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# Expenditure on health for Aboriginal and Torres Strait Islander people 2006–07

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#### Australian Institute of Health and Welfare

Board Chair Hon. Peter Collins, AM, QC

Director Penny Allbon

Any enquiries about or comments on this publication should be directed to: Damian O'Rourke Australian Institute of Health and Welfare GPO Box 570 Canberra ACT 2601 Phone: (02) 6244 1074 Email: damian.orourke@aihw.gov.au

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Please note that there is the potential for minor revisions of data in this report. Please check the online version at <www.aihw.gov.au> for any amendments.

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# Preface

This report is the fifth in a series and is based on the latest available data from 2006–07. The report shows that Aboriginal and Torres Strait Islander people continue to receive the majority of their health services through mainstream programs. Government-funded hospital services consume most of the funding, an outcome consistent with that reported in the 2004–05 report.

A significant change in the method for allocating MBS and PBS expenditure, involving the use of Medicare Voluntary Indigenous Identifier data, has been implemented in this report. As a result, users are advised to exercise care when comparing the 2006–07 results with those from the 2004–05 report, and those contained in earlier reports.

The regular reporting of expenditure on health services for Aboriginal and Torres Strait Islander communities provides important information for policy makers, program managers, community members and those interested in Indigenous health issues. Unmet health needs are not identified in this report, but expenditure patterns point to possible gaps in service use. It is recommended that unmet needs are examined in the future to provide a picture of the health needs of Aboriginal and Torres Strait Islander people. This will also provide appropriate context for interpreting of health expenditure information such as those in this report.

The Australian Government's Office for Aboriginal and Torres Strait Islander Health within the Department of Health and Ageing commissioned this report. Data contained in the report have been prepared in close collaboration with all health jurisdictions and other government agencies responsible for the development, implementation and evaluation of health policy, production of statistics and financial measurement and analyses.

I trust that you find the information contained in this report relevant, and, as always, I welcome your feedback and suggestions about how reporting in this area can be improved in the future.

Penny Allbon Director Australian Institute of Health and Welfare

# Acknowledgments

The collection and analysis of the data and the writing of this publication was primarily done by Damian O'Rourke, Paul Lukong, John Goss, Maneerat Pinyopusarerk and John Shelton Agar. Input was also provided by Jenny Hargreaves.

Thanks are extended to the Australian and state and territory governments and members of the Technical Advisory Group (TAG) for providing input and advice during the preparation of this report. Members of the TAG have worked with the project team to finalise the health expenditure estimates and the supporting methodology used in their jurisdictions. The members of the TAG and additional contributors to this report are listed below.

In addition, the AIHW acknowledges the funding for the project from the Office for Aboriginal and Torres Strait Islander Health within the Australian Government Department of Health and Ageing.

Office for Aboriginal and Torres Strait Islander Health – Department of Health and Ageing	Elizabeth Clout John Maxwell Robyn Hewson Kate Coffey
New South Wales Health	Peter Brandt
Victorian Department of Human Services	Mary Sullivan
Queensland Health	Bryan Kennedy Abdulla Suleman
Department of Health Western Australia	Elizabeth Rohwedder
Department of Health South Australia	David Moffatt John Evans
Department of Health and Human Services Tasmania	Vicki Sherburd
ACT Health	Josephine Smith Faith Gibson
Northern Territory Department of Health and Families	Margaret Foley
Australian Bureau of Statistics	Geoff Dane Andrew Webster Brent Bufton
Office of Indigenous Policy Coordination, Department of Families, Housing, Community Services and Indigenous Affairs	Stephen Powrie Darren Benham
Department of Veterans' Affairs	Eric McDonald
Australian Institute of Health and Welfare	John Goss Damian O'Rourke Paul Lukong Maneerat Pinyopusarerk John Shelton Agar Jenny Hargreaves

# Abbreviations and symbols

ABS	Australian Bureau of Statistics
ACCHO	Aboriginal Community Controlled Health Organisation
AIHW	Australian Institute of Health and Welfare
ARIA	Accessibility/Remoteness Index of Australia
ASGC	Australian Standard Geographic Classification
BEACH	Bettering the Evaluation and Care of Health
DHS	(Victorian) Department of Human Services
DoHA	Department of Health and Ageing
DRG	Diagnosis related groups
DVA	Department of Veterans' Affairs
GP	General Practitioner
GPC	Government Purpose Classification
HACC	Home and Community Care
HEAC	Health Expenditure Advisory Committee
HWEDB	Health and Welfare Expenditure Database
MBS	Medical Benefits Schedule
NAHS	National Aboriginal Health Strategy
NHS	National Health Survey
OATSIH	Office for Aboriginal and Torres Strait Islander Health
PBS	Pharmaceutical Benefits Scheme
RPBS	Repatriation Pharmaceutical Benefits Scheme
SPP	Specific Purpose Payments
VII	Voluntary Indigenous Identifier
n.a.	not available
	not applicable
Nec	not elsewhere classified
_	nil or rounded to zero

# Summary

## Per person health and residential aged care expenditure

- In 2006–07, the per person total health and high care residential aged care expenditure ratio for Aboriginal and Torres Strait Islander people compared to non-Indigenous people was 1.25 that is, \$1.25 was spent on health and high care residential aged care per Aboriginal and Torres Strait Islander person for every \$1.00 spent per non-Indigenous person.
- This represents growth from 2004–05, where the per person Aboriginal and Torres Strait Islander health and high care residential aged care expenditure ratio was 1.17.
- Part of the increase in the per person Aboriginal and Torres Strait Islander expenditure ratio in 2006–07 from 1.17 to 1.25 may be due to better methods for estimating Aboriginal and Torres Strait Islander health expenditure, particularly for MBS and PBS expenditure (see Box 1). Some of the increase is due to greater growth since 2004–05 for some types of services for Aboriginal and Torres Strait Islander people, particularly for public hospitals.
- The average total health and high care residential aged care expenditure per Aboriginal and Torres Strait Islander person was \$5,696 in 2006–07 compared to \$4,557 for each non-Indigenous person.
- Total health and high care residential aged care expenditure for Aboriginal and Torres Strait Islander people was estimated at \$2,976 million in 2006–07, or 3.1% of national expenditure on health and high care residential aged care services. It was 2.8% in 2004–05.

## Public versus private services

- Aboriginal and Torres Strait Islander people are high users of public hospital and community health services, and comparatively low users of medical, pharmaceutical, dental and other health services, which are mostly privately provided, that is, GPs and specialists.
- In 2006–07, 48.7% of total health and high care residential aged care expenditure for Aboriginal and Torres Strait Islander people was for public hospital services. In addition, 20.8% was for expenditure on community health services – including those provided by Aboriginal health workers, nurses and dentists in Aboriginal Community Controlled Health Organisations.
- In contrast, for non-Indigenous people 28.6% of health and high care residential aged care expenditure was on public hospital services and 3.9% on community health services.
- For the Australian Government schemes of Medicare and the Pharmaceutical Benefits Scheme (PBS):
  - Total Medicare benefits paid per Aboriginal and Torres Strait Islander person was around 58% of the amount spent on non-Indigenous people; and
  - Total PBS benefits paid per Aboriginal and Torres Strait Islander person was around 60% of the amount spent on non-Indigenous people.

- There is some evidence to suggest that the lower usage of MBS and the PBS by Aboriginal and Torres Strait Islander people compared to non-Indigenous people is due to a number of issues (particularly for those Aboriginal and Torres Strait Islander people living in remote areas). The lower MBS use may be partly the result of public hospital services substituting for the use of private GP and specialist services.
- Aboriginal and Torres Strait Islander people have much lower incomes compared to non-Indigenous people and, like low income people everywhere, they therefore use more public hospital services and less private specialist medical services. In 2006 the median equivalised gross household income of Aboriginal and Torres Strait Islander people was \$460 per week, or 62.2% of the level earned by non-Indigenous people, which was \$740 per week (ABS 2008a).
- An examination of in-hospital Medicare services benefits indicates that the Aboriginal and Torres Strait Islander share of the \$1.7 billion benefits in this area is 0.4%, and the share of out-of-hospital Medicare benefits is 1.6% of the \$10.3 billion total. The low in-hospital Medicare benefits reflect the lower rates of private health insurance among Aboriginal and Torres Strait Islander people compared to non-Indigenous people.

#### **Funding sources**

- Governments fund over 92% of health and high care residential aged care services for Aboriginal and Torres Strait Islander people, with the state and territory governments, and the Australian Government providing the following in 2006–07:
  - state and territory governments, 50.3%
  - Australian Government, 42.5%
  - non-government, 7.2% (including out-of-pocket payments).
- In contrast, the funding for providing health and high care residential aged care services to non-Indigenous people was two-thirds by government and one-third by non-government/private organisations (including out-of-pocket payments):
  - state and territory governments, 22.5%
  - Australian Government, 46.2%
  - non-government, 31.3%.
- In comparison to non-Indigenous people, state and territory governments provide substantial funding to Aboriginal and Torres Strait Islander people for public hospital services (per person expenditure ratio of 2.54) and community health services (ratio of 4.11). This is largely because non-Indigenous people have a greater reliance on non-government services.

Overall the total per person government funding on health and residential aged care services was higher for Aboriginal and Torres Strait Islander people than for others with a ratio of 1.69.

In contrast, the per person health and residential aged care services expenditure ratio for all funding sources (government and non-government) for Aboriginal and Torres Strait Islander people compared to non-Indigenous people is much lower at 1.25.

#### Box 1: Comparison with estimates for 2004-05

The definition of health expenditure has changed since the previous (2004-05) report in this series and no longer includes expenditure on high care residential aged care, which is now classified as welfare expenditure.

*This report therefore provides separate estimates of expenditure for health, and for health and high care residential aged care services.* 

This allows comparison with estimates of health and high care residential aged care expenditure in the 2004–05 report as well as presentation of estimates that relate more directly to estimates in the AIHW's Health expenditure Australia 2007–08 (AIHW 2009).

In this report, the calculation of expenditure on high care residential aged care services includes expenditure on the National Aboriginal and Torres Strait Islander Flexible Aged Care Program, which was not included in the 2004-05 report (AIHW 2008a).

There has been a change in the method for estimating MBS and PBS expenditure. The method involves the use of Medicare Voluntary Indigenous Identifier (VII) data to estimate expenditure on medical services, such as general practitioner (GP), specialist, pathologist and imaging services, and prescription pharmaceuticals provided to Aboriginal and Torres Strait Islander people (see Appendix B for more details).

*This change may have contributed to the increase in estimated MBS and PBS expenditure reported in 2006–07 compared with 2004–05.* 

# 1 Introduction

## 1.1 Background

This report has been produced at the request of the Australian Health Ministers Advisory Council. The Office for Aboriginal and Torres Strait Islander Health (OATSIH) within the Australian Government Department of Health and Ageing provided the funding for the report.

The report contains information about the levels of recurrent expenditure in 2006–07 on health services for Aboriginal and Torres Strait Islander people and builds on the information contained in previous reports in this series.

It should be noted that there has been a significant methodological change in this report compared to the 2004–05 report, namely, that high care residential aged care is not included in the core health expenditure definition. However, for comparative purposes, this report contains estimates both including and excluding high care residential aged care.

Enhancements have been made wherever possible to the methodology and data used to compile the report. A notable enhancement to estimate expenditure on Medicare and the Pharmaceutical Benefits Scheme is the use of Medicare Voluntary Indigenous Identifier (VII) data.

This report will provide governments, policy makers, service providers and communities with information essential for planning, monitoring and evaluating health expenditure for Aboriginal and Torres Strait Islander people.

## 1.2 Context

This is the fifth report on *Expenditure on health for Aboriginal and Torres Strait Islander people*. The first report was published in 1998 for the expenditure year 1995–96 (Deeble et al. 1998). Subsequent reports have been published at three yearly intervals – in 2001 for the 1998–99 reference year (AIHW 2001), in 2005 for the 2001–02 reference year (AIHW 2005a) and in 2008 for the 2004–05 reference year (AIHW 2008). This report is in respect of the 2006–07 financial year.

All the reports have shown that the per person health care spending on Aboriginal and Torres Strait Islander people has been higher than for the non-Indigenous population. This is of interest given the much lower health status of Aboriginal and Torres Strait Islander people.

As is detailed in this report, the physical remoteness of many Aboriginal and Torres Strait Islander people is one of the factors contributing to the higher cost of health service delivery for the Aboriginal and Torres Strait Islander population.

The different ways Aboriginal and Torres Strait Islander people access and use health services are also contributing factors. Aboriginal and Torres Strait Islander people are much more likely than non-Indigenous people to rely on public hospital services. They are much

less likely than non-Indigenous people to use private doctors, private hospitals and other private sector health providers. Aboriginal and Torres Strait Islander people are much more dependent on government funding for their health services.

Overall, Aboriginal and Torres Strait Islander people have lower levels of household income compared to non-Indigenous people and their health expenditure patterns correspond to people with similar levels of income, in particular their reliance on the public health system for their health requirements.

It must be noted also that these data relate to health needs that have been met. The limited data available on unmet need for health services show that needs for Aboriginal and Torres Strait Islander people are greater than for non-Indigenous people. This report does not directly identify gaps in health service delivery where needs are not being met. Future work on unmet needs would provide a fuller picture of health service gaps and an appropriate basis for interpretation of the expenditure estimates in this report in the context of health needs.

## 1.3 Delivery and financing of health services

Australian health services are delivered and financed in a variety of ways. All levels of governments are involved in the financing process. The system includes public and private providers, public and private funders, and a variety of ways in which payments are made within the sector. There are three main ways in which health spending for the whole population, or any component group of people, can be examined:

- health expenditure;
- health funding; and
- health program management.

The results in this report are presented using those three methods, with increasing levels of detail. Spending on Aboriginal and Torres Strait Islander people and non-Indigenous people is estimated and recurrent expenditure per person is presented and compared.

The results need to be interpreted in the light of judgments about how the 'need' for those services varies across the two groups of people. Those judgments are beyond the scope of this report. However, the development and analysis of expenditure data is a necessary first step in enabling an in-depth analysis of the Aboriginal and Torres Strait Islander need for services to be undertaken.

## 1.4 Definitions and concepts

The definition of health expenditure has changed since the Aboriginal and Torres Strait Islander health expenditure estimates were first made for the financial year 1995–96. A definitional change occurred in 2007, when all residential aged care services expenditure was classified as welfare services. Prior to this point, residential aged care expenditure was split, with high care residential aged care expenditure being classified as health, and low care residential aged care expenditure classified as welfare services.

Previous reports on Aboriginal and Torres Strait Islander health expenditure have used the definition of health which included high care residential aged care expenditure.

In this report, high care residential aged care expenditure is included in the tables to enable comparability with previous reports. High care residential aged care expenditure is not included as part of total health expenditure. However, it is included as part of 'Health and high care residential aged care'. (Note that in some cases 'Health and high care residential aged care' is abbreviated as 'Health and residential aged care', but in all cases in this report 'Health and residential aged care' only includes 'High care residential aged care', and does not include 'Low care residential aged care'.)

