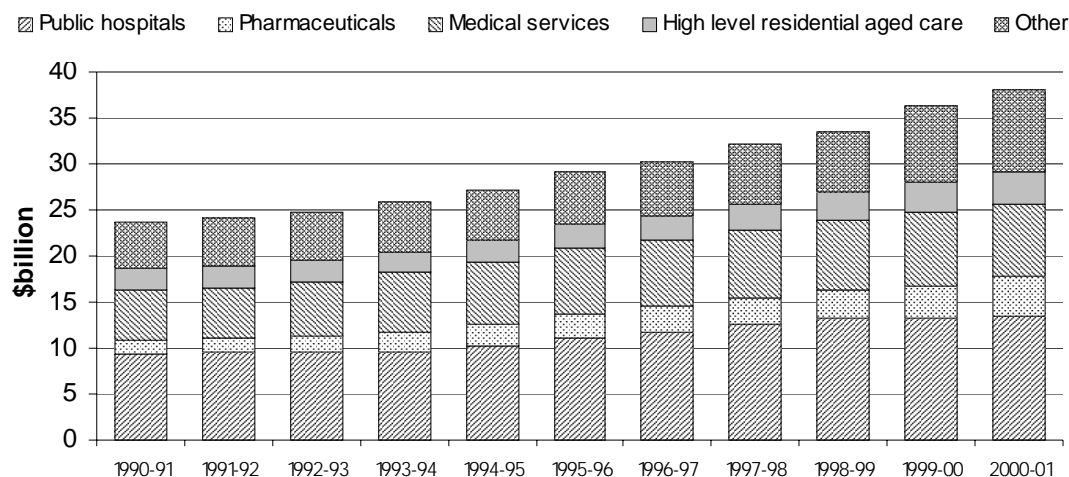


<sup>a</sup> Almost all expenditure on 'medical services' relates to services provided by practitioners on a fee-for-service basis, including those provided to private patients in hospitals. Excluded are the medical component of hospital care provided to public hospital inpatients and outpatient medical services provided at public hospitals. <sup>b</sup> 'Pharmaceutical services' include (but are not limited to) those provided under the PBS. <sup>c</sup> 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 in residential aged care services. These services are commonly classified as health services expenditure, but are included in the Report in chapter 12 (Aged care services). <sup>d</sup> 'Other' includes community and public health services, dental services, funding for aids and appliances, administration, ambulance services (reported in chapter 8 [Emergency management]), research and public psychiatric hospitals.

Source: AIHW (2002a); tables EA.2 and EA.3.

The relative share of government recurrent health expenditure allocated to public hospitals has fallen since 1990-91 when it was 39.6 per cent. This decline reflects the more rapid growth over the decade of expenditure on medical and pharmaceutical services (figure E.3). The real average annual growth rate of government recurrent expenditure on medical services was 4.2 per cent between 1990-91 and 2000-01 and on pharmaceuticals was 10.8 per cent, compared with 3.7 per cent for public hospitals (AIHW 2002a). The most rapid areas of growth in government expenditure were private hospitals and other professional services, which grew 30.7 per cent and 9.0 per cent, respectively (AIHW 2002a). Several policy measures introduced to restrain growth in health expenditure over the decade include the restriction of Medicare provider numbers, initiatives to encourage the use of generic pharmaceutical brands and increases in co-payments for pharmaceuticals.

**Figure E.3 Government real recurrent health expenditure (1999-2000 dollars)<sup>a, b, c, d</sup>**



<sup>a</sup> 'Pharmaceutical services' include (but are not limited to) those provided under the PBS. <sup>b</sup> 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 outpatient medical services provided at public hospitals. <sup>c</sup> High level residential aged care is included by definition in health expenditure, but is reported along with other aged care services in chapter 12 (Aged care services). <sup>d</sup> 'Other' includes community and public health services, funding for aids and appliances, administration, private hospitals, ambulance services (reported in chapter 8 [Emergency management]), research, dental services and public psychiatric hospitals.

Source: AIHW (2002a); table EA.2.

The rapid growth of expenditure on pharmaceutical services and private hospitals meant that their proportion of government health care expenditure rose over the period 1990-91 to 2000-01. Expenditure on pharmaceutical services increased from 6.4 per cent of government expenditure in 1990-91 to 11.0 per cent in 2000-01. Expenditure on private hospitals increased from 0.5 per cent in 1990-91 to 4.1 per cent in 2000-01 (table EA.2).

### Health expenditure per person

Health expenditure in each State and territory is affected by different policy initiatives and differences in socioeconomic and demographic characteristics. Total health expenditure (recurrent and capital) per person in 2000-01 was \$3153, rising by 14.9 per cent in the two years since 1998-99 (when it was \$2743). In 2000-01, it was highest in the ACT (\$3499) and lowest in WA (\$3092) (table EA.13).

The most recent data for recurrent expenditure by State and Territory are for 1999-2000. Recurrent expenditure on health care services rose from \$2616 per person in 1998-99 to \$2726 per person in 1999-2000 (in 1999-2000

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dollars) (table EA.11).<sup>3</sup> Recurrent spending per person in 1999-2000 was highest in the NT (\$3020) and lowest in Queensland (\$2609).

Government recurrent spending rose from \$1776 per person in 1998-99 to \$1898 in 1999-2000 (1999-2000 dollars) (table EA.11).<sup>4</sup> Government expenditure in 1999-2000 was highest in the NT (\$2393 per person) and lowest in Victoria (\$1795 per person) (figure E.4).

Non-government recurrent spending per person declined between 1998-99 and 1999-2000 (from \$840 to \$827 in 1999-2000 dollars).<sup>5</sup> Non-government expenditure was highest in Victoria (\$974 per person) and lowest in the NT (\$628 per person) in 1999-2000 (figure E.4).

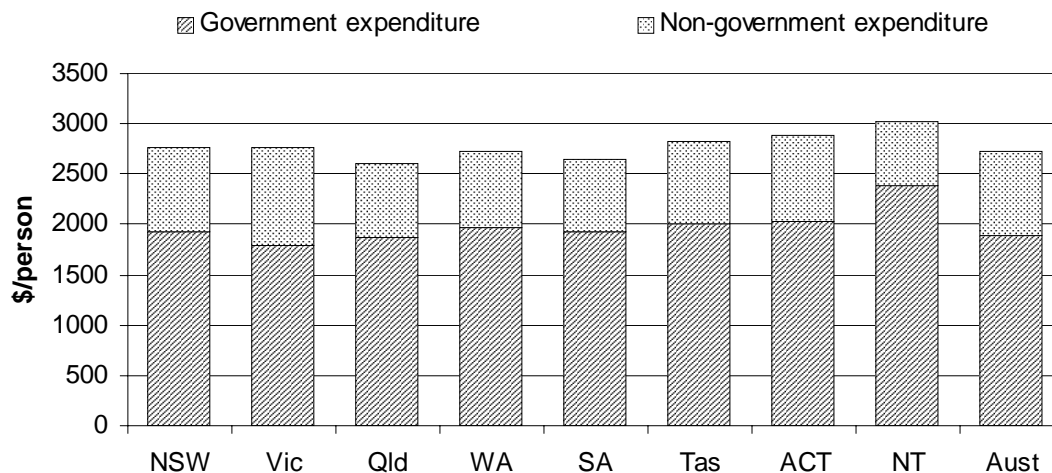
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<sup>3</sup> For the purposes of separating health expenditure from spending on aged care covered in chapter 12, recurrent spending per person on health care services can also be calculated excluding expenditure on high level residential aged care. If spending on high level residential aged care is removed, total recurrent expenditure on health care services rose from \$2415 per person in 1998-99 to \$2513 per person in 1999-2000 (in 1999-2000 dollars) (table EA.12). In 1999-2000, total expenditure per person on health excluding spending on high level residential aged care was highest in the NT (\$2959) and lowest in SA (\$2387).

<sup>4</sup> If spending on high level residential aged care is removed, government recurrent expenditure on health care services rose from \$1619 per person in 1998-99 to \$1733 per person in 1999-2000 (in 1999-2000 dollars) (table EA.12). In 1999-2000, government expenditure on health excluding spending on high level residential aged care ranged from \$2347 in the NT to \$1641 in Victoria.

