3.13 Access to prescription medicines

This measure has two components:

- Pharmaceutical Benefits Scheme expenditure per capita for Indigenous Australians
- Not filling prescriptions because of cost.

Data sources

Data for this measure come from AIHW health expenditure data and the AIHW Pharmacists Labour Force Survey

Health expenditure data

The AIHW reports biennially on expenditure on health for Aboriginal and Torres Strait Islander people. The latest report in the series, *Expenditure on health for Aboriginal and Torres Strait Islander people 2006–07 (AIHW 2009)*, was released in 2009.

There are a number of difficulties in reporting on Indigenous health expenditure, including limitations in the scope and definition of health expenditure, as well as inconsistencies in reporting expenditure on health goods and services across data providers. Under-identification (where Indigenous people are not identified as such) and under-coverage (where the sample does not reflect the true population structure) of Indigenous Australians in health data collections (such as hospital separations) are further issues that affect data quality. Although under-identification adjustments are made to the data, the adjusted estimates may be an overestimate or underestimate of actual health service use and expenditure by Indigenous people. The allocation of expenditure to Indigenous people either on an overall population or per capita basis should also be treated with caution, as Indigenous population estimates have similar issues of under-coverage and under-identification (AIHW 2009).

AIHW Pharmacists Labour Force Survey

The AIHW runs a number of surveys of the health labour force including the Pharmacy Labour Force Survey. The AIHW is the data custodian of this collection. The survey is of registered pharmacists and is drawn from the registration files maintained by each state and territory pharmacy registration board. Each pharmacy board conducts an annual renewal of registration and, in some years, questionnaires are sent to pharmacists on renewal of their registration. In 2003, the survey was conducted in all jurisdictions except the Northern Territory. The response rate to the survey was 76.3%

There is currently no data source for statistics on not filling prescriptions because of cost for Indigenous Australians. This will be recommended for inclusion in the next NATSIHS.

Analyses

Pharmaceuticals expenditure

- Expenditure on medications provided by the Australian Government for Aboriginal and Torres Strait Islander people in 2006–07 was estimated at \$93.6 million, which represented 1.4% of total expenditure on pharmaceuticals in Australia by the Australian Government (Table 3.13.1). Non-government expenditure on pharmaceuticals for Indigenous people was estimated at \$35.8 million, which represented 0.6% of total expenditure on pharmaceuticals by non-government organisations.
- The majority of expenditure on these pharmaceuticals was for benefit-paid pharmaceuticals (\$87.9 million of Australian Government expenditure and \$4.7 million of non-government expenditure).
- Per capita expenditure on pharmaceuticals by the Australian Government for 2006–07 was estimated at \$179 for Indigenous people and \$316 for non-Indigenous people a ratio of 0.57:1. Per capita non-government expenditure on pharmaceuticals was estimated at \$69 for Indigenous people and \$298 for non-Indigenous people a ratio of 0.23:1.

Table 3.13.1: Total and per person expenditure (current prices) on pharmaceuticals by the Australian Government and non-government organisations, by Indigenous status, 2006–07

	Total expenditure (\$ million)			Expenditure per person (\$)		
	Indigenous	Non- Indigenous	Indigenous share (%)	Indigenous	Non- Indigenous	Ratio
Australian Government						
Benefit-paid pharmaceuticals ^(a)	87.9	5,868.7	1.5	168.2	288.2	0.58
Other pharmaceuticals	5.6	555.2	1.0	10.8	27.3	0.40
Total pharmaceuticals	93.6	6,423.9	1.4	179.0	315.5	0.57
Non-government						
Benefit-paid pharmaceuticals ^(a)	4.7	1,272.2	0.4	8.9	62.5	0.14
Other pharmaceuticals	31.1	4,784.8	0.6	59.6	235.0	0.25
Total pharmaceuticals	35.8	6,057.0	0.6	68.5	297.5	0.23
Total						
Benefit-paid pharmaceuticals ^(a)	92.6	7,140.9	1.3	177.2	350.7	0.51
Other pharmaceuticals	36.8	5,340.1	0.7	70.4	262.3	0.27
Total pharmaceuticals	129.4	12,481.0	1.0	247.5	613.0	0.40

⁽a) Includes the repatriation pharmaceutical benefits scheme as well as the PBS.

Source: AIHW 2009.

PBS expenditure

- In 2006–07, benefits to Indigenous Australians through the Pharmaceutical Benefits Scheme were estimated at \$92 million. Pharmaceutical benefits expenditures per person for Indigenous Australians were 60% of the non-Indigenous average (Table 3.13.2). The average per person share of expenditure on mainstream pharmaceutical benefits was also lower, at 45%.
- In 1999, special provisions were introduced under Section 100 of the *National Health Act* 1953 for Indigenous Australians in remote areas where access to private pharmacies was poor. Clients of approved remote area Aboriginal Health Services (AHS) were able to receive PBS medicines directly from the AHS at the time of medical consultation without the need for a normal prescription form, and without charge. Estimated expenditure on Indigenous Australians in 2006–07 on drugs dispensed under this Act was \$23 million. The estimated ratio of Indigenous to non-Indigenous expenditure per person under the scheme was 258:1.