Tables throughout this report include both 'Total health expenditure' and 'Total health and high care residential aged care expenditure'. The 'Health and high care residential aged care expenditure' numbers enable comparisons with the total health expenditure numbers in previous reports. However, readers should note that the estimate of expenditure on high care residential aged care services includes expenditure on the National Aboriginal and Torres Strait Islander Flexible Aged Care Program, which was not included in the 2004-05 report (AIHW 2008a). This Program constitutes around 12% of total high care residential aged care expenditure on Aboriginal and Torres Strait Islander people in 2006-07.

The health expenditure numbers in this report use the current definition of health expenditure and enable valid comparisons with data in *Health expenditure Australia* 2007–08 (AIHW 2009).

### **Box 1.1: Health spending concepts**

*When examining how much is spent on health, three concepts are used – health expenditure, health funding and health program management. These concepts, while related, are quite distinct.* 

#### Health expenditure

Health expenditure is reported in terms of who incurs the expenditure, rather than who provides the funds to pay for that expenditure. For example, in the provision of public hospital services, the states and territories incurred almost all the expenditure (that is, they paid the bills for expenditure on medical and surgical supplies, drugs, salaries of doctors and nurses and so forth). However they did not fund all this expenditure.

#### Health funding

Health funding is reported on the basis of who ultimately provides the funds that are used to pay for health goods and services; not who actually buys the inputs that are used up in the production of the related goods and services. In the case of public hospital services, although the states and territories incur nearly all the related expenditure, the Australian Government and the states and territories each provide a significant amount of the funding that is used to pay for the services (In 2006–07 the Australian Government funded 42% and the states and territories funded 50% of total health and high care residential aged care for Aboriginal and Torres Strait Islander people. See Table 3.5). Some other funding comes from private health insurers (for insured patients), injury compensation insurers and from individuals who choose to be treated as private patients and pay any fees charged.

#### Health program management

*Expenditure reported by health program management is reported on the basis of who manages the program through which the expenditure occurred – the Australian Government, state and territory governments or non-government/private organisations. For example, expenditure on Medicare funded GP services are reported as expenditure through a program managed by the Australian Government.* 

## 1.5 Data quality and limitations

The underlying data quality and the methods used to calculate the estimates determine the quality of the information and estimates contained in this report.

## Data sources

The estimates presented in this report have been derived using a number of different data sources that are used to compile the AIHW's Health and Welfare Expenditure Database (HWEDB).

Some of the organisations that have provided information include:

- the Department of Health and Ageing;
- the Australian Bureau of Statistics;
- the Department of Veterans' Affairs; and
- state and territory health authorities.

The major change in respect of the data sources used in this report was to substitute information previously obtained from the Bettering the Evaluation and Care of Health (BEACH) survey of general practice activity with information obtained from the Medicare Voluntary Indigenous Identifier (VII) data for estimating expenditure on Medicare and PBS. For more details, refer to Appendix B.

The BEACH survey is a continuous collection of activity data from general practices across Australia. The proportion of patients who identified as Indigenous in the survey was used in previous reports, in conjunction with other data, to estimate how much expenditure on medical services (GP, specialist and other) services and prescription pharmaceuticals should be allocated to Aboriginal and Torres Strait Islander people.

Data obtained from the BEACH survey are subject to sampling and non-sampling error, and while the survey is representative of GP service provision, there is a significant degree of uncertainty associated with the estimates of Aboriginal and Torres Strait Islander use of services based on the data. The coverage of the VII data has been improving over time. For earlier reports in this series, it was judged that the BEACH data were a better series for estimating Aboriginal and Torres Strait Islander expenditure. However, with the improved coverage of VII data and with tests having being made of the representativeness of VII data, it has been judged that the VII data are now a better basis for the estimates.

## Quality of expenditure estimates

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

Non-health agency contributions to health expenditure, such as health expenditure incurred within education departments, defence establishments and prisons, are not included.

## Quality of data on Aboriginal and Torres Strait Islander service use

For many publicly funded health services there is incomplete information available about service users and, in particular, their Aboriginal and Torres Strait Islander status. For privately funded services, this information is frequently unavailable. For those services that do collect information of Aboriginal and Torres Strait Islander status the data are not always accurate. This may be because Indigenous identification is voluntary and not all Indigenous patients choose to identify as Indigenous and some providers may not optimise collection of data on Indigenous status. The result is that it is not always possible to estimate health expenditure accurately for Aboriginal and Torres Strait Islander people and their corresponding service use. Consequently, the estimates published in this report may partially overestimate or underestimate the level of actual expenditure.

# Adjustment for variation in Aboriginal and Torres Strait Islander identification across regions

Estimates of the level of Aboriginal and Torres Strait Islander under-identification were used to adjust some reported expenditure. 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 in which the particular service(s) were located. In some jurisdictions, no Aboriginal and Torres Strait Islander under-identification adjustment was considered necessary.

Some of the patterns suggested in this report may be influenced by variations in completeness of Aboriginal and Torres Strait Islander identification, despite the adjustments made for under-identification.

## 1.6 Economies of scale and geographic isolation

Economies of scale and the relative isolation of some Aboriginal and Torres Strait Islander target populations influence the costs of both producing and delivering health goods and services. These factors 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 economic disadvantages in comparison with, say, Victoria, in providing health goods and services to its population. Differences in the relative isolation of the two jurisdictions' populations further compound this comparative disadvantage. This disparity is even more pronounced in respect of the Aboriginal and Torres Strait Islander populations of the two jurisdictions.

## 1.7 Key definitions

There are a number of key definitions underpinning the concepts and estimates presented in this report (refer to the box below).

### **Box 1.2: Key definitions**

### Health expenditure:

All expenditure on goods and services that have the main objective of improving or maintaining population health, or of reducing the effects of disease and injury amongst the population. It does not include expenditure on high care residential aged care.

#### Australian Government expenditure:

Total expenditure actually incurred by the Australian Government on its own health programs. It does not include funding provided to the states and territories through grants (Specific Purpose Payments). It does not include rebates paid in respect of people with private health insurance cover.

#### Australian Government funding:

The sum of Australian Government expenditure and Section 96 grants to the states and territories, plus the estimated funding for health goods and services through the rebate on private health insurance premiums.

#### Specific Purpose Payments:

Australian Government payments to the states and territories under the provisions of Section 96 of the Constitution, to be used for purposes specified in agreements between the Australian Government and individual state and territory governments.

#### Primary health services:

Services provided to whole populations (community health services and public health activities) and those provided in, or flowing from, a patient-initiated contact with a health service (GP consultations, hospital emergency attendances, GP-ordered investigations and prescriptions, over-the-counter medicines and so on).

#### Secondary/tertiary health services:

Secondary and tertiary health services are those generated from within the health system by a referral, hospital admission and so forth.

#### Recurrent expenditure:

*Expenditure incurred by organisations on a recurring basis, for the provision of health services, excluding capital expenditure.* 

# 2 Population, health status and incomes of Aboriginal and Torres Strait Islander people

## 2.1 Aboriginal and Torres Strait Islander population

The definition of an Aboriginal or Torres Strait Islander is a person of Aboriginal or Torres Strait Islander descent who identifies as an Aboriginal or Torres Strait Islander and is accepted as such by the community in which he or she lives.

Aboriginal and Torres Strait Islander people represented 2.5% of the Australian population at 31 December 2006 (Table 2.1). They have an age profile that is significantly younger than that of non-Indigenous people. Aboriginal and Torres Strait Islander people aged less than 15 years constitute 37.2% of the total Aboriginal and Torres Strait Islander population, whereas this age group represents 20% of the total Australian population. Conversely, those aged 65 years and over are only 3.1% of the Aboriginal and Torres Strait Islander population, compared with 13% of the total Australian population (ABS 2009b).

		ASGC Re	emoteness Ar	eas			Proportion of
	Major cities <sup>(a)(b)</sup>	Inner regional <sup>(a)</sup>	Outer regional <sup>(b)</sup>	Remote	Very remote	Total	total population (%)
NSW	68,191	47,927	30,606	7,050	2,459	156,235	2.3
Vic	16,904	10,967	5,166	142		33,180	0.6
Qld	38,357	27,396	47,150	12,280	19,462	144,646	3.5
WA	25,565	6,377	10,781	12,444	19,053	74,222	3.6
SA	14,453	2,693	6,503	1,852	4,151	29,654	1.9
Tas	_	9,944	8,825	453	212	19,434	4.0
ACT	4,274	8	_	_		4,282	1.3
NT	_		12,061	10,681	37,355	60,098	28.3
Australia total Indigenous <sup>(c)</sup>	167,997	111,547	115,133	47,873	79,987	522,537	2.5
Australia total non- Indigenous <sup>(c)</sup>	14,130,741	4,009,579	1,865,075	268,397	86,447	20,360,241	97.5
Indigenous (%)	32.2	21.3	22.0	9.2	15.3	100.0	
Non-Indigenous (%)	69.4	19.7	9.2	1.3	0.4	100.0	

Table 2.1: Aboriginal and Torres Strait Islander population by ASGC Remoteness Area and state and territory and non-Indigenous population by ASGC Remoteness Area, 31 December 2006

(a) Hobart is Inner regional.

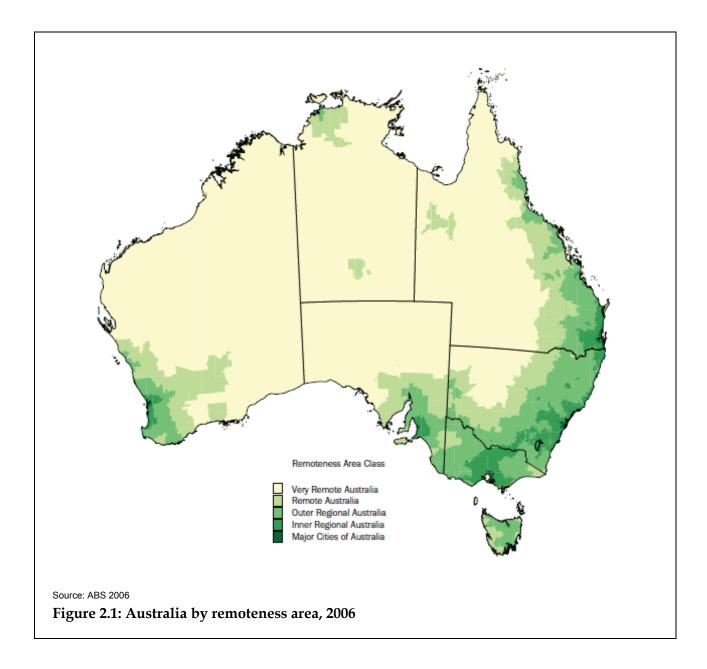
(b) Darwin is Outer regional.

(c) Includes populations of Christmas and Cocos (Keeling) Islands and Jervis Bay.

Sources: AIHW derived from ABS 2009c, 'Series B' Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians.

While more than half (53.5%) of Australia's Aboriginal and Torres Strait Islander people lived in *Major cities* and *Inner regional* areas, a large proportion (24.5%) resided in *Remote* and *Very remote* areas. In comparison only 1.7% of non-Indigenous people reside in *Remote* and *Very remote* areas. These patterns vary by state and territory. In the Northern Territory, 79.9% of the Aboriginal and Torres Strait Islander population lived in *Remote* and *Very remote* areas. In contrast, only 6.1% of New South Wales' Aboriginal and Torres Strait Islander population reside in those areas.

Figure 2.1 presents the Australian Standard Geographic Classification (ASGC) Remoteness Area boundaries for 2006.



# 2.2 Aboriginal and Torres Strait Islander health status

In 2004–05, 34% of Aboriginal and Torres Strait Islander adults (aged 18 years and over) reported their health as fair to poor, compared with 15% reported by non-Indigenous adults (ABS and AIHW 2008).

Life expectancy is much lower – particularly for Aboriginal and Torres Strait Islander males.

- Overall, for 2005-07 male Aboriginal and Torres Strait Islander persons had a life expectancy of 67.2 years, 11.5 years less than non-Indigenous males (78.7 years). Female Aboriginal and Torres Strait Islander persons have a life expectancy of 72.9 years, or around 9.7 years less than non-Indigenous females (82.6 years) (ABS 2009a).
- In the Northern Territory, Aboriginal and Torres Strait Islander life expectancy for males was 61.5 years and for females it was 69.2 years. In NSW it was 69.6 years for males and 75.0 years for females.

A variety of diseases and conditions are the cause of much of the long-term ill-health that Aboriginal and Torres Strait Islander people experience compared to non-Indigenous people. The differences were greatest for kidney disease, (where the overall age standardised Indigenous rate was 10 times the non-Indigenous rate) and diabetes/high sugar levels which are three times as high (ABS and AIHW 2008).

In 2005–06, Aboriginal and Torres Strait Islander people were hospitalised at 14 times the rate of non-Indigenous people for care involving dialysis, and at three times the rate for endocrine, nutritional and metabolic diseases (which include diabetes).

Aboriginal and Torres Strait Islander people were hospitalised for potentially preventable conditions at five times the rate of non-Indigenous people (ABS and AIHW 2008).

## 2.3 Aboriginal and Torres Strait Islander incomes

The capacity to pay for health care affects both the level and the pattern of health care spending.

Policy analysts most commonly determine an individual's capacity to pay for health care using mean equivalised gross household income as the statistical measure. This measure plays an important role in assessing Aboriginal and Torres Strait Islander people's capacity to pay for health care.

In 2006 the median equivalised gross household income of Aboriginal and Torres Strait Islander people was \$460 per week, around 62% of the level earned by non-Indigenous people, which was \$740 per week (ABS 2008a).

The ABS determined that, in 2006, 39% of Aboriginal and Torres Strait Islander people were living in low resource households, almost five times the rate of non-Indigenous people — which was 8%. The situation in *Very remote* areas was much worse, with 61% of Aboriginal and Torres Strait Islander people in low resource households, 10 times the proportion of non-Indigenous people — which was 6%.