<sup>5</sup> If spending on high level residential aged care is removed, non-government recurrent expenditure on health care services dropped from \$796 per person in 1998-99 to \$780 per person in 1999-2000 (in 1999-2000 dollars) (table EA.12). In 1999-2000, non-government expenditure on health excluding spending on high level residential aged care ranged from \$930 per person in Victoria to \$612 per person in the NT.

Figure E.4 Total recurrent expenditure per person, 1999-2000



Source: AIHW (2002a); table EA.11.

#### *Expenditures on health services for Indigenous people*

The Steering Committee has allocated a high priority to reporting on Indigenous people. There are limited data available on Indigenous health and the data are of poor quality. Some of the problems associated with Indigenous health data are outlined in ABS/AIHW (2001) and Australian Indigenous Health Infonet (2002). In summary:

- estimating the Indigenous population is difficult because the propensity for people to identify as Indigenous varies;
- Indigenous people are not always accurately identified in administrative collections, such as hospital records and birth and death registrations, due to variations in definitions, different data collection methods and failure to record Indigenous status; and
- sampling for national household surveys is usually designed to provide aggregate information about the total Australian population, often does not include remote areas, and is usually insufficient to enable separate results to be published for Indigenous people.

Estimating health services expenditure for Indigenous people is difficult. Department of Veterans' Affairs' records do not identify Indigenous status. In other data sets, while Indigenous status is recorded, the identification of Indigenous people remains incomplete. Indigenous people have been able to voluntarily identify as Indigenous for the Medicare and PBS databases since late 2002.

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Two sets of estimates of health services expenditure for Aboriginal and Torres Strait Islander people have now been released; the most recent for 1998-99 (AIHW 2001a). Expenditure on primary care (including Medicare and the PBS) was approximated based on survey data, with identification of Indigenous status acknowledged as being incomplete. A full account of the most recent estimates was provided in the 2002 Report. The key issues are repeated here.

Total recurrent expenditure on health services for Indigenous people was around \$1.2 billion in 1998-99.<sup>6</sup> This was equivalent to \$3065 per Indigenous person compared with \$2518 per non-Indigenous person; a ratio of 1.22:1 (table E.1).<sup>7</sup>

The study (AIHW 2001a) found that public expenditures on the health of Indigenous people appear to have been similar to those for non-Indigenous people in low income groups, when their relative income position was taken into account. Indigenous people were on average much higher users of publicly provided health services, but used fewer privately provided services (such as doctors in private practice). Governments funded 90.8 per cent of Indigenous recurrent health costs compared with 67.5 per cent of the recurrent health care costs of non-Indigenous Australians in 1998-99. For public funding, the ratio of Indigenous to non-Indigenous expenditures per person was 1.64:1, reflecting their relatively poor health and socioeconomic status (table E.1).

The vast majority of Indigenous health expenditure 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 Aboriginal Community Controlled Health Services (ACCHSs).

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<sup>6</sup> The Report examines recurrent expenditure only. Capital costs are not included in expenditure estimates.

<sup>7</sup> If the higher costs of providing services in remote areas were factored in, the ratio of Indigenous to non-Indigenous health expenditure would be lower.

**Table E.1 Estimated recurrent expenditure by source of funds and by Indigenous status, 1998-99 (per person)<sup>a</sup>**

| Source of funds                                       | Indigenous   |              | Non-Indigenous |              | Indigenous/<br>other |
|---|--------------|--------------|----------------|--------------|----------------------|
|   | \$/person    | %            | \$/person      | %            | Ratio                |
| State government funding of State government programs | 1 376        | 44.9         | 484            | 19.2         | 2.84                 |
| Commonwealth Government funding                       | 1 393        | 45.5         | 1 206          | 47.9         | 1.15                 |
| Indigenous-specific                                   | 298          | 9.7          | 1              | –            | ..                   |
| Medicare/PBS  | 196          | 6.4          | 506            | 20.1         | 0.39                 |
| Other Commonwealth programs                           | 163          | 5.3          | 366            | 14.5         | 0.45                 |
| Payments to States                                    | 735          | 24.0         | 334            | 13.2         | 2.20                 |
| Local government funding                              | 15           | 0.5          | 9              | 0.4          | 1.67                 |
| <b>Total government</b>                               | <b>2 783</b> | <b>90.8</b>  | <b>1 700</b>   | <b>67.5</b>  | <b>1.64</b>          |
| <b>Total private<sup>b</sup></b>                      | <b>281</b>   | <b>9.2</b>   | <b>819</b>     | <b>32.5</b>  | <b>0.34</b>          |
| <b>Total health expenditure</b>                       | <b>3 065</b> | <b>100.0</b> | <b>2 518</b>   | <b>100.0</b> | <b>1.22</b>          |

<sup>a</sup> Totals may not add as a result of rounding. <sup>b</sup> Private funding includes funding from out-of-pocket payments by patients, health insurance funding and other funding sources such as workers compensation. – Nil or rounded to zero. .. Not applicable.

Source: AIHW (2001a).

While the Commonwealth was the major *source* of funding in 1998-99 (table E.1), the majority of health services provided to Indigenous people were *administered* by State and Territory governments (around 72.0 per cent). State and Territory government services may be funded by the States and Territories, by the Commonwealth or from private sources. Programs delivered directly by the Commonwealth Government accounted for 22.5 per cent of total health expenditure per Indigenous person — a significant proportion through grants to ACCHSs (AIHW 2001a). Commonwealth Government programs may be funded by the Commonwealth or from private sources.

Indigenous Australians are currently using secondary/tertiary care at a higher rate than primary health care. Patterns of government expenditure per person in 1998-99 for Indigenous people reflected their relatively higher use of hospital services (both admitted and non-admitted) compared with non-Indigenous Australians. Expenditure on Indigenous people in public hospitals was twice as much per person, and in community and public health services more than five times as much per person, as expenditure for non-Indigenous people (see table E.2). On the other hand, expenditure per person on Medicare and the PBS was much lower for Indigenous people — around 39 per cent of that for non-Indigenous people (AIHW 2001a) (table E.1). Indigenous per person expenditure on private sector services was only 23 per cent of non-Indigenous expenditure per person (table E.2).

Table E.2 **Estimated recurrent expenditure by program and by Indigenous status, 1998-99<sup>a</sup>**

|  | <i>Indigenous<br/>\$/person</i> | <i>non-Indigenous<br/>\$/person</i> | <i>Ratio Indigenous/<br/>non-Indigenous</i> |
|--|---------------------------------|-------------------------------------|---|
| <b>Expenditure through Commonwealth, State and Territory government programs</b> |                                 |                                     |   |
| Acute care institutions  |                                 |                                     |   |
| Admitted patient services  | 1 125                           | 558                                 | 2.02  |
| Non-admitted patient services  | 307                             | 139                                 | 2.21  |
| Mental health institutions   | 64                              | 25                                  | 2.53  |
| <i>Public hospitals</i>  | 1 496                           | 722                                 | 2.07  |
| High care residential aged care  | 99                              | 209                                 | 0.47  |
| Community and public health  | 874                             | 170                                 | 5.14  |
| Patient transport  | 106                             | 31                                  | 3.39  |
| Medicare and other medical <sup>b</sup>  | 179                             | 468                                 | 0.38  |
| PBS medicines <sup>c</sup>   | 61                              | 195                                 | 0.31  |
| Administration and research  | 101                             | 72                                  | 1.40  |
| <b>Total government program expenditure</b>                                      | <b>2 917</b>                    | <b>1 868</b>                        | <b>1.56</b>                                 |
| <b>Expenditures on private sector services</b>                                   |                                 |                                     |   |
| Private hospitals  | 25                              | 222                                 | 0.11  |
| Dental and other professional  | 42                              | 213                                 | 0.20  |
| Non-PBS medicines and appliances   | 66                              | 144                                 | 0.46  |
| Medical (compensable etc)  | 11                              | 37                                  | 0.30  |
| Administration   | 5                               | 34                                  | 0.14  |
| <b>Total private sector services expenditure</b>                                 | <b>148</b>                      | <b>650</b>                          | <b>0.23</b>                                 |
| <b>Total health expenditure</b>  | <b>3 065</b>                    | <b>2 518</b>                        | <b>1.22</b>                                 |

<sup>a</sup> Totals may not add as a result of rounding. <sup>b</sup> Includes Medicare optometrical and dental as well as medical services, and includes MBS payments through patient co-payments, and MBS payments through the Department of Veterans' Affairs. <sup>c</sup> Includes PBS payments through patient co-payments and PBS payments through the Department of Veterans' Affairs.