Table 3.13.2: Total and per person expenditures through the Pharmaceutical Benefits Scheme, by Indigenous status, 2006–07^(a)

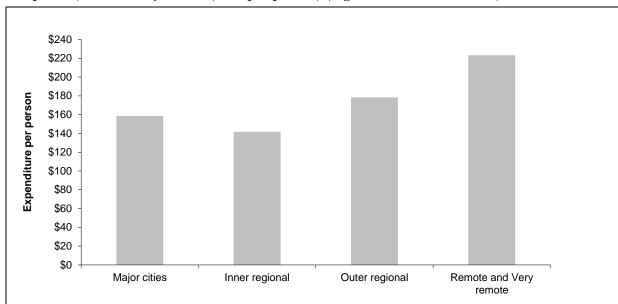
	Total expenditure (\$ million)			Expenditure per person (\$)		
Pharmaceutical benefits	Indigenous	Non- Indigenous	Indigenous share (%)	Indigenous	Non- Indigenous	Ratio
Mainstream PBS	63.0	5,414.0	1.2	120.6	265.9	0.45
Section 100 ^(b)	23.0	3.5	86.9	43.9	0.2	258.1
Other PBS special supply	5.6	492.1	1.1	10.7	24.2	0.44
Total PBS benefits ^{(b)(c)}	91.5	5,909.5	1.5	175.2	290.2	0.60

⁽a) Includes only DoHA expenditure.

Source: AIHW 2009.

PBS expenditure by remoteness

• In 2006–07, PBS pharmaceutical expenditures on Indigenous people were greater in *Remote* and *Very remote* areas, where the Section 100 arrangements apply, (\$223 per person) than in *Major cities* (\$159 per person) (Figure 3.13.1; Table 3.13.3).



Note: PBS expenditure includes expenditure on Section 100 pharmaceuticals (\$19.4 million in 2006–07). Almost all of this expenditure occurs in Remote and Very remote areas.

Source: AIHW 20010. Expenditure on health for Aboriginal and Torres Strait Islander people 2008–09: An analysis by remoteness and disease. Cat. no. HWE 49. Canberra: AIHW.

Figure 3.13.1: Estimated average health expenditures per person on pharmaceutical benefits, for Aboriginal and Torres Strait Islander people, by remoteness, 2006–07

⁽b) Excludes RPBS.

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

Table 3.13.3: Estimated average health expenditures per person on pharmaceutical benefits, for Aboriginal and Torres Strait Islander people, by remoteness, 2006–07

	Expenditure per person (\$)				
	Major cities	Inner regional	Outer regional	Remote and Very remote	All regions
Indigenous	158.6	141.8	178.3	223.2	175.2
Non-Indigenous	285.1	319.3	284.2	200.1	290.2

Note:

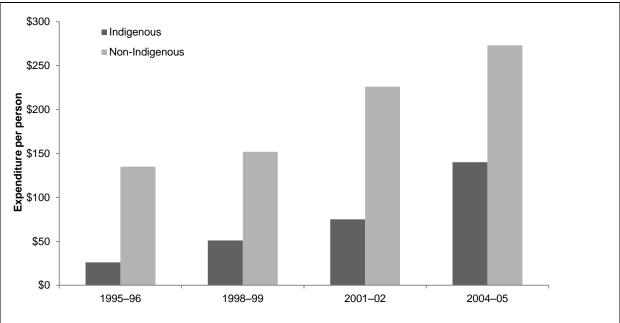
- PBS expenditure includes expenditure on Section 100 pharmaceuticals and other PBS special supply. Almost all of this expenditure occurs in Remote and Very Remote areas.
- Excludes RPBS, methadone, co-payments and highly specialised drugs dispensed from public and private hospitals.

Source: AIHW 2010.

PBS expenditure over time

Changes in expenditure over time should be interpreted with caution because of differences in methodology used to calculate some Indigenous expenditure estimates for different time periods. The following estimates are presented in constant 2004–05 dollars.

- The estimates of average expenditure per person for the Indigenous population by the Australian Government on the PBS between 1995–96 and 1998–99 almost doubled from an estimated \$26 in 1995–96 to \$51 in 1998–99.
- Expenditure increased by another 48% between 1998–99 and 2001–02 (from \$51 to \$75) and by another 86% between 2001–02 and 2004–05 (from \$75 to \$140).
- The Indigenous to non-Indigenous expenditure ratios were higher in 2004–05 than in 1995–96 (0.51 compared with 0.19) (Figure 3.13.2; Table 3.13.4).