		ASGC F	Remoteness a	reas		
	Major cities	Inner regional	Outer regional	Remote	Very remote	Australia
		Aboriginal a	nd Torres Str	ait Islander po	pulation	
Mean income per week \$	539	450	448	433	329	460
Income quintiles (%)						
Lowest	36.6	43.9	45.0	49.8	63.7	45.2
Second	22.4	26.1	25.7	24.2	25.9	24.6
Third	17.6	15.6	15.1	11.9	6.1	14.4
Fourth	14.4	10.0	9.7	8.6	2.8	10.2
Highest	9.0	4.4	4.6	5.5	1.6	5.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total (number)	113,478	74,505	70,830	26,742	51,950	337,505
Unknown (number)	22,211	15,599	17,471	7,831	9,942	73,054
Non-Indigenous population						
Mean income per week \$	779	645	644	752	812	740
Income quintiles (%)						
Lowest	18.0	23.2	24.5	20.0	17.1	19.6
Second	17.8	23.6	23.2	18.8	17.1	19.4
Third	19.6	21.7	20.8	19.1	18.1	20.1
Fourth	21.4	18.7	18.2	20.4	21.8	20.6
Highest	23.2	12.8	13.3	21.7	26.0	20.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total (number)	10,692,107	3,001,681	1,358,030	181,473	54,830	15,288,121
Unknown (number)	1,311,044	367,095	180,650	26,130	8,415	1,893,334

Table 2.2: Aboriginal and Torres Strait Islander and non-Indigenous population<sup>(a)</sup> by equivalised gross household income quintile by ASGC remoteness area, 2006 distribution

(a) Residents of occupied private dwellings, excluding visitors and residents of non-private dwellings such as nursing homes, hospitals, prisons.

(b) Mean weekly equivalised gross household income for 2001 adjusted for inflation to approximate 2006 dollar value using the CPI.

Source: ABS 2008a.

# 3 Total expenditure and funding

# 3.1 Total health and residential aged care expenditure

Table 3.1 shows estimated expenditure by broad types of health service for Aboriginal and Torres Strait Islander people and non-Indigenous people. The table also presents expenditure per person and the ratio of Aboriginal and Torres Strait Islander to non-Indigenous expenditure for each service.

The ratio of Aboriginal and Torres Strait Islander to non-Indigenous per person health and high care residential aged care expenditure in 2006–07 was 1.25. This means that \$1.25 was spent per person on health and high care residential aged care services for Aboriginal and Torres Strait Islander people for every dollar spent for a non-Indigenous person.

The increase in the average Indigenous/non-Indigenous health and residential aged care expenditure per person ratio between 2004–05 and 2006–07 from 1.17 to 1.25 can be explained by the following:

- part of the increase can be attributed to greater growth in expenditure for Aboriginal and Torres Strait Islander people in certain areas, particularly in public hospital services expenditure. Public hospital services expenditure constitutes the most significant area of health expenditure for Aboriginal and Torres Strait Islander people. In 2004–05, the Aboriginal and Torres Strait Islander share of total expenditure on public hospital services was 4.7%. In 2006–07, the Aboriginal and Torres Strait Islander share had increased to 5.2%.
- part of the increase may be due to greater spending for Medicare funded medical services, but there was a change in method for estimating Medicare medical services (see Chapter 6 and Appendix B). It is therefore not possible to say with certainty how much of the change in methodology contributes to the change in the estimates and how much is due to a real increase in expenditure on medical services and pharmaceuticals for Indigenous people.

Expenditure on health and high care residential aged care services for Aboriginal and Torres Strait Islander people was 3.1% of all recurrent health expenditure in 2006–07, a higher proportion than their 2.5% representation in the Australian population.

The major feature is the reliance of Aboriginal and Torres Strait Islander people on public hospitals and community health services. Although Aboriginal and Torres Strait Islander people used few private hospital services, as their private insurance membership was low, overall hospital expenditure (public and private hospital) per Aboriginal and Torres Strait Islander person was 71.5% higher than for non-Indigenous people (Table 3.1). Spending on community health services was six and a half times that for non-Indigenous people.

In contrast, per person expenditure on medical services, medications and dental services was half or less than that for non-Indigenous people (Table 3.1). This is partly because Aboriginal and Torres Strait Islander people have much lower incomes compared to non-Indigenous people and, like low income people everywhere, they therefore use more public hospital services and less private specialist medical services. Approximately 70% of Aboriginal and

Torres Strait Islander households are in the lowest two household income quintiles (ABS 2008a).

The difference between average health expenditure on Aboriginal and Torres Strait Islander and non-Indigenous people reflects, among other things, the differences in the average costs of providing goods and services to the two populations. For example, a higher proportion of Aboriginal and Torres Strait Islander people live in remote and very remote regions in Australia where the costs of providing health goods and services are higher than for those people who live in capital cities or in the inner regional areas of Australia.

	Exp	Expenditure (\$ million)	Ē		Expenditure	Expenditure (\$) per person	Ratio (Indigenous to non-Indigenous)	jenous to jenous)
Area of expenditure	Indigenous	Non- Indigenous	Total	Indigenous share (%)	Indigenous	Non- Indigenous	2006-07	2004–05
Total hospitals	1,483.1	33,687.6	35,170.7	4.2	2,838.3	1,654.6	1.72	1.60
Public hospital services <sup>(a)</sup>	1,450.9	26,565.3	28,016.2	5.2	2,776.6	1,304.8	2.13	2.01
Admitted patient services <sup>(b)</sup>	1,123.5	20,817.0	21,940.5	5.1	2,150.0	1,022.4	2.10	1.99
Non-admitted patient services	327.4	5,748.3	6,075.7	5.4	626.5	282.3	2.22	2.09
Private hospitals <sup>(c)</sup>	32.3	7,122.3	7,154.5	0.5	61.7	349.8	0.18	0.21
Patient transport	115.9	1,672.4	1,788.3	6.5	221.8	82.1	2.70	3.05
Medical services	220.8	16,544.5	16,765.3	1.3	422.6	812.6	0.52	0.46
Medicare services	193.2	13,441.1	13,634.3	1.4	369.7	660.2	0.56	0.42
Other	27.6	3,103.4	3,131.0	0.9	52.9	152.4	0.35	0.59
Dental services	72.9	5,676.2	5,749.1	1.3	139.5	278.8	0.50	0.40
Community health services	620.1	3,706.3	4,326.4	14.3	1,186.7	182.0	6.52	6.59
Other professional services	22.3	3,250.8	3,273.1	0.7	42.8	159.7	0.27	0.40
Public health	110.9	1,700.2	1,811.0	6.1	212.2	83.5	2.54	2.66
Medications	129.4	12,481.0	12,610.3	1.0	247.5	613.0	0.40	0.40
Aids and appliances	21.0	3,004.6	3,025.6	0.7	40.3	147.6	0.27	0.29
Research	32.1	2,317.0	2,349.1	1.4	61.5	113.8	0.54	1.11
Health administration	75.7	2,294.0	2,369.7	3.2	144.8	112.7	1.29	1.34
Other health services (nec) <sup>(d)</sup>	5.5	141.9	147.4	3.7	10.5	7.0	1.51	I
Total health	2,909.7	86,476.4	89,386.1	3.3	5,568.5	4,247.3	1.31	1.25
High care residential aged care	66.7	6,305.1	6,371.8	1.0	127.6	309.7	0.41	0.27
Total health and high care residential aged care	2,976.4	92,781.5	95,757.9	3.1	5,696.1	4,557.0	1.25	1.17

Table 3.1: Expenditure on health and high care residential aged care services for Aboriginal and Torres Strait Islander and non-Indigenous

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Notes

- (a) Excludes dental services, community health services, patient transport services, public health and health research undertaken by the hospital.
- (b) Admitted patient expenditure estimates allow for Aboriginal and Torres Strait Islander under-identification, except for Tasmania.
- (c) Includes state/territory government expenditure for services provided for public patients in private hospitals (\$249.5 million).
- (d) Other health services (not elsewhere classified) include expenditure on health services such as family planning.

Source: AIHW health expenditure database.

In many of the areas where Aboriginal and Torres Strait Islander people live, hospital admission is a common means of delivering basic health services, and hospital emergency and outpatient departments are the most accessible source of affordable medical treatment, including GP-type care.

In 2006–07, around 21.0% of health and high care residential aged care expenditure for Aboriginal and Torres Strait Islander people was for community health. Almost all of the Australian Government's community health expenditure was through grants to ACCHOs but, for the state and territory component, there was a variety of maternal and child health programs, drug and alcohol programs, community mental health programs and other services.

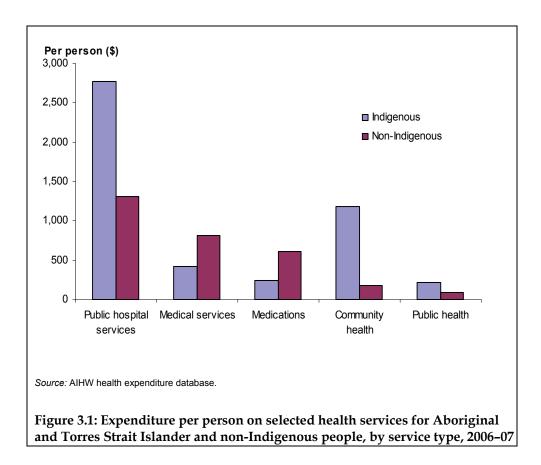
## **Total health expenditure**

As explained earlier, the definition of health expenditure changed since the last report on Aboriginal and Torres Strait Islander health expenditure in 2004–05. Health expenditure now excludes high care residential aged care expenditure, which is classified instead to 'welfare services'.

This section examines the expenditure for Aboriginal and Torres Strait Islander people according to the new definition of health expenditure.

The ratio of Aboriginal and Torres Strait Islander to non-Indigenous per person health expenditure in 2006–07 was 1.31. This means that \$1.31 was spent per person on health services for Aboriginal and Torres Strait Islander people for every dollar spent for a non-Indigenous person. An estimated \$5,569 was spent for health services per Aboriginal and Torres Strait Islander person compared to the \$4,247 spent for non-Indigenous persons.

Figure 3.1 highlights the differences in expenditure per person for the major types of health services delivered to Aboriginal and Torres Strait Islander and non-Indigenous people in 2006–07.



The Medicare medical services expenditure row in the expenditure tables such as Table 3.1 consists of in-hospital private medical services as well as out-of-hospital medical services. Now that detailed Medicare VII data are available, it is possible to separate out these two aspects of medical expenditure for Aboriginal and Torres Strait Islander and non-Indigenous people (Tables 3.2 and 3.3). This shows that the Aboriginal and Torres Strait Islander/non-Indigenous benefits paid ratio per person is much lower for in-hospital private medical services (0.16) than for out-of-hospital Medicare medical services (0.65). The lower in-hospital private medical services ratio reflects the lower private health insurance membership for Aboriginal and Torres Strait Islander people.

Overall, the Medicare medical benefits paid ratio is 0.58 (Table 4.3), so the inclusion of inhospital private medical services in the Medicare data substantially lowers the Indigenous to non-Indigenous per person ratio for Medicare medical services overall.

Table 3.2: Australian Government benefits paid for in-hospital Medicare medical and other	
services for Aboriginal and Torres Strait Islander and non-Indigenous people, 2006–07	

	Amo	ount (\$ million)	)		Expenditure	(\$ per person)	
In-hospital medical services	Indigenous	Non- Indigenous	Total	Indigenous share %	Indigenous	Non- Indigenous	Ratio
Medicare benefits							
GP	0.1	20.0	20.1	0.3	0.1	1.0	0.13
Referred services	6.6	1,637.8	1,644.4	0.4	12.6	80.4	0.16
Specialist consultations	0.9	216.8	217.6	0.4	1.6	10.6	0.15
Pathology	0.6	186.1	186.7	0.3	1.1	9.1	0.12
Imaging	0.4	131.2	131.6	0.3	0.8	6.4	0.13
Operations and other	4.7	1,103.7	1,108.4	0.4	9.0	54.2	0.17
All Medicare medical services	6.6	1,657.8	1,664.4	0.4	12.7	81.4	0.16
Other practitioner services	_	4.3	4.3	0.5	0.0	0.2	0.20
Allied health	_	_	_	_	_	_	_
Optometry services	_	_	_	—	_	_	_
Dental services	_	4.3	4.3	0.5	_	0.2	0.20
Total Medicare benefits	6.7	1,662.1	1,668.8	0.4	12.8	81.6	0.16

Source: AIHW health expenditure database.

# Table 3.3: Australian Government benefits paid for out-of-hospital Medicare medical and other services for Aboriginal and Torres Strait Islander and non-Indigenous people, 2006–07

	Am	ount (\$ million	)		Expenditure (\$	6 per person)	
Out-of-hospital medical services	Indigenous	Non- Indigenous	Total	Indigenous share %	Indigenous	Non- Indigenous	Ratio
Medicare benefits							
GP	85.7	4,179.2	4,264.8	2.0	164.0	205.3	0.80
Referred services	78.3	5,617.3	5,695.6	1.4	149.9	275.9	0.54
Specialist consultations	18.3	1,092.4	1,110.8	1.7	35.1	53.7	0.65
Pathology	25.9	1,512.6	1,538.4	1.7	49.5	74.3	0.67
Imaging	19.5	1,567.2	1,586.7	1.2	37.3	77.0	0.48
Operations and other	14.6	1,445.2	1,459.8	1.0	28.0	71.0	0.39
All Medicare medical services	164.0	9,796.5	9,960.5	1.6	313.8	481.2	0.65
Other practitioner services	3.9	349.9	353.8	1.1	7.4	17.2	0.43
Allied health	1.0	106.3	107.3	0.9	1.8	5.2	0.35
Optometry services	2.9	237.1	240.0	1.2	5.5	11.6	0.47
Dental services	0.0	6.5	6.5	0.7	0.1	0.3	0.29
Total Medicare benefits	167.8	10,146.4	10,314.3	1.6	321.2	498.3	0.64

Source: AIHW health expenditure database.

Table 3.4 shows the estimated expenditure on total hospital services and Medicare medical services for Aboriginal and Torres Strait Islander people and non-Indigenous people. The table also provides estimates of expenditure per person and the ratios of Aboriginal and Torres Strait Islander people and non-Indigenous people for each service.

Table 3.4 also shows that:

- Expenditure on total hospital services (excluding in-hospital private medical services) for Aboriginal and Torres Strait Islander people was 4.2% of the total spent for hospital services. On a per person basis, expenditure for Aboriginal and Torres Strait Islander people was 1.72 times the amount spent on non-Indigenous people.
- Expenditure on non-admitted patient services for Aboriginal and Torres Strait Islander people was 19.7% of the total expenditure on hospital services for this group, compared to 12.2% for non-Indigenous patients. This indicates that non-admitted patient services are an important service delivery mechanism for Aboriginal and Torres Strait Islander patients compared to those for non-Indigenous patients.