Source: AIHW (2001a).

International experience has shown that a comprehensive approach to primary health care can contribute to significant improvements in health in developing countries and among Indigenous populations in developed countries comparable to Australia (DHA 2001).

In its 1999-2000 budget, the Commonwealth Government announced the Primary Health Care Access Program, a local health services development program to increase the availability of appropriate primary health care services for Indigenous Australians where services are inadequate. The program will establish a framework for the expansion of comprehensive primary health care services, including clinical care, illness prevention and early intervention activities and management and support system, in a planned and coordinated manner in line with regional planning.

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## 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), and governments use a variety of services in different settings to fulfil this objective.

### 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 which recognise the cultural differences between people; and
- providing equitable access to these services.

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; and
- delay the onset of illness.

Medical intervention strategies are implemented after a diagnosis.

Measuring the effectiveness 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 for the performance of service providers (such as community health centres, GPs and public hospitals), as well as 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 (hospital-based versus community-based), play an important role in determining outcomes. Factors external to the health system, such as socioeconomic and demographic characteristics of the population, and infrastructure and the environment, are also relevant.

The Steering Committee has not sought to develop a single unifying performance indicator framework that captures all these aspects of the health system. Instead, it has taken a two-pronged approach. First, there are performance indicator

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frameworks for significant providers (hospitals and GPs). Second, there are separate frameworks that aim to examine the appropriate mix of services, including the prevention of illness and injury, medical treatment and the appropriate mix of service delivery mechanisms. The latter are measured by focusing on health management issues — breast cancer and mental health.

Individual performance indicator frameworks are discussed in more detail in chapters 9, 10 and 11. A complete set of performance indicator frameworks can contribute to an improved understanding of the performance of health care service systems in each jurisdiction.

### **The National Health Performance Committee framework for measuring the performance of the health system**

The 2002 Report noted the development, in 2001, of the National Health Performance Framework (NHPF) by the National Health Performance Committee (NHPC). The framework consists of three tiers:

- health status and outcomes (comprising the dimensions of health conditions, human function, life expectancy and wellbeing, and deaths);
- determinants of health (grouped into environmental factors, socioeconomic factors, community capacity, health behaviours and person-related factors); and
- performance of health systems (grouped into nine dimensions comprising effectiveness, appropriateness, efficiency, responsiveness, accessibility, safety, continuity, capability and sustainability).

Equity is incorporated across all tiers of the framework using the question: ‘Is it the same for everyone?’

A number of other groups involved in health performance indicator development have adopted this framework, adapting it for use within specific project areas. These groups include, for example, 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 and the Australian Council on Healthcare Standards.

#### *Alignment of the Review and NHPC frameworks*

The development of the NHPF is a significant achievement and is likely to drive reporting in the health sector in future. The Steering Committee therefore considers

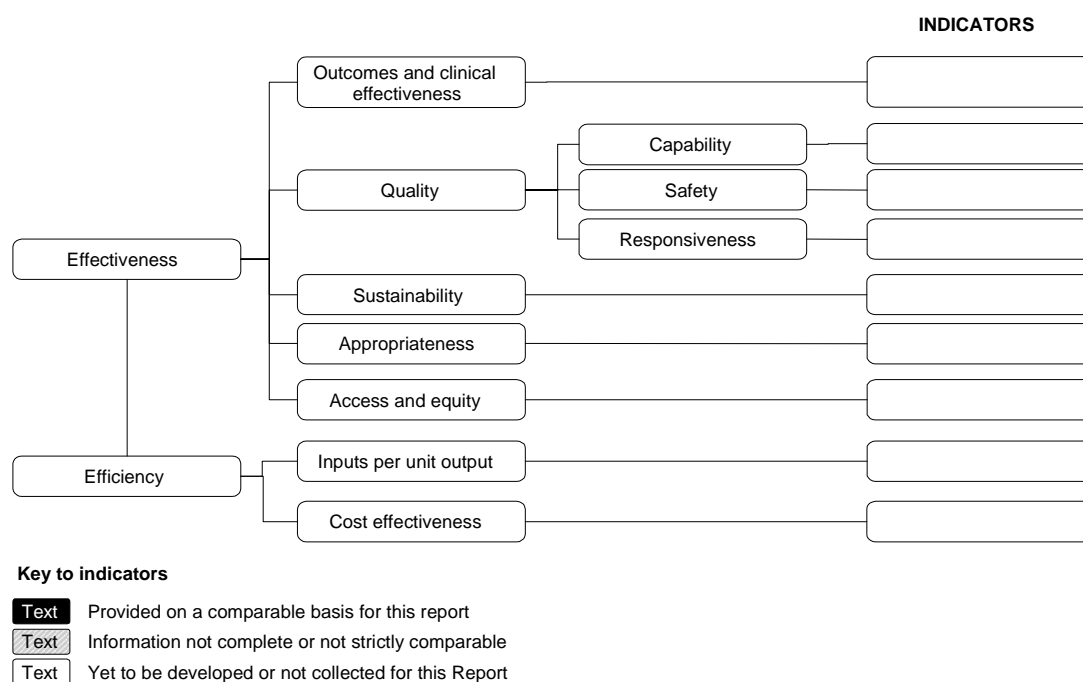
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alignment of the Review framework and the NHPF desirable wherever possible. There are obvious similarities between the frameworks used for the health chapters of the Report and the framework used by the NHPC, however, it should be noted that the frameworks cannot be completely aligned as the aims and terms of reference of the Review and the NHPC differ.

- The Review focuses on comparisons across State and Territory governments, while the NHPC does not necessarily report by jurisdiction.
- The NHPC may not always present ongoing comparisons of the same indicators, with the intention of taking a theme based approach, whereas the terms of reference for the Review require that it present a consistent set of data and indicators to allow for evaluation over time.
- The Review framework is used to compare the efficiency and effectiveness of government service provision (tier three of the NHPC framework), while the NHPC framework is designed to allow benchmarking of the whole health system, including the performance of the non-government sector and external influences.

A new Review framework more closely aligned to the NHPC framework is presented in figure E.5. It includes dimensions from the third tier of the NHPC framework (sustainability, responsiveness, capability and safety). Reporting against this framework will commence in the 2004 Report.

Figure E.5 **Future performance indicator framework for the health chapters of the *Report on Government Services 2004***



## 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 ethnicity, residential location, income levels and employment rates) and the provision of nonhealth care government services (such as clean water, sewerage, nutrition, education and public housing) each contribute to overall health outcomes. Data on health outcomes presented in this Report include life expectancy, mortality rates (for infants and all people), leading causes of death, and the birthweight of babies.

As discussed elsewhere, reporting data for Indigenous people is a priority for the Review. Where possible, data are presented for Indigenous people as well as the Australian population as a whole.

The efforts of governments to address health care needs are influenced by factors external to their control, including geographic dispersion, age profiles, racial characteristics and socioeconomic status. Statistical Appendix A provides a summary of some factors that could influence health outcomes and government expenditure. It is important to remember the limits of the data presented, due to the effects of other nonhealth related factors.

