# 1 Introduction

The report on expenditures on health services for Aboriginal and Torres Strait Islander peoples is produced every three years. This is the third report in the series and covers expenditure for the 2001–02 financial year. The first report covered 1995–96 (Deeble et al. 1998) and the second report covered 1998–99 (AIHW 2001).

Methodological issues related to the compilation of the estimates of expenditure and funding are discussed in the appendices to this report. The appendices are quite extensive and have not been included in the printed version. They are available at the Institute's website <www.aihw.gov.au>. Additionally, the tables used in the compilation of the estimates are also available, as MS-Excel spreadsheets from the Institute's website — including supporting tables not included in the printed version of the report.

## **Terms of reference**

This report has been produced at the request of the Australian Health Ministers Advisory Council (AHMAC), with funding from the Office for Aboriginal and Torres Strait Islander Health (OATSIH).

The report covers recurrent expenditure for 2001–02, building on information that was included in the two previous reports, as well as enhancing the data and methodology. The report should be useful to governments, service providers and communities for planning, evaluating and accountability purposes.

# Context

In this, as in previous reports in this series, the standard Australian Bureau of Statistics (ABS) definitions have been applied in determining Indigenous status (ABS & AIHW 2003:227).

Aboriginal and Torres Strait Islander peoples continue to have the poorest health status of any demographic group in Australia. Improvements to the health system can help to address this situation. Health expenditure information is one means of investigating health service delivery and the levels of access to health services, and identifying where improvements can be made.

Aboriginal and Torres Strait Islander peoples represented 2.4% of the Australian population in 2001–02 (Table 1.1). They had an age structure that was significantly younger than that of other Australians. For example, Aboriginal and Torres Strait Islander peoples aged less than 15 years constituted 39.0% of the total Indigenous population, whereas this age group represented 20.1% of the total Australian population. Conversely, those aged 65 years and over were only 2.8% of the Indigenous population, compared with 12.8% of the total Australian population.

More than half of Aboriginal and Torres Strait Islander peoples lived in the major cities and inner regional areas. However, more than a quarter (26.4%) resided in remote and very remote areas. These patterns varied by state and territory. In the Northern Territory, 81.2% of the Indigenous population lived in remote and very remote areas. In contrast, only 6.3% of New South Wales' Indigenous population resided in such areas.

| State/<br>territory      | ASGC Remoteness areas          |                   |                                  |        |             |         | Proportion of                 |
|--------------------------|--------------------------------|-------------------|----------------------------------|--------|-------------|---------|-------------------------------|
|                          | Major<br>cities <sup>(a)</sup> | Inner<br>regional | Outer<br>regional <sup>(a)</sup> | Remote | Very remote | Total   | total state<br>population (%) |
| NSW                      | 56,773                         | 43,697            | 25,922                           | 6,178  | 2,318       | 134,888 | 2.1                           |
| Vic                      | 13,655                         | 9,711             | 4,410                            | 70     | _           | 27,846  | 0.6                           |
| Qld                      | 31,208                         | 22,995            | 41,318                           | 11,513 | 18,876      | 125,910 | 3.5                           |
| WA                       | 21,168                         | 5,295             | 9,717                            | 10,670 | 19,081      | 65,931  | 3.5                           |
| SA                       | 11,789                         | 2,197             | 5,910                            | 1,220  | 4,428       | 25,544  | 1.7                           |
| Tas                      | _                              | 8,869             | 7,911                            | 402    | 202         | 17,384  | 3.7                           |
| ACT                      | 3,901                          | 8                 | _                                | _      | _           | 3,909   | 1.2                           |
| NT                       | _                              | _                 | 10,687                           | 10,108 | 36,080      | 56,875  | 28.8                          |
| Australia <sup>(b)</sup> | 138,494                        | 92,988            | 105,875                          | 40,161 | 81,002      | 458,520 | 2.4                           |

Table 1.1: Aboriginal and Torres Strait Islander population, by remoteness area and state/territory,2001

(a) Darwin is included as an outer regional area under ARIA+.

(b) Includes populations of Christmas Island and Cocos Islands.

Source: ABS 2003c

Life expectancy for Aboriginal and Torres Strait Islander peoples is considerably lower than that of the non-Indigenous population. In the period 1999–2001, life expectancy of Indigenous people was 56 years for males and 63 for females – 21 and 19 years lower respectively than for the non-Indigenous population (ABS & AIHW 2003).

Infant mortality for Aboriginal and Torres Strait Islander peoples is higher than for the non-Indigenous population. In 2001, the infant mortality rate for Aboriginal and Torres Strait Islanders was 11 deaths per 1,000 live births – more than twice that of the non-Indigenous population, at 5 per 1,000 live births (ABS 2002a).

Indigenous Australians are also much poorer, on average, than their non-Indigenous counterparts. In 2001, the median weekly income of Aboriginal and Torres Strait Islanders was 40% lower (at \$226) than for other Australians (at \$380) (ABS 2003c).