	Exper	Expenditure (\$ million)	~		Expenditure	Expenditure per person (\$)	
Area of expenditure	Indigenous	Non- Indigenous	Total	Indigenous share (%)	Indigenous	Non- Indigenous	Ratio
Total hospital (including in-hospital private medical services)	1,489.8	35,349.7	36,839.5	4.0	2,851.1	1,736.2	1.64
Total hospital (excluding in-hospital private medical services)	1,483.1	33,687.6	35,170.7	4.2	2,838.3	1,654.6	1.72
Public hospital services (including in-hospital private medical services)	1,451.8	26,803.0	28,254.8	5.1	2,778.4	1,316.4	2.11
Public hospital services (excluding in-hospital private medical services)	1,450.9	26,565.3	28,016.2	5.2	2,776.6	1,304.8	2.13
Admitted patient services (including in- hospital private medical services)	1,124.4	21,054.7	22,179.1	5.1	2,151.9	1,034.1	2.08
Admitted patient services (excluding in- hospital private medical services)	1,123.5	20,817.0	21,940.5	5.1	2,150.0	1,022.4	2.10
Non-admitted patient services	327.4	5,748.3	6,075.7	5.4	626.5	282.3	2.22
Private hospital (including in hospital private medical services)	38.0	8,546.7	8,584.7	0.4	72.7	419.8	0.17
Private hospital (excluding in hospital private medical services)	32.3	7,122.3	7,154.5	0.5	61.7	349.8	0.18
Total Medicare benefits	174.5	11,808.6	11,983.1	1.5	334.0	580.0	0.58
Out-of-hospital Medicare medical services	167.8	10,146.4	10,314.3	1.6	321.2	498.3	0.64
In-hospital private medical services	6.7	1,662.1	1,668.8	0.4	12.8	81.6	0.16
Public hospital private medical services	1.0	237.7	238.6	0.4	1.8	11.7	0.16
Private hospital private medical services	5.7	1,424.4	1,430.2	0.4	10.9	70.0	0.16
Total	1,664.3	47,158.3	48,822.6	3.4	3,185.0	2,316.2	1.38

Table 3.4: Expenditure on hospital services for Aboriginal and Torres Strait Islander and non-Indigenous people, 2006–07

Source: AIHW health expenditure database.

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## 3.2 Total health funding

This section presents estimates of total health funding for the Australian Government, state and territory governments and non-government/private sources.

The Australian Government funding of health is primarily through:

- Special Purpose Payments (SPPs) to the states and territories for health; and
- private health insurance rebates.

Table 3.5 shows the funding of all recurrent health expenditure in 2006–07 by final source of funds for Aboriginal and Torres Strait Islander people and non-Indigenous people. Table 3.6 provides the same information expressed as estimated funding per person and the ratios of Aboriginal and Torres Strait Islander to non-Indigenous amounts.

In 2006–07, governments provided 93.4% of the total funding for Aboriginal and Torres Strait Islander health care spending and 68.2% of the health care funding for non-Indigenous people. For Aboriginal and Torres Strait Islander health spending, the states and territories contributed \$1,496 million or 51.4% of total funding, and \$1,221 million or 42.0% of total funding came from the Australian Government (Table 3.5). Non-government sources contributed around \$193 million, or 6.6% of total funding.

		Amount (\$ million)					
Source of funding	Indigenous	Non-Indigenous	Total	Indigenous share (%)			
State and territory governments	1,495.8	20,861.6	22,357.4	6.7			
Australian Government	1,220.7	38,107.3	39,328.1	3.1			
Direct Australian Government	720.5	24,869.4	25,589.9	2.8			
Indirect through Australian state/territory governments	487.4	9,406.4	9,893.8	4.9			
Indirect through non-government <sup>(a)</sup>	12.8	3,831.5	3,844.3	0.3			
All government	2,716.5	58,968.9	61,685.4	4.4			
Non-government	193.2	27,507.5	27,700.7	0.7			
Total health	2,909.7	86,476.4	89,386.1	3.3			
Australian Government funded high care residential aged care	43.8	4,769.3	4,813.1	0.9			
Non-government funded high care residential aged care	22.9	1,535.7	1,558.6	1.5			
Government funded health and high care residential aged care	2,760.3	63,738.2	66,498.5	4.2			
Total health and high care residential aged care	2,976.4	92,781.4	95,757.9	3.1			

## Table 3.5: Total funding for health and high care residential aged care for Aboriginal and Torres Strait Islander and non-Indigenous people, 2006–07 (\$ million)

(a) Includes private health insurance rebates of \$3,073 million for all Australians. Also includes SPPs covering highly specialised drugs in private hospitals and other payments.

Source: AIHW health expenditure database.

Table 3.6 shows that on a per person basis, the level of all government funding, that is, Australian Government and the states/territories, was much higher for Aboriginal and Torres Strait Islander people than for non-Indigenous people. The average amount of funding per person was:

- \$5,199 per Aboriginal and Torres Strait Islander person; and
- \$2,896 per non-Indigenous person.

In 2006–07, the Australian Government funded 24.8% more per person for health services for Aboriginal and Torres Strait Islander people than for non-Indigenous people.

The state and territory governments incurred almost three times the level of funding of health expenditure per person on Aboriginal and Torres Strait Islander people than for non-Indigenous people.

## Table 3.6: Funding per person for health and high care residential aged care for Aboriginal and Torres Strait Islander and non-Indigenous people, 2006–07

	F	unding per person (\$)	
Source of funding	Indigenous	Non-Indigenous	Ratio
State and territory governments	2,862.5	1,024.6	2.79
Australian Government	2,336.2	1,871.7	1.25
Direct Australian Government	1,378.8	1,221.5	1.13
Indirect through Australian state/territory governments	932.8	462.0	2.02
Indirect through non-government <sup>(a)</sup>	24.5	188.2	0.13
All government	5,198.7	2,896.3	1.79
Non-government	369.8	1,351.0	0.27
Total health	5,568.5	4,247.3	1.31
Australian Government funded high care residential aged care	83.9	234.2	0.36
Non-government funded high care residential aged care	43.7	75.4	0.58
Government funded health and high care residential aged care	5,282.6	3,130.5	1.69
Total health and high care residential aged care	5,696.1	4,557.0	1.25

(a) Includes private health insurance rebates (\$147.1 was paid out per Australian in 2006–07). This category also includes SPPs which covers highly specialised drugs provided in private hospitals, along with other payments.

Source: AIHW health expenditure database.

## 3.3 Australian Government funding

The Australian Government provided \$1,265 million to fund health and high care residential aged care expenditure in 2006–07 for Aboriginal and Torres Strait Islander people.

This represented about 2.9% of total Australian government health and high care residential aged care funding (Table 3.7).

The average Australian Government funding for health and high care residential aged care per Aboriginal and Torres Strait Islander person was \$2,420 compared to \$2,106 for each non-Indigenous person.

Table 3.7 shows funding by area of expenditure by the Australian Government.

	Fun	ding (\$ millior	ı)		Funding pe	r person (\$)	
Area of expenditure	Indigenous	Non- Indigenous	Total	Indigenous share (%)	Indigenous	Non- Indigenous	Ratio
Total hospital	510.7	12,727.4	13,238.1	3.9	977.4	625.1	1.56
Public hospital services	502.8	10,238.3	10,741.1	4.7	962.3	502.9	1.91
Private hospitals	7.9	2,489.1	2,497.1	0.3	15.1	122.3	0.12
Patient transport services	15.0	173.8	188.8	7.9	28.6	8.5	3.36
Medical services	179.8	12,912.7	13,092.5	1.4	344.2	634.2	0.54
Dental services	1.7	480.4	482.1	0.4	3.3	23.6	0.14
Other professional services	5.1	821.1	826.2	0.6	9.7	40.3	0.24
Community health	272.0	143.0	415.0	65.5	520.6	7.0	74.10
Public health	54.7	941.2	995.9	5.5	104.8	46.2	2.27
Medications	93.6	6,423.9	6,517.5	1.4	179.0	315.5	0.57
Aids and appliances	4.0	422.4	426.4	0.9	7.6	20.7	0.37
Research	20.6	1,814.0	1,834.5	1.1	39.4	89.1	0.44
Health administration	63.5	1,247.5	1,310.9	4.8	121.5	61.3	1.98
Other health services	_	_	_	_	_	_	_
Total health	1,220.7	38,107.3	39,328.1	3.1	2,336.2	1,871.7	1.25
High care residential aged care	43.8	4,769.3	4,813.1	0.9	83.9	234.2	0.36
Total health and high care residential aged care	1,264.6	42,876.6	44,141.2	2.9	2,420.0	2,105.9	1.15

Table 3.7: Australian Government funding of health and high care residential aged care for Indigenous and non-Indigenous people, 2006–07 (\$ million)

(a) Admitted patient expenditure estimates allow for Aboriginal and Torres Strait Islander under-identification, except for Tasmania.

Source: AIHW health expenditure database.

Table 3.8 shows that, of the Australian Government funding on health and high care residential aged care services in 2006–07 for Aboriginal and Torres Strait Islander people, 59.6% was through the Australian Government Department of Health and Ageing (DoHA) and the Department of Veterans' Affairs. The second largest source of funds from the Australian Government was through Specific Purpose Payments (SPPs) to the states and

territories for health and high care residential aged care purposes, which was 38.5% of total funding.

Table 3.8: Australian Government funding of health and high care residential aged care for Aboriginal and Torres Strait Islander and non-Indigenous people, by source of funding, 2006–07 (\$ million)

	Fur	nding (\$ million)			Funding pe	r person (\$)	
Source of funding	Indigenous	Non- Indigenous	Total	Indigenous share (%)	Indigenous	Non- Indigenous	Ratio
DoHA and DVA health	710.5	24,245.8	24,956.4	2.8	1,359.7	1,190.8	1.14
DoHA and DVA high care residential aged care	43.8	4,769.3	4,813.1	0.9	83.9	234.2	0.36
Total DoHA and DVA	754.3	29,015.1	29,769.5	2.5	1,443.6	1,425.1	1.01
SPPs to the states and territories	487.4	9,406.4	9,893.8	4.9	932.8	462.0	2.02
Rebates for private health insurance	11.3	3,062.7	3,074.0	0.4	21.5	150.4	0.14
Other Australian Government	11.5	1,392.3	1,403.9	0.8	22.1	68.4	0.32
Total health funding	1,220.7	38,107.3	39,328.1	3.1	2,336.2	1,871.7	1.25
Total health and high care residential aged care funding	1,264.6	42,876.6	44,141.2	2.9	2,420.0	2,105.9	1.15

Source: AIHW health expenditure database.

	Australian Government	overnment	State/territory government	government	Non-government	ernment	Total expenditure	enditure
Area of expenditure	Indigenous	Non- Indigenous	Indigenous	Non- Indigenous	Indigenous	Non- Indigenous	Indigenous	Non- Indigenous
				\$ million	u			
Total hospital	510.7	12,727.4	940.9	14,587.4	31.5	6,372.8	1,483.1	33,687.6
Public hospital services <sup>(a)</sup>	502.8	10,238.3	936.4	14,342.3	11.6	1,984.8	1,450.9	26,565.3
Private hospitals	7.9	2,489.1	4.4	245.1	19.9	4,388.0	32.3	7,122.3
Patient transport services	15.0	173.8	97.5	1,092.9	3.4	405.7	115.9	1,672.4
Medical services	179.8	12,912.7	Ι	Ι	41.0	3,631.8	220.8	16,544.5
Dental services	1.7	480.4	30.8	501.0	40.3	4,694.8	72.9	5,676.2
Other professional services	5.1	821.1	Ι	Ι	17.3	2,429.7	22.3	3,250.8
Community health	272.0	143.0	347.5	3,291.4	0.5	271.9	620.1	3,706.3
Public health	54.7	941.2	56.0	629.1	0.2	129.9	110.9	1,700.2
Medications	93.6	6,423.9	Ι	Ι	35.8	6,057.0	129.4	12,481.0
Aids and appliances	4.0	422.4	Ι	Ι	17.1	2,582.2	21.0	3,004.6
Research	20.6	1,814.0	8.1	317.5	3.5	185.5	32.1	2,317.0
Health administration	63.5	1,247.5	9.5	300.4	2.7	746.2	75.7	2,294.0
Other health services (nec)	Ι	Ι	5.5	141.9	I	Ι	5.5	141.9
Total health	1,220.7	38,107.3	1,495.8	20,861.6	193.2	27,507.5	2,909.7	86,476.4
High care residential aged care	43.8	4,769.3	Ι	Ι	22.9	1,535.7	66.7	6,305.0
Total health and high care residential				0 100 00	1010			

Table 3.9: Funding of health and high care residential aged care for Aboriginal and Torres Strait Islander and non-Indigenous people, by

Excludes any dental services, community health services, patient transport services, public health and health research undertaken by the hospital. (a)

Source: AIHW health expenditure database.

## 3.4 Funding by state and territory governments

Table 3.10 indicates that the total health funding by state and territory governments during 2006–07 was estimated at \$22,357 million. Of this total, an estimated 6.7% (\$1,496 million) was to fund health care for Aboriginal and Torres Strait Islander people.

Generally, funding by the state and territory governments for Aboriginal and Torres Strait Islander health was directed at services administered by the state and territory governments themselves. The largest two of these services were public hospital services (\$936 million) and community health services (\$348 million).

	Funding (	\$ million)		Funding per	person (\$)	
Area of expenditure	Indigenous	Non- Indigenous	Indigenous share %	Indigenous	Non- Indigenous	Ratio
Total hospitals	940.9	14,587.4	6.1	1,800.5	716.5	2.51
Public hospital services	936.4	14,342.3	6.1	1,792.1	704.4	2.54
Admitted patient services <sup>(a)</sup>	611.7	8,901.6	6.4	1,170.7	437.2	2.68
Non-admitted patient services	324.7	5,440.6	5.6	621.4	267.2	2.33
Private hospitals	4.4	245.1	1.8	8.5	12.0	0.71
Patient transport services	97.5	1,092.9	8.2	186.7	53.7	3.48
Dental services	30.8	501.0	5.8	59.0	24.6	2.40
Community health	347.5	3,291.4	9.6	665.1	161.7	4.11
Public health	56.0	629.1	8.2	107.1	30.9	3.47
Research	8.1	317.5	2.5	15.5	15.6	0.99
Health administration	9.5	300.4	3.1	18.1	14.8	1.23
Other health services, nec	5.5	141.9	3.7	10.5	7.0	1.51
Total funding	1,495.8	20,861.6	6.7	2,862.5	1,024.6	2.79

## Table 3.10: Total and per person state and territory government funding of health services for Aboriginal and Torres Strait Islander and non-Indigenous people, 2006–07

(a) Admitted patient expenditure adjusted for Aboriginal and Torres Strait Islander under-identification, except for Tasmania.

Source: AIHW Health expenditure database.

# 4 Government and non-government expenditure

This chapter examines the expenditure directly incurred by the Australian Government, state and territory governments and non-government organisations in providing and supporting health goods and services through activities for which they are primarily responsible. These activities include mainstream programs along with 'Aboriginal and Torres Strait Islanderspecific' programs. The Australian Government direct expenditure included here does not include grants made to the states and territories, nor does it include the private health insurance rebate.

Non-government expenditure includes copayments under the Medicare and PBS arrangements and by residents in residential aged care. They also include expenditure on largely privately provided health goods and services, such as private hospital care and nonhospital services provided by dentists and other health professionals. The Australian Government private health insurance rebate is included as part of non-government expenditure except where it supports private patient services in public hospitals in which case it is included as part of state and territory government expenditure.

