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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.

Contents

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Abbreviations

ABS	Australian Bureau of Statistics
ACCHO	Aboriginal Community Controlled Health Organisation
AIHW	Australian Institute of Health and Welfare
ASGC	Australian Standard Geographical Classification
BEACH	Bettering the Evaluation and Care of Health
DoHA	Department of Health and Ageing
DVA	Department of Veterans' Affairs
IER	Indigenous Expenditure Report
MBS	Medicare Benefits Schedule
OATSIH	Office for Aboriginal and Torres Strait Islander Health
OECD	Organisation for Economic Cooperation and Development
PBS	Pharmaceutical Benefits Scheme
RPBS	Repatriation Pharmaceutical Benefits Scheme
VII	Voluntary Indigenous Identifier

Symbols

n.a.	not available
n.e.c.	not elsewhere classified
n.p.	not published due to small numbers
. .	not applicable
–	nil or rounded to zero

Summary

This report presents estimates on health expenditure for Aboriginal and Torres Strait Islander people and their non-Indigenous counterparts for 2008–09. It is the sixth report in the series, which started in 1998 for the 1995–96 expenditure year, and builds on the information contained in previous reports.

In 2008–09, health expenditure for Aboriginal and Torres Strait Islander people was estimated at $3,700 million, amounting to 3.5% of Australia's total health expenditure in that year. The Aboriginal and Torres Strait Islander population comprised 2.5% of the Australian population.

Per person health expenditure

- In 2008–09, average health expenditure per Indigenous Australian was $6,787, compared with $4,876 for each non-Indigenous Australian. This represents a per person ratio of 1.39—that is, $1.39 was spent on health per Indigenous Australian for every $1.00 spent per non-Indigenous Australian.
- This ratio (1.39) was an increase from 1.31 in 2006–07. Some of this increase may be due to improvements to the accuracy and quality of the estimates in this report.

Public versus private services

- Relative to the non-Indigenous population, Aboriginal and Torres Strait Islander people are high users of publicly provided services (such as public hospital and community health services) and low users of medical, pharmaceutical, dental and other health services that are, for the most part, privately provided (such as specialists).
- Community health services, including those provided by the Australian Government-funded Aboriginal Community Controlled Health Organisations, accounted for 22.2% of all Indigenous health expenditure in 2008–09, compared with just 4.5% of all non-Indigenous health expenditure.
- In 2008–09, per person expenditure on public hospital services for Indigenous Australians was more than double that for non-Indigenous Australians (2.25). In comparison, the expenditure ratios for benefits paid through the Medicare Benefits Schedule and Pharmaceutical Benefits Scheme were 0.57 and 0.74 respectively.

Funding sources

- The Australian Government (43.0%) and the state and territory governments (48.0%) combined funded 91.0% of the total health expenditure for Indigenous Australians in 2008–09. The non-government sector (including out-of-pocket payments) funded 9.0%.
- For non-Indigenous Australians, the Australian Government (45.0%) and the state and territory governments (24.5%) funded 69.5% of the total health expenditure. Non-government sources funded the remaining 30.5%.

1 Introduction

1.1 Background

This report builds on the previous five Australian Institute of Health and Welfare (AIHW) reports in the *Expenditure on health for Aboriginal and Torres Strait Islander people* series, which started in 1998 for the 1995–96 expenditure year (Deeble et al. 1998). Estimates of recurrent expenditure on health for Aboriginal and Torres Strait Islander people have, more recently, been calculated by the AIHW at two-yearly intervals.

The report provides governments, policy makers, service providers and communities with information to support planning, monitoring and evaluating health expenditure for Aboriginal and Torres Strait Islander people.

Expenditure on health for Indigenous Australians is of particular interest, given their considerably poorer health status than non-Indigenous Australians; they have lower life expectancies and are more likely to have a disability and reduced quality of life because of ill health (AIHW 2009b).

This report provides detailed health expenditure estimates for Indigenous Australians and their non-Indigenous counterparts for 2008–09. Reporting estimates by Indigenous status and area of expenditure provides insight into how health services for Aboriginal and Torres Strait Islander people are delivered and used.

Since the publication of the first report in 1998, there have been significant improvements to the methods used to derive the estimates in this report.

In the 2006–07 report (AIHW 2009a), the AIHW introduced an important change in methods to improve the accuracy and quality of health expenditure estimates for Indigenous Australians. This involved the use of Medicare Voluntary Indigenous Identifier (VII) data to improve the quality of the estimates on Medicare Benefits Schedule (MBS) and Pharmaceutical Benefits Scheme (PBS) components of expenditure on health for Indigenous Australians.

Following the 2004–05 report (AIHW 2008a), expenditure on high-care residential aged care services was reclassified from 'health services' to 'welfare services'. As a result of this important change, comparisons over time should be based on estimates provided in this publication and the 2006–07 report, which excluded high-care residential aged care services.

1.2 Context

Expenditure on health for Aboriginal and Torres Strait Islander people 2008–09 used data from the AIHW health expenditure database to answer three key questions:

- How much is spent on total health care for Aboriginal and Torres Strait Islander people?
- What is the expenditure on health for Aboriginal and Torres Strait Islander people for the various areas of health care?
- What are the sources of funding?

Since the publication of the first report for the 1995–96 financial year, total expenditure per person for Indigenous Australians has remained higher than for non-Indigenous Australians.

Several factors contribute to the higher cost of health services delivery for Aboriginal and Torres Strait Islander people, including the fact that many live in remote areas, and the

different ways through which individuals access and use health services. Indigenous Australians are more likely than non-Indigenous Australians to rely on public hospital services, and less likely to use private health services.

Estimates of expenditure on health for Aboriginal and Torres Strait Islander people in this report relate to health needs that have been met. 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 looked at in the future to provide a picture of the health needs of Aboriginal and Torres Strait Islander people.

Estimates of expenditure on health for Aboriginal and Torres Strait Islander people provided in this report need to be interpreted in light of judgments about how the 'need' for those services varies between Indigenous and non-Indigenous Australians. 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.

The *2010 Indigenous Expenditure Report*

The *2010 Indigenous Expenditure Report (IER)* was released in February 2011 (IERSC 2011). The IER draws together information about the level and patterns of government expenditure on all services related to Aboriginal and Torres Strait Islander people in 2008–09. It also provides estimates of government expenditure for Indigenous Australians, and compares these with government expenditure for non-Indigenous Australians. These estimates cover all government expenditure, including, but not only, health services.

The IER was prepared under the auspices of the Ministerial Council for Federal Financial Relations on behalf of the Council of Australian Governments. It was produced by the Productivity Commission's Indigenous Expenditure Report Secretariat under the guidance of a steering committee comprising representatives from the Australian, state and territory government treasuries and specialist data agencies (including the AIHW).

The IER found that per person government health expenditure for Indigenous Australians was $1.95 for every $1.00 spent on non-Indigenous Australians. This is similar to the findings of this report, which show a ratio of $1.93 to $1.00 for government health expenditure (Table 3.12). The *Indigenous Expenditure Report* figure is not comparable with this report's overall per person ratio for total health expenditure ($1.39 to $1.00), as the IER only looks at government health expenditure, whereas this report covers all health expenditure, government and non-government.

In many ways the two reports use similar approaches to estimating Indigenous health expenditure, but several methodological differences explain the small difference between the two results:

- The IER separates data for Indigenous-specific health programs and Indigenous use of mainstream programs in its calculation, whereas the AIHW's method does not make a distinction between these two types of programs.
- Health expenditure estimates in these reports are based on different reporting frameworks. This report is based on the Australian system of health accounts, which aligns with the international reporting framework known as the System of Health Accounts. In contrast, the IER estimates are based on the Australian Bureau of Statistics (ABS) Government Finance Statistics framework.
- The AIHW and the IER Steering Committee have also used different expenditure data sources to derive their respective estimates. This report uses data from the AIHW's

health expenditure database collected from many data providers, including the Australian Government Department of Health and Ageing (DoHA) and the Department of Veterans' Affairs (DVA), state/territory health departments, and private sector health authorities. In contrast, expenditure data used by the IER Steering Committee was collected from the Australian Government Department of the Treasury, and state/territory treasury departments.

The IER used AIHW figures to estimate Indigenous service use of each kind of service, but because of timing it used the AIHW 2006–07 service use measures from the previous report (AIHW 2009a). These have since been updated in the development of this report.

Although there is some overlap between the two reports, each has a different focus and addresses some issues not covered by the other. The IER has a much broader scope, looking at all government expenditure—for example, education and defence—whereas this AIHW report provides more comprehensive and detailed information relating solely to expenditure on health.

1.3 Definitions and concepts

Since the publication of the first report: *Expenditure on health for Aboriginal and Torres Strait Islander people 1995–96* (Deeble et al. 1998), there has been a significant change in the definition of health expenditure. In 2007, expenditure on high-care residential aged care services was reclassified from health services to welfare services. Before this change, residential aged care expenditure was subdivided into high-care residential aged care expenditure and low-care residential aged care expenditure. High-care residential aged care expenditure was classified as a health service, because of its nursing care component, such as providing medications and injections. Low-care residential aged care expenditure was classified as a welfare service, as it mostly entailed providing support for activities of daily living such as showering, dressing and meals.

The report for 2006–07 (AIHW 2009a), provided the first health expenditure estimates that excluded expenditure on high-care residential aged care. However, to enable comparison with earlier reports, the 2006–07 report provided some additional estimates that included high-care residential aged care.

Consistent with *Health expenditure Australia 2008–09* (AIHW 2010a), this report does not present data on residential aged care expenditure. As a result, data contained in this report are not comparable with those published in the reports for the years 1995–96, 1998–09, 2001–02 and 2004–05.

The current definition of health expenditure used in this report aligns with that of *Health expenditure Australia 2008–09* (AIHW 2010a), so the estimates in the two reports are directly comparable. Health expenditure includes all expenditure on goods and services that has the primary objective of improving or maintaining population health, or of reducing the effects of disease and injury among the population. The Appendix provides a more detailed definition of health expenditure, and a classification of the various areas of health expenditure.

Box 1.1: Health spending concepts

Health expenditure, health funding and health program management are three distinct but interrelated concepts used to describe health care financing. These concepts are needed to explain the financial resources used by the overall health system, and those used by the various segments of the system (such as general practice or hospitals).

Health expenditure

Health expenditure is reported in terms of who spends the money, rather than who provides the money for any particular 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 the states and territories did not fund all this expenditure.

Health funding

Health funding is reported in terms of who ultimately provides the money used to pay for health goods and services. In the case of public hospitals, although states and territories incur almost all the expenditure, the Australian, state and territory governments each provide a significant amount of the funds used to pay for health services. In 2008–09, the Australian Government funded 43.0% and the state and territory governments funded 48.0% of total health services for Aboriginal and Torres Strait Islander people (Table 4.1). Funding also comes from private health insurers and injury compensation insurers, and from individuals who incur an out-of-pocket cost when they choose to be treated as private patients in public hospitals.

Health program management

Expenditure reported by health program management is based on who manages the program on which the expenditure was incurred (Australian Government, state/territory governments or non-government organisations). Expenditure on Medicare-funded general practitioner services is reported as expenditure through a program managed by the Australian Government.

1.4 Data sources, methods, 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

Data used by the AIHW to derive estimates presented in this report come from the health expenditure database, which collects data from many sources, including:

- the Department of Health and Ageing
- the Australian Bureau of Statistics
- the Department of Veterans' Affairs
- state and territory health departments
- the Private Health Insurance Administration Council
- Comcare
- the major workers compensation and compulsory third party motor vehicle insurers in each state and territory.

Health expenditure Australia (AIHW 2010a) provides more detailed information about data sources.

The AIHW draws upon both expenditure data and service use data to prepare Indigenous health expenditure estimates. The total expenditure and revenue data used to generate the tables are mainly administrative by-products of the accounting process, and are, as much as possible, produced on an accrual basis. Service use data, where available, provide demographic information about who is actually using the services provided.

As in the previous report, information obtained from Medicare Voluntary Indigenous Identifier (VII) data have been used to estimate MBS and PBS expenditure for Aboriginal and Torres Strait Islander people. In earlier reports, the information used was from the Bettering the Evaluation and Care of Health (BEACH) survey of general practice activity. As a result, comparisons of health expenditure for Aboriginal and Torres Strait Islander people presented in this report and in earlier reports should be interpreted with caution.

The source of data used to estimate health expenditure for Indigenous and non-Indigenous Australians through Aboriginal Community Controlled Health Organisations (ACCHOs) has changed slightly in this report. Past reports in this series used information from the Service Activity Report database, which was a joint project of the Office for Aboriginal and Torres Strait Islander Health (OATSIH) and the National Aboriginal Community Controlled Health Organisation. The database collected service level data on health care through an annual questionnaire completed by every Australian Government-funded Aboriginal and Torres Strait Islander primary health care service. In 2008–09, however, it was replaced with the new OATSIH Service Report database, which also includes data previously collected under the Drug and Alcohol Service Report, and Bringing Them Home and Link Up Counsellors data collections. The AIHW managed the OATSIH Service Report data collection for 2008–09, and produced the *Aboriginal and Torres Strait Islander health services report, 2008–09* (AIHW 2010c) key findings in August 2010.

Estimates of health expenditure for Aboriginal and Torres Strait Islander people presented in this report that have used OATSIH Service Report data should be interpreted with caution, as they may not be directly comparable with those in past reports that used Service Activity Report data. For example, in the 2008–09 data, auspice services were treated as individual

services. As a result of this definitional change, the number of respondent services in the OATSIH Service Report has increased substantially; this does not reflect an increase in the actual number of respondent services.

Methods

Methods used to derive Indigenous health expenditure estimates are described in detail in the Appendix.

Quality of Aboriginal and Torres Strait Islander service use and expenditure estimates

The quality of Indigenous service use data is of varying quality, as there is widespread non-reporting of Indigenous status or under-identification in administration records. Although the quality of Indigenous service use data such as admitted patient data is improving, under-identification of Aboriginal and Torres Strait Islander people in these data sets remains a major issue.

In 2010, the AIHW released *Indigenous identification in hospital separations data: quality report* (AIHW 2010b). This report presented the latest findings on the quality of Indigenous identification in hospitalisation data in Australia, based on studies of Indigenous identification in public hospitals during 2007 and 2008. The results indicated that, overall, the quality of Indigenous identification in hospitalisation data had improved since the 2005 *Improving the quality of Indigenous identification in hospital separation data* (AIHW 2005a). However, in the 2010 report there was still 11% Indigenous under-identification in Australian public hospitals. Although the level of under-identification varied substantially between states/territories and by remoteness, the quality of identification in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory was considered acceptable for analysis purposes.

For private hospitals, the report found that Indigenous status information was often unavailable, and, where collected, the data were not of good quality.

Estimates of the level of Indigenous under-identification from this report were used to adjust admitted patient expenditure for New South Wales, Victoria, Queensland, South Australia, Western Australia and the Northern Territory (public hospitals only). 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 particular service(s) were located (see the Appendix for more information).