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## Prevalence of illness and injury

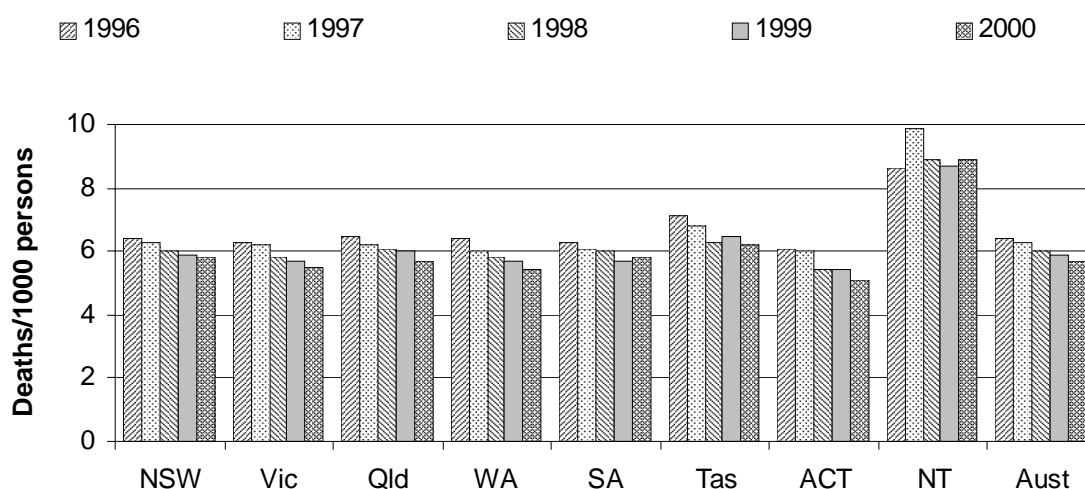
One method for measuring overall health outcomes is to use data outlining the prevalence and incidence of illness and injury. The Australian Bureau of Statistics (ABS) published data on the prevalence of illness and injury in 1997 based on the 1995 National Health Survey (table EA.4). These data have been discussed in previous editions of the Report. Data from the 2001 National Health Survey will be included in the 2004 Report.

## Mortality rates

Another method for measuring overall health outcomes is to use mortality rates among all people and infants. There were 128 291 deaths in Australia in 2000 (ABS 2001a) which translated into an age-standardised mortality rate of 5.7 per 1000 people (figure E.6). Across jurisdictions, mortality rates in 2000 were highest in the NT (8.9 per 1000) and lowest in the ACT (5.1 per 1000).

Data on Indigenous mortality are collected through State and Territory death registrations. Although these data collections have good data for the total Australian population, the accuracy of the identification of Indigenous Australians varies significantly between States and Territories. The term 'coverage' refers to the number of Indigenous deaths registered, expressed as a percentage of the number of deaths expected based on Census-based population data. The NT, SA, WA and, more recently, Queensland are generally considered to have the best coverage of death registrations for Indigenous people. In 2000, the estimated coverage ranged from 92 per cent in the NT to six per cent in Tasmania, with 59 per cent coverage Australia-wide (based on 1996 low series population projections). There are also limitations to identification in the Census and births data which affect the reliability of Indigenous mortality data. There can be underestimation of the number of Indigenous deaths (or births) and, by extension, an underestimation of the mortality (or birth) rate of Indigenous people (ABS 2001a). The ABS now publishes the Indigenous mortality data for all jurisdictions except Tasmania and the ACT. Changes are being made that will improve the coverage of Indigenous death registrations in these jurisdictions (ABS 2000). With these caveats in mind the Indigenous mortality rate in 2000 in the NT, SA and WA combined was 21 deaths per 1000, a rate over three times the national rate for all people (six per 1000) (ABS 2001a). Of these three jurisdictions, the Indigenous mortality rate in 2000 was highest in the NT (24.0 per 1000) and lowest in SA (18.1 per 1000) (table E.3).

Figure E.6 Mortality rate per 1000 people, age standardised



Source: ABS (2001 and unpublished); table EA.5.

Table E.3 Mortality rates, age standardised for all causes, 2000 (per 1000 people)

|                         | NSW  | Vic  | Qld  | WA   | SA   | Tas | ACT | NT   | Aust <sup>a</sup> |
|-------------------------|------|------|------|------|------|-----|-----|------|-------------------|
| All Australians         | 5.8  | 5.5  | 5.7  | 5.4  | 5.8  | 6.2 | 5.1 | 8.9  | 5.7               |
| Indigenous <sup>b</sup> | 12.0 | 12.1 | 14.0 | 19.8 | 18.1 | na  | na  | 24.0 | 15.2              |

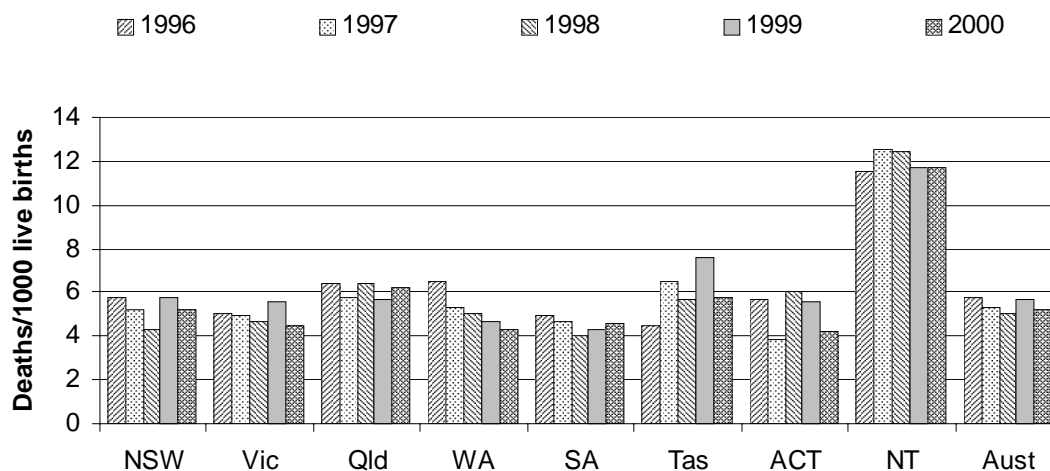
<sup>a</sup> Figures for Australia include 'Other Territories'. <sup>b</sup> Indigenous death rates for 2000 are based on indirect age standardisation according to the ABS *Experimental Projections for the Indigenous Population: 1996 to 2006*. **na** Not available.

Source: ABS (2001a); table EA.5.

Infant mortality rates<sup>8</sup> in Australia declined between 1991 and 1998 — from 7.1 to 5.0 per 1000 live births (table EA.6). Between 1998 and 1999, the national infant mortality rate increased from 5.0 to 5.7, however, between 1999 and 2000 infant mortality rates decreased in NSW, Victoria, WA, Tasmania and the ACT. These decreases are reflected in a lower national infant mortality rate — 5.2 in 2000 (figure E.7). Across jurisdictions, infant mortality rates in 2000 were highest in the NT (11.7 per 1000 live births) and lowest in the ACT (4.2 per 1000 live births).

<sup>8</sup> The number of deaths of children under one year of age in a calendar year per 1000 live births in the same calendar year.

Figure E.7 **Infant mortality rate**



Source: ABS (2001 and unpublished); table EA.6.

Infant mortality rates for Indigenous Australians are reported for NSW, Queensland, WA and the NT in this year's Report. The accuracy of Indigenous mortality data is variable due to varying rates of coverage across jurisdictions and over time, and changes in the estimated Indigenous population caused by changing rates of identification in the Census and births data. The Indigenous infant mortality rate was between 22.9 per 1000 live births in the NT and 10.7 per 1000 live births in Queensland (between 4.4 times (NT) and 2.1 times (Queensland) the national average for all Australians in 2000) (table EA.6).

### Principal causes of death

The main causes of death among Australians in 2000, when measured in terms of broad categories of disease and injury, were diseases of the circulatory system (heart diseases, heart attacks and strokes), neoplasms (tumours and malignant cancers), diseases of the respiratory system (such as chronic obstructive pulmonary disease) and external causes (including accidents and suicide). These accounted for 83.5 per cent of all deaths among males and 80.2 per cent of all deaths among females (table EA.7).

Table E.4 summarises the most significant individual causes of mortality among Australian males and females. Ischaemic heart disease, acute myocardial infarction and stroke are the most common causes for both men and women.