	Australian Government	overnment	State/territory government	government	Non-government	ernment	Total expenditure	enditure
Area of expenditure	Indigenous	Non- Indigenous	Indigenous	Non- Indigenous	Indigenous	Non- Indigenous	Indigenous	Non- Indigenous
				\$ million	uo			
Total hospital	25.4	499.1	1,425.6	26,097.5	32.1	7,091.0	1,483.1	33,687.6
Public hospital services <sup>(a)</sup>	25.3	467.9	1,425.6	26,097.5	I	Ι	1,450.9	26,565.3
Private hospitals	0.1	31.2	Ι	Ι	32.1	7,091.0	32.3	7,122.3
Patient transport services	14.8	128.5	101.1	1,543.9	Ι	Ι	115.9	1,672.4
Medical services	178.7	12,596.6	I	Ι	42.1	3,947.9	220.8	16,544.5
Dental services	0.4	113.2	31.0	529.9	41.5	5,033.2	72.9	5,676.2
Other professional services	4.4	637.8	0.0	0.0	17.9	2,613.0	22.3	3,250.8
Community health	272.0	143.0	347.7	3,548.6	0.4	14.8	620.1	3,706.3
Public health	29.7	468.3	81.2	1,124.4	0.0	107.4	110.9	1,700.2
Medications	93.6	6,423.9	I	Ι	35.8	6,057.0	129.4	12,481.0
Aids and appliances	3.5	294.1	I	Ι	17.5	2,710.4	21.0	3,004.6
Research	20.6	1,814.0	8.1	317.5	3.5	185.5	32.1	2,317.0
Health administration	62.3	928.2	9.5	300.4	3.9	1,065.4	75.7	2,294.0
Other health services (nec)	Ι	Ι	5.5	141.9	Ι	I	5.5	141.9
Total health	705.3	24,046.8	2,009.7	33,604.0	194.8	28,825.6	2,909.7	86,476.4
High care residential aged care	43.8	4,769.3	Ι	Ι	22.9	1,535.7	66.7	6,305.0
Total health and high care residential aged care	749.2	28.816.1	2 000 2	33 604 D	217 G	303613	2 976 4	92 781 4

Table 4.1: Expenditure on health and high care residential aged care for Aboriginal and Torres Strait Islander and non-Indigenous people, by

Excludes any dental services, community health services, patient transport services, public health and health research undertaken by the hospital.

Source: AIHW health expenditure database.

# 4.1 Direct expenditure by the Australian Government

In 2006–07, expenditure by the Australian Government on health and high care residential aged care services for Aboriginal and Torres Strait Islander people was \$749 million, representing 2.5% of its total direct health and residential aged care expenditure (Table 4.2).

	Total expen	diture (\$ million)		Expenditure		
Area of expenditure	Indigenous Non-Indigenous		Indigenous share (%)	Indigenous	Non- Indigenous	Ratio
Total hospitals	25.4	499.1	4.8	48.6	24.5	1.98
Public hospital services <sup>(a)</sup>	25.3	467.9	5.1	48.3	23.0	2.10
Private hospitals	0.1	31.2	0.5	0.3	1.5	0.18
Patient transport	14.8	128.5	10.3	28.3	6.3	4.49
Medical services	178.7	12,596.6	1.4	342.0	618.7	0.55
Medicare services	170.6	11,454.3	1.5	326.6	562.6	0.58
Other	8.1	1,142.3	0.7	15.4	56.1	0.27
Dental services	0.4	113.2	0.4	0.8	5.6	0.14
Other professional services	4.4	637.8	0.7	8.5	31.3	0.27
Community health services	272.0	143.0	65.5	520.6	7.0	74.10
Through ACCHOs	249.5	46.5	84.3	477.6	2.3	209.08
Other	22.5	96.5	18.9	43.0	4.7	9.07
Public health	29.7	468.3	6.0	56.8	23.0	2.47
Medications	93.6	6,423.9	1.4	179.0	315.5	0.57
Benefit-paid pharmaceuticals <sup>(b)</sup>	87.9	5,868.7	1.5	168.2	288.2	0.58
All other medications	5.6	555.2	1.0	10.8	27.3	0.40
Aids and appliances	3.5	294.1	1.2	6.7	14.4	0.46
Research	20.6	1,814.0	1.1	39.4	89.1	0.44
Health administration	62.3	928.2	6.3	119.2	45.6	2.62
Other health services, nec	_	_	_	_	_	_
Total health	705.3	24,046.8	2.8	1,349.8	1,181.1	1.14
High care residential aged care	43.8	4,769.3	0.9	83.9	234.2	0.36
Total health and high care residential aged care	749.2	28,816.1	2.5	1,433.7	1,415.3	1.01

Table 4.2: Direct expenditure by the Australian Government on health and high care residential aged care services for Aboriginal and Torres Strait Islander and non-Indigenous people, 2006–07

(a) Excludes dental services, community health services, patient transport services, public health and health research undertaken by the hospital. These expenditures are included in the appropriate rows below 'Public hospital services'.

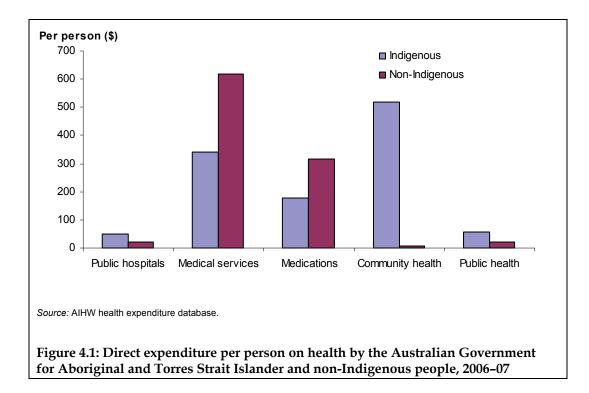
(b) Includes the Repatriation Pharmaceutical Benefits Scheme (RPBS) as well as the PBS.

Source: AIHW Health expenditure database.

As shown in Table 4.2, the major areas of Australian Government expenditure on Aboriginal and Torres Strait Islander health and high care residential aged care expenditure were:

- community health services \$272 million (36.3% of total Australian Government Aboriginal and Torres Strait Islander direct expenditure)
- medical services \$179 million (23.9%)
- medications \$94 million (12.5%)
- health administration \$62 million (8.3%)
- public health \$30 million (4.0%).

Figure 4.1 provides a comparison of direct Australian Government expenditure per person on major health goods and services, and highlights the differences in use between Aboriginal and Torres Strait Islander and non-Indigenous people. Average expenditure per person on community health services and public health was higher for Aboriginal and Torres Strait Islander people, but was lower in the case of medical services and medications.



Primary care services provided by the ACCHOs (\$250 million) were the principal component of expenditure on community health services for Aboriginal and Torres Strait Islander people.

On a per person basis, direct expenditure by the Australian Government on health was higher for Aboriginal and Torres Strait Islander people than for non-Indigenous people (ratio of 1.14).

# 4.2 Medicare and the Pharmaceutical Benefits Scheme

This section presents estimates of health expenditure on Aboriginal and Torres Strait Islander people through the Medicare and PBS.

#### Box 4.1: New method to allocate MBS and PBS health expenditure

A significant change in the methodology for allocating Medicare Benefits Schedule (MBS) and Pharmaceutical Benefits Scheme (PBS) health expenditure has been implemented in 'Expenditure on health for Aboriginal and Torres Strait Islander people 2006–07'. The method involves the use of Medicare Voluntary Indigenous Identifier (VII) data to estimate expenditure on medical services such as GP, specialist, pathologist and imaging services, and prescription pharmaceuticals provided to Indigenous people. The previous method used a combination of data from Medicare and the Bettering the Evaluation and Care of Health (BEACH) survey of general practice activity.

Calculations have been performed to derive the 2006-07 MBS and PBS ratios using BEACH data for the purposes of comparing estimates derived using the VII methodology. However, estimates from the BEACH survey are subject to variation due to differences in the rates of Indigenous GP encounters across enumeration periods. For example, the average percentage of Indigenous GP encounters from 2003-04 to 2005-06 was 1.28%, whereas from 2005-06 to 2007-08 it was 0.9%. This variation in sample data has a considerable impact on the derived expenditure estimates. It is therefore not possible to say with certainty how much of the change in methodology contributes to the change in the estimates and how much is due to a real increase in expenditure on medical services and pharmaceuticals for Indigenous people.

*This change in method affects comparisons of the estimates of medical services and prescription pharmaceuticals in this report with previous reports. Users are advised to exercise care when comparing the 2006–07 results to 2004–05 estimates, and those contained in earlier reports.* 

Table 4.3 shows that benefits to Aboriginal and Torres Strait Islander people through Medicare – including some benefits for non-medical services – were estimated at \$175 million. Benefits to Aboriginal and Torres Strait Islander people through the PBS were estimated at \$92 million.

Medicare expenditure per person for Aboriginal and Torres Strait Islander people was 58% of the non-Indigenous average. The average pharmaceutical benefit per person for Aboriginal and Torres Strait Islander people was 60% of the non-Indigenous average.

Table 4.3: Total Medicare and Pharmaceutical Benefits Scheme (PBS) benefits<sup>(a)</sup> for Aboriginal and Torres Strait Islander and non-Indigenous people, by service type, 2006–07

	Amount (	\$ million)		Expenditure		
Type of health goods and services	Indigenous	Non- Indigenous	Indigenous share (%)	Indigenous	Non- Indigenous	Ratio
Medicare benefits						
GP	85.7	4,199.2	2.0	164.1	206.2	0.80
Referred services	84.9	7,255.1	1.2	162.5	356.3	0.46
Specialist consultations	19.2	1,309.2	1.4	36.8	64.3	0.57
Pathology	26.4	1,698.7	1.5	50.6	83.4	0.61
Imaging	19.9	1,698.4	1.2	38.1	83.4	0.46
Operations and other	19.3	2,548.8	0.8	37.0	125.2	0.30
All Medicare medical services	170.6	11,454.3	1.5	326.6	562.6	0.58
Other services	3.9	354.3	1.1	7.4	17.4	0.43
Allied health	1.0	106.3	0.9	1.8	5.2	0.35
Optometry services	2.9	237.1	1.2	5.5	11.6	0.47
Dental services	0.1	10.8	0.6	0.1	0.5	0.25
Total Medicare benefits	174.5	11,808.6	1.4	334.0	580.0	0.58
Pharmaceutical benefits <sup>(b) (c)</sup>	91.5	5,909.5	1.5	175.2	290.2	0.60
Mainstream PBS	63.0	5,414.0	1.2	120.6	265.9	0.45
Section 100	23.0	3.5	86.9	43.9	0.2	258
Other PBS special supply	5.6	492.1	1.1	10.7	24.2	0.44
Total PBS	91.5	5,909.5	1.5	175.2	290.2	0.60
Total PBS and MBS	266.0	17,718.1	1.5	509.1	870.2	0.59

(a) Includes only DoHA expenditure.

(b) Excludes RPBS.

(c) Excludes highly specialised drugs dispensed from public and private hospitals.

Source: AIHW health expenditure database.

### 4.3 Expenditure by state and territory governments

State and territory governments spent \$35,614 million on health services in 2006-07.

Table 4.4 shows total expenditure and average expenditure per person for Aboriginal and Torres Strait Islander people for each state and territory. Figure 4.2 presents the average expenditure by state and territory for Aboriginal and Torres Strait Islander and non-Indigenous people graphically.

Table 4.5 shows the distribution by services and the estimated components for Aboriginal and Torres Strait Islander people and non-Indigenous people.

The estimates contained in Tables 4.4 and 4.5 are AIHW estimates derived from data provided by the state and territory authorities.

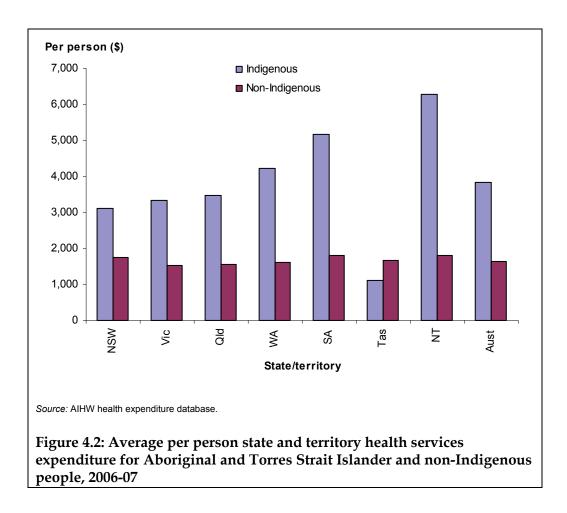
	Am	Amount (\$ million)			Expenditure		
State and territory	Indigenous	Non- Indigenous	Total	Indigenous share (%)	Indigenous	Non- Indigenous	Ratio
New South Wales	485.4	11,674.4	12,159.7	4.0	3,107.0	1,741.3	1.78
Victoria	110.2	7,901.5	8,011.7	1.4	3,321.3	1,537.0	2.16
Queensland	500.8	6,192.6	6,693.3	7.5	3,460.0	1,548.6	2.23
Western Australia	313.6	3,217.8	3,531.4	8.9	4,223.6	1,599.4	2.64
South Australia	153.5	2,801.2	2,954.7	5.2	5,177.0	1,810.5	2.86
Tasmania <sup>(a)</sup>	21.5	784.5	806.0	2.7	1,103.5	1,661.7	0.66
Australian Capital Territory <sup>(b)</sup>	22.8	756.2	779.0	2.9	n.a.	n.a.	n.a.
Northern Territory	401.9	275.8	677.7	59.3	6,279.8	1,808.3	3.47
Total health services expenditure	2,009.7	33,604.0	35,613.7	5.6	3,846.0	1,650.5	2.33

## Table 4.4: State and territory total and per person expenditure on health services for Aboriginal and Torres Strait Islander and non-Indigenous people, 2006–07

(a) The Tasmanian Department of Health and Human Services Aboriginal Health and Wellbeing Steering Committee advised that no underidentification adjustment be used when calculating admitted patient public hospital expenditure for Tasmanian government expenditure.

(b) ACT per person expenditure estimates are not calculated because estimates for the ACT include substantial expenditures for NSW residents. As a result, the ACT population is not an appropriate denominator.

Source: AIHW health expenditure database.