As the AIHW studies on Indigenous identification in hospitalisation data did not include private hospitals, an adjustment factor of 54% for private hospitals was derived from the analysis of linked hospital morbidity data from New South Wales (AIHW 2001).

Some of the expenditure patterns in this report may be influenced by variations in the completeness of Indigenous identification, despite the adjustments made for under-identification. The use of scaled up MBS and PBS data based on the level of VII enrolment is one such example (see Appendix). It is possible that health expenditure estimates for Aboriginal and Torres Strait Islander people may slightly overestimate or underestimate the actual level of health expenditure. As a result, estimating health expenditure for Indigenous Australians is an evolving field, and conclusions should be drawn with caution.

In addition, 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 expenditure data providers. These result from limitations of financial reporting systems and/or different reporting mechanisms.

1.5 Economies of scale and geographic isolation

Economies of scale and the relative isolation of some Aboriginal and Torres Strait Islander target populations affect 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 additional costs compared with other jurisdictions, such as Victoria, in providing health goods and services to its population. Differences in the relative isolation of the populations in these two jurisdictions further compound this situation.

1.6 Estimating expenditure per person

As with previous reports in the series, this report presents health expenditure estimates per person separately for Indigenous and non-Indigenous Australians. Using different denominators (populations) affects the per person health expenditure calculations and the corresponding Indigenous to non-Indigenous ratio, even when total expenditure is held constant.

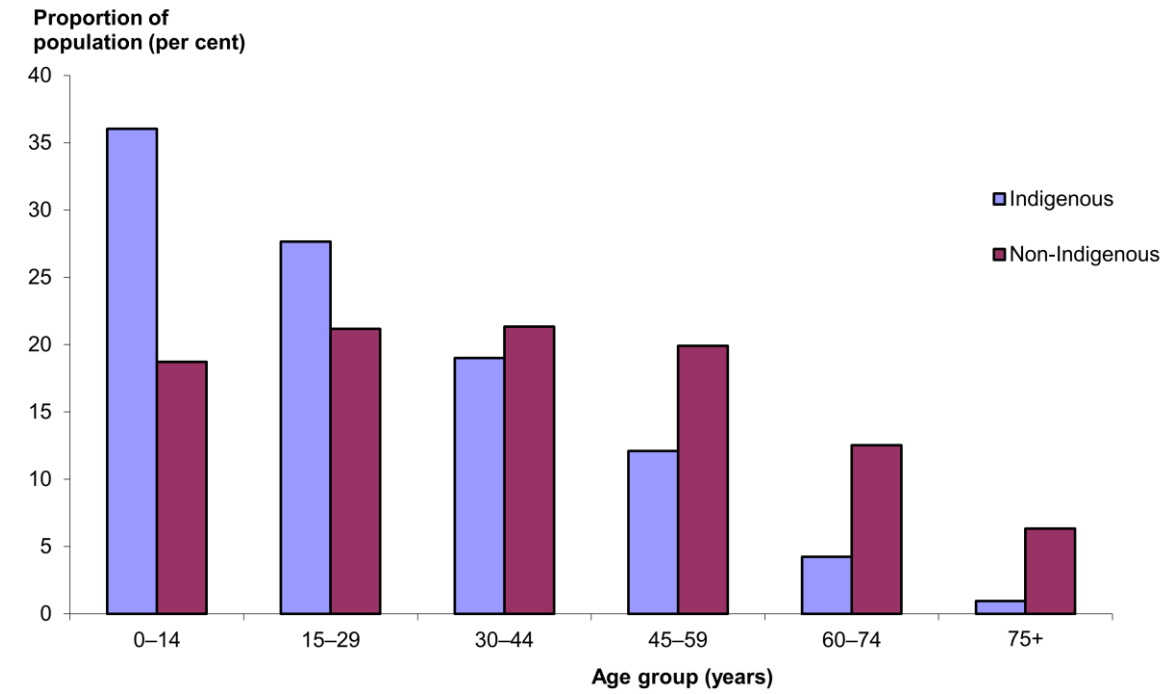
For the 2006–07 report, a combination of 2001 and 2006 census-based population projections were used to estimate state and territory Aboriginal and Torres Strait Islander populations. For this report, the 2006 census-based population projections have been used as the denominators in estimating health expenditure per person. Therefore, caution should be exercised when comparing state and territory per person expenditure and ratios between reports in this series. For comparative purposes, estimates in Chapter 6 'Changes over time' are all based on the 2006 population projection. Additional information on population sources used in this report can be found in the Appendix.

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

2.1 Aboriginal and Torres Strait Islander population

An Aboriginal or Torres Strait Islander person 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 live. However, self-identification is the only criterion used to collect Indigenous statistics for many data sets, including population and hospital statistics.

At 31 December 2008, Aboriginal and Torres Strait Islander people comprised 2.5% of the Australian population (Table 2.1). The age profile of Indigenous Australians is much younger than that of non-Indigenous Australians (Figure 2.1). In December 2008, people aged less than 15 years constituted 36.0% of the total Aboriginal and Torres Strait Islander population, whereas this age group represented 18.7% of the non-Indigenous population. Conversely, only 1.0% of the Aboriginal and Torres Strait Islander population were aged 75 years and over, compared with 6.3% of the non-Indigenous population.



Source: AIHW derived projections from ABS 2009b.

Figure 2.1: Age composition of Indigenous and non-Indigenous Australians, 2008–09

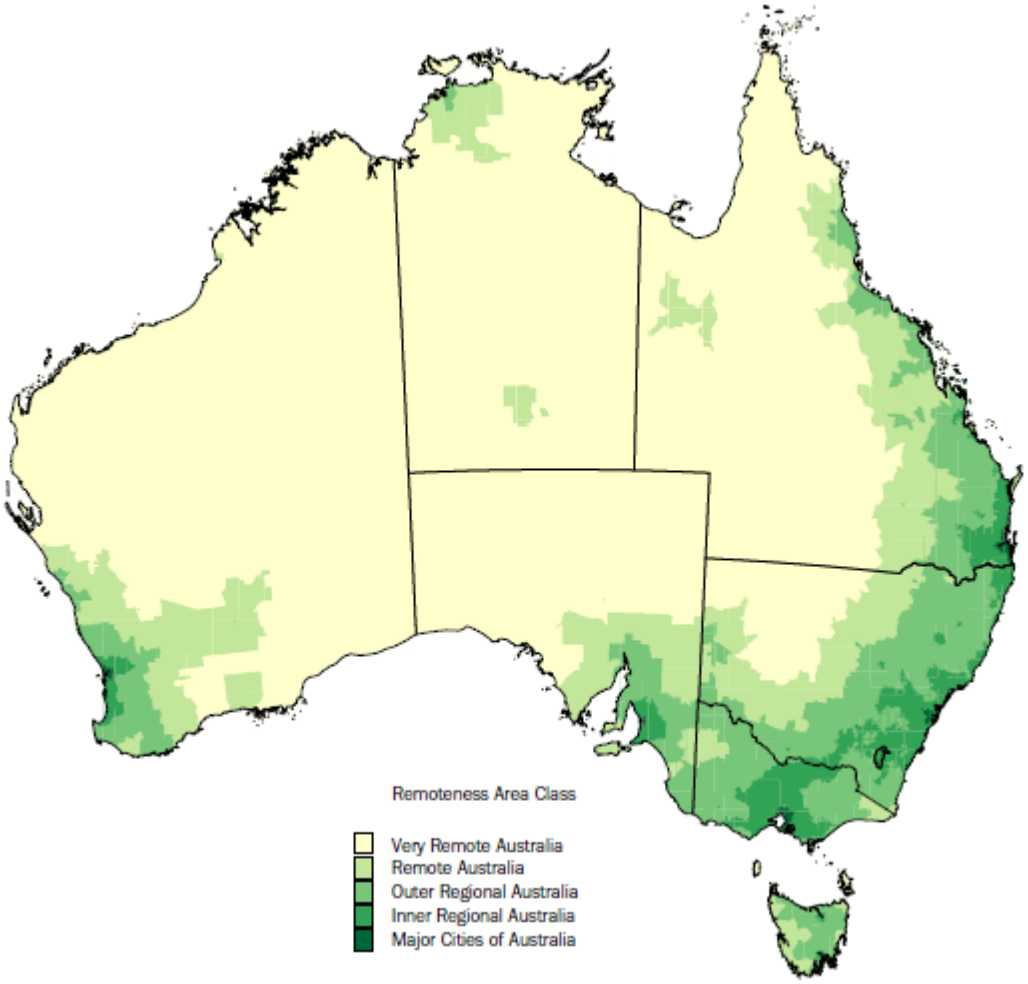
Table 2.1: Aboriginal and Torres Strait Islander population estimates, by Australian Standard Geographical Classification Remoteness Area and state and territory, 31 December 2008

	ASGC Remoteness Areas						Proportion of total population (per cent)
	Major cities	Inner regional[(a)]	Outer regional[(b)]	Remote	Very remote	Total	
NSW	69,912	53,056	29,377	6,759	1,263	160,368	2.3
Vic	17,611	12,385	5,451	50	. .	35,497	0.7
Qld[(c)]	44,411	32,195	45,065	12,686	20,166	154,523	3.5
WA	26,002	6,066	11,266	12,415	18,462	74,211	3.4
SA	14,574	2,699	6,868	1,231	4,115	29,487	1.8
Tas	. .	10,469	8,277	459	233	19,438	3.9
ACT[(d)]	4,546	n.p.	. .	. .	. .	4,546	1.3
NT	. .	. .	14,655	15,360	36,875	66,890	30.0
Indigenous[(e)]	**177,062**	**117,087**	**120,957**	**48,961**	**81,134**	**545,202**	**2.5**
Indigenous (per cent)	32.5	21.5	22.2	9.0	14.9	100.0	
Non-Indigenous[(e)]	**14,726,786**	**4,164,930**	**1,924,417**	**273,596**	**91,966**	**21,181,696**	**97.5**
Non-Indigenous (per cent)	69.5	19.7	9.1	1.3	0.4	100.0	

(a) Hobart is classified as *Inner regional*.
(b) Darwin is classified as *Outer regional*.
(c) Aboriginal and Torres Strait Islander population by Australian Standard Geographical Classification Remoteness Area for Queensland differ from equivalent estimates published by Queensland Treasury.
(d) *Inner regional* ACT population has not been published due to small numbers.
(e) Includes Christmas Island, Jervis Bay, and Cocos (Keeling) Islands.

Source: AIHW derived from ABS 2008 & 2009b.

While more than half (54.0%) of Australia's Aboriginal and Torres Strait Islander people live in *Major cities* and *Inner regional* areas, a large proportion (23.9%) reside in *Remote* and *Very remote* areas (Table 2.1). In comparison only 1.7% of non-Indigenous Australians reside in *Remote* and *Very remote* areas. These patterns vary by state and territory; in the Northern Territory, 78.1% of the Aboriginal and Torres Strait Islander population live in *Remote* and *Very remote* areas. In contrast, only 5.0% of New South Wales' Aboriginal and Torres Strait Islander population reside in those areas. Figure 2.2 presents the Australian Standard Geographical Classification (ASGC) Remoteness Area boundaries for 2006.



Source: ABS 2006.

Figure 2.2: Australia, by Australian Standard Geographical Classification Remoteness Area, 2006

2.2 Aboriginal and Torres Strait Islander health status

Compared with non-Indigenous Australians, Indigenous Australians report poorer self-assessed health and have higher rates of hospitalisation and disease prevalence for many health conditions (ABS & AIHW 2008).

In 2008, 21% of Indigenous Australian adults surveyed reported their health as fair or poor, compared with 14% for non-Indigenous Australian adults (ABS 2010a).

Life expectancy is lower for Aboriginal and Torres Strait Islander people—particularly for males. In 2005–07, Indigenous males had a life expectancy of 67.2 years, 11.5 years less than non-Indigenous males (78.7 years). Indigenous females had a life expectancy of 72.9 years, 9.7 years less than non-Indigenous females (82.6 years) (ABS 2009a).

In the Northern Territory, Indigenous expectancy was 61.5 years for males and 69.2 years for females. In New South Wales it was 69.9 years for males and 75.0 years for females.

The poorer long-term health status of Indigenous Australians compared with non-Indigenous Australians is largely attributed to higher prevalence rates for a number of diseases and conditions. In 2008–09, Aboriginal and Torres Strait Islander people were hospitalised at 12 times the rate of non-Indigenous Australians for care involving dialysis (AIHW 2010d:183).

Potentially preventable chronic conditions accounted for 22.4% of all Indigenous hospitalisations in 2006-07; these conditions represented a much smaller proportion of non-Indigenous hospitalisations (8.2%) (SCRGSP 2009).

2.3 Aboriginal and Torres Strait Islander incomes

One of the reasons for the poorer health among Aboriginal and Torres Strait Islander people is that they are more socioeconomically disadvantaged compared with non-Indigenous Australians. On average, Indigenous Australians report having lower incomes, higher rates of unemployment, lower educational attainment, and more overcrowded households than non-Indigenous Australians (AIHW 2009b).

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 the capacity of Indigenous Australians to pay for health care.

In 2006, the median equivalised gross household income of Indigenous Australians was $460 per week, about 62% of the level earned by non-Indigenous Australians, which was $740 per week (Table 2.2).

The ABS defines households in the lowest income bracket, excluding those who own their home, to be low resource households. In 2006, 39% of Indigenous Australians were living in low resource households, almost 5 times the rate of non-Indigenous Australians (8%) (ABS 2010b:110).

Table 2.2: Aboriginal and Torres Strait Islander and non-Indigenous population[(a)], by equivalised gross household income quintile[(b)] and ASGC Remoteness Area, 2006

	ASGC Remoteness Areas					
	Major cities	**Inner regional**	**Outer regional**	**Remote**	**Very remote**	**Australia**
			Indigenous population			
Mean income per week ($)	539	450	448	433	329	460
Income quintile (per cent)						
Lowest	36.6	43.9	45.0	49.8	63.7	45.2
Second	22.4	26.1	25.7	24.2	25.9	24.6
Third	17.6	15.6	15.1	11.9	6.1	14.4
Fourth	14.4	10.0	9.7	8.6	2.8	10.2
Highest	9.0	4.4	4.6	5.5	1.6	5.6
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Total (number)	**113,478**	**74,505**	**70,830**	**26,742**	**51,950**	**337,505**
Unknown (number)	22,211	15,599	17,471	7,831	9,942	73,054
			Non-Indigenous population			
Mean income per week ($)	779	645	644	752	812	740
Income quintile (per cent)						
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

(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 Consumer Price Index.

Source: ABS 2010b.

3 Health expenditure

This chapter presents information about total and average health expenditure per person for Indigenous and non-Indigenous Australians in 2008–09. Expenditure estimates are provided at the level of the Australian Government, state and territory governments and non-government organisations through activities for which they are primarily responsible. The estimates include mainstream programs along with programs specific to Aboriginal and Torres Strait Islander people. Direct expenditure estimates by the Australian Government presented in this chapter exclude grants from the Australian Government to the states and territories, and the private health insurance rebate.