**Table E.4 Principal causes of deaths, 2000 (per cent)**

|  | <i>NSW</i> | <i>Vic</i> | <i>Qld</i> | <i>WA</i> | <i>SA</i> | <i>Tas</i> | <i>ACT</i> | <i>NT</i> | <i>Aust</i> |
|--|------------|------------|------------|-----------|-----------|------------|------------|-----------|-------------|
| <b>Male</b>                              |            |            |            |           |           |            |            |           |             |
| Heart disease <sup>a</sup>               | 21.5       | 20.2       | 21.6       | 19.8      | 22.2      | 20.4       | 19.2       | 15.8      | 21.0        |
| Acute myocardial infarction <sup>c</sup> | 11.2       | 11.0       | 11.7       | 11.2      | 12.9      | 11.4       | 9.7        | 7.2       | 11.4        |
| Stroke <sup>b</sup>                      | 8.1        | 6.8        | 7.2        | 6.6       | 7.0       | 8.0        | 6.5        | 3.5       | 7.4         |
| Lung cancer <sup>d</sup>                 | 6.7        | 6.7        | 7.3        | 7.3       | 7.1       | 7.0        | 5.0        | 6.0       | 6.9         |
| Prostate cancer                          | 3.8        | 4.2        | 4.3        | 3.7       | 4.1       | 4.4        | 3.7        | 1.1       | 4.0         |
| Suicide                                  | 2.5        | 2.3        | 3.5        | 3.6       | 2.6       | 2.1        | 3.9        | 6.5       | 2.8         |
| Diabetes mellitus                        | 1.9        | 3.0        | 2.6        | 2.5       | 2.1       | 2.1        | 1.6        | 3.2       | 2.4         |
| <b>Female</b>                            |            |            |            |           |           |            |            |           |             |
| Heart disease <sup>a</sup>               | 20.5       | 18.7       | 23.2       | 20.8      | 18.6      | 19.2       | 9.8        | 20.2      | 20.3        |
| Stroke <sup>b</sup>                      | 12.8       | 11.1       | 12.4       | 12.0      | 11.0      | 11.3       | 5.6        | 12.9      | 12.0        |
| Acute myocardial infarction <sup>c</sup> | 10.8       | 11.0       | 13.4       | 13.0      | 10.4      | 10.5       | 4.4        | 11.9      | 11.4        |
| Breast cancer                            | 3.8        | 4.5        | 3.8        | 3.9       | 4.1       | 4.4        | 4.4        | 6.7       | 4.1         |
| Lung cancer <sup>d</sup>                 | 3.6        | 3.8        | 3.5        | 3.4       | 4.7       | 4.2        | 3.8        | 4.7       | 3.7         |
| Suicide                                  | 0.6        | 0.8        | 1.2        | 0.7       | 1.1       | 0.6        | 1.5        | 0.6       | 0.8         |
| Diabetes mellitus                        | 1.8        | 2.8        | 2.4        | 2.7       | 2.5       | 1.3        | 5.0        | 1.7       | 2.3         |

<sup>a</sup> Ischaemic heart disease. <sup>b</sup> Cerebrovascular disease. <sup>c</sup> Heart attack. <sup>d</sup> Cancer of the trachea, bronchus and lung.

Source: ABS (2001a); table EA.7.

The leading causes of death for Indigenous people in 2000 are presented in table E.5. External causes<sup>9</sup> of death made up a higher proportion of deaths for Indigenous people (19.2 per cent for males and 10.3 per cent for females) than for all Australians (8.3 per cent for males and 4.2 per cent for females). Similarly, diabetes mellitus contributed to 5.6 per cent (males) and 11.3 per cent (females) of Indigenous deaths compared to 2.3 per cent (females) and 2.4 per cent (males) of total deaths (table E.5). Malignant neoplasms (cancers) accounted for a smaller proportion of Indigenous deaths (15.7 per cent for males and 15.8 per cent for females) than for all Australians (30.2 per cent for males and 25.2 per cent for females) (tables EA.7 and EA.8).

<sup>9</sup> 'External causes' includes transport accidents, suicide, assault and all other external causes of mortality.

**Table E.5 Principal causes of deaths for Indigenous people, 2000 (per cent)<sup>a</sup>**

|                              | <i>NSW</i> | <i>Vic</i> | <i>Qld</i> | <i>WA</i> | <i>SA</i> | <i>Tas</i> | <i>ACT</i> | <i>NT</i> | <i>Aust</i> |
|------------------------------|------------|------------|------------|-----------|-----------|------------|------------|-----------|-------------|
| <b>Male</b>                  |            |            |            |           |           |            |            |           |             |
| External causes <sup>b</sup> | 15.4       | 15.8       | 19.2       | 24.5      | 17.7      | na         | na         | 19.1      | 19.2        |
| Suicide                      | 4.2        | 5.3        | 6.9        | 8.4       | 3.8       | na         | na         | 5.3       | 6.0         |
| Transport accidents          | 4.2        | 1.8        | 3.8        | 5.1       | 5.1       | na         | na         | 6.1       | 4.6         |
| Assault                      | 2.7        | –          | 1.7        | 2.1       | 1.3       | na         | na         | 4.1       | 2.4         |
| Heart disease <sup>c</sup>   | 24.7       | 22.8       | 18.2       | 13.1      | 15.2      | na         | na         | 15.9      | 18.1        |
| Diabetes mellitus            | 4.2        | 3.5        | 7.2        | 6.3       | 6.3       | na         | na         | 4.9       | 5.6         |
| <b>Female</b>                |            |            |            |           |           |            |            |           |             |
| External causes <sup>b</sup> | 9.8        | 11.8       | 8.6        | 15.3      | 15.4      | na         | na         | 6.9       | 10.3        |
| Suicide                      | 1.9        | 3.9        | 1.6        | 1.8       | 3.1       | na         | na         | 0.5       | 1.7         |
| Transport accidents          | 3.3        | 3.9        | 2.0        | 2.9       | 4.6       | na         | na         | 2.0       | 2.7         |
| Assault                      | 2.3        | –          | 2.0        | 4.1       | –         | na         | na         | 2.5       | 2.3         |
| Heart disease <sup>c</sup>   | 18.7       | 5.9        | 17.6       | 17.1      | 18.5      | na         | na         | 9.8       | 15.4        |
| Diabetes mellitus            | 6.1        | 11.8       | 16.0       | 14.1      | 20.0      | na         | na         | 6.4       | 11.3        |

<sup>a</sup> The NT, SA, WA and, more recently, Queensland are generally considered to have the best coverage of death registrations for Aboriginal and Torres Strait Islander Australians. Numbers of Indigenous deaths for some causes in some jurisdictions are very small and a small change in the number of deaths for one of those causes may result in a large change in percentage terms. <sup>b</sup> Includes transport accidents, intentional self harm, assault and all other external causes of mortality. <sup>c</sup> Ischaemic heart disease. **na** Not available.

Source: ABS (2001b); table EA.8.

## Burden of disease and injury

The Australian Burden of Disease and Injury Study (Mathers, Vos and Stephenson 1999) provides a comprehensive assessment of the amount of ill health and disability in Australia — the ‘burden of disease’. The burden of disease is measured in terms of the total years of life lost to premature mortality or disability (box E.3). In 1996, premature mortality was responsible for 1.35 million years of life lost in Australia. When adjusted to include the number of years lost to disability resulting from disease or injury, the AIHW estimated the total burden to be 2.5 million Disability-Adjusted Life Years (DALY) in 1996.

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### Box E.3     **Disability- adjusted life expectancy and adjusted life years**

Both Disability-Adjusted Life Expectancy (DALE) and DALY are summary measures of population health.

DALE = life expectancy adjusted for the average time spent in states of less than full health weighted for severity.

$DALE = YLL + YLD$

YLL = years of life lost due to premature mortality

YLD = years of life lost due to disability

The DALE measure estimates the number of years that a person could expect to live in a defined state of health, and is therefore a health expectancy measure. It is a measure of years lived in full health combined with years lived in states of less than full health, weighted for severity of disability.

The DALY measure is the number of years lost due to premature mortality (relative to a standard life expectancy) combined with years lived in states of less than full health and is known as a health gap measure. At the population level, it can be interpreted as the gap between current health status and an ideal in which everyone lives into old age free of disease.

'Disability' in this context is defined as any departure from full health, and can include a short-term disability, from a common cold through to a long-term disability, such as quadriplegia. This is a broader definition of disability than is often used in common language.

Over-reliance on aggregated measures, such as DALE and DALY, can obscure information on the impact of particular disabilities. However, both the mortality and disability components of DALYs can be scrutinised separately.