	Amount (	\$ million)		Expenditure		
Area of expenditure	Indigenous	Non- Indigenous	Indigenous share %	Indigenous	Non- Indigenous	Ratio
Total hospital services	1,425.6	26,097.5	5.2	2,728.3	1,281.8	2.13
Public hospital services <sup>(a)</sup>	1,425.6	26,097.5	5.2	2,728.3	1,281.8	2.13
Admitted patient services <sup>(b)</sup>	1,098.2	20,349.2	5.1	2,101.7	999.5	2.10
Non-admitted patient services	327.4	5,748.3	5.4	626.5	282.3	2.22
Patient transport services	101.1	1,543.9	6.1	193.5	75.8	2.55
Dental services	31.0	529.9	5.5	59.4	26.0	2.28
Community health	347.7	3,548.6	8.9	665.3	174.3	3.82
Alcohol and drug treatment (c)	66.4	241.6	21.6	127.0	11.9	10.70
Community mental health <sup>(c)</sup>	60.8	1,347.6	4.3	116.3	66.2	1.76
Other community health <sup>(c)</sup>	220.5	1,959.4	10.1	422.0	96.2	4.39
Public health	81.2	1,124.4	6.7	155.4	55.2	2.81
Communicable disease control	19.7	193.8	9.2	37.7	9.5	3.97
Selected health promotion	13.6	222.4	5.8	26.0	10.9	2.38
Organised immunisation	18.8	298.0	5.9	36.0	14.6	2.46
Environmental health	4.8	66.0	6.7	9.1	3.2	2.81
Food standards and hygiene	0.7	17.2	4.0	1.4	0.8	1.63
Breast cancer screening	1.4	131.9	1.0	2.6	6.5	0.40
Cervical cancer screening	5.0	29.3	14.5	9.5	1.4	6.59
Prevention of hazardous and harmful drug use	15.5	145.1	9.7	29.7	7.1	4.17
Public health research	1.8	20.7	8.1	3.5	1.0	3.41
Research	8.1	317.5	2.5	15.5	15.6	0.99
Health administration	9.5	300.4	3.1	18.1	14.8	1.23
Other health services, nec	5.5	141.9	3.7	10.5	7.0	1.51
Total health expenditure	2,009.7	33,604.0	5.6	3,846.0	1,650.5	2.33

Table 4.5: State and territory government health expenditure, for Aboriginal and Torres Strait Islander people and non-Indigenous people, by area of expenditure, 2006–07

(a) Excludes any dental services, community health services, patient transport services, public health and health research undertaken by the hospital.

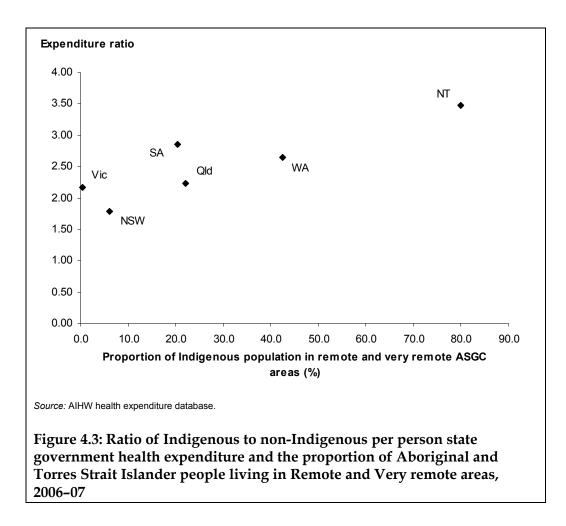
(b) Admitted patient expenditure estimates allow for Aboriginal and Torres Strait Islander under-identification, except for Tasmania.

(c) Estimates are of lesser quality than the community health aggregate due to limited information available to accurately split the total.

(d) This data includes depreciation. Previous State and Territory data published in AIHW (2008a) did not include depreciation, so comparison of data in this table with the previous report should be done cautiously.

Source: AIHW Health expenditure database.

Figure 4.3 shows the relationship across selected jurisdictions – for expenditure on health services for Aboriginal and Torres Strait Islander people according to the proportion of Aboriginal and Torres Strait Islander people who lived in *Remote* and *Very remote* areas in each state. In general, the higher the remote proportion, the higher the ratio of Indigenous to non-Indigenous health expenditure per person.



In Table 4.6, there are marked differences across the states and territories in terms of the reported expenditure per Aboriginal and Torres Strait Islander person, and less marked ones for non-Indigenous people. For example, at \$6,280 per person, the Northern Territory's spending on Aboriginal and Torres Strait Islander people was more than twice the amount spent in NSW at \$3,107. A range of factors drive the high Northern Territory expenditure on Aboriginal and Torres Strait Islander people, including the high costs of delivering services to the large proportions of their Aboriginal and Torres Strait Islander people living there.

Area of expenditure	NSW	Vic	Qld	WA	SA	Tas	NT	Total
				\$ per p	erson			
Public hospital services								
Indigenous	2,043.4	2,180.1	2,552.7	3,337.6	3,886.2	728.7	4,209.0	2,728.3
Non-Indigenous	1,409.2	1,228.6	1,162.9	1,158.5	1,324.7	1,243.1	1,176.6	1,281.8
Ratio	1.45	1.77	2.20	2.88	2.93	0.59	3.58	2.13
Admitted patients <sup>(a)</sup>								
Indigenous	1,489.6	1,662.51	2,058.6	2,589.3	2,654.3	619.2	3,405.4	2,101.7
Non-Indigenous	1,054.1	995.8	955.9	941.0	933.1	1,071.2	942.2	999.5
Ratio	1.41	1.67	2.15	2.75	2.84	0.58	3.61	2.10
Non-admitted patients								
Indigenous	553.7	517.6	494.1	748.3	1,231.9	109.6	803.6	626.5
Non-Indigenous	355.0	232.8	207.0	217.5	391.6	171.9	234.4	282.3
Ratio	1.56	2.22	2.39	3.44	3.15	0.64	3.43	2.22
Patient transport								
Indigenous	112.9	75.6	251.8	190.6	226.4	38.8	352.1	193.5
Non-Indigenous	73.9	75.6	95.0	50.4	75.2	64.2	102.7	75.8
Ratio	1.53	1.00	2.65	3.79	3.01	0.60	3.43	2.55
Dental services								
Indigenous	93.1	35.5	45.2	28.6	78.6	3.7	64.2	59.4
Non-Indigenous	19.1	23.9	33.5	30.0	34.1	37.0	35.5	26.0
Ratio Community health	4.87	1.49	1.35	0.96	2.30	0.10	1.81	2.28
services								
Indigenous	766.9	701.7	501.8	501.0	723.9	257.4	1,018.0	665.3
Non-Indigenous	173.5	131.5	183.8	228.9	161.9	230.0	222.5	174.3
Ratio	4.42	5.34	2.73	2.19	4.47	1.12	4.57	3.82
Public health								
Indigenous	78.5	259.0	77.9	56.3	90.4	65.2	634.1	155.4
Non-Indigenous	48.1	52.6	54.6	62.4	65.6	72.4	140.4	55.2
Ratio	1.63	4.92	1.43	0.90	1.38	0.90	4.52	2.81
Research								
Indigenous	12.0	69.4	9.6	12.2	32.9	9.7	2.5	15.5
Non-Indigenous	13.0	24.9	9.3	30.0	13.0	14.9	0.8	15.6
Ratio Health administration, nec <sup>(b)</sup>	0.92	2.79	1.03	0.41	2.53	0.65	2.90	0.99
Indigenous	0.0	0.0	21.0	23.7	138.6	0.0	0.0	
Non-Indigenous	0.0	0.0	9.4	24.9	118.2	0.0	0.0	
Ratio	-	_	2.23	0.95	1.17	_	-	
Total health expenditure <sup>(c)</sup>								
Indigenous	3,107.0	3,321.3	3,460.0	4,223.6	5,177.0	1,103.5	6,279.8	3,846.0
Non-Indigenous	1,741.3	1,537.0	1,548.6	1,599.4	1,810.5	1,661.7	1,808.3	1,650.5
Ratio	1.78	2.16	2.23	2.64	2.86	0.66	3.47	2.33

Table 4.6: Estimated state and territory<sup>(a)</sup> health expenditure per person, Aboriginal and Torres Strait Islander and non-Indigenous people, 2006–07

(a) Admitted patient expenditure adjusted for Aboriginal and Torres Strait Islander under-identification, except for Tasmania.

(b) Health administration costs by NSW, Victoria, Tasmania and the NT are zero, as these jurisdictions have allocated administrative expenses into the functional expenditure categories in the table.

(c) Includes 'Other health services, nec.

Source: AIHW health expenditure database.

## 4.4 Non-government

This section provides estimates of non-government sector expenditure on health for Aboriginal and Torres Strait Islander people. In this section, the estimates of non-government expenditure include the copayments for Medicare services and benefit-paid pharmaceuticals. They also include expenditure on privately provided health goods and services, such as private hospital care and non-hospital private services provided by dentists and other health professionals (for example, physiotherapists, acupuncturists, audiologists).

Non-government expenditure on health and high care residential aged care services for all people in 2006–07 was estimated at \$30,579 million. Of this amount, \$218 million (0.7%) was expenditure on health and high care residential aged care services for Aboriginal and Torres Strait Islander people (Table 4.7).

On an expenditure per person basis, the average non-government expenditure for Aboriginal and Torres Strait Islander people was \$416 in 2006–07 compared with \$1,491 for non-Indigenous people – a ratio of 0.28. This low ratio partly reflects the low membership Aboriginal and Torres Strait Islander people have in private health insurance funds. In 2004–05 around 14.0% of the Aboriginal and Torres Strait Islander population were members of private health insurance funds compared to 51.0% for the non-Indigenous population (ABS and AIHW 2008).

	Expenditur	Expenditure (\$ million)		Expenditure p		
Area of expenditure	Indigenous	Non- Indigenous	Indigenous share %	Indigenous	Non- Indigenous	Ratio
Total private hospitals	32.1	7,091.0	0.5	61.5	348.3	0.18
Medical services	42.1	3,947.9	1.1	80.6	193.9	0.42
Medicare services	22.6	1,986.8	1.1	43.2	97.6	0.44
Other	19.6	1,961.0	1.0	37.4	96.3	0.39
Dental services	41.5	5,033.2	0.8	79.4	247.2	0.32
Other professional services	17.9	2,613.0	0.7	34.3	128.3	0.27
Community health services	0.4	14.8	2.6	0.8	0.7	1.05
Medications	35.8	6,057.0	0.6	68.5	297.5	0.23
Benefit-paid pharmaceuticals <sup>(a)</sup>	4.7	1,272.2	0.4	8.9	62.5	0.14
All other medications	31.1	4,784.8	0.6	59.6	235.0	0.25
Aids and appliances	17.5	2,710.4	0.6	33.6	133.1	0.25
Research	3.5	185.5	1.8	6.6	9.1	0.73
Health administration	3.9	1,065.4	0.4	7.5	52.3	0.14
Total health <sup>(b)</sup>	194.8	28,825.6	0.7	372.7	1,415.8	0.26
High care residential aged care	22.9	1,535.7	1.5	20.0	88.8	0.22
Total health and high care residential aged care $^{(\mathrm{b})}$	217.6	30,361.3	0.7	416.4	1,491.2	0.28

Table 4.7: Estimated non-government expenditure on health and high care residential aged care for Aboriginal and Torres Strait Islander people and non-Indigenous people, 2006–07

(a) Includes the Repatriation Pharmaceutical Benefits Scheme (RPBS) as well as the PBS.

(b) Includes public health regulatory expenditure which is funded by the private sector.

Source: AIHW health expenditure database.

### 4.5 Expenditure by program management

Table 4.8 shows recurrent expenditure through programs that were managed by the Australian Government and the state/territory governments. In addition, Table 4.8 also includes expenditure for services that were provided privately by non-government or private sector providers and not managed by government. It should be noted that management does not necessarily imply direct service provision.

The Australian Government delivers very few services directly, although its funding policies affect a wide variety of them. However, funding does give varying degrees of control.

The main reason that responsibility for funding differs from responsibility for management is the fact that much of the Australian Government's financing is indirect and does not involve actual management responsibilities within the health-care system.

#### **Program management**

The Medicare and PBS programs are considered to be under Australian Government management, and user copayments of Medicare and the PBS are included in the costs of these programs because they are part of each program's design.

The Australian Government's contribution to the cost of state and territory programs, particularly public hospital services, is not included in programs managed by the Australian Government because it does not directly manage these hospitals or other programs.

Similarly, with regard to the Australian Government subsidy of private health insurance, the distinction relates to operational responsibility, so the subsidy of private health insurance is mostly included in non-government program expenditure.

The residential aged care sector is considered an Australian Government program as it not only determines subsidies, it also determines through the Aged Care Assessment Program (ACAP) who is eligible for which level of subsidy and it sets and monitors quality standards for residential aged care.

#### Expenditure levels by program

Table 4.8 provides the following data about expenditure levels by program.

Government programs accounted for \$65,179 million of expenditure on health and residential aged care services for both Aboriginal and Torres Strait Islander people and non-Indigenous people in 2006-07.

Non-government service delivery accounted for \$30,579 million.

Government-managed programs accounted for around 92.7% of the spending on Aboriginal and Torres Strait Islander health and residential aged care services, with programs managed by state and territory governments making up 67.5% of this expenditure.

Aboriginal and Torres Strait Islander people made proportionally lower use of non-government (or private) services – around 7.3%.

#### **Expenditure patterns**

The Aboriginal and Torres Strait Islander expenditure pattern was entirely different from the pattern for non-Indigenous people.

For non-Indigenous people, the three sectors responsible for program management were almost equally important – namely the Australian Government, state/territory governments and non-government (Table 4.8).

For Aboriginal and Torres Strait Islander people, government programs were the most important – particularly state and territory government programs.

## Table 4.8: Total expenditure on health and high care residential aged care, by program management, 2006–07 (\$ million)

	Indig	enous	Non-Indigenous		Total		
Program management	Amount (\$million)	Proportion (%)	Amount (\$million)	Proportion (%)	Amount (\$million)	Proportion (%)	
Through state and territory government programs <sup>(a)</sup>	2,009.7	67.5	33,604.0	36.2	35,613.7	37.2	
Through Australian Government programs <sup>(b)</sup>	705.3	23.7	24,046.8	25.9	24,752.1	25.8	
Australian Government high residential aged care programs	43.8	1.5	4,769.3	5.1	4,813.1	5.0	
Through all government programs	2,758.8	92.7	62,420.1	67.3	65,178.9	68.1	
Through non-government activities	194.8	6.5	28,825.6	31.1	29,020.4	30.3	
Non-government high residential aged care programs	22.9	0.8	1,535.7	1.7	1,558.6	1.6	
Through all non-government programs	217.6	7.3	30,361.3	32.7	30,578.9	31.9	
Total health	2,909.7	97.8	86,476.4	93.2	89,386.1	93.3	
Total health and high care residential aged care	2,976.4	100.0	92,781.4	100.0	95,757.9	100.0	

(a) Includes state/territory government expenditure on private hospitals (\$249.5 million), shown elsewhere in this report as funding by state/territory governments.

(b) Includes patient copayments under Medicare and PBS (\$27.3 million Aboriginal and Torres Strait Islander people, \$3,282.0 million non-Indigenous), shown elsewhere in this report as expenditure incurred by the non-government sector.