Non-government expenditure includes payments by individuals in the form of patient copayments under Medicare and PBS arrangements. They also include expenditure on health goods and services that are largely privately provided, such as private hospital care and non-hospital 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.

3.1 Total health expenditure

Compared with the data published in the 2006–07 report in this series (AIHW 2009a), recurrent health expenditure for Indigenous and non-Indigenous Australians increased across all areas of health expenditure, from $94,991 million in 2006–07 to $106,984 million in 2008–09 (in constant 2008–09 dollars). The Indigenous component of health expenditure increased from $3,092 million to $3,700 million (Table 3.1).

In 2008–09, the Indigenous to non-Indigenous health expenditure ratio was 1.39. This means that $1.39 was spent on health per Indigenous Australian for every dollar spent per non-Indigenous Australian. Health expenditure per Indigenous Australian increased by 14.7%, from $5,918 in 2006–07, to $6,787 in 2008–09. The increase in the Indigenous to non-Indigenous health expenditure ratio reflects a faster rate of growth in health expenditure for Indigenous Australians, particularly in public hospital services, the largest area of health expenditure for Indigenous Australians. The availability of improved data sources to allocate expenditure into Indigenous and non-Indigenous components may also contribute. It is not possible to say with certainty how much is due to the method changes, and how much is due to a real increase in expenditure on medical services and pharmaceuticals for Indigenous Australians.

In 2008–09, public hospitals and community health services were the highest expenditure areas for Aboriginal and Torres Strait Islander people (Table 3.1), which reflects a greater reliance on these services by Indigenous Australians. Expenditure per person for Indigenous Australians in public hospitals was more than double (2.25) that for non-Indigenous Australians (Table 3.1). Expenditure per person on community health services was almost 7 times that for non-Indigenous Australians.

Table 3.1: Expenditure on health for Indigenous and non-Indigenous Australians, 2008–09

Area of expenditure	Expenditure ($ million)			Indigenous share (per cent)	Expenditure ($) per person		Ratio (Indigenous to non-Indigenous)	
	Indigenous	Non-Indigenous	Total		Indigenous	Non-Indigenous	2008–09	2006–07
Total hospitals	1,868.1	39,906.6	41,774.7	4.5	3,426.5	1,884.0	1.82	1.72
Public hospital services[(a)]	1,828.2	31,594.3	33,422.5	5.5	3,353.3	1,491.6	2.25	2.13
Admitted patient services[(b)]	1,430.6	24,476.8	25,907.5	5.5	2,624.0	1,155.6	2.27	2.10
Non-admitted patient services	397.6	7,117.4	7,515.1	5.3	729.3	336.0	2.17	2.22
Private hospital services[(c)]	39.9	8,312.3	8,352.2	0.5	73.1	392.4	0.19	0.18
Patient transport services	159.8	2,228.1	2,387.9	6.7	293.2	105.2	2.79	2.70
Medical services	266.4	19,553.6	19,820.0	1.3	488.7	923.1	0.53	0.52
Medicare services	218.4	15,535.8	15,754.2	1.4	400.6	733.5	0.55	0.56
Other	48.0	4,017.8	4,065.8	1.2	88.1	189.7	0.46	0.35
Dental services	68.2	6,646.7	6,714.8	1.0	125.1	313.8	0.40	0.50
Community health services[(d)]	823.1	4,617.8	5,440.9	15.1	1,509.8	218.0	6.93	6.52
Other professional services	28.6	3,397.8	3,426.5	0.8	52.5	160.4	0.33	0.27
Public health services[(d)]	139.5	2,129.5	2,268.9	6.1	255.8	100.5	2.54	2.54
Medications	171.9	15,034.5	15,206.3	1.1	315.2	709.8	0.44	0.40
Aids and appliances	19.5	3,248.2	3,267.7	0.6	35.8	153.3	0.23	0.27
Research	100.6	3,574.3	3,674.9	2.7	184.6	168.7	1.09	0.54
Health administration	54.5	2,946.6	3,001.1	1.8	100.0	139.1	0.72	1.29
Total health[(e)]	**3,700.3**	**103,283.6**	**106,983.9**	**3.5**	**6,787.0**	**4,876.1**	**1.39**	**1.31**

Notes: See page 15

Table 3.1 Notes:

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

(b) Admitted patient expenditure estimates adjust 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.

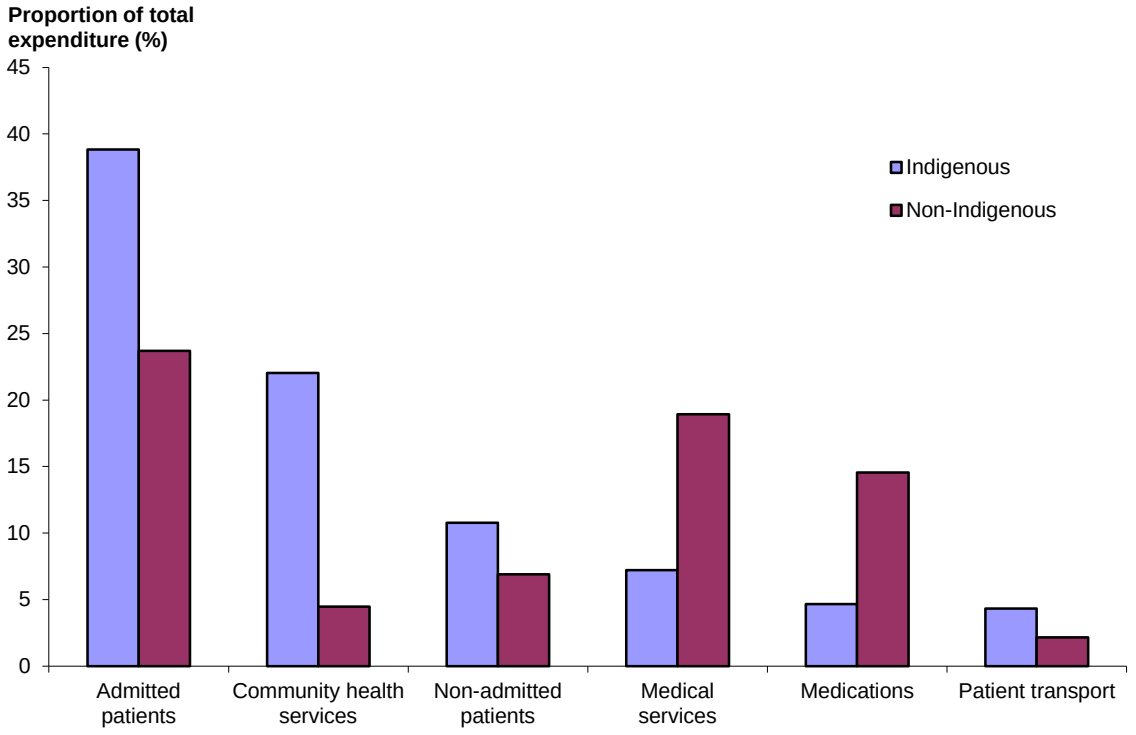
(d) Includes other recurrent expenditure on health, not elsewhere classified, such as family planning previously reported under 'Other health services (nec)'.

(e) Expenditure estimates include depreciation (capital consumption).

Source: AIHW health expenditure database.

The difference in average health expenditure between Indigenous and non-Indigenous Australians reflects, among other things, differences in the average costs of delivering goods and services to the two populations. For example, a higher proportion (23.9% in 2008–09) of Indigenous Australians live in *Remote* and *Very remote* areas of Australia where the cost of providing health goods and services is higher than for those who live in *Major cities* or *Inner regional* areas (Table 2.1).

In 2008–09, 38.7% of health expenditure for Aboriginal and Torres Strait Islander people was for admitted patient services, 22.2% for community health services and 7.2% for medical services. Admitted and non-admitted patient services, community health services, medical services, medications and patient transports combined accounted for 87.8% of the $3,700 million spent on health for Indigenous Australians, compared with 70.7% of the $103,284 million for non-Indigenous Australians (Figure 3.1).



Source: AIHW health expenditure database.

Figure 3.1: Contributions of selected areas to health expenditure for Indigenous and non-Indigenous Australians, 2008–09

3.2 Australian Government health expenditure

In 2008–09, the Australian Government's direct expenditure on health goods and services for Aboriginal and Torres Strait Islander people was estimated at $912 million (2.9% of total direct health expenditure) (Table 3.2). Australian Government expenditure per person on health services in 2008–09 was higher for Indigenous Australians ($1,673 per person) than for non-Indigenous Australians ($1,418 per person), at a ratio of 1.18.

Table 3.2: Direct expenditure by the Australian Government on health for Indigenous and non-Indigenous Australians, 2008–09

	Total expenditure ($ million)		Indigenous share	Expenditure per person ($)		
Area of expenditure	**Indigenous**	**Non-Indigenous**	**(per cent)**	**Indigenous**	**Non-Indigenous**	**Ratio**
Total hospitals	41.6	927.4	4.3	76.4	43.8	1.74
Public hospital services	40.1	712.1	5.3	73.6	33.6	2.19
Private hospital services	1.5	215.3	0.7	2.8	10.2	0.27
Patient transport services	35.9	170.7	17.4	65.8	8.1	8.17
Medical services	225.4	14,854.5	1.5	413.4	701.3	0.59
Medicare services	197.9	13,161.3	1.5	362.9	621.4	0.58
Other	27.5	1,693.2	1.6	50.5	79.9	0.63
Dental services	6.3	474.8	1.3	11.5	22.4	0.51
Other professional services	11.0	966.9	1.1	20.2	45.6	0.44
Community health services	326.2	287.2	53.2	598.3	13.6	44.13
Through ACCHOs	314.6	47.1	87.0	577.1	2.2	259.40
Other	11.6	240.1	4.6	21.2	11.3	1.87
Public health services	14.7	443.4	3.2	26.9	20.9	1.29
Medications	143.9	7,661.5	1.8	264.0	361.7	0.73
Benefit-paid pharmaceuticals[(a)]	133.6	6,956.5	1.9	245.1	328.4	0.75
All other medications	10.3	705.0	1.4	18.9	33.3	0.57
Aids and appliances	5.1	362.8	1.4	9.3	17.1	0.54
Research	68.3	2,653.3	2.5	125.3	125.3	1.00
Health administration	33.9	1,228.0	2.7	62.1	58.0	1.07
Total health	**912.3**	**30,030.3**	**2.9**	**1,673.3**	**1,417.7**	**1.18**

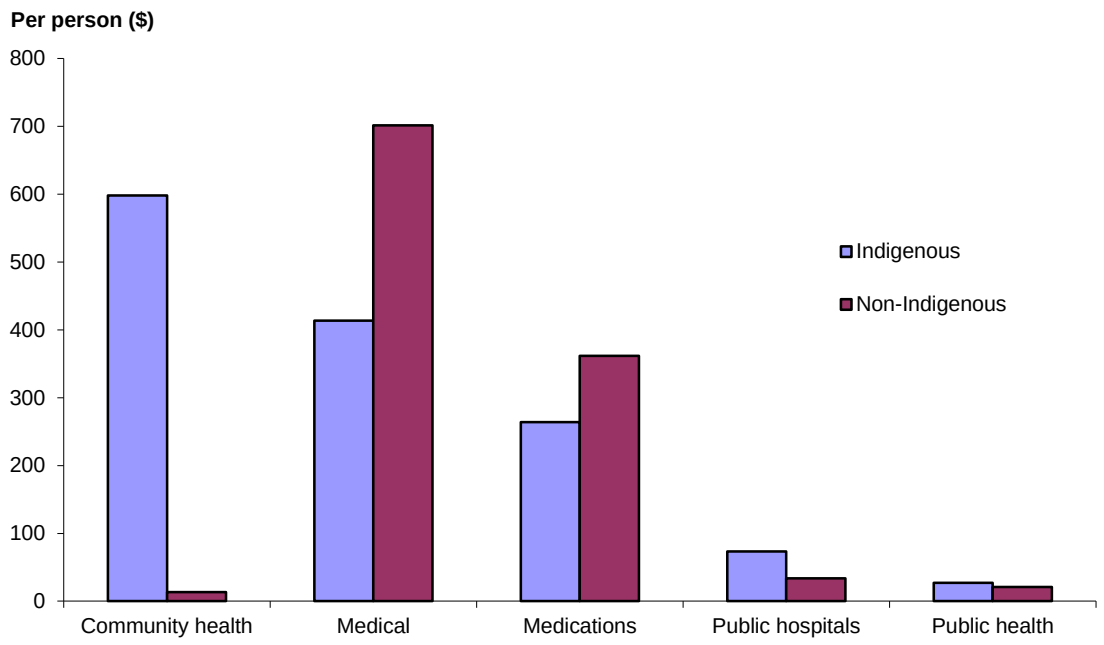
(a) Includes the RPBS as well as the PBS.

Source: AIHW health expenditure database.

The largest areas of the Australian Government's direct health expenditure for Aboriginal and Torres Strait Islander people were:

- community health services—$326 million (35.8% of total direct health expenditure by the Australian Government for Indigenous Australians)
- medical services—$225 million (24.7%)
- medications—$144 million (15.8%)
- health research—$68 million (7.5%)
- health administration—$34 million (3.7%) (Table 3.2).

Figure 3.2 compares direct Australian Government health expenditure per person on major health goods and services, highlighting differences in use between Indigenous and non-Indigenous Australians. Average expenditure per person on community health services and public health services was higher for Aboriginal and Torres Strait Islander people, but was lower in the case of medical services and medications.



Source: AIHW health expenditure database.

Figure 3.2: Direct expenditure per person on health by the Australian Government for Indigenous and non-Indigenous Australians, 2008–09

In 2008–09, an estimated $315 million of health expenditure for Aboriginal and Torres Strait Islander people by the Australian Government was through ACCHOs. ACCHOs are organisations funded by the Australian Government through the Office for Aboriginal and Torres Strait Islander Health to provide various Indigenous-specific primary health care and substance misuse services, which are largely delivered in community-based settings (AIHW 2010c).

3.3 Medicare Benefits Schedule and the Pharmaceutical Benefits Scheme

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

In 2008–09, an estimated $206 million of Australian Government expenditure on health goods and services for Aboriginal and Torres Strait Islander people was through the MBS, and an estimated $136 million through the PBS (Table 3.3).

Overall, Medicare expenditure per person for Indigenous Australians was much lower than that for non-Indigenous Australians, with a ratio of 0.57 (Table 3.3).

Expenditure per person was much lower for Indigenous than non-Indigenous Australians for all MBS service types. However, the ratio of Indigenous to non-Indigenous MBS expenditure per person was higher for unreferred services (including general practitioner services) than for other MBS service types (pathology, imaging, specialist, and operations and other).