Notes

- Does not include RPBS benefits for veterans.
- The 1995–96 estimate for Indigenous Australians is based on the revised price estimate of \$9.3 million for PBS benefits for Indigenous Australians in 1995–96 (AIHW 2001: 42), down from \$9.8 million (Deeble et al. 1998:21). That revision reduced the current price per person estimate from \$26.64 to \$25.28.
- There were substantial changes in estimating methods between the first (1995–96) and second (1998–99) Aboriginal and Torres
 Strait Islander health expenditure reports.

Source: AIHW 2008.

Figure 3.13.2: Average PBS health expenditure (constant prices) per person by the Australian Government, 1995–96, 1998–99, 2001–02 and 2004–05

Table 3.13.4: Average PBS health expenditure (constant prices) per person by the Australian Government, 1995–96, 1998–99, 2001–02 and 2004–05

	Indigenous	Non-Indigenous	Ratio
1995–96	26	135	0.19
		Break in time series	
1998–99	51	152	0.33
2001–02	75	226	0.33
2004–05	140	273	0.51

Notes

- 1. Does not include RPBS benefits for veterans.
- The 1995–96 estimate for Indigenous Australians is based on the revised price estimate of \$9.3 million for PBS benefits for Indigenous Australians in 1995–96 (AIHW 2001), down from \$9.8 million (Deeble et al. 1998). That revision reduced the current price per person estimate from \$26.64 to \$25.28.
- There were substantial changes in estimating methods between the first (1995–96) and second (1998–99) Aboriginal and Torres Strait Islander health expenditure reports.

Source: AIHW 2008.

Pharmacy labour force

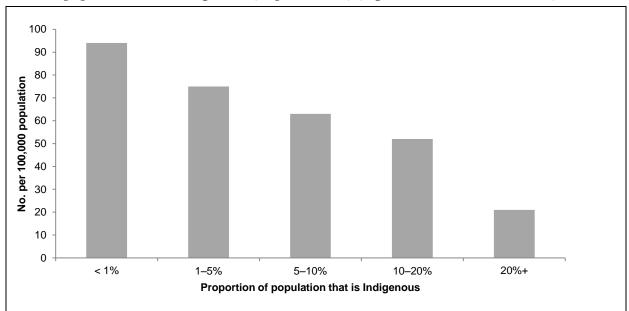
Information on pharmacists in Australia is available from the AIHW Pharmacy Labour Force Survey. The population for the survey is registered pharmacists and is drawn from the registration files maintained by each state and territory pharmacy registration board. Each pharmacy board conducts an annual renewal of registration and, in some years,

questionnaires are sent to pharmacists on renewal of their registration. In 2003, the survey was conducted in all jurisdictions except the Northern Territory. It covered all pharmacists registered with the pharmacy board in each state and territory, but may have excluded pharmacists who registered for the first time in the survey year (AIHW 2003).

Response to the Pharmacy Labour Force Survey in 2003 represented 71.5% of pharmacist registrations in all participating jurisdictions. The overall response rate is an approximation because some pharmacists were registered in more than one state or territory. The AIHW uses data collected in the Pharmacy Labour Force Survey to derive estimates of the total pharmacy labour force. Survey responses are weighted to account for non-response.

Data presented below shows the FTE rate of employed pharmacists per 100,000 population by areas of low through to high proportions of Indigenous populations. Using population data from the 2001 Census, Statistical Local Areas (SLAs) were grouped according to the proportion of the population living in these areas that was Indigenous.

- In 2003, there were 15,673 employed pharmacists in Australia. The FTE rate of employed pharmacists was around 86 per 100,000.
- The FTE rate of employed pharmacists was highest in areas where less than 1% of the population was Indigenous (94 per 100,000) and lowest in areas where 20% or more of the population were Indigenous (21 per 100,000) (Figure 3.13.3 and Table 3.13.5).



Notes

- In 2003, 808 employed pharmacists did not report the postcode they worked in. Hence the number of employed pharmacists stated by region is an underestimate.
- 2. Data do not include Northern Territory.
- 3. FTE is based on 35 hours per week.
- Data from Victoria are based on 2004 survey data weighted to 2005 registration data.

Source: AIHW analysis of 2003 Pharmacy Labour Force Survey data.

Figure 3.13.3: FTE employed pharmacists per 100,000 population, by areas of low through to high proportions of Indigenous population, 2003

Table 3.13.5: FTE employed pharmacists per 100,000 population, by areas of low through to high proportions of Indigenous population, 2003

Indigenous SLA group	FTE per 100,000 population
< 1%	94
1–5%	75
5–10%	63
10–20%	52
20%+	21

Notes

- In 2003, 808 employed pharmacists did not report the postcode they worked in. Hence the number of employed pharmacists stated by region is an underestimate.
- 2. Data do not include Northern Territory.
- 3. FTE is based on 35 hours per week.
- 4. Data from Victoria are based on 2004 survey data weighted to 2005 registration data.