Source: AIHW health expenditure database.

Table 4.9 shows average expenditure per person under program management and the ratios of Aboriginal and Torres Strait Islander to non-Indigenous spending. The ratios highlight the differences in service use between Aboriginal and Torres Strait Islander and non-Indigenous people – particularly for state and territory government managed programs where the ratio of Indigenous to non-Indigenous expenditure per person was 2.33. It is also worth noting the relatively low use by Indigenous people of private arrangements, where the ratio was 0.26.

	Expenditu		
Program management	Indigenous	Non-Indigenous	Ratio
Through state and territory government programs <sup>(a)</sup>	3,846.0	1,650.5	2.33
Through Australian Government programs <sup>(b)</sup>	1,349.8	1,181.1	1.14
Australian Government high residential aged care programs	83.9	234.2	0.36
Through all government programs	5,195.8	2,831.5	1.83
Through non-government activities	372.7	1,415.8	0.26
Non-government high residential aged care programs	43.7	75.4	0.58
Through all non-government programs	416.4	1,491.2	0.28
Total health	5,568.5	4,247.3	1.31
High care residential aged care	127.6	309.7	0.41
Total health and high care residential aged care	5,696.1	4,557.0	1.25

## Table 4.9: Expenditure per person on health and high care residential aged care services, by program management, 2006–07

(a) Includes state/territory government expenditure on private hospitals (\$12.0 per person), shown elsewhere in this report as funding by state/territory governments.

(b) Includes patient copayments under Medicare and PBS (\$52.3 per Aboriginal and Torres Strait Islander person,
 \$161.2 per non-Indigenous person), shown elsewhere in this report as expenditure incurred by non-government.

Source: AIHW health expenditure database.

The Australian Government spent more on its programs per Aboriginal and Torres Strait Islander person than non-Indigenous per person spending – with a ratio of 1.14.

In 2006–07, the states and territories administered two-thirds of all of the resources used in providing Aboriginal and Torres Strait Islander health care.

# 5 Expenditure on primary and secondary/tertiary health services

Primary health services are defined as services provided to whole populations (community health services and public health activities) and those provided in, or flowing from, a patient-initiated contact with a health service (GP consultations, hospital emergency attendances, GP-ordered investigations and prescriptions, and over-the-counter medicines).

Secondary/tertiary services are defined as those generated within the health system by a referral, hospital admission, and so forth.

This section provides a further perspective on the differing patterns of use of health services between Aboriginal and Torres Strait Islander people and non-Indigenous people.

Tables 5.1 and 5.2 show estimated expenditure on the two categories of service, in total, and by per person respectively. Because available data on Aboriginal and Torres Strait Islander and non-Indigenous use differed between services, the figures are estimates. Also, overhead costs in administration and research could not be allocated to one category or the other.

	•	xpenditure Illion)		Seconda expenditur		
Area of expenditure	Indigenous	Non- Indigenous	Indigenous share (%)	Indigenous	Non- Indigenous	Indigenous share (%)
Total hospital services	170.1	4,298.6	3.8	1,313.0	29,389.0	4.3
Admitted patient services				1,149.3	26,514.8	4.2
Non-admitted patient services	170.1	4,298.6	3.8	163.7	2,874.2	5.4
Patient transport	57.9	334.5	14.8	57.9	1,337.9	4.2
Medical services	178.4	10,683.6	1.6	42.4	5,860.9	0.7
Dental services	72.9	5,676.2	1.3	n.a.	n.a.	n.a.
Other professional services	11.2	1,625.4	0.7	11.2	1,625.4	0.7
Community health services	620.1	3,706.3	14.3			
Public health	110.9	1,700.2	6.1			
Medications	117.3	10,352.9	1.1	12.1	2,128.1	0.6
Aids and appliances	19.1	2,492.3	0.8	2.0	512.3	0.4
Total health <sup>(a)</sup>	1,357.9	40,869.9	3.2	1,438.5	40,853.6	3.4
High care residential aged care				66.7	6,305.0	1.0
Total health and high care residential aged care <sup>(a)</sup>	1,357.9	40,869.9	3.2	1,505.2	47,158.6	3.1

Table 5.1: Expenditure on primary and secondary/tertiary health and high care residential aged care
services, 2006–07 (\$ million)

(a) Excludes expenditure on research, health administration and other health services (nec).

Source: AIHW health expenditure database.

A significant component of the expenditure on secondary and tertiary care for Aboriginal and Torres Strait Islander people was provided in hospitals – 87.2% of the total health and aged care expenditure (Table 5.1).

Aboriginal and Torres Strait Islander people have a higher expenditure per person – ratio 1.29 – (Table 5.2) for primary health and high care residential aged care services expenditure than for secondary/tertiary health services (1.24). For non-Indigenous people, community health services constitute a relatively minor expenditure item.

	Primary ex (\$ per p			Secondary/terti   sper		
Area of expenditure	Indigenous	Non- Indigenous	Ratio	Indigenous	Non-Indigenous	Ratio
Total hospital services	325.6	211.1	1.54	2,512.7	1,443.5	1.74
Admitted patient services				2,199.4	1,302.3	1.69
Non-admitted patient services	325.6	211.1	1.54	313.3	141.2	2.22
Patient transport	110.9	16.4	6.75	110.9	65.7	1.69
Medical services	341.5	524.7	0.65	81.1	287.9	0.28
Dental services	139.5	278.8	0.50			
Other professional services	21.4	79.8	0.27	21.4	79.8	0.27
Community health services	1,186.7	182.0	6.52			
Public health	212.2	83.5	2.54			
Medications	224.4	508.5	0.44	23.1	104.5	0.22
Aids and appliances	36.5	122.4	0.30	3.8	25.2	0.15
Total health <sup>(a)</sup>	2,598.7	2,007.3	1.29	2,753.0	2,006.5	1.37
High care residential aged care				127.6	309.7	0.41
Total health and high care residential aged care <sup>(a)</sup>	2,598.7	2,007.3	1.29	2,880.6	2,316.2	1.24

Table 5.2: Expenditure per person on primary and secondary/tertiary health and high care residential aged	
care services for Aboriginal and Torres Strait Islander and non-Indigenous people, 2006–07	

(a) Excludes expenditure on research, health administration and other health services nec.

Source: AIHW health expenditure database.

## 6 Changes over time

Table 6.1 compares this report's results with those from the 2004–05 studies by level of government. Figure 6.1 illustrates the changes in Aboriginal and Torres Strait Islander per person expenditure levels over these periods for the Australian Government and state and territory governments.

Table 6.1: Health and high care residential aged care expenditure per Aboriginal and Torres Strait Islander person (constant 2006–07 prices) by level of government, 2004–05 and 2006–07

	2004–05 2006–07		Growth 2004–05 to 2006–07		
	\$ per per	son	\$ per person	%	
Australian Government					
ACCHO grants	471.1	477.6	6.5	1.4	
Medicare and PBS	479.5	509.1	29.6	6.2	
Other	307.3	363.1	55.9	18.2	
Total Australian Government excluding residential aged care	1,257.9	1,349.8	92.0	7.3	
High care residential aged care	67.9	83.9	15.9	23.6	
Total Australian Government <sup>(a)</sup>	1,325.8	1,433.7	107.9	8.1	
State and territory governments					
Admitted patient services in public hospitals	1,781.3	2,101.7	320.4	18.0	
Community/public health	789.9	820.8	30.9	3.9	
Other	909.4	923.5	14.0	1.5	
Total states and territories	3,480.6 <sup>(b)</sup>	3,846.0	365.3	10.5	
Total governments excluding residential aged care	4,738.5	5,195.8	457.3	9.7	
Total governments including residential aged care	4,806.4	5,279.7	473.3	9.8	

(a) Includes high care residential aged care.

(b) Depreciation is not included in 2004–05 but is included in 2006–07. This reduces the 2004–05 state/territory government numbers by about 5%, but has minimal impact on the Australian Government numbers.

Source: AIHW health expenditure database.

The expenditure estimates in Table 6.1 show a significant increase in the levels of expenditure by governments per Aboriginal and Torres Strait Islander person over the period from 2004–05 to 2006–07.

- The levels of expenditure rose in almost every category for the Australian Government and the states and territories.
  - The real Australian Government expenditure per person for Aboriginal and Torres Strait Islander people grew by 8.1% (or \$108) between 2004–05 and 2006–07.
  - The real state and territory government expenditure per person for Aboriginal and Torres Strait Islander people grew by 10.5% (or \$365) between 2004–05 and 2006–07,

but given that depreciation was not included in the 2004-05 numbers, the growth after allowing for this was about 6%.

#### Box 6.1: Comparison with estimates for 2004-05

The definition of health expenditure has changed since the previous (2004-05) report in this series and no longer includes expenditure on high care residential aged care, which is now classified as welfare expenditure.

*This report therefore provides separate estimates of expenditure for health and high care residential aged care services.* 

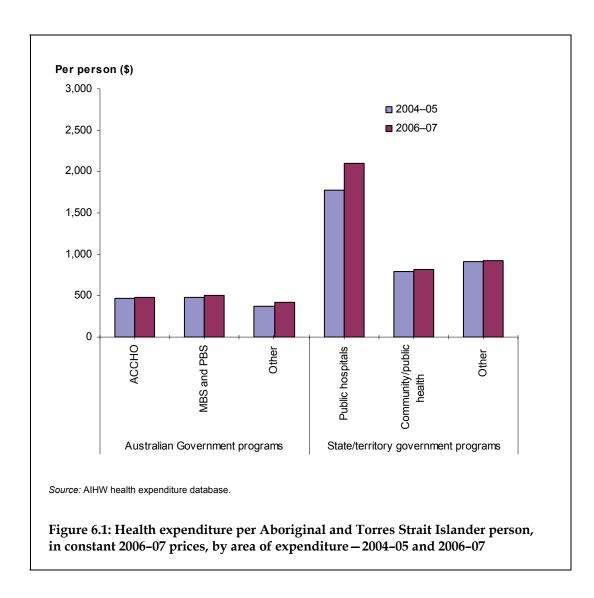
This allows comparison with estimates of health, and for health and high care residential aged care expenditure in previous reports as well as presentation of estimates that relate more directly to estimates in the AIHW's Health expenditure Australia 2007–08 (AIHW 2009).

The calculation of expenditure on high care residential aged care services in this report includes expenditure on the National Aboriginal and Torres Strait Islander Flexible Aged Care Program, which was not included in the 2004-05 report (AIHW 2008a).

There has also been a change in the method for estimating MBS and PBS expenditure. The method involves the use of Medicare Voluntary Indigenous Identifier (VII) data to estimate expenditure on medical services, such as general practitioner (GP), specialist, pathologist and imaging services, and prescription pharmaceuticals provided to Aboriginal and Torres Strait Islander people (see Appendix B for more details).

*This change may have contributed to the increase in estimated MBS and PBS expenditure reported in 2006–07 compared with 2004–05.* 

- A significant component of Australian Government growth was for Medicare and PBS benefits an increase of \$30 in constant prices (or 6.2%). An unknown portion of this increase was due to a change in the way Medicare and PBS benefits for Aboriginal and Torres Strait Islander people was estimated (see Box 4.1 and Appendix B).
- Expenditure on admitted patient services by states and territories increased by \$320 in constant prices (or 18%), noting that depreciation is not included in the 2004–05 estimates.
- There was an increase in the reported levels of Community/Public health expenditure with a 3.9% per person increase over the two year period.



# **Appendix A: Methodology**

## A1.1 Scope

#### Definition of health expenditure

The definition of health expenditure used in this report is the same as that used in the AIHW *Health expenditure Australia* series, which is in general based on the Organisation for Economic Cooperation and Development's (OECD) *A system of health accounts, version 1.0* (OECD 2000).

Health expenditure includes all expenditure on goods and services that have the main objective of improving or maintaining population health, or of reducing the effects of disease and injury amongst the population. It does not include expenditure that, as a secondary purpose, has an impact on health but whose main purpose is something other than health (such as water supply, sanitation or road safety) or expenditure on what can be referred to as the 'social determinants of health' (such as housing, education or income support policies etc.).

In this analysis, capital expenditure on health service infrastructure – such as hospitals and clinics – is not distributed between Aboriginal and Torres Strait Islander people and non-Indigenous people. However, the expenditure figures in this report include capital consumption, which is generally referred to as depreciation. This is a change in methodology compared to the last report (2004–05), which excluded depreciation from the expenditure estimates. This methodological change is consistent with the recommendations of the OECD's *System of Health Accounts* (para 3.24). In accordance with the OECD framework, consumption of fixed capital is distributed across the health services categories identified in this report.

#### Classification of areas of health expenditure

The classification of areas of health expenditure used in this report aligns with those used in the AIHW's Health Expenditure Database and *Health Expenditure Australia*. The classifications and definitions are shown in Table A1.

Term	Definition		
Public hospitals	Hospitals operated by, or on behalf of, state and territory governments that provide a range of hospital services that may include services to patients with psychiatric disorder and are recognised under the Australian Health Care Agreements.		
Public hospital services	Services provided to a patient who is treated by a public hospital (as defined above), but excludes, where possible, dental services, community health services, patient transport services, public health and health research undertaken by the hospital. Can include services provided off the hospital site, such as hospital in the home dialysis or other services.		
Private hospitals	Privately owned and operated institutions that provide a range of general hospital services. The tern includes private freestanding day hospital facilities.		
Patient transport	Public or registered non-profit organisations which provide patient transport (or ambulance) services associated with outpatient or residential episodes to and from health care facilities.		
	Excludes patient transport expenses that are included in the operating costs of public hospitals.		
Medical services	Services of a type listed in the Medical Benefits Schedule that are provided by registered medical practitioners.		
	Most medical services in Australia are provided on a fee-for-service basis and attract benefits from the Australian Government under Medicare.		
	Expenditure on medical services includes services provided to private patients in hospitals as well a some expenditure that is not based on fee-for-service (that is, alternative funding arrangements like Practice Grants). It also includes expenditure funded by injury compensation insurers.		
	Expenditure on medical services provided to public patients in public hospitals and medical services provided to public patients at outpatient clinics in public hospitals is excluded.		
Other health practitioner services	Services provided by registered health practitioners (other than doctors and dentists). These include chiropractors, optometrists, physiotherapists, speech therapists, audiologists, dieticians, podiatrists, homeopaths, naturopaths, practitioners of Chinese medicine and other forms of traditional medicine		
Other medications	Pharmaceuticals for which no PBS or RPBS benefit was paid and over-the-counter medications.		
	Includes:		
	<ul> <li>pharmaceuticals listed in the PBS or RPBS, the total costs of which are equal to, or less, than, the statutory patient contribution for the class of patient concerned</li> </ul>		
	<ul> <li>pharmaceuticals dispensed through private prescriptions that do not fulfil the criteria for payment of benefit under the PBS or RPBS</li> </ul>		
	<ul> <li>over-the-counter medicines, including pharmacy-only medicines, aspirin, cough and cold medicines, vitamins and minerals, herbal and other complementary medicines, and a range of medical non-durables, such as bandages, bandaids and condoms.</li> </ul>		
Aids and appliances	Durable medical goods dispensed to outpatients, which are designed for use more than once, such as optical products, hearing aids, wheelchairs and orthopaedic appliances and prosthetics that are not implanted surgically.		
	Excludes prostheses fitted as part of admitted patient care in a hospital.		
Community health	Non-residential health services offered by public or registered non-profit establishments to patients/clients,, or the coordination of health services elsewhere in the community. Excludes 'Medical services'.		