The 2008–09 per person Medicare expenditure ratio (0.57) was similar to the comparable ratio reported in 2006–07 (0.58) (AIHW 2009a). It is not possible, however, to assess whether Indigenous MBS expenditure has actually increased at a lower rate than non-Indigenous MBS expenditure. The MBS and PBS estimates published in this series, which are derived by using a scaled up VII factor (see the Appendix), become more reliable as the level of VII coverage increases. Consequently, the decrease in the MBS expenditure ratio could simply reflect the higher level of VII coverage, producing more accurate estimates than in the previous report. However, there are other possible contributing factors.

For the PBS, the Indigenous to non-Indigenous expenditure per person ratio was 0.74. The only PBS service type with a high expenditure ratio was that under Section 100 of the *National Health Act 1953*. Section 100 arrangements allow patients attending an approved remote area Aboriginal and Torres Strait Islander health service to receive PBS medicines without the need for a prescription form and at no charge (Table 3.3).

Table 3.3: Total Medicare Benefits Schedule and Pharmaceutical Benefits Scheme benefits[(a)] for Indigenous and non-Indigenous Australians, by service type, 2008–09

Type of health goods and services	Amount ($ million)		Indigenous share (per cent)	Expenditure per person ($)		Ratio
	Indigenous	Non-Indigenous		Indigenous	Non-Indigenous	
Medicare benefits						
Unreferred services	105.1	4,524.8	2.3	192.9	213.6	0.90
General practitioners[(b)]	88.2	3,793.5	2.3	161.8	179.1	0.90
Other unreferred services[(c)]	17.0	731.3	2.3	31.1	34.5	0.90
Referred services	92.7	8,634.5	1.1	169.9	407.6	0.42
Specialist consultations	23.6	1,506.6	1.5	43.3	71.1	0.61
Pathology	22.4	1,926.8	1.2	41.2	91.0	0.45
Imaging	17.2	1,927.6	0.9	31.5	91.0	0.35
Operations	8.4	1,253.6	0.7	15.4	59.2	0.26
Other	21.1	2,019.8	1.0	38.6	95.4	0.40
All Medicare medical services	**197.8**	**13,159.2**	**1.48**	**362.8**	**621.3**	**0.58**
Other services	8.6	984.5	0.9	15.8	46.5	0.34
Allied health services	2.4	333.8	0.7	4.4	15.8	0.28
Optometry services	2.4	277.8	0.9	4.5	13.1	0.34
Dental services	3.7	372.9	1.0	6.8	17.6	0.39
Total Medicare benefits	**206.4**	**14,143.7**	**1.44**	**378.6**	**667.7**	**0.57**
Pharmaceutical benefits[(d)]						
Mainstream PBS	97.5	6,481.0	1.5	178.8	306.0	0.58
Section 100	29.5	4.4	87.0	54.2	0.2	259.40
Other PBS special supply	9.4	668.5	1.4	17.2	31.6	0.55
Total PBS	**136.4**	**7,154.0**	**1.9**	**250.2**	**337.7**	**0.74**
Total PBS and MBS	**342.8**	**21,297.7**	**1.6**	**628.7**	**1,005.5**	**0.63**

(a) Includes Australian Government Department of Health and Ageing expenditure only.
(b) Includes general practitioners and vocationally registered general practitioners.
(c) Includes practice nurses, Enhanced Primary Care Program and other unreferred services.
(d) Excludes RPBS, and highly specialised drugs dispensed from public and private hospitals.

Source: AIHW health expenditure database.

Medicare expenditure for Indigenous and non-Indigenous Australians presented in tables throughout this report is composed of both private in-hospital and out-of-hospital medical services. As in the last report, the availability of detailed and high-quality Medicare VII data has enabled health expenditure estimates for Indigenous and non-Indigenous Australians in this report to be presented separately for private in-hospital and out-of-hospital medical services (tables 3.4 and 3.5).

In 2008–09, the ratio of Indigenous to non-Indigenous Medicare expenditure per person was much lower for private in-hospital medical services (0.22) than for out-of-hospital medical services (0.63). This is because the Medicare benefits paid are to cover the cost of in-hospital medical services that are provided to private patients in hospitals. The lower Indigenous to non-Indigenous ratio for private in-hospital medical services expenditure reflects the fact that only a small proportion of Indigenous Australians have private health insurance.

Table 3.4: Australian Government benefits paid for in-hospital Medicare medical and other services for Indigenous and non-Indigenous Australians, 2008–09

	Amount ($ million)			Indigenous share (per cent)	Expenditure ($ per person)		
In-hospital medical services	**Indigenous**	**Non-Indigenous**	**Total**		**Indigenous**	**Non-Indigenous**	**Ratio**
Medicare benefits							
Unreferred services	0.1	20.0	20.1	0.5	0.2	0.9	0.20
General practitioners[(a)]	0.1	16.3	16.4	0.5	0.1	0.8	0.19
Other unreferred services[(b)]	0.0	3.6	3.7	0.6	0.0	0.2	0.25
Referred services	11.7	2,089.7	2,101.4	0.6	21.5	98.7	0.22
Specialist consultations	1.2	258.4	259.5	0.5	2.2	12.2	0.18
Pathology	1.0	210.5	211.5	0.5	1.8	9.9	0.18
Imaging	0.7	146.7	147.4	0.5	1.3	6.9	0.18
Operations	4.8	826.4	831.2	0.6	8.9	39.0	0.23
Other	4.0	647.8	651.8	0.6	7.4	30.6	0.24
All Medicare medical services	**11.8**	**2,109.6**	**2,121.5**	**0.6**	**21.7**	**99.6**	**0.22**
Other services	0.1	5.5	5.6	1.0	0.1	0.3	0.39
Allied health services	—	—	—	—	—	—	—
Optometry services	—	—	—	—	—	—	—
Dental services	0.1	5.5	5.6	1.0	0.1	0.3	0.39
Total Medicare benefits	**11.9**	**2,115.2**	**2,127.0**	**0.6**	**21.8**	**99.9**	**0.22**

(a) Includes general practitioners and vocationally registered general practitioners.

(b) Includes practice nurses, Enhanced Primary Care Program and other unreferred services.

Source: AIHW health expenditure database.

Table 3.5: Australian Government benefits paid for out-of-hospital Medicare medical and other services for Indigenous and non-Indigenous Australians, 2008–09

Out-of-hospital medical services	Amount ($ million)			Indigenous share (per cent)	Expenditure ($ per person)		Ratio
	Indigenous	Non-Indigenous	Total		Indigenous	Non-Indigenous	
Medicare benefits							
Unreferred services	105.0	4,504.8	4,609.9	2.3	192.7	212.7	0.91
General practitioners[(a)]	88.1	3,777.2	3,865.3	2.3	161.6	178.3	0.91
Other unreferred services[(b)]	16.9	727.6	744.6	2.3	31.1	34.4	0.90
Referred services	80.9	6,544.8	6,625.7	1.2	148.5	309.0	0.48
Specialist consultations	22.4	1,248.3	1,270.7	1.8	41.1	58.9	0.70
Pathology	21.5	1,716.3	1,737.8	1.2	39.4	81.0	0.49
Imaging	16.5	1,780.9	1,797.4	0.9	30.2	84.1	0.36
Operations	3.6	427.2	430.8	0.8	6.5	20.2	0.32
Other	17.0	1,372.0	1,389.1	1.2	31.2	64.8	0.48
All Medicare medical services	**186.0**	**11,049.6**	**11,235.6**	**1.7**	**341.1**	**521.7**	**0.65**
Other services	8.5	978.9	987.5	0.9	15.7	46.2	0.34
Allied health services	2.4	333.8	336.2	0.7	4.4	15.8	0.28
Optometry services	2.4	277.8	280.2	0.9	4.5	13.1	0.34
Dental services	3.7	367.4	371.1	1.0	6.7	17.3	0.39
Total Medicare benefits	**194.5**	**12,028.5**	**12,223.1**	**1.6**	**356.8**	**567.9**	**0.63**

(a) Includes general practitioners and vocationally registered general practitioners.

(b) Includes practice nurses, Enhanced Primary Care Program and other unreferred services.

Source: AIHW health expenditure database.

3.4 State and territory governments health expenditure

This section presents health expenditure estimates for Aboriginal and Torres Strait Islander people from data provided by the state and territory health authorities. Table 3.6 provides total and per person expenditure on health for Aboriginal and Torres Strait Islander people by state and territory. Figure 3.3 compares average expenditure per person for Indigenous Australians and non-Indigenous Australians for each state and territory. As highlighted in the Introduction (Section 1.6), the 2006–07 and 2008–09 reports use different census-based population projections to estimate state and territory per person expenditure. Readers should therefore exercise caution when comparing per person estimates and Indigenous to non-Indigenous ratios over time at the state/territory level, as some changes may be due to the changed population estimates.

In 2008–09, the total health expenditure for Aboriginal and Torres Strait Islander people by the state and territory governments was estimated at $2,594 million. This represented 6.0% of state and territory governments' health expenditure in 2008–09 (Table 3.6).

Table 3.6: State and territory total and per person expenditure on health services for Indigenous and non-Indigenous Australians, 2008–09

	Amount ($ million)			Indigenous share (per cent)	Expenditure per person ($)		
State/territory	Indigenous	Non-Indigenous	Total		Indigenous	Non-Indigenous	Ratio
NSW	593.4	13,235.7	13,829.1	4.3	3,700.3	1,914.3	1.93
Vic	146.6	9,452.5	9,599.2	1.5	4,130.9	1,767.0	2.34
Qld	703.1	8,025.5	8,728.7	8.1	4,550.4	1,905.3	2.39
WA	387.8	4,129.3	4,517.1	8.6	5,226.0	1,932.4	2.70
SA	198.8	3,607.3	3,806.1	5.2	6,743.0	2,276.9	2.96
Tas[(a)]	27.9	913.1	940.9	3.0	1,433.9	1,897.6	0.76
ACT[(b)]	32.9	859.1	892.0	3.7	n.a.	n.a.	n.a.
NT	503.4	328.8	832.2	60.5	7,525.8	2,102.9	3.58
Australia	**2,594.0**	**40,551.2**	**43,145.2**	**6.0**	**4,757.9**	**1,914.4**	**2.49**

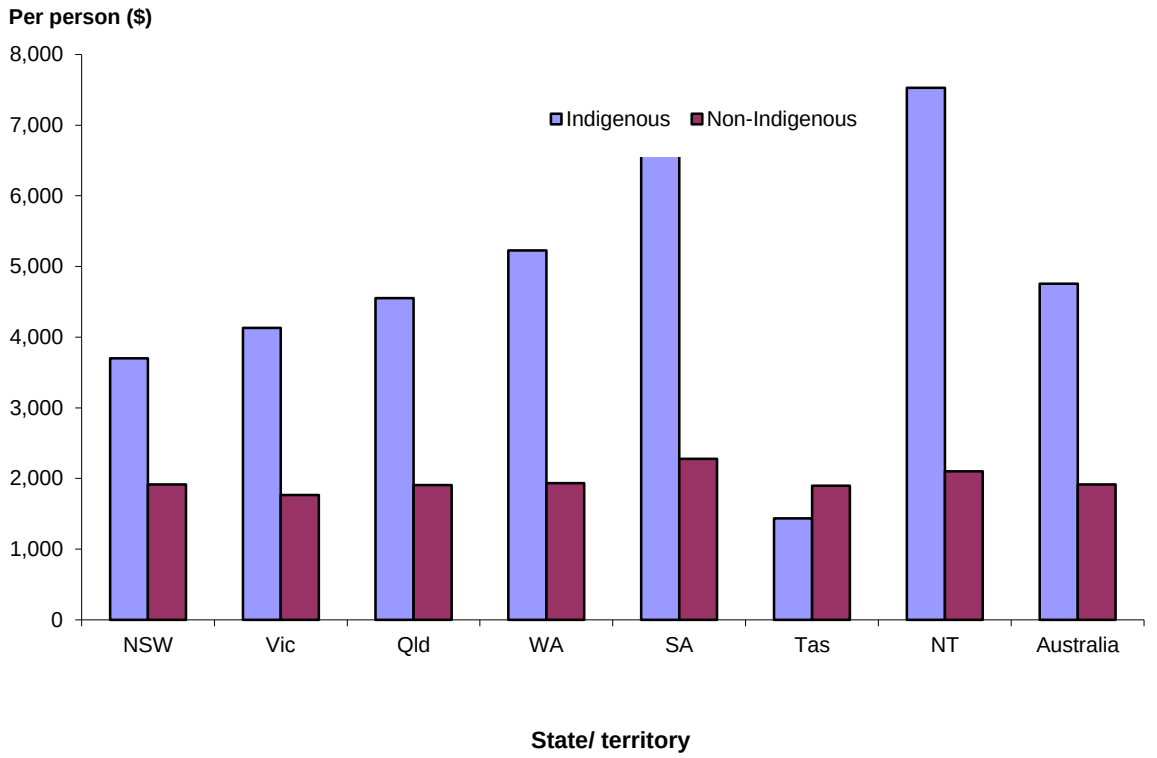
(a) A reliable estimate of the level of Aboriginal and Torres Strait Islander under-identification for Tasmanian public hospital admitted patients is not available. Consequently, admitted patient expenditure estimates for Tasmania are not adjusted for under-identification.

(b) Australian Capital Territory per person expenditure estimates are not calculated, because estimates for the Australian Capital Territory include substantial expenditures for New South Wales residents. As a result, the Australian Capital Territory population is not an appropriate denominator.

Source: AIHW health expenditure database.

The level of health expenditure per person for Indigenous Australians varied substantially across jurisdictions compared with those of non-Indigenous Australians (tables 3.6 and 3.8; Figure 3.3). For example, in 2008–09, the Northern Territory spent $7,526 per person on health for Aboriginal and Torres Strait Islander people, which was more than twice the amount spent in New South Wales ($3,700). For non-Indigenous Australians, South Australia's spending in 2008–09 was the highest of the jurisdictions at $2,277 per person. This

was less than one-third (28.9%) larger than the comparable figure in the lowest jurisdiction, Victoria ($1,767).



(a) Australian Capital Territory per person expenditure estimates are not calculated, because estimates for the Australian Capital Territory include substantial expenditures for New South Wales residents. As a result, the Australian Capital Territory population is not an appropriate denominator.

Source: AIHW health expenditure database.

Figure 3.3: Average per person state and territory[(a)] health services expenditure for Indigenous and non-Indigenous Australians

Table 3.7 shows health expenditure estimates for Indigenous and non-Indigenous Australians by area of expenditure. The average expenditure per person for Aboriginal and Torres Strait Islander people varied across areas of expenditure. Overall, it was higher for Indigenous Australians than for non-Indigenous Australians.

The main areas of state and territory governments' expenditure on health for Aboriginal and Torres Strait Islander people were:

- public hospital services—$1,790 million (69.0% of total health expenditure by the state and territory governments for Indigenous Australians)
- community health services—$496 million (19.1%)
- public health services—$117 million (4.5%)
- patient transport services—$114 million (4.4%)
- dental services—$39 million (1.5%).