The definition for YLD shown above is the definition used by the World Health Organisation. The definition that is more commonly used in Australia is 'years of life lost due to disability'.

There may be issues around the acceptability to some groups of people with a disability of both the DALE and DALY concepts in general and the specific weights assigned to various disabilities. There is a need for discussion within the community as to how well the weights (especially those derived from overseas research) reflect the views of both the people most affected by disability and Australian society as a whole. The technical application of the terms from a statistical and data measurement perspective will also be subject to further debate within Australia.

*Source:* NHPC (2001).

## Life expectancy

The life expectancy of Australians has improved dramatically since the turn of the century. The average life expectancy at birth in the period 1901–10 was 58.8 years for females and 55.2 years for males. It then rose steadily until it reached 82.0 for females and 76.6 years for males in 1998–2000 (table EA.9).

Life expectancy at birth varies across jurisdictions. Average life expectancy for males at birth was 78.3 years in the ACT in 2000, compared with 70.3 years in the NT (table E.6). The average for females in WA was 82.6 years, which was more than seven years longer than that for females in the NT (75.2 years). These differences reflect the large Indigenous proportion of the NT population (compared with other jurisdictions) and the shorter life expectancy of Indigenous people generally (table EA.9).

**Table E.6 Average life expectancy at birth (years)**

|                | <i>NSW</i> | <i>Vic</i> | <i>Qld</i> | <i>WA</i> | <i>SA</i> | <i>Tas</i> | <i>ACT</i> | <i>NT</i> | <i>Aust</i> |
|----------------|------------|------------|------------|-----------|-----------|------------|------------|-----------|-------------|
| <i>Males</i>   |            |            |            |           |           |            |            |           |             |
| 1994–96        | 75.0       | 75.6       | 75.1       | 75.4      | 75.3      | 74.1       | 76.6       | 69.2      | 75.2        |
| 1995–97        | 75.4       | 75.8       | 75.4       | 75.7      | 75.7      | 74.8       | 77.1       | 70.0      | 75.6        |
| 1996–98        | 75.8       | 76.3       | 75.6       | 76.1      | 76.0      | 75.1       | 77.5       | 70.6      | 75.9        |
| 1997–99        | 76.1       | 76.7       | 76.0       | 76.4      | 76.4      | 75.4       | 77.9       | 70.6      | 76.2        |
| 1998–2000      | 76.4       | 77.1       | 76.4       | 76.9      | 76.6      | 75.7       | 78.3       | 70.3      | 76.6        |
| <i>Females</i> |            |            |            |           |           |            |            |           |             |
| 1994–96        | 80.9       | 81.2       | 80.9       | 81.3      | 81.3      | 80.0       | 81.6       | 75.0      | 81.1        |
| 1995–97        | 81.2       | 81.4       | 81.3       | 81.6      | 81.5      | 80.1       | 81.3       | 74.7      | 81.3        |
| 1996–98        | 81.6       | 81.7       | 81.5       | 81.9      | 81.6      | 80.4       | 81.6       | 75.0      | 81.5        |
| 1997–99        | 81.7       | 82.0       | 81.7       | 82.1      | 82.1      | 80.7       | 81.8       | 75.1      | 81.8        |
| 1998–2000      | 81.9       | 82.3       | 81.9       | 82.6      | 82.3      | 81.2       | 82.3       | 75.2      | 82.0        |

Source: ABS (2001a); table EA.9.

Indigenous Australians had considerably lower life expectancies than non-Indigenous Australians for all years reported. The ABS has published experimental estimates of life expectancy for Indigenous Australians for 1998–2000. Based on these estimates, the life expectancies at birth of Indigenous Australians were 56.0 for males and 62.7 for females. Indigenous life expectancies are 19.3 years less for females and 20.6 years less for males than the average life expectancies for all Australians (table EA.9). Care needs to be taken when interpreting these figures as they are estimates only.

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Concerns with the under reporting of Indigenous deaths also affect estimates of life expectancies (ABS 2001a). An alternative measure of longevity is the median age at death, although this does not indicate the current health status of living people. In 2000, the median age at death for all Australians was 75.3 years for males and 81.7 years for females. In contrast, the median age at death for Indigenous Australians was 50.8 years for males and 57.4 years for females (table EA.10).

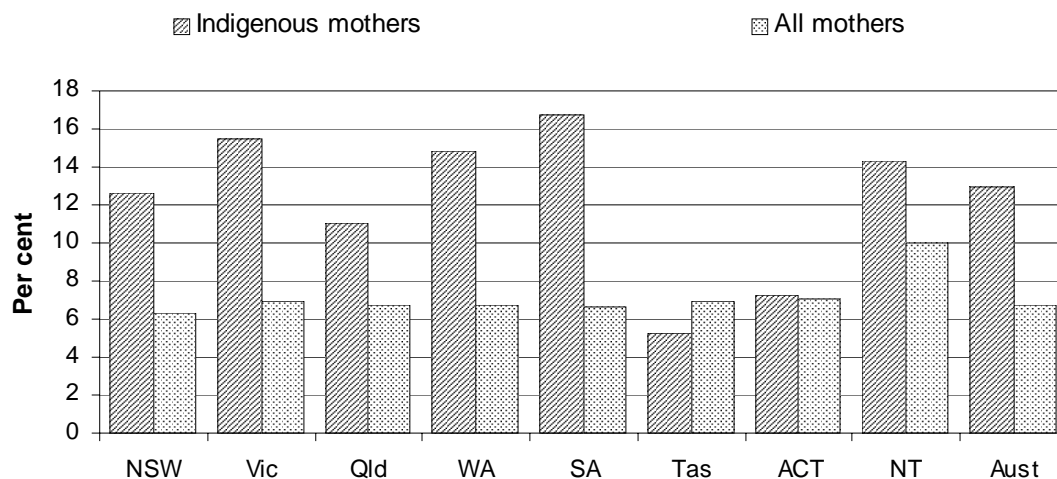
The median age at death for Indigenous Australians was highest among females in Queensland (61.3 years) and lowest among males in the NT (46.2 years). For all Australians, the highest median age at death was for females in SA (82.2 years) and the lowest was for males in the NT (55.7 years) (table EA.10).

### **Birthweight of babies**

For the first time this year, the Report contains information on the birthweights of babies born to all mothers and to Indigenous mothers. It is reported as part of the Steering Committee's focus on improving reporting on the Indigenous population, and this indicator is a key signal of the health and life expectancy of Indigenous people compared with the population generally.

The birthweight of a baby is an important indicator of its health status and future wellbeing. The mean birthweight of babies born to Indigenous mothers nationally was 3149 grams in 1999, compared to 3360 grams for babies born to all mothers (tables EA.15 and EA.16). The percentage of babies weighing less than 2500 grams born to Indigenous mothers nationally was 13.0 per cent in 1999, compared with 6.7 per cent for babies born to all mothers. The percentage of babies weighing less than 2500 grams born to Indigenous mothers ranged from 16.7 per cent in SA to 5.3 per cent in Tasmania. The percentage of babies weighing less than 2500 grams born to all mothers ranged from 10.0 per cent in the NT to 6.3 per cent in NSW (figure E.8). The data are only for babies born to Indigenous mothers and do not include babies with Indigenous fathers and non-Indigenous mothers.

Figure E.8 **Proportion of babies with birthweights under 2500 grams, 1999<sup>a, b</sup>**



<sup>a</sup> Data are for babies born to Indigenous mothers only. Babies with Indigenous fathers and non-Indigenous mothers are not included. <sup>b</sup> Data for 1999 for Tasmania unavailable. Data for 1998 used as estimates.

Source: AIHW (2001b), tables EA.15 and EA.16.

## Future directions

The Steering Committee has agreed to focus on developing reporting of health services across four broad areas:

- Indigenous health;
- primary health and community care;
- interactions between services; and
- regional, rural and remote health.

## Indigenous health

Performance indicators for use of health services by Indigenous Australians were first published in the 2000 Report. Since then improvements have been made where possible. The 2003 Report's Health preface includes data on expenditure on health services to Indigenous people and Indigenous mortality, causes of death and life expectancy. The Public hospitals chapter (chapter 9) in the 2003 Report includes several indicators for use of public hospital services by Indigenous people.