Table A1: Major areas of health expenditure

Term	Definition
Community health (continued)	Includes:
	Community mental health
	Alcohol and other drug treatment
	Other community health services—such as domiciliary nursing services, well baby clinics and family planning services.
Public health	Services provided and/or funded by governments that are aimed at protecting and promoting the health of the whole population or specified population subgroups and/or preventing illness, injury and disability, in the whole population or specified population subgroups.
	The nine reporting categories are those defined by the National Public Health Expenditure Project:
	Communicable disease control
	Selected health promotion
	Organised immunisation
	Environmental health
	Food standards and hygiene
	Breast cancer screening
	Cervical screening
	Prevention of hazardous and harmful drug use
	Public health research.
Dental services	Services provided by registered dental practitioners.
	Includes maxiofacial surgery items listed in the Medical Benefits Schedule.
	Dental services provided by the state and territory governments.
Health administration	Activities related to the formulation and administration of government and non-government policy in health and in the setting and enforcement of standards for medical and paramedical personnel and for hospitals, clinics, etc.
	Includes the regulation and licensing of providers of health services.
Health research	Research funded by tertiary institutions, private non-profit organisations and government agencies that have a health objective.
Other health services (nec)	Includes other recurrent expenditure on health, not elsewhere classified, eg family planning.

Table A1 (continued): Major areas of health expenditure

#### Public hospital and public hospital services expenditure

Text box A1 outlines the differences between public hospital and public hospital services expenditure in this report and other reports in the AIHW's *Health expenditure Australia* series.

#### Box A1: Public hospital and public hospital services expenditure

*Expenditure for the following public hospital services is reported separately under their respective categories:* 

- community health services
- public health services
- dental services (non-admitted)
- patient transport services
- *health research*.

The balance of public hospital expenditure, remaining after the above components have been removed and re-allocated to their own expenditure categories, is referred to as **'public hospital services'** expenditure.

Not all expenditure on community and public health services, dental and patient transport services and health research provided in public hospitals can be identified separately. For example, some expenditure relating to dental programs provided in public hospitals can be identified and re-allocated to the expenditure category 'State dental services' expenditure. But some hospital dental services cannot be identified and costed, so this expenditure remains as part of 'public hospital services'. Similarly, many of the community health services that are provided by public hospitals can be identified and re-allocated to the 'community health services' expenditure category. But some are not able to be identified so remain as part of 'public hospital services'.

#### Primary and secondary/tertiary care

Primary care is defined as those services that are provided to the whole population (public health and community health services) and those that arise from, or are the outcome of, a health service contact initiated by a patient. Patient-initiated health service contacts mainly comprise GP services.

Secondary/tertiary services are defined as those services generated within the health care system through a referral. Secondary/tertiary services include:

- specialist consultations;
- specialist procedures;
- diagnostic investigations/prescribed drugs ordered by specialists; and
- all admitted patient treatment in hospitals.

#### Allocation of expenditure for Aboriginal and Torres Strait Islander people

#### Primary care

For Aboriginal and Torres Strait Islander people, expenditure on primary care includes:

- all expenditure on public health activities and community health services, including all expenditure on health services provided through the ACCHOs;
- expenditure on GP services for which benefits were paid under Medicare to Aboriginal and Torres Strait Islander people, and the diagnostic services GPs ordered;
- pharmaceuticals prescribed by GPs for which PBS benefits were paid;
- pharmaceuticals provided through Section 100 arrangements in remote areas; and
- a proportion of aids and appliances, split along the same lines as PBS expenditure on pharmaceuticals.

The costs of patient transport services have been estimated using the following methods for Aboriginal and Torres Strait Islander and non-Indigenous people:

- For Aboriginal and Torres Strait Islander people, 50% of their total patient transport services were allocated to primary care.
- For non-Indigenous people, 20% of their total patient transport services were allocated to primary care.

#### Secondary/tertiary care

The remainder of services for Aboriginal and Torres Strait Islander people are classified as secondary/tertiary. This same broad division was applied to services for non-Indigenous people.

In principle, all emergency department attendances are primary, but not all hospitals record that component of expenditure consistently, and the allocation of 50:50 primary and secondary/tertiary is an approximation.

Secondary/tertiary patient transport services for Aboriginal and Torres Strait Islander people were allocated on the basis of constituting 50% of their total patient transport services.

### A1.2 Sources of data and methods of estimation of Aboriginal and Torres Strait Islander proportion

The basic source of information used in this report for Australian health expenditure comes from the AIHW report *Health expenditure Australia* 2007–08 (AIHW 2009).

The task was to allocate this expenditure between:

- Aboriginal and Torres Strait Islander people; and
- non-Indigenous people.

#### **Hospital costs**

#### **Admitted patients**

In principle, hospital records identify all Aboriginal and Torres Strait Islander admitted patients. This information is obtained through a question on Aboriginal and Torres Strait Islander status on the forms to be completed on admission. However, the question is not always asked or answered and there has always been an unknown amount of under-identification.

#### Non-admitted patients

Non-admitted patient expenditure was derived from both state and territory estimates and the AIHW's health expenditure database. For most state and territories, two areas of non-admitted patient expenditure were able to be estimated – emergency departments and other non-admitted patient expenditure. Estimates of the Aboriginal and Torres Strait Islander proportion of total non-admitted patient expenditure were derived from data provided by the state and territory authorities in light of all the information available to them. These proportions were applied to total estimates of non-admitted patient expenditure for each jurisdiction from AIHW's health expenditure database.

#### **Community health services**

It was relatively easy to measure those services that came through Australian Government programs – as grants to the ACCHOs funded almost all of them. Those grants did not cover the medical services provided in the ACCHOs, almost all of which were billed to Medicare, and they do not represent all of the expenditure by ACCHOs, many of which receive additional funding from the state and territory. Those contributions are reported as state and territory expenditure.

As an earlier study has identified, many ACCHOs are community centres as well, carrying out an important social role (Keys Young 2006). The activity reports of the organisations also show that about 12 per cent of all client contacts were for non-Indigenous people and that proportion of expenditure was deducted from the total expenditure to derive the Aboriginal and Torres Strait Islander estimates.

It was more difficult to estimate the Aboriginal and Torres Strait Islander people's share of state and territory-funded community health services. Except for some Aboriginal and Torres Strait Islander-specific programs, most community health services lacked patient-

level data in their records. The estimates presented here were based on information from the jurisdictions and the best indicators of Aboriginal and Torres Strait Islander use. Where there were no such indicators, the Aboriginal and Torres Strait Islander share was based on the Aboriginal and Torres Strait Islander proportion of the populations that the programs were intended to serve.

# Medicare Benefits Schedule and the Pharmaceutical Benefits Scheme

Until 2002, there was no provision for the identification of Aboriginal and Torres Strait Islander peoples in the records of either Medicare or the PBS. Since 2002, additional and better information has become available for those Aboriginal and Torres Strait Islanders who voluntarily identify themselves to Medicare as Indigenous through the Voluntary Indigenous Scheme (VII).

As the VII coverage has improved, it has allowed for a change in method for allocating MBS and PBS costs to be implemented in this report. The method involves the use of the VII data to estimate expenditure on medical services such as GP, specialist and in-hospital services, and prescription pharmaceuticals provided to Aboriginal and Torres Strait Islander people.

Given the change in method, users are advised to exercise care when comparing the 2006–07 results to 2004–05 estimates, and earlier reports.

# A1.3 Deflation and constant price expenditure aggregates

Expenditure aggregates in this report are expressed in current price terms, constant price terms or both. The transformation of a current price aggregate into its constant price counterpart is called 'deflation' and the price indexes used in this transformation are called 'deflators'. The analytical benefit of a constant price estimate (of, say, expenditure on health goods, health services or capital) lies in the fact that the effects of price change have been removed to provide a measure of the volume of the goods, services or capital.

A variety of general price indexes or price indexes specific to health might be used to deflate current price aggregates into constant price terms. These include chain price indexes, implicit price deflators (IPDs) and fixed-weight indexes such as the consumer price index (CPI) or its components. For this report, deflation has been undertaken using chain price indexes and IPDs only.

The chain price indexes used in this report are annually re-weighted Laspeyres (base period weighted) chain price indexes. The indexes are calculated at a detailed level, and they provide a close approximation to measures of pure price change. In this report, the chain price indexes have been used for deflation of hospital services and facilities that are provided by or purchased through the public sector and capital consumption.

Some other constant price aggregates in this report have been derived using IPDs, when a directly constructed chain index is not available. An IPD is an index obtained by dividing a current price value by its corresponding chain volume estimate. Thus, IPDs are implicit rather than directly computed measures of price; they are not measures of pure price change as they are affected by compositional changes. The IPD for gross domestic product (GDP) is

the broadest measure of price change available in the national accounts; it provides an indication of the overall changes in the prices of goods and services produced in Australia.

Neither the CPI nor its health services subgroup is appropriate for measuring movements in overall prices of health goods and services, or for deflating macro-expenditure aggregates. This is because the CPI measures movements in the prices faced by households only. The overall CPI and its components do not, for example, include government subsidies, benefit payments and non-marketed services provided by governments.

## Appendix B: Summary of the use of Medicare's Voluntary Indigenous Identifier

### Medicare Voluntary Indigenous Identifier data

When Medicare was introduced in 1984 there was no provision to identify the Indigenous status of users of Medicare services. Since 2002, Aboriginal and Torres Strait Islander people have been able to voluntarily identify themselves to Medicare Australia as Indigenous under the Medicare Voluntary Indigenous Identifier (VII) program. The VII program enables information to be collated for the voluntarily identified Indigenous population about their Medicare and PBS service use and characteristics (such as the type of service used, benefit paid and fee charged, type of pharmaceutical dispensed). The identification of Aboriginal and Torres Strait Islander people through the VII provides a vital evidence base to inform program development and delivery with the aim of improving the health status of Aboriginal and Torres Strait Islander people.

As at January 2009, about 210,350 (41%) of the Aboriginal and Torres Strait Islander population had identified themselves as Indigenous under the Medicare VII program.

- The proportion of the Aboriginal and Torres Strait Islander Estimated Resident Population who voluntarily identified as Indigenous in 2009 varied from 50% in Queensland to 27% in the Australian Capital Territory.
- The levels of VII registration also varied by age.
- There was also variation by the remoteness of patient residence. Approximately 47% of the Aboriginal and Torres Strait Islander population in *Remote* areas identified as Indigenous compared with 35% in *Major cities*.

#### Use of VII data in the 2006–07 report

The 2006–07 edition of 'Expenditure on health for Aboriginal and Torres Strait Islander people' will for the first time primarily use VII data in the estimation of medical and pharmaceutical expenditure. Extensive analysis of the VII dataset and other Medicare data has shown the Medicare benefits paid to the VII group to be broadly representative of the pattern of Medicare benefits paid nationally across the Aboriginal and Torres Strait Islander population.

The levels of service usage and Medicare and PBS expenditure by Aboriginal and Torres Strait Islander people registered on the VII have been scaled up to estimate expenditure data for all Aboriginal and Torres Strait Islander people. These data were used to estimate expenditure and Australian Government benefits paid for medical services (GP, specialists etc) and PBS pharmaceuticals provided to all Aboriginal and Torres Strait Islander people.

While this change in methodology provides more precise estimates of MBS and PBS expenditure than has previously been possible, there remains a level of uncertainty about these estimates of MBS and PBS expenditure by Aboriginal and Torres Strait Islander people, given the variations in the number of people registered on the VII across Australia by age

and remoteness, and given uncertainty as to exactly how representative the VII group are of the total Aboriginal and Torres Strait Islander population across all communities for all types of MBS and PBS usage. Readers should therefore exercise some caution in the interpretation of these estimates.

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Female									
0–4	47	56	75	79	61	63	35	77	65
5–9	19	22	34	28	23	18	14	30	26
10–14	17	22	31	26	18	14	13	27	23
15–19	43	52	70	71	51	55	39	46	56
20–24	40	58	65	71	55	51	38	55	56
25–29	36	53	61	57	45	42	35	52	50
30–34	31	54	54	56	43	35	32	48	46
35–39	26	48	48	50	39	27	22	46	40
40–44	23	40	44	43	38	22	29	45	36
45–49	21	40	42	36	35	21	21	40	33
50–54	23	38	42	37	34	23	27	40	34
55–59	23	35	38	35	31	16	23	41	32
60–64	22	33	40	28	31	20	10	28	29
65+	18	33	34	28	30	13	54	32	27
Total	29	42	51	50	39	33	28	46	42
Male									
0–4	46	57	75	80	60	59	58	78	65
5–9	18	22	33	24	20	17	12	29	25
10–14	16	18	30	23	18	14	12	26	22
15–19	33	40	57	54	40	36	28	35	44
20–24	31	43	57	54	42	42	28	36	44
25–29	31	46	53	46	40	38	24	36	42
30–34	30	49	51	48	34	34	24	37	41
35–39	27	47	47	45	35	25	20	37	38
40–44	23	39	44	40	33	21	23	39	35
45–49	23	37	41	33	37	23	25	35	32
50–54	22	36	42	34	30	17	18	39	32
55–59	21	37	38	34	30	19	29	37	31
60–64	19	41	41	30	26	22	24	38	30
65+	20	35	41	30	32	19	28	39	31
Total	27	38	48	44	35	30	25	40	37

Table B1: VII enrolees to total Aboriginal and Torres Strait Islander population at 30 June 2007 by state, sex and age group (%)

Source: Medicare VII file January 2009.

#### Method of estimating benefits paid and fees paid for services provided to Aboriginal and Torres Strait Islander patients

The methods used to adjust for Aboriginal and Torres Strait Islander under-identification are based on the percentages of VII coverage, disaggregated by gender, state/territory and age group (Table B1).

In the adjustment method, fees charged and benefits paid for medical services provided to Aboriginal and Torres Strait Islander patients registered with the VII are multiplied by scale up factors. These scale up factors are calculated using the formula:

Factor = 100 / % VII enrolee to estimated Aboriginal and Torres Strait Islander resident population

Out-of-pocket payments by Aboriginal and Torres Strait Islander people are obtained by subtracting the scaled up benefits paid from the scaled up fees charged.

A similar scale up process is applied to VII PBS data to estimate PBS benefits paid and PBS copayments for Aboriginal and Torres Strait Islander people.

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