Table 3.7: State and territory government health expenditure, for Indigenous and non-Indigenous Australians, by area of expenditure, 2008–09

Area of expenditure	Amount ($ million)		Indigenous share (per cent)	Expenditure per person ($)		Ratio
	Indigenous	Non-Indigenous		Indigenous	Non-Indigenous	
Total hospitals	1,795.9	31,215.7	5.4	3,294.0	1,473.7	2.24
Public hospital services[(a)]	1,790.0	30,881.5	5.5	3,283.2	1,457.9	2.25
Admitted patient services[(b)]	1,392.4	23,764.1	5.5	2,553.9	1,121.9	2.28
Non-admitted patient services	397.6	7,117.4	5.3	729.3	336.0	2.17
Private hospital services	5.9	334.1	1.7	10.8	15.8	0.69
Patient transport services	113.8	1,939.0	5.5	208.8	91.5	2.28
Dental services	39.5	622.3	6.0	72.4	29.4	2.46
Community health services[(c)]	495.9	4,323.5	10.3	909.6	204.1	4.46
Alcohol and drug treatment	65.3	351.4	15.7	119.8	16.6	7.22
Community mental health	78.0	1,466.1	5.1	143.0	69.2	2.07
Other community health	352.6	2,505.9	12.3	646.8	118.3	5.47
Public health services[(c)]	116.9	1,554.9	7.0	214.4	73.4	2.92
Communicable disease control	24.8	235.4	9.5	45.4	11.1	4.09
Selected health promotion	19.6	289.2	6.4	36.0	13.7	2.63
Organised immunisation	34.0	541.0	5.9	62.4	25.5	2.44
Environmental health	5.4	74.3	6.8	9.9	3.5	2.84
Food standards and hygiene	1.0	18.0	5.0	1.7	0.9	2.05
Breast cancer screening	2.5	184.3	1.4	4.7	8.7	0.54
Cervical cancer screening	7.9	37.0	17.5	14.4	1.7	8.26
Prevention of hazardous and harmful drug use	19.0	153.5	11.0	34.8	7.2	4.81
Public health research	2.7	22.2	10.9	5.0	1.0	4.75
Research	16.2	483.4	3.3	29.8	22.8	1.31
Health administration	15.7	412.4	3.7	28.9	19.5	1.48
Total health expenditure	**2,594.0**	**40,551.2**	**6.0**	**4,757.9**	**1,914.4**	**2.49**

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

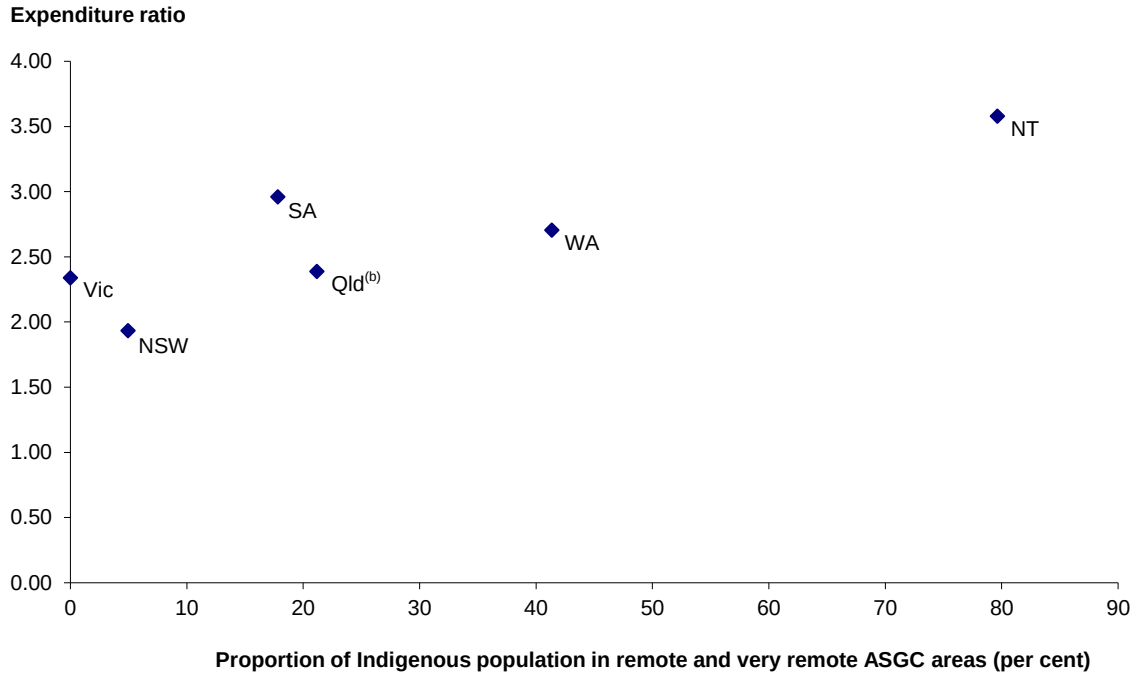
(b) Admitted patient expenditure estimates adjust for Aboriginal and Torres Strait Islander under-identification, except for Tasmania.

(c) Includes other recurrent expenditure on health, not elsewhere classified, such as family planning previously reported under 'Other health services (n.e.c.)'.

Source: AIHW health expenditure database.

Figure 3.4 shows the relationship between the Indigenous to non-Indigenous health expenditure ratios, and the proportion of Aboriginal and Torres Strait Islander people who lived in *Remote* and *Very remote* areas in each state and territory (except the Australian Capital Territory). Health expenditure per person estimates for the Australian Capital Territory are not calculated, because its expenditure estimates include substantial expenditure for New South Wales residents. As a result, the Australian Capital Territory population is not an appropriate denominator.

Figure 3.4 shows that jurisdictions (such as the Northern Territory and Western Australia) with a higher proportion of the Indigenous population in *Remote* and *Very remote* areas also tended to have higher per person ratios of Indigenous to non-Indigenous health expenditure in 2008–09. South Australia, however, had a relatively small proportion of its Indigenous population living in *Remote* and *Very remote* areas, and the second highest expenditure ratio in 2008–09.



(a) Australian Capital Territory per person expenditure estimates are not calculated because estimates for the Australian Capital Territory include substantial expenditures for New South Wales residents. As a result, the Australian Capital Territory population is not an appropriate denominator. Tasmanian per person expenditure estimates are not represented because a reliable estimate of the level of Aboriginal and Torres Strait Islander under-identification for Tasmanian public hospital admitted patients is not available. Consequently, admitted patient expenditure estimates for Tasmania are not adjusted for under-identification.

(b) Aboriginal and Torres Strait Islander population by ASGC Remoteness Area for Queensland differ from equivalent estimates published by Queensland Treasury.

Source: AIHW health expenditure database; Table 2.1.

Figure 3.4: Indigenous to non-Indigenous health expenditure per person[(a) (b)]ratio and the proportion of Aboriginal and Torres Strait Islander people living in ASGC *Remote* and *Very remote* areas, 2008–09

Table 3.8: Estimated state and territory[(a)] health expenditure per person, Indigenous and non-Indigenous Australians, 2008–09

Area of expenditure	NSW	Vic	Qld	WA	SA	Tas	NT	Total
				$ per person				
Public hospital services								
Indigenous	2,601.0	2,674.3	3,353.5	4,296.4	4,317.1	945.0	4,030.0	3,283.2
Non-Indigenous	1,526.4	1,401.8	1,380.4	1,395.0	1,580.1	1,377.2	1,334.4	1,457.9
Ratio	1.70	1.91	2.43	3.08	2.73	0.69	3.02	2.25
Admitted patients[(b)]								
Indigenous	1,933.6	2,013.1	2,648.0	3,189.1	3,449.1	747.7	3,714.2	2,553.9
Non-Indigenous	1,162.9	1,095.9	1,113.1	1,103.4	1,318.0	1,111.4	1,225.9	1,121.9
Ratio	1.66	1.84	2.38	2.89	2.62	0.67	3.03	2.28
Non-admitted patients								
Indigenous	667.4	661.2	705.5	1,107.3	868.0	197.2	315.8	729.3
Non-Indigenous	363.5	305.9	267.3	291.7	262.1	265.8	108.5	336.0
Ratio	1.84	2.16	2.64	3.80	3.31	0.74	2.91	2.17
Private hospital services								
Indigenous	—	6.4	5.1	65.6	—	—	—	10.8
Non-Indigenous	—	13.2	5.8	111.7	—	—	—	15.8
Ratio	—	0.48	0.88	0.59	—	—	—	0.69
Patient transport services								
Indigenous	137.4	91.7	285.2	187.2	394.6	65.5	257.2	208.8
Non-Indigenous	89.9	91.6	107.6	41.9	124.6	102.8	87.0	91.6
Ratio	1.53	1.00	2.65	4.47	3.17	0.64	2.95	2.28
Dental services								
Indigenous	121.2	36.7	47.7	30.6	86.4	5.5	94.1	72.4
Non-Indigenous	24.9	24.7	35.4	32.0	35.6	52.1	58.2	29.4
Ratio	4.87	1.49	1.35	0.96	2.42	0.11	1.62	2.46
Community health services[(c)]								
Indigenous	713.0	935.3	655.1	555.3	1,593.4	331.0	2,191.1	909.6
Non-Indigenous	179.8	143.6	240.8	253.4	272.3	273.3	453.0	204.1
Ratio	3.97	6.51	2.72	2.19	5.85	1.21	4.84	4.46

(continued)

Table 3.8 (continued): Estimated state and territory[(a)] health expenditure per person, Indigenous and non-Indigenous Australians, 2008–09

Area of expenditure	NSW	Vic	Qld	WA	SA	Tas	NT	Total
Public health services[(c)]								
Indigenous	102.8	312.8	116.0	70.8	123.6	87.0	900.3	214.4
Non-Indigenous	66.3	67.3	78.1	77.6	84.1	92.1	159.0	73.4
Ratio	1.55	4.65	1.49	0.91	1.47	0.94	5.66	2.92
Research								
Indigenous	24.9	73.7	34.0	5.9	10.3	—	53.1	29.8
Non-Indigenous	26.9	24.9	33.1	6.0	3.9	—	11.2	22.8
Ratio	0.92	2.96	1.03	1.00	2.66	—	4.75	1.31
Health administration[(d)]								
Indigenous	—	—	53.6	14.1	217.6	—	—	28.9
Non-Indigenous	—	—	24.1	14.8	176.4	—	—	19.5
Ratio	—	—	2.23	0.95	1.23	—	—	1.48
Total health expenditure								
Indigenous	**3,700.3**	**4,130.9**	**4,550.4**	**5,226.0**	**6,743.0**	**1,433.9**	**7,525.8**	**4,757.9**
Non-Indigenous	**1,914.3**	**1,767.0**	**1,905.3**	**1,932.4**	**2,276.9**	**1,897.6**	**2,102.9**	**1,914.5**
Ratio	**1.93**	**2.34**	**2.39**	**2.70**	**2.96**	**0.76**	**3.58**	**2.49**

(a) Australian Capital Territory per person expenditure estimates are not calculated because estimates for the Australian Capital Territory include substantial expenditures for New South Wales residents. As a result, the Australian Capital Territory population is not an appropriate denominator.

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

(c) Includes other recurrent expenditure on health, not elsewhere classified, such as family planning previously reported under 'Other health services (n.e.c.)'.

(d) Health administration costs for New South Wales, Victoria, Tasmania and the Northern Territory are zero, as these jurisdictions have allocated administrative expenses into the functional expenditure categories in the table.

Source: AIHW health expenditure database.

3.5 Non-government expenditure

This section provides health expenditure estimates for Aboriginal and Torres Strait Islander people by the non-government sector. These estimates include 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 out-of-hospital private services provided by dentists and other health professionals (for example, physiotherapists, acupuncturists, audiologists).

Total non-government expenditure on health services in 2008–09 was estimated at $32,896 million. Of this amount, $194 million (or 0.6%) was expenditure on health services for Aboriginal and Torres Strait Islander people (Table 3.9).

In terms of health expenditure per person, the non-government sector spent on average $356 per Indigenous person compared with $1,544 per non-Indigenous person in 2008–09. As a result, the non-government sector's Indigenous to non-Indigenous health expenditure per person ratio was 0.23. This low ratio is partly related to the low private health insurance membership of Aboriginal and Torres Strait Islander people. In 2004–05, about 14.0% of the Aboriginal and Torres Strait Islander population had private health insurance compared with 51.0% for the non-Indigenous population (ABS & AIHW 2008).

Table 3.9: Estimated non-government expenditure on health for Indigenous and non-Indigenous Australians, 2008–09

	Expenditure ($ million)		Indigenous share (per cent)	Expenditure per person ($)		
Area of expenditure	**Indigenous**	**Non-Indigenous**		**Indigenous**	**Non-Indigenous**	**Ratio**
Total hospitals[(a)]	30.6	7,763.6	0.4	56.1	366.5	0.15
Medical services	41.0	4,699.1	0.9	75.3	221.8	0.34
Medicare services	20.5	2,374.5	0.9	37.7	112.1	0.34
Other	20.5	2,324.6	0.9	37.6	109.7	0.34
Dental services	22.4	5,549.5	0.4	41.2	262.0	0.16
Other professional services	17.6	2,431.0	0.7	32.3	114.8	0.28
Community health services	0.9	7.1	11.0.5	1.6	0.3	4.78
Medications	27.9	7,373.0	0.4	51.2	348.1	0.15
Benefit-paid pharmaceuticals[(b)]	5.3	1,446.5	0.4	9.8	68.3	0.14
All other medications	22.6	5,926.5	0.4	41.5	279.8	0.15
Aids and appliances	14.4	2,885.4	0.5	26.5	136.2	0.19
Research	16.1	437.6	3.5	29.5	20.7	1.43
Health administration	4.9	1,306.2	0.4	9.0	61.7	0.15
Total health[(c)]	**194.0**	**32,702.1**	**0.6**	**355.8**	**1,543.9**	**0.23**

(a) Hospital expenditure for the non-government sector is not broken down at the public and private level.

(b) Includes the RPBS as well as the PBS.

(c) Includes public health regulatory expenditure and patient transport services funded by the private sector.

Source: AIHW health expenditure database.