During 2002, the Review considered how best to expand its reporting of Indigenous health. The Review has considered the work done by other bodies in identifying

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priorities, for example, the Commonwealth Grants Commission (CGC) (box E.4), the National Aboriginal and Torres Strait Islander Health Council, and the Australian Health Ministers Advisory Council (AHMAC) (box E.5). Governments have tested health reforms to improve Indigenous health through the Aboriginal and Torres Strait Islander Coordinated Care Trials (box E.6).

**Box E.4 Commonwealth Grants Commission Report on Indigenous Funding 2001**

The CGC *Report on Indigenous Funding 2001* suggested the following priorities for Indigenous health:

- Increased resources allocated to Indigenous health — particularly in rural and remote areas — justified by the poor health status of Indigenous people and their reliance on the public health system. (The Commonwealth Government in its response to the CGC report said that data limitations mean it is difficult to draw conclusions about whether Indigenous people in remote areas have poorer health than those in urban areas [Commonwealth Government 2002]);
- Equitable access to mainstream services: access to renal dialysis and ‘improved support services such as patient transport and liaison officers’ in acute care settings, and increasing Indigenous people’s access to Medicare and the PBS;
- Improving the effectiveness of primary care services and increasing their use through:
  - partnership arrangements/community control;
  - improving access to mainstream services;
  - expansion of community controlled health services in accordance with regional health plans;
  - focusing on environmental issues; and
  - focusing on workforce issues;
- Emphasising community-based care to assist elders to remain in communities.

*Source:* CGC (2001)

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**Box E.5 National performance indicators for Aboriginal and Torres Strait Islander health**

For several years there has been a collaborative effort between statistical agencies, health departments and Indigenous organisations to improve the quality of data and reporting on Indigenous health status and health services. A key initiative has been the development of an indicator set for annual reporting by all jurisdictions. An interim set of national health performance indicators was endorsed by AHMAC in 1997, and a refined set was endorsed in 2000.

The interim set covered performance within a framework of health status, risk factors and service delivery and has been reported against by jurisdictions for 1998 and 1999. For many jurisdictions, the data required to report on the indicators were unavailable, of poor quality, or in need of substantial development in order to be reported (NHIMG 2001).

At present, the refined set includes over 50 indicators covering mortality, morbidity, access to health services, health services impacts, workforce developments, risk factors, intersectoral issues, community development and quality of service provision. The technical specifications for the refined set include recommendations for improved definitions and methods of collection for many of the indicators. In August 2002, the AHMAC Standing Committee on Aboriginal and Torres Strait Islander Health established a sub-committee to prioritise a subset of core indicators for jurisdictions to develop and improve data. The sub-committee will choose the indicators for their usefulness rather than the ability of jurisdictions to report on them. As the quality of reporting improves for the core indicators, the sub-committee will choose another group of the refined indicators for developing data with the eventual aim of improving data quality for all of the indicators.

**Box E.6 The Aboriginal and Torres Strait Islander Coordinated Care Trials**

A first round of Aboriginal and Torres Strait Islander Coordinated Care Trials, comprising four trials in the NT, NSW and WA, ran from 1997 to 1999. They were evaluated in 2000. The Aboriginal and Torres Strait Islander trials ran concurrently with a first round of general trials. The trials were implemented by Aboriginal community health organisations with pooling of Commonwealth, State and Territory funds for health services in the participating communities. Their overall objective was to improve the health status of targeted Indigenous communities through a more coordinated approach to delivery of health care. The approach was to improve accessibility and appropriateness of health care services and establish or improve local organisational capacity and make financial and administrative arrangements more flexible. The process was to be driven by clients and their communities to create empowerment.

(Continued on next page)

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**Box E.6 (Continued)**

The evaluation found that the trials made considerable progress in all aspects of the intended program of reforms. The reported outcomes included significantly improved access to services, health care planning, population health programs targeting priority needs at the community level, and building the skills and resources of local communities and organisations so that improvements could be made and sustained into the future.

Financial reform and enhanced community capacity — that is, the combination of funds pooling and its administration by community-based organisations — were the key factors in improving the capacity of the health care system to achieve enhanced health outcomes for Indigenous people.

A second round of Coordinated Care Trials includes three trials specifically targeting Aboriginal and Torres Strait Islander people. The second round of Aboriginal and Torres Strait Islander Coordinated Care Trials will run for three years and include a focus on reforming local health care systems, building the capacity of communities, organisations and services to identify and address local health care needs, and ways to enhance access to medical services for Indigenous people.

*Source: DHAC (2001).*

Future priorities for Indigenous health reporting by the Review are likely to include:

- social equity/access/disadvantage;
- mental health;
- substance abuse;
- primary and community health;
- funding for Indigenous health; and
- information on Indigenous health trends over time.

These issues have been selected as priorities because they have been identified by governments as key policy and program priorities in Indigenous health or because they represent areas where there is currently a dearth of information or where the availability of reliable and comparable data is limited but where the Review can potentially be a positive influence in improving data sets.

The availability of data is gradually improving. During 2001-02, key statistics on the services provided by Commonwealth funded Aboriginal primary health care services were collected and are being used for policy development and planning by the services, the sector, the National Aboriginal Community Controlled Health Organisation (NACCHO) and government. These statistics are collected through the annual Service Activity Reporting Questionnaire, a joint Office of Aboriginal and

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Torres Strait Islander Health and NACCHO initiative. The questionnaire collects service level data on health care and health-related activities over a 12-month period from over 100 Commonwealth funded Aboriginal primary health care services.

Comprehensive data have been published for the first time on the activities of Commonwealth funded stand-alone Aboriginal and Torres Strait Islander substance use services. The annual Drug and Alcohol Service Report questionnaire collects detailed service level information about episodes of care provided, staffing profiles, and the broad range of activities undertaken to prevent and treat substance use. This important information can be used by the government and the sector in formulating policy, in planning, and to profile the work of substance use services for Indigenous people.

Data development in the area of primary health care has been recognised as a priority by the National Advisory Group Aboriginal and Torres Strait Islander Health Information and Data (NAGATSIHID). A NAGATSIHID working group is being formed to consider issues such as the development of a minimum data set to standardise primary health care information across the health sector with an emphasis on improving service delivery.

### **Primary health and community care**

There is already relatively good coverage of performance indicators in some areas where the processes of data specification and capture have been refined over a number of years, particularly in hospital care. Major gaps remain in reporting on other areas of the health system, such as primary health and community care. In order to achieve more comprehensive reporting on whether high level objectives are being met in these areas, there is an ongoing need to develop:

- indicators that cover health services more comprehensively;
- indicators that show the relationship or links between primary health, community care and other sectors; and
- processes to upgrade the quality of the data available for reporting.

The primary health and community care sector is responsible for approximately one third of all health expenditure in Australia. It is the most visible and commonly used part of the health system with nine out of every 10 Australians accessing services in any given year (DHAC 2000).

In general terms, the sector encompasses services which are a person's first point of contact with the health system, such as general practice, hospital emergency departments and pharmacies, community-based care to support people within their

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own homes, and services with an emphasis on illness and injury prevention and early detection, such as maternal and child health programs.

The effectiveness and efficiency of services provided in the primary health and community care sector affect the use of the health system as a whole. Appropriate, easily accessed, well integrated community-based services, for example, can reduce the overall reliance of the health system on the provision of more acute care services. Understanding the relative investment in these services and their impact is critical for governments that need to make decisions about future investment in health services.

To better understand these issues, the Review will increase its focus on the primary health and community care sector by expanding reporting in this area. Currently, the Report covers general practice (in the General practice chapter), mental health and breast cancer (within the Health management issues chapter), hospital emergency department services (within the Public hospitals chapter) and community care (within the Aged care services chapter), but does not specifically focus on primary health and community care. In future, the Report may include State and Territory funded community services, including community nursing, community dental services, podiatry, Aboriginal Medical Services, community pharmacy and other allied health services that are key components of the primary health and community care sector. In addition to broadening reporting, the existing performance indicators for services such as general practice and preventable hospital admissions will be refined.