### **Data limitations**

There are some important issues that need to be understood about the data contained in this report. The quality of the information and estimates is limited by underlying data and the methods used for calculation. A number of key issues are outlined below. Readers are urged to bear them in mind and to exercise appropriate caution in the interpretation of the estimates.

#### Quality of data on Indigenous service use

For many publicly funded health services there are few details available about service users and, in particular, their Indigenous status. For privately funded services, this information is frequently unavailable. For those services that do collect this information, recording Indigenous status accurately for all people does not always occur. The result is that it is not always possible to make accurate estimations of health expenditure for Aboriginal and Torres Strait Islander peoples and their corresponding service use. Consequently, the estimates published here may somewhat overstate or understate actual expenditure. Furthermore, much of the data that are available relate only to needs that have been met. There are limited data available on unmet needs for health services by Aboriginal and Torres Strait Islander peoples. Consequently this report does not directly assist in identifying gaps in service delivery.

#### **Quality of expenditure estimates**

There may be some limitations associated with the scope and definition of health expenditures included in this report. Other (non-health) agency contributions to health expenditure, such as 'health' expenditures incurred within education departments and prisons, are not included.

Furthermore, while every effort has been made to ensure consistent reporting and categorisation of expenditure on health goods and services, in some cases there may be inconsistencies across data providers. These may result from limitations of financial reporting systems, and/or different reporting mechanisms. Reporting of health administration (nec) is one such example. In some cases, all the associated administration costs have been included in the estimates of expenditure on a particular health service category (for example acute-care services), whereas in other cases, they have not and have been separately reported.

There have also been some changes in the methodology used to calculate some expenditure estimates. This means that readers will need to exercise caution when interpreting changes in expenditures over time.

#### Variations within regions

Estimates of the level of Indigenous under-identification were used to adjust some reported expenditures. In some states and territories a single, state-wide average under-identification adjustment factor was applied; in others, differential under-identification factors were used, depending on the region type in which the particular service(s) were located. In some jurisdictions no Indigenous under-identification adjustment was deemed necessary.

There is evidence to suggest that Indigenous identification is likely to be more accurate in areas where Indigenous Australians make up a larger proportion of the population, and poorer where they are a small minority (ATSIHWIU 1999; Young 2001).

This hypothesis was further supported by evidence from a number of studies examining the accuracy of hospital data in the lead-up to this report.

One Western Australian study of the data collected by 26 public hospitals over the period from June 2000 to January 2001 found variations in the accuracy of hospital records covering Indigenous status (Young 2001). The study found that hospital data from the area with the highest proportion of Indigenous Australians within its catchment area had the highest level of accuracy in the recording of Indigenous status. This corroborated earlier evidence collected in a national study covering 11 hospitals (ATSIHWIU 1999).

In New South Wales, a record linkage study undertaken prior to the second Indigenous health expenditure report resulted in the application of Area Health Service specific under-identification factors (AIHW 2001:87). For this report, the results of that analysis were again used; however, variations in the adjustment were applied at a very broad level to two

regional classifications – a 38% under-identification adjustment was applied to data from hospitals in metropolitan areas and a 21% adjustment to all other hospitals.

It could be concluded that some of the patterns suggested in this report are influenced by these likely variations in identification. It is also important to consider that the application of very broad under-identification adjustments may mask some differences that may exist between states and territories and between regional types.

#### Economies of scale and geographic isolation

Economies of scale and the relative isolation of target populations both greatly influence the costs of producing and delivering health goods and services. Consequently, these are factors that can have large impacts on both the levels of health expenditure and the quantity of goods and services that can be provided to particular population groups. For example, the Northern Territory, with its relatively small population, faces substantial diseconomies in comparison with, say, Victoria in providing health goods and services to its population. This comparative disadvantage is further compounded by differences in the relative isolation of the two jurisdictions' populations. This disparity is even more pronounced in respect of their Indigenous populations.

Furthermore, variations in Indigenous health status by geographic regions are likely, although these are not easily substantiated by the available data. Several reports, including one examining death rates within regions, attest to the poorer health of Australians who live in more remote areas (AIHW 2003c; AIHW & AACR 2003).

#### Per person expenditure estimates

Reporting expenditure estimates on a per person or per capita basis is a practice followed in many financial reports aimed at enabling comparative assessments. Estimates of average expenditures per person have been included in this report. These estimates and comparisons need to be interpreted with care. They are an indication of the average health expenditure per head of the reference population(s) — in this case, the whole of the Indigenous and non-Indigenous populations drawn from ABS census estimates for 2001 — and do not reflect the average expenditure incurred by each person accessing the goods and services being discussed.

Depending on the nature of the services being examined, it is also important to bear in mind that the age structure of the Aboriginal and Torres Strait Islander population is younger than that of the non-Indigenous population. Accordingly, for programs that target particular population sub-groups—such as services for older people, childhood immunisation, breast and cervical cancer screening—the reported estimates of average expenditures per person do not reflect average expenditures on the members of those target populations.