Table 3.10: Expenditure on health for Indigenous and non-Indigenous Australians, by government and non-government sector, 2008–09 ($ million)

	Australian Government		State/territory government		Non-government		Total expenditure	
Area of expenditure	**Indigenous**	**Non-Indigenous**	**Indigenous**	**Non-Indigenous**	**Indigenous**	**Non-Indigenous**	**Indigenous**	**Non-Indigenous**
				$ million				
Total hospitals	41.6	927.4	1,795.9	31,215.7	30.6	7,763.6	1,868.1	39,906.6
Public hospital services[(a)]	40.1	712.1	1,790.0	30,881.5	–	–	1,830.1	31,593.6
Private hospital services	1.5	215.3	5.9	334.1	30.6	7,763.6	38.0	8,313.0
Patient transport services	35.9	170.7	113.8	1,939.0	10.1	118.4	159.8	2,228.1
Medical services	225.4	14,854.5	–	–	41.0	4,699.1	266.4	19,553.6
Dental services	6.3	474.8	39.5	622.3	22.4	5,549.5	68.2	6,646.7
Other professional services	11.0	966.9	–	–	17.6	2,431.0	28.6	3,397.8
Community health services	326.2	287.2	495.9	4,323.5	1.0	7.1	823.1	4,617.8
Public health services	14.7	443.4	116.9	1,554.9	7.9	131.2	139.5	2,129.5
Medications	143.9	7,661.5	–	–	27.9	7,373.0	171.9	15,034.5
Aids and appliances	5.1	362.8	–	–	14.4	2,885.4	19.5	3,248.2
Research	68.3	2,653.3	16.2	483.4	16.1	437.6	100.6	3,574.3
Health administration	33.9	1,228.0	15.7	412.4	4.9	1,306.2	54.5	2,946.6
Total health	**912.3**	**30,030.3**	**2,594.0**	**40,551.2**	**194.0**	**32,702.1**	**3,700.3**	**103,283.6**

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

Source: AIHW health expenditure database.

3.6 Expenditure by program management

Table 3.11 shows recurrent expenditure through programs that were managed by the Australian Government and the state/territory governments. In addition, the table 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 program management does not necessarily imply direct service provision.

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

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

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 the Australian Government does not directly manage these hospitals or other programs.

Similarly, with the Australian Government's 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.

Expenditure levels by program

Government programs accounted for $74,088 million of expenditure on health services for both Indigenous and non-Indigenous Australians in 2008-09 (Table 3.11).

Non-government service delivery accounted for $32,896 million. Non-government providers deliver most out-of-hospital health care in Australia, including private medical and dental services, other health practitioner services (such as those provided by physiotherapists, acupuncturists and podiatrists) and pharmaceutical sales.

Government-managed programs accounted for about 94.8% of the spending on Aboriginal and Torres Strait Islander health services, with programs managed by state and territory governments making up 70.1% of total expenditure.

Indigenous Australians made proportionally lower use of non-government services (5.2% of total expenditure) than non-Indigenous Australians (31.7%).

Expenditure patterns

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

For non-Indigenous Australians, the three sectors responsible for program management—the Australian Government, state/territory governments and non-government—were roughly equally represented (Table 3.11).

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

Table 3.11: Total expenditure on health, by program management, 2008–09 ($ million)

	Indigenous		Non-Indigenous		Total	
Program management	**Amount ($ million)**	**Proportion (per cent)**	**Amount ($ million)**	**Proportion (per cent)**	**Amount ($ million)**	**Proportion (per cent)**
Through state and territory government programs[(a)]	2,594.0	70.1	40,551.2	39.3	43,145.2	40.3
Through Australian Government programs[(b)]	912.3	24.7	30,030.3	29.1	30,942.6	28.9
Through all government programs	*3,506.3*	*94.8*	*70,581.6*	*68.3*	*74,087.8*	*69.3*
Through all non-government programs	194.0	5.2	32,702.1	31.7	32,896.1	30.7
Total health	**3,700.3**	**100.0**	**103,283.6**	**100.0**	**106,983.9**	**100.0**

(a) Includes state/territory government expenditure on private hospitals, shown elsewhere in this report as funding by state/territory governments.
(b) Includes patient copayments under Medicare and PBS, shown elsewhere in this report as expenditure incurred by the non-government sector.

Source: AIHW health expenditure database.

Table 3.12 shows average expenditure per person under program management, and the ratios of Indigenous to non-Indigenous expenditure. The ratios highlight the differences in service use between Indigenous and non-Indigenous Australians—particularly for programs managed by state and territory governments, where the ratio was 2.49. It is also worth noting the relatively low use by Aboriginal and Torres Strait Islander people of non-government programs, with a ratio of 0.23.

Table 3.12: Expenditure per person on health services, by program management, 2008–09

	Expenditure per person ($)		
Program management	**Indigenous**	**Non-Indigenous**	**Ratio**
Through state and territory government programs[(a)]	4,757.9	1,914.4	2.49
Through Australian Government programs[(b)]	1,673.3	1,417.7	1.18
Through all government programs	*6,431.2*	*3,332.2*	*1.93*
Through non-government programs	355.8	1,543.9	0.23
Total health	**6,787.0**	**4,876.1**	**1.39**

(a) Includes state/territory government expenditure on private hospitals, shown elsewhere in this report as funding by state/territory governments.
(b) Includes patient copayments under Medicare and PBS, 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 Indigenous Australian than per non-Indigenous Australian—with a ratio of 1.18 (Table 3.12). In 2008–09, the states and territories administered about two-thirds of all of the resources used in providing Aboriginal and Torres Strait Islander health care.

4 Health funding

4.1 Total health funding

This section presents estimates of total health funding for Aboriginal and Torres Strait Islander people. Funding for Indigenous health goods and services comes from different sources, including the Australian Government, state and territory governments and non-government sources such as private health insurers, out-of-pocket payments by individuals and injury compensation insurers.

Table 4.1 and Table 4.2 show total recurrent health funding in 2008–09, as well as per person expenditure, and Indigenous to non-Indigenous ratios, by source of funds for Indigenous and non-Indigenous Australians.

In 2008–09, the Australian Government and state and territory governments provided the bulk of the funding (91.0%) for Aboriginal and Torres Strait Islander health expenditure, which was provided as follows:

- Australian Government—43.0% ($1,590 million)
- states and territories—48.0%($1,777 million)
- non-government sources—9.0%($333 million)

The Australian Government provides health funding mostly through:

- Specific Purpose Payments to states and territories for health
- MBS and PBS payments.

Table 4.1: Health funding for Indigenous and non-Indigenous Australians, 2008–09 ($ million)

	Amount ($ million)			Indigenous share
Source of funding	**Indigenous**	**Non-Indigenous**	**Total**	**(per cent)**
State and territory governments	1,777.4	25,327.8	27,105.2	6.6
Australian Government	1,589.8	46,451.1	48,040.9	3.3
Direct Australian Government	941.5	33,719.3	34,660.8	2.7
Indirect through state/territory governments	616.7	11,087.3	11,704.0	5.3
Indirect through non-government[(a)]	31.6	1,644.5	1,676.1	1.9
All government	*3,367.2*	*71,779.0*	*75,146.1*	*4.5*
Non-government	333.1	31,504.7	31,837.8	1.0
Total health	**3,700.3**	**103,283.6**	**106,983.9**	**3.5**

(a) Includes private health insurance rebates for all Australians, and Specific Purpose Payments covering highly specialised drugs in private hospitals and other payments.

Source: AIHW health expenditure database.

Health funding per person from the Australian and state/territory governments was much higher for Indigenous Australians ($6,176) than for non-Indigenous Australians ($3,389) in 2008–09 (Table 4.2).

The Australian Government funded 33.0% more per person for health services for Indigenous Australians than for non-Indigenous Australians.

The state and territory governments' Indigenous health funding per person was about 2.7 times that for non-Indigenous Australians.

Table 4.2: Health funding per person for Indigenous and non-Indigenous Australians, 2008–09

	Funding per person ($)		
Source of funding	**Indigenous**	**Non-Indigenous**	**Ratio**
State and territory governments	3,260.0	1,195.7	2.73
Australian Government	2,916.0	2,193.0	1.33
Direct Australian Government	1,726.9	1,591.9	1.08
Indirect through state/territory governments	1,131.1	523.4	2.16
Indirect through non-government[(a)]	58.0	77.6	0.75
All government	*6,176.0*	*3,388.7*	*1.82*
Non-government	611.0	1,487.4	0.41
Total health	**6,787.0**	**4,876.1**	**1.39**

(a) Includes private health insurance rebates, and Specific Purpose Payments covering highly specialised drugs provided in private hospitals, along with other payments.

Source: AIHW health expenditure database.

Table 4.3: Health funding for Indigenous and non-Indigenous Australians, by government and non-government, 2008–09 ($ million)

	Australian Government		State/territory government		Non-government		Total expenditure	
Area of expenditure	**Indigenous**	**Non-Indigenous**	**Indigenous**	**Non-Indigenous**	**Indigenous**	**Non-Indigenous**	**Indigenous**	**Non-Indigenous**
				$ million				
Total hospitals	683.9	14,997.5	1,040.5	17,288.8	143.7	7,620.2	1,868.1	39,906.6
Public hospital services[(a)]	669.6	12,121.1	1,033.8	16,951.1	124.9	2,522.1	1,828.2	31,594.3
Private hospital services	14.3	2,876.4	6.8	337.7	18.7	5,098.2	39.9	8,312.3
Patient transport services	36.1	230.8	101.1	1,452.8	22.6	544.5	159.8	2,228.1
Medical services	227.0	15,247.4	—	—	39.4	4,306.2	266.4	19,553.6
Dental services	7.8	899.0	37.9	586.9	22.5	5,160.7	68.2	6,646.7
Other professional services	11.8	1,172.0	—	—	16.8	2,225.8	28.6	3,397.8
Community health services[(b)]	326.2	287.9	466.1	4,147.9	30.8	182.0	823.1	4,617.8
Public health services[(b)]	42.9	1,124.9	92.9	879.4	3.7	125.2	139.5	2,129.5
Medications	144.0	7,681.7	—	—	27.8	7,352.7	171.9	15,034.5
Aids and appliances	5.6	512.1	—	—	13.9	2,736.1	19.5	3,248.2
Research	69.2	2,688.6	23.9	593.2	7.5	292.5	100.6	3,574.3
Health administration	35.3	1,609.1	15.0	378.8	4.3	958.7	54.5	2,946.6
Total health	**1,589.8**	**46,451.1**	**1,777.4**	**25,327.8**	**333.1**	**31,504.7**	**3,700.3**	**103,283.6**

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

(b) Includes other recurrent expenditure on health, not elsewhere classified, such as family planning previously reported under 'Other health services (n.e.c.)'.

Source: AIHW health expenditure database.

4.2 Australian Government health funding

In 2008–09, the total health funding for Aboriginal and Torres Strait Islander people from the Australian Government was estimated at $1,590 million, or 3.3% of the total Australian Government health funding (Table 4.4).

The average Australian Government health funding per Indigenous Australian was $2,916, compared with $2,193 per non-Indigenous Australian, a ratio of 1.33.

Table 4.4: Australian Government health funding for Indigenous and non-Indigenous Australians, 2008–09 ($ million)

	Funding ($ million)			Indigenous share (per cent)	Funding per person ($)		
Area of expenditure	Indigenous	Non-Indigenous	Total		Indigenous	Non-Indigenous	Ratio
Total hospitals	683.9	14,997.5	15,681.4	4.4	1,254.4	708.0	1.77
Public hospital services	669.6	12,121.1	12,790.7	5.2	1,228.1	572.2	2.15
Private hospital services	14.3	2,876.4	2,890.8	0.5	26.3	135.8	0.19
Patient transport services	36.1	230.8	266.9	13.5	66.2	10.9	6.08
Medical services	227.0	15,247.4	15,474.4	1.5	416.4	719.8	0.58
Dental services	7.8	899.0	906.8	0.9	14.4	42.4	0.34
Other professional services	11.8	1,172.0	1,183.8	1.0	21.6	55.3	0.39
Community health services	326.2	287.9	614.1	53.1	598.3	13.6	44.01
Public health services	42.9	1,124.9	1,167.8	3.7	78.7	53.1	1.48
Medications	144.0	7,681.7	7,825.8	1.8	264.1	362.7	0.73
Aids and appliances	5.6	512.1	517.7	1.1	10.3	24.2	0.43
Research	69.2	2,688.6	2,757.8	2.5	127.0	126.9	1.00
Health administration	35.3	1,609.1	1,644.4	2.1	64.7	76.0	0.85
Total health	**1,589.8**	**46,451.1**	**48,040.9**	**3.3**	**2,916.0**	**2,193.0**	**1.33**

Source: AIHW health expenditure database.

Most Australian Government health funding (56.3%) for Aboriginal and Torres Strait Islander people was through DoHA and DVA combined.

This was followed by Specific Purpose Payments to the states and territories, through which 38.8% of the funding was contributed (Table 4.5).

Table 4.5: Australian Government health funding for Indigenous and non-Indigenous Australians, by source of funding, 2008–09 ($ million)

	Funding ($ million)			Indigenous share (per cent)	Funding per person ($)		
Source of funding	**Indigenous**	**Non-Indigenous**	**Total**		**Indigenous**	**Non-Indigenous**	**Ratio**
DoHA and DVA health	893.9	28,489.9	29,383.8	3.0	1,639.6	1,345.0	1.22
Specific Purpose Payments to states/territories	616.7	11,087.3	11,704.0	5.3	1,131.1	523.4	2.16
Rebates for private health insurance	13.3	3,629.7	3,643.0	0.4	24.5	171.4	0.14
Other Australian Government	64.8	2,515.5	2,580.3	2.5	118.9	118.8	1.00
Total health	**1,588.7**	**45,722.4**	**47,311.2**	**3.4**	**2,914.0**	**2,158.6**	**1.35**

Source: AIHW health expenditure database.

4.3 State and territory governments funding

In 2008–09, total health funding for Aboriginal and Torres Strait Islander people from state and territory governments (including local councils) was estimated at $1,777 million. This represented 6.6% of total health funding from state and territory governments (Table 4.6).

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 were public hospital services ($1,034 million) and community health services ($466 million).

Table 4.6: Total and per person state and territory government funding of health services for Indigenous and non-Indigenous Australians, 2008–09

	Funding ($ million)		Indigenous share (per cent)	Funding per person ($)		
Area of expenditure	**Indigenous**	**Non-Indigenous**		**Indigenous**	**Non-Indigenous**	**Ratio**
Total hospitals	1,040.5	17,288.8	5.7	1,908.6	816.2	2.34
Public hospital services	1,033.8	16,951.1	5.7	1,896.1	800.3	2.37
Admitted patient services[(a)]	818.3	13,283.9	5.8	1,501.0	627.1	2.39
Non-admitted patient services	215.4	3,667.2	5.5	395.1	173.1	2.28
Private hospital services	6.8	337.7	2.0	12.5	15.9	0.78
Patient transport services	101.1	1,452.8	6.5	185.4	68.6	2.70
Dental services	37.9	586.9	6.1	69.4	27.7	2.51
Community health services	466.1	4,147.9	10.1	855.0	195.8	4.37
Public health services	92.9	879.4	9.6	170.4	41.5	4.10
Research	23.9	593.2	3.9	43.8	28.0	1.56
Health administration	15.0	378.8	3.8	27.5	17.9	1.54
Total funding	**1,777.4**	**25,327.8**	**6.6**	**3,260.0**	**1,195.7**	**2.73**

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

Source: AIHW health expenditure database.