The pace of new reporting will reflect developments in data collection. Information on primary and community care is currently limited because of the nature of the sector, which comprises a large number of public and private service providers funded by Commonwealth, State and Territory governments and private contributions.

In developing more comprehensive sets of indicators, it is important to focus on the significant aspects of public health or the performance of the health system that are worth measuring. The Review and AHMAC have both commissioned work to consider future directions within the existing range of primary health, and community care services, including general practice, community care, population health, as well as the interfaces between services.

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In particular, work is underway that aims to improve and strengthen understanding of the contribution of primary health and community care to overall health system performance, including:

- refining existing performance indicators and/or developing new indicators in areas such as community health and population health (box E.7);
- improving reporting of the effectiveness of service delivery to specific client groups, including Indigenous people and people in regional, rural and remote areas; and
- working to improve understanding of the interface between services.

**Box E.7 Possible indicators of performance of community and population health services**

Future editions of the Report may include the following indicators of community health and population health services:

1. Measure of effectiveness and accessibility — influenza prevention:
  - influenza immunisations provided to people with chronic health conditions;
  - hospital separations for conditions associated with influenza for people aged 65 years and older; and
2. Measure of effectiveness — health assessments:
  - annual voluntary health assessments provided to people within the target population.

## **Interactions between services**

Many people have complex care needs and require a number of services. These services are typically provided by a range of service providers and are funded or provided by both government and non-government organisations within each jurisdiction, and across tiers of government. This means clients usually have contact with, and receive services from, a number of care providers.

An important issue for government is to determine how to meet complex care needs in a coordinated fashion and to assess performance in meeting those needs across agencies.

There are links between health services and other government services. The performance of health services may influence outcomes for clients of education, aged care, disability, ambulance and justice sector services, while these other

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service areas, in turn, affect outcomes for clients of health services. A broader discussion of these links is contained in chapter 1.

Work has commenced on a long term strategy to enhance the capacity of the Review's reporting frameworks to reflect interrelationships between services. In the first instance, this analysis is focusing on the nexus between general practice and aged care. Work on this issue is also being undertaken for the health sector more generally by the AHCA Reference Group on the Interface between Aged and Acute Care.

### **Regional, rural and remote health**

In Australia, approximately two thirds of all people live in major cities. The remaining third live in regional, rural, and remote areas, and have many health disadvantages their urban counterparts do not experience. These include shortages of health care providers and services, difficulties in accessing health care, a higher disease burden in relation to chronic conditions such as diabetes, asthma and cardiovascular disease, and greater exposure to injury. The much poorer health of the Indigenous population is a significant aspect of rural and remote health.

Governments have recognised the need for improved health services in rural Australia. The Commonwealth Government has introduced a range of programs in recent years that aim to improve access to health services and health workers for rural communities. The Regional Health Strategy is summarised in box E.8. Improved data and reporting will be important as these programs are reviewed and further improvements made.

The number of new Commonwealth health services supported in rural areas has grown from 60 in 1996-97 to over 350 in 2002-03.

Commonwealth initiatives to improve access to health services in rural communities include:

- the Multipurpose Services Program — which is jointly funded by the Commonwealth, State and Territory governments, provides aged care and health services to small rural communities. In 2001-02 there were 63 Multipurpose Services operating across all States and Territories;
- the Regional Health Services Program — which involves the planning and delivery of primary health care services at the local level. Many of the Regional Health Services funded by the Commonwealth are delivered by State and Territory Governments. In 2001-02 there were 106 Regional Health Services in operation across all States and Territories;

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- more medical specialists and allied health professionals visiting rural Australia;
  - improved access to pharmacies, pathology and imaging services and to Medicare claiming facilities;
  - the establishment of ten university departments of rural health and nine clinical schools in regional locations to enable students in rural areas the opportunity to study to be rural health professionals in, or near, their home towns;
  - the expansion of Commonwealth scholarship schemes for people seeking to enter rural health practice — medical, nursing and allied health professions. At the end of 2001-02 there were over 1750 students accessing Commonwealth funded rural health scholarships;
  - financial incentives for encouraging long serving rural doctors to stay in country communities. To the end of 2001-02, over 2100 rural doctors have received rural retention payments totalling in excess of \$32.6 million; and
  - additional workforce support to the general practice workforce in rural and remote areas.

**Box E.8    Regional Health Strategy**

A consolidated set of programs is now in place at the Commonwealth level, collectively known as the Regional Health Strategy, which seeks to redress the imbalance of rural health service delivery by:

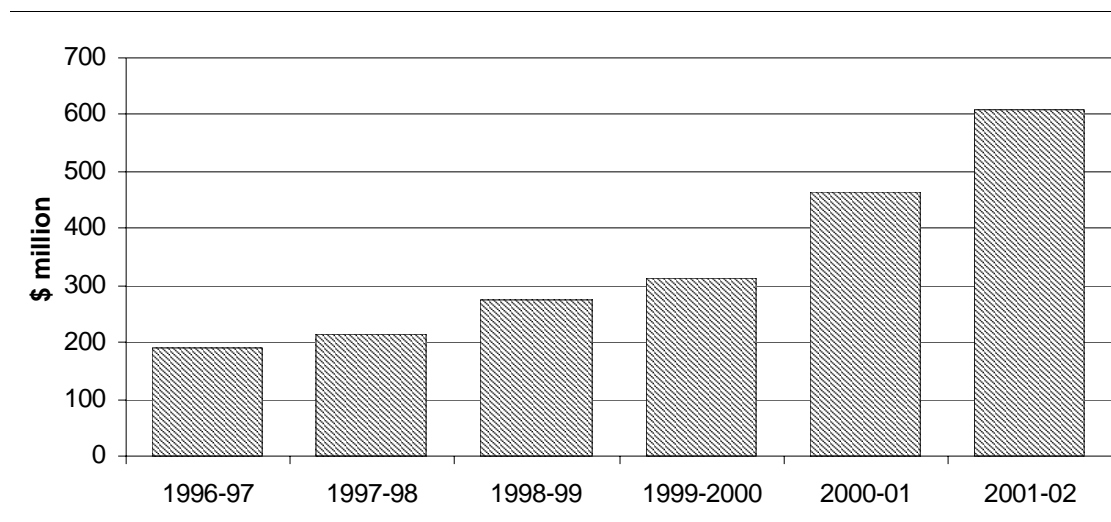
- increasing and improving access to health and aged care services in rural areas; and
- strengthening the rural health workforce.

Overall, annual Commonwealth expenditure for specifically targeted programs in rural and remote areas has increased from approximately \$190 million in 1996-97 to \$610 million in 2001-02 (refer to figure E.9 below).

(Continued on next page)

Box E.8 (Continued)

Figure E.9 **Real Commonwealth expenditure — approximate consolidation — for targeted rural health initiatives (\$million)<sup>a</sup>**



<sup>a</sup> Excluding MBS, PBS, ACHA and aged care funding.

Source: DHA (unpublished)

*Future directions in performance reporting on regional, rural and remote health*

The limited information currently available about regional, rural and remote health is partly due to the extreme diversity amongst rural populations and the limitations of the service delivery mechanisms. Reviews of the early impact of some of the rural programs are being conducted with a view to determining progress, including identifying barriers to the provision of new services in rural areas. In addition, the Australian Institute of Health and Welfare has been engaged to provide a series of reports on rural health performance indicators and selected rural health issues. The series includes a Framework for Rural Health Information (based on the NHPF) and a first report against the indicators in the framework.

*Healthy Horizons: A Framework for Improving the Health of Rural, Regional and Remote Australians 1999–2003*

The Commonwealth, State and Territory Governments and the National Rural Health Alliance developed a framework to guide the provision of rural health programs and services, and agreed to implement actions and programs in their own

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jurisdictions which are based on a primary health care approach. The Healthy Horizons Framework was endorsed by the Australian Health Ministers Conference in 1999.

The first national report of progress against the Healthy Horizons framework is due to be launched early in 2003. It will include a snapshot of what jurisdictions have been doing to improve health conditions and services for people living in rural and remote areas to the end of 2001. The Review will be able to draw on the information in this report to further expand reporting on health services performance in nonmetropolitan areas.

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