4.4 Non-government funding

Table 4.7 provides health funding estimates for Indigenous and non-Indigenous Australians by the non-government sector. Note that the figures presented in this table do not distinguish between Indigenous and non-Indigenous sources of funds.

Total non-government health funding in 2008–09 was estimated at $31,838 million. Of this, $333 million (1.0%) was spent on Indigenous Australians. In per person terms, Indigenous Australians received less than half (0.41) the amount of non-governmental funding that non-Indigenous Australians received. It is important to note that the non-government sector includes individual health investments and out-of pocket expenses in addition to private firms and not-for-profit organisations. It is likely that a greater proportion of the non-government funds were provided by non-Indigenous Australians.

There were several differences in the areas receiving non-governmental funding for Indigenous and non-Indigenous Australians. Medications comprised a much lower share of total non-government funding for Indigenous Australians (8.4%) compared with non-Indigenous Australians (23.3%), as did aids and appliances funding, at 4.2% and 8.7%, respectively. While hospital service funding was the largest area of non-government funding for both groups, it was markedly higher for Indigenous Australians (43.1% compared with 24.2% for non-Indigenous Australians).

Table 4.7: Total and per person non-government funding of health services for Indigenous and non-Indigenous Australians, 2008–09

	Funding ($ million)		Indigenous share (per cent)	Funding per person ($)		
Area of expenditure	**Indigenous**	**Non-Indigenous**		**Indigenous**	**Non-Indigenous**	**Ratio**
Total hospitals	143.7	7,620.2	1.9	263.5	359.8	0.73
Patient transport services	22.6	544.5	4.0	41.5	25.7	1.62
Medical services	39.4	4,306.2	0.9	72.3	203.3	0.36
Medicare services	20.5	2,374.5	0.9	37.7	112.1	0.34
Other	18.9	1,931.7	1.0	34.6	91.2	0.38
Dental services	22.5	5,160.7	0.4	41.3	243.6	0.17
Other professional services	16.8	2,225.8	0.8	30.9	105.1	0.29
Community health services	30.8	182.0	14.5	56.5	8.6	6.58
Public health services	3.7	125.2	2.9	6.8	5.9	1.14
Medications	27.8	7,352.7	0.4	51.1	347.1	0.15
Benefit-paid pharmaceuticals	5.3	1,446.5	0.4	9.8	68.3	0.14
All other medications	22.5	5,906.2	0.4	41.3	278.8	0.15
Aids and appliances	13.9	2,736.1	0.5	25.5	129.2	0.20
Research	7.5	292.5	2.5	13.8	13.8	1.00
Health administration	4.3	958.7	0.4	7.8	45.3	0.17
Total health	**333.1**	**31,504.7**	**1.0**	**611.0**	**1,487.4**	**0.41**

Source: AIHW Health expenditure database.

5 Expenditure on primary and secondary/tertiary health services

Aboriginal and Torres Strait Islander people tend to use mainstream services differently to the rest of the Australian population (AIHW 2008b). Health expenditure estimates on primary and secondary/tertiary health services for Indigenous and non-Indigenous Australians presented in this chapter underscore the different patterns of mainstream health service use between Indigenous and non-Indigenous Australians.

Box 5.1: Definitions

Primary care is defined as those services that are provided to the whole population (for example, 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 general practitioner services. Secondary/tertiary services are defined as those services generated within the health care system through a referral, such as:

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

For more detailed information about how expenditure is allocated between primary and secondary expenditure, refer to section A1.5 of the Appendix.

Tables 5.1 and 5.2 show expenditure estimates on primary and secondary/tertiary health services (total and per person) for Indigenous and non-Indigenous Australians. Section A1.5 of the Appendix outlines how expenditure has been allocated between primary and secondary expenditure for the various health categories.

In 2008–09, the Indigenous share of total expenditure on primary health services was 3.5%, and that of secondary/tertiary health services was 4.1% (Table 5.1). Of all the expenditure on primary health services for Aboriginal and Torres Strait Islander people in 2008–09, expenditure on community health services was the highest area of expenditure, representing 49.0%of expenditure, compared with 9.9% for non-Indigenous Australians. It is important to note that the Australian Government, through the Office for Aboriginal and Torres Strait Islander Health, provides most of the funding to ACCHOs to promote access to primary health services for Aboriginal and Torres Strait Islander people.

In terms of expenditure on secondary/tertiary health services in 2008–09, hospital services accounted for the highest area of expenditure for Aboriginal and Torres Strait Islander people, at 89.8% compared with 68.7% for non-Indigenous Australians (Table 5.1).

The Indigenous to non-Indigenous expenditure per person ratio was lower for primary health services (1.40) than for secondary/tertiary services (1.68) (Table 5.2).

Table 5.1: Expenditure on primary and secondary/tertiary health services, 2008–09 ($ million)

Area of expenditure	Primary expenditure ($ million)		Indigenous share (per cent)	Secondary/tertiary expenditure ($ million)		Indigenous share (per cent)
	Indigenous	Non-Indigenous		Indigenous	Non-Indigenous	
Total hospitals	198.8	3,558.7	5.3	1,709.3	30,263.6	5.3
Admitted patient services	—	—	—	1,510.5	26,704.9	5.4
Non-admitted patient services	198.8	3,558.7	5.3	198.8	3,558.7	5.3
Patient transport services	79.9	445.6	15.2	79.9	1,782.5	4.3
Medical services	178.8	10,940.8	1.6	87.7	8,612.8	1.0
Dental services	68.2	6,646.7	1.0	—	—	—
Other professional services	14.3	1,698.9	0.8	14.3	1,698.9	0.8
Community health services	823.1	4,617.8	15.1	—	—	—
Public health services	139.5	2,129.5	6.1	—	—	—
Medications	160.0	13,629.5	1.2	11.8	1,404.9	0.8
Aids and appliances	18.2	2,944.6	0.6	1.3	303.5	0.4
Total health[(a)]	**1,680.8**	**46,612.2**	**3.5**	**1,904.4**	**44,066.3**	**4.1**

(a) Excludes expenditure on research and health administration.

Source: AIHW health expenditure database.

Table 5.2: Expenditure per person on primary and secondary/tertiary health services for Indigenous and non-Indigenous Australians, 2008–09

Area of expenditure	Primary expenditure ($ per person)		Ratio	Secondary/tertiary expenditure ($ per person)		Ratio
	Indigenous	Non-Indigenous		Indigenous	Non-Indigenous	
Total hospitals	364.6	168.0	2.17	3,135.2	1,428.8	2.19
Admitted patient services	—	—	—	2,770.6	1,260.8	2.20
Non-admitted patient services	364.6	168.0	2.17	364.6	168.0	2.17
Patient transport services	146.6	21.0	6.97	146.6	84.2	1.74
Medical services	327.9	516.5	0.63	160.8	406.6	0.40
Dental services	125.1	313.8	0.40	—	—	—
Other professional services	26.3	80.2	0.33	26.3	80.2	0.33
Community health services	1,509.8	218.0	6.93	—	—	—
Public health services	255.8	100.5	2.54	—	—	—
Medications	293.5	643.5	0.46	21.7	66.3	0.33
Aids and appliances	33.3	139.0	0.24	2.5	14.3	0.17
Total health[(a)]	**3,082.8**	**2,200.6**	**1.40**	**3,493.1**	**2,080.4**	**1.68**

(a) Excludes expenditure on research and health administration.

Source: AIHW health expenditure database.

6 Changes over time, 2001–02 to 2008–09

This chapter looks at how selected components of health expenditure for Aboriginal and Torres Strait Islander people have changed over time. To enable reliable comparison, expenditure for all years is presented in constant 2008–09 prices. Constant price expenditure adjusts for the effects of inflation by using either the annually re-weighted chain price indexes produced by the ABS or implicit price deflators derived by the ABS or AIHW. See section A1.3 of the Appendix for more information about the use of deflators.

Caution should be exercised when interpreting this data, given the change in method between reports in this series (see Box 6.1).

Box 6.1: Time series estimate comparisons

The definition of health expenditure changed in 2007 to exclude high-care residential aged care, which was instead classified as welfare expenditure.

For the purpose of comparison, high-care residential aged care expenditure has been omitted from all of the years' estimates in the tables and figures below. This allows for the comparison of health expenditure estimates over time, as well as providing estimates that relate more directly to those in *Health expenditure Australia 2008–09* (AIHW 2010a).

There was a change in the method for estimating MBS and PBS expenditure for the 2006–07 and 2008–09 reports in this series. The revised method involves the use of Medicare VII data to estimate expenditure on medical services, such as general practitioner, specialist services, pathologist services, imaging services, and prescription pharmaceuticals provided to Aboriginal and Torres Strait Islander people (see section A1.2 of the Appendix for more details).

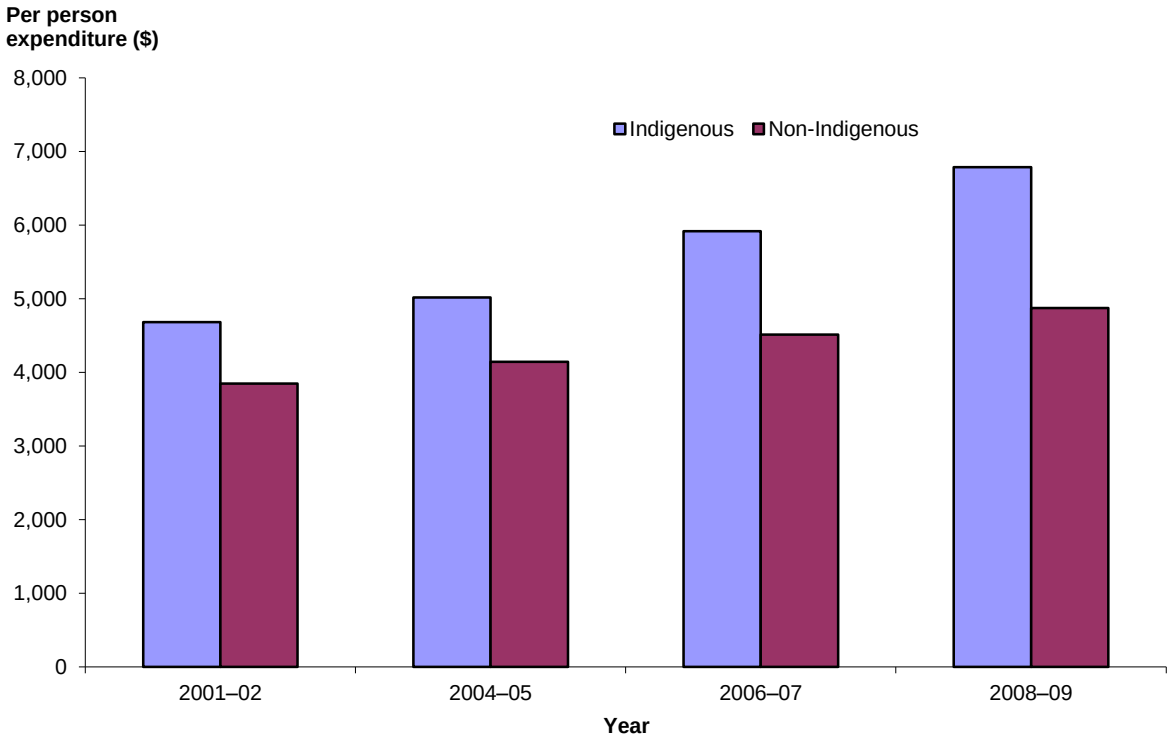
This change may have contributed to the increase in MBS and PBS expenditure estimates in 2006–07 and 2008–09 reports compared with those in the 2001–02 and 2004–05 reports.

Change 2001–02 to 2008–09

Figure 6.1 shows a general increase in total expenditure per person for Indigenous and non-Indigenous Australians from 2001–02 to 2008–09. The per person expenditure ratio between Indigenous and non-Indigenous Australians has generally been increasing over time. Expenditure per person was 39% as high for Indigenous Australians as non-Indigenous Australians in 2008–09, compared with: 22% in 2001–02; 21% in 2004–05; and 31% in 2006–07. This indicates that per person expenditure is rising at a faster rate for Indigenous Australians than for non-Indigenous Australians.

Government expenditure per person on health for Indigenous Australians has increased substantially over the 7 years, reaching $6,431 per person in 2008–09 (Table 6.1). Over this period, Indigenous health expenditure grew at an average annual rate of 5.6%. In comparison, the average annual growth rate in the Indigenous population is estimated at 2.2% (ABS 2009b).

Between 2001–02 and 2008–09, government health expenditure per person for Aboriginal and Torres Strait Islander people rose by 46.8% (Table 6.1). Of the total increase, state and territory governments' expenditure on admitted patient services contributed 51.2%.This increase amounted to $1,049 more per person in 2008–09 than in 2001–02. State and territory governments' expenditure per person grew by 41.4%between 2001–02 and 2008–09, and the Australian Government's expenditure by 64.8%.



(a) Constant price expenditure for 2001–02 to 2008–09 is expressed in 2008–09 prices. See section A1.3 of the Appendix for more details. High-care residential aged care expenditure has been subtracted from the estimates published in the 2001–02 and 2004–05 reports in the series.

Source: AIHW health expenditure database.

Figure 6.1: Health expenditure per person for Indigenous and non-Indigenous Australians, 2001–02 to 2008–09[(a)]

MBS and PBS benefits contributed a substantial component of the Australian Government growth in health expenditure per person for Aboriginal and Torres Strait Islander people, accounting for 60.2% of Australian government growth between 2001–02 and 2008–09 (Table 6.1). Some of the increase in Indigenous health expenditure per person may have been due to improvements in data collection rather than actual change (see Box 6.1 and Section A1.2 of the Appendix).

The increase in Indigenous health expenditure per person between 2001–02 and 2008–09 was partly due to greater growth in expenditure for Aboriginal and Torres Strait Islander people for certain types of services, particularly public hospital services. Public hospital services expenditure is the most significant area of health expenditure for Indigenous Australians.

Table 6.1: Government health expenditure per person for Aboriginal and Torres Strait Islander people, constant prices[(a)], 2001–02 to 2008–09[(b)(c)]

	$ per person				Change 2001–02 to 2008–09		Change 2006–07 to 2008–09	
	2001–02	2004–05	2006–07	2008–09	Growth 2001–02 to 2008–09 (per cent)	Average annual growth (per cent)	Growth 2006–07 to 2008–09 (per cent)	Average annual growth (per cent)
Australian Government	**1,015.4**	**1,285.1**	**1,434.5**	**1,673.3**	**64.8**	**7.4**	**16.6**	**8.0**
ACCHO grants	468.4	489.2	514.6	577.1	23.2	3.0	12.1	5.9
MBS and PBS	232.9	358.9	512.2	628.7	170.0	15.2	22.7	10.8
MBS	158.6	221.1	336.0	378.6	138.7	13.2	12.7	6.1
PBS	74.3	137.8	176.2	250.2	236.9	18.9	42.0	19.1
Other	314.1	436.9	407.7	467.5	48.8	5.8	14.7	7.1
State/territory governments	**3,364.9**	**3,339.8**	**4,087.2**	**4,757.9**	**41.4**	**5.1**	**16.4**	**7.9**
Admitted patient services in public hospitals	2,233.7	2,179.1	2,899.4	3,283.2	47.0	5.7	13.2	6.4
Community/public health	769.0	584.5	717.0	909.6	18.3	2.4	26.9	12.6
Other	362.2	576.2	470.8	565.1	56.0	6.6	20.0	9.6
Total governments	**4,380.3**	**4,624.9**	**5,521.6**	**6,431.2**	**46.8**	**5.6**	**16.5**	**7.9**

(a) Constant price health expenditure for 2001–02 to 2008–09 is expressed in terms of 2008–09 prices. Refer to the Appendix for further details.

(b) Indigenous population estimates used to estimate the expenditure figures are all derived from 2006-census base.

(c) Estimates for 2001–02 and 2004–05 exclude depreciation, but those for 2006–07 and 2008–09 include depreciation. 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.

Change 2006–07 to 2008–09

Between 2006–07 and 2008–09, per person government health expenditure on Aboriginal and Torres Strait Islander people increased by $910 (in constant dollars). This represented an annual growth rate of 7.9%, which is higher than the corresponding annual growth rate for the 5 years before 2006–07 (4.7%). Expenditure per person was higher in all health categories for 2008–09 compared with 2006–07 (Table 6.1).

State and territory government expenditure accounted for 73.7% of the increased Indigenous per person government expenditure between 2006–07 and 2008–09, with growth in public hospital service expenditure contributing 42.2%, and community health services and public health combined contributing 21.2%.

Australian Government expenditure growth accounted for 26.3% of the growth in government Indigenous expenditure between 2006–07 and 2008–09. MBS and PBS expenditure accounted for 12.8% of the total growth, and grants to ACCHOs to 6.9%. The growth in PBS expenditure for Aboriginal and Torres Strait Islander peoples was particularly marked, increasing by 42.0% over the 2 years from 2006–07 to 2008–09.

Appendix: Method

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, closely aligned with 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 with the main objective of improving or maintaining population health, or of reducing the effects of disease and injury among 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).

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

See 'Classification of areas of health expenditure' contained in this appendix and the Glossary for detailed descriptions of the health expenditure components.

Data collection process

A new data collection process was put in place for *Health expenditure Australia 2008–09* (AIHW 2010a). For the first time, detailed data was collected through the newly developed Government Health Expenditure National Minimum Data Set. The new data collection process involved jurisdictional data providers put expenditure items against different categories from those used for previous collections. While these statistics, particularly at the higher level, are consistent with previous years, there is a possibility that for some of the more itemised state expenditure estimates changes have been driven by these amendments to the data collection and analysis process rather than by actual increases or decreases in health expenditure.

See *Health expenditure Australia* (AIHW 2010a), Section 6.3, for more detailed information about state/territory data sources.

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 2008–09* (AIHW 2010a). The classifications and definitions are shown in Table A1.

Table A1: Major areas of health expenditure

Term	Definition
Public hospitals	Hospitals operated by, or on behalf of, state and territory governments, which provide various 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 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 done 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 various general hospital services. The term includes private freestanding day hospital facilities.
Patient transport	Public or registered non-profit organisations that 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 Medicare 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 as 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: • 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 • pharmaceuticals dispensed through private prescriptions that do not fulfil the criteria for payment of benefit under the PBS or RPBS • over-the-counter medicines, including pharmacy-only medicines, aspirin, cough and cold medicines, vitamins and minerals, herbal and other complementary medicines, and various medical non-durables, such as bandages, bandaids and condoms.
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'.

(continued)

Table A1 (continued): Major areas of health expenditure

Term	Definition
Community health (cont.)	Includes: • alcohol and other drug treatment • community mental health services • 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 formulating and administering government and non-government policy in health and in the setting and enforcement of standards for medical and paramedical personnel and for hospitals, clinics, and others. 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.

Public hospital and public hospital services expenditure

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

The AIHW has refined its data collection and expenditure reporting since 2003–04 to more clearly classify expenditures according to the type of services they support, rather than the institutions in which they are provided. From 2003–04, the AIHW has collected state and territory government expenditure data directly from the state and territory health authorities using a uniform data collection template. In particular, from 2003–04, the states and territories have been reporting expenditure for the following services separately under the respective categories (where they are provided by, or on behalf of, public hospitals, and they can be established):

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

Correspondingly most of the analysis in this publication looks at expenditure on 'hospital services' rather than expenditure on hospitals. Expenditures on dental, community health, public health, health research and patient transport services that hospitals provide are now reported as expenditures on those particular services.

Public hospital expenditure estimates are sourced from the AIHW public hospitals establishments collection data, and include services provided in public hospitals that are not usually thought of as hospital services (such as community health, public health, dental, patient transport and health research).

Public hospital services expenditure, on the other hand, is based on data directly provided by the states and territories, and is the balance of public hospital expenditure remaining after the service categories mentioned above have been removed and reallocated to their own expenditure.

A1.2 Data and methods used to provide estimates for Aboriginal and Torres Strait Islander people

The basic source of overall health expenditure data used in this report for Australian health expenditure comes from the AIHW report *Health expenditure Australia 2008–09* (AIHW 2010a). Please refer to this publication for the methods used to derive total health expenditure estimates.

The task of this report was to allocate this expenditure between Indigenous and non-Indigenous Australians.

The methods used for each expenditure category are outlined below.

Hospital expenditure

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.

In this report, admitted and non-admitted patient expenditure was calculated from data in the AIHW Hospital Morbidity Costing Model. This model applies Australian-Refined Diagnosis Related Group weights and length of stay adjustment to both Indigenous and non-Indigenous cases for each hospital. So this model takes into account differences not only in casemix, but also in hospital operating costs across the regions. It also adjusts for under-identification in hospital admissions in each state and territory except Tasmania.

As in the 1998–99, 2001–02, 2004–05 and 2006–07 reports on *Expenditure on health for Aboriginal and Torres Strait Islander people*, a loading of 5% was added to the Aboriginal and Torres Strait Islander patient costs to take into account known differences in comorbidity for similar Diagnosis Related Groups in Aboriginal and Torres Strait Islander patients (AIHW 2001; AIHW 2005b; AIHW 2008a; AIHW 2009a).

Non-admitted patients

Non-admitted patient expenditure was derived from both state and territory estimates and the AIHW's health expenditure database. Estimates of the Aboriginal and Torres Strait Islander proportion of total non-admitted patient expenditure were derived either from data provided by the state and territory authorities in light of all the information available to them, or from the Hospital Morbidity Costing Model. These proportions were applied to total estimates of non-admitted patient expenditure for each jurisdiction from AIHW's health expenditure database.

Patient transport

A variety of indicators were used to estimate the Indigenous proportion of patient transport expenditure. The percentage of Indigenous patients using the Royal Flying Doctor's Service was one such indicator, as was the Indigenous proportion of non-admitted patients.

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 state or territory governments. Those contributions are reported as state and territory expenditure.

As an earlier study has found, many ACCHOs are community centres as well, carrying out a social role (Keys Young 2006). The activity reports of the organisations also show that about 13% of all client contacts were for non-Indigenous Australians; that proportion of expenditure was deducted from the total expenditure to derive the Aboriginal and Torres Strait Islander estimates (AIHW 2010c).

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.

Public health services

The estimates presented here were based on information from the jurisdictions and the best indicators of Aboriginal and Torres Strait Islander use. The breast cancer and cervical cancer screening proportions were derived from two AIHW reports—*Cervical screening in Australia 2007-08* (AIHW 2010e) and *Breast cancer in Australia: An overview 2009* (AIHW 2009c).

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 Pharmaceutical Benefits Scheme

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

As the VII coverage has improved, it has allowed for a change in method for allocating MBS and PBS costs from the 2006-07 report in this series and onwards. The method involves the use of the VII data to estimate expenditure on medical services, such as general practitioner, 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 estimates in the 2008–09 and 2006–07 reports to the 2004–05 estimates and those in earlier reports.

Section A1.6 of this appendix describes in detail the method used to calculate the Indigenous proportion of MBS and PBS expenditure.

Dental, health research, health administration and other

The Indigenous proportions of the remaining categories of health expenditure were derived using various indicators from secondary sources and/or state-based data. These indicators included, but were not limited to, the overall MBS/PBS proportion, the private hospital public patient proportion and the population proportion.

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, for example, 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 that enables valid comparisons between reporting periods.

Various general price indexes or price indexes specific to health can be used to deflate current price aggregates into constant price terms. These include chain price indexes, implicit price deflators and fixed-weight indexes such as the consumer price index or its components. For this report, only chain price indexes and implicit price deflators have been used.

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.

Other constant price aggregates in this report have been derived using implicit price deflators, when a directly constructed chain index was not available. An implicit price deflator is an index obtained by dividing a current price value by its corresponding chain volume estimate. So these deflators 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 implicit price deflator for gross domestic product 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 consumer price index 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 consumer price index measures movements in the prices faced by households only. The overall consumer price index and its components do not, for example, include government subsidies, benefit payments and non-marketed services provided by governments.

A1.4 Aboriginal and Torres Strait Islander population

Population projections of Aboriginal and Torres Strait Islander people used in this report are derived by the AIHW from the ABS 2008 and 2009 *Series B—Experimental estimates and projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021* (ABS 2009b). Projections of the Indigenous population by state/territory and remoteness area for December 2008 were calculated by applying proportions from the 2006 ABS experimental estimates (ABS 2008) to the total projected state/territory Series B population for 2008–09. This method was based on the assumptions that the distribution of Indigenous Australians by state/territory and by remoteness area has remained unchanged since 2006–07, and that population growth by remoteness categories will broadly follow ABS Series B remoteness growth rates.

A1.5 Allocation of primary and secondary/tertiary expenditure for Aboriginal and Torres Strait Islander people

Primary care can be defined as those services that are provided to whole populations (public health and community health services), and those that arise from, or are the result of, a health service contact initiated by a patient—mainly general practitioner services and the investigations and prescribed drugs which general practitioners order. Secondary/tertiary services can be defined as those generated within the health-care system by referral. They include specialist consultations, specialist procedures and the diagnostic investigations and prescribed drugs that specialists order, plus all in-patient treatment in hospitals. Due to the quality of Aboriginal and Torres Strait Islander data used in this report, and the need to provide estimates that are comparable with those in previous reports, the allocations made were as follows:

- **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 general practitioners services for which benefits were paid under Medicare to Aboriginal and Torres Strait Islander people, and the diagnostic services general practitioners ordered
  - pharmaceuticals prescribed by general practitioners for which PBS benefits were paid
  - pharmaceuticals provided through Section 100 arrangements in remote areas
  - a proportion of aids and appliances, split along the same lines as PBS expenditure on pharmaceuticals.

  The costs of patient transport services for Indigenous and non-Indigenous Australians have been estimated using the following methods:
  - For Indigenous Australians, 50% of their total patient transport services were allocated to primary care.
  - For non-Indigenous Australians, 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 Australians.

  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.

  Overhead costs in administration and research could not be separated into primary and secondary expenditure in these tables.

A1.6 Medicare's 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 VII program. The VII program enables information to be collated for that 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). Finding Aboriginal and Torres Strait Islander people through the VII provides a vital evidence base to feed into program development and delivery, with the aim of improving the health status of Aboriginal and Torres Strait Islander people.

As at June 2009, about 244,100 (45%) 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 identified as Indigenous in 2009 varied from 54% in Queensland to 31% in the Australian Capital Territory.
- The levels of VII registration also varied by age.
- There was also variation by the remoteness of patient residence. About 50% of the Aboriginal and Torres Strait Islander population in *Remote/ Very remote* areas identified as Indigenous compared with 38% in *Major cities*.

Use of VII data in the 2008–09 report

The 2008–09 edition, as with the 2006–07 edition, of *Expenditure on health for Aboriginal and Torres Strait Islander people* primarily uses VII data to estimate medical and pharmaceutical expenditure. Analysis of the VII data set 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 use 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 (such as general practitioners and specialists) and PBS pharmaceuticals provided to all Aboriginal and Torres Strait Islander people.

While this change in method provides more precise estimates of MBS and PBS expenditure than was possible before the 2006–07 report, there remains a level of uncertainty about these estimates of MBS and PBS expenditure by Aboriginal and Torres Strait Islander people, because of: the variations in the number of people registered on the VII across Australia by age and remoteness; and uncertainty as to exactly how representative the VII group is of the total Aboriginal and Torres Strait Islander population across all communities for all types of MBS and PBS use. So readers should exercise some caution in interpreting these estimates.

Method of estimating benefits paid and fees paid for services

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

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 are calculated using the formula:

Factor = 100 / percentage of VII enrolees 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.

Glossary

Aboriginal or Torres Strait Islander

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.

Admitted patient

A patient who undergoes a hospital's formal admission process.

Allied health professionals

Defined as professionals working in audiology, dietetics and nutrition, hospital pharmacy, occupational therapy, orthoptics, orthotics and prosthetics, physiotherapy, podiatry, psychology, radiography, speech pathology and social work.

Australian Government expenditure

Total expenditure actually incurred by the Australian Government on its own health programs. It excludes funding provided to states/territories through grants (Specific Purpose Payments), as well as rebates paid for 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 rebate on private health insurance premiums.

Capital consumption

The amount of fixed capital used up each year, otherwise known as depreciation.

Capital expenditure

Expenditure on large-scale fixed assets (for example, new buildings and equipment with a useful life extending over a number of years).

Constant prices

Dollar amounts for different years that are adjusted to reflect the prices in a chosen reference year. This provides a way of comparing expenditure over time on an equal value-for-value basis without the distorting effects of inflation. The comparison will reflect only the changes in the amount of goods and services purchased—changes in the 'buying power'—not the changes in prices of these goods and services caused by inflation.

Health expenditure

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

Indigenous

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.

Non-admitted patient

A patient who receives care from a recognised non-admitted patient service/clinic of a hospital, including emergency departments and outpatient clinics.

Non-Indigenous Australians

Australians who have declared they are not of Aboriginal or Torres Strait Islander descent.

Private patient (in hospital)

Person admitted to a private hospital, or person admitted to a public hospital who decides to choose the doctor(s) who will treat them or to have private ward accommodation. This means they will be charged for medical services and accommodation.

Recurrent expenditure

Expenditure incurred by organisations on a recurring basis to provide health services, excluding capital expenditure.

Section 100 medicines

Medicines provided under Section 100 of the *National Health Act of 1953*. These arrangements allow patients who attend an approved remote area Aboriginal or Torres Strait Islander Health Service to receive medicines without charge and without the need for a prescription. Section 100 medicines are an important source of medicines for Australians living in remote areas, especially Indigenous Australians.

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.

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List of tables

List of figures