Source: AIHW analysis of 2003 Pharmacy Labour Force Survey data.

Data quality issues

Health Expenditure Data

Health expenditure data is affected by most of the reservations about data relating to Aboriginal and Torres Strait Islander people. The issue of poor Indigenous identification means that the attribution of expenditure to Indigenous people either on a population or per capita basis must be treated with caution. This single factor is arguably the most important data quality issue, affecting as it does nearly all health and population based measures. Reliable Indigenous status data is a major requirement to produce reliable, consistent and valid information on most aspects of Indigenous health. The "completeness of identification of Indigenous Australians varies significantly across states and territories" and in administrative health data collections (SCRGSP 2006).

For many publicly funded health services, there is incomplete information available about service users and, in particular, about their Indigenous status. For privately funded services, this information is frequently unavailable. For those services that do collect this information, recording Indigenous status accurately for all people does not always occur. The result is that there is some margin of error in the estimations of health expenditure for Indigenous people and their corresponding service use.

Expenditure estimates

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

In some areas of expenditure, surveys have been used to estimate service use by Indigenous people, which, in turn, have been used in the estimates of expenditure. Consequently, the reliability of the expenditure estimates is affected by sampling error.

Furthermore, although every effort has been made to ensure consistent reporting and categorisation of expenditure on health goods and services, in some cases there may be inconsistencies across data providers. These may result from limitations of financial reporting systems, and/or different reporting mechanisms (AIHW 2009).

Under-identification

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

Comparison with estimates for 2004-05

The definition of health expenditure changed in 2007, when high care residential aged care services were reclassified as welfare services. Prior to this point, residential aged care expenditure was divided with high care residential aged care expenditure being classified as health and low care residential aged care expenditure classified as welfare services.

This indicator provides separate estimates of expenditure for health, and for health and high care residential aged care services. This allows comparison with estimates with health and high care residential aged care expenditure in the 2004–05 report as well as presentation of estimates that relate more directly to estimates in the AIHW's Health expenditure Australia 2007–08 (AIHW 2009). There has also been a change in the method for estimating MBS and PBS expenditure. For the first time in 2006–07, Medicare Voluntary Indigenous

Identifier (VII) data was used to estimate expenditure on Indigenous people for Medicare services. Services include general practitioner (GP), specialist, pathologist and imaging services, and prescription pharmaceuticals provided to Aboriginal and Torres Strait Islander people (see Appendix B for more details). Prior to this, data from the Bettering the Evaluation and Care of Health (BEACH) survey data were used in these estimates. This change may have contributed to the increase in estimated MBS and PBS expenditure reported in 2006–07 compared with 2004–05.

List of symbols used in tables

- n.a. not available
- rounded to zero (including null cells)
- 0 zero
- .. not applicable
- n.e.c. not elsewhere classified
- n.f.d. not further defined
- n.p. not available for publication but included in totals where applicable, unless otherwise indicated

References

AIHW (Australian Institute of Health and Welfare) 2001. Expenditures on health services for Aboriginal and Torres Strait Islander peoples, 1998–99. Cat. no. IHW 7. Canberra: AIHW.

AIHW 2003. Pharmacy labour force to 2001. National Health Labour Force Series no.25. Cat.no. HWL 25. Canberra: AIHW.

AIHW 2008. Expenditures on health for Aboriginal and Torres Strait Islander people 2004–05. Health and welfare expenditure series no. 32. Cat. no. HWE 40. Canberra: AIHW.

AIHW 2009. Expenditure on health for Aboriginal and Torres Strait Islander people 2006–07. Health and welfare expenditure series no. 39. Cat. no. HWE 48. Canberra: AIHW.

AIHW 2010. Expenditure on health for Aboriginal and Torres Strait Islander people 2006–07: an analysis by remoteness and disease. Health and welfare expenditure series no. 40. Cat. no. HWE 49. Canberra: AIHW.

Deeble J, Mathers C, Smith L, Goss J, Webb R and Smith V 1998. Expenditures on health services for Aboriginal and Torres Strait Islander peoples. AIHW cat. no. HWE 6. Canberra: AIHW, Department of Health and Family Services and National Centre for Epidemiology and Population Health.

SCRGSP (Steering Committee for the Review of Government Service Provision) 2009. Overcoming Indigenous Disadvantage: Key Indicators 2009. Canberra: Productivity Commission.

List of tables

Table 3.13.1:	Total and per person expenditure (current prices) on pharmaceuticals by the Australian Government and non-government organisations, by Indigenous status, 2006–07	2001
Table 3.13.2:	Total and per person expenditures through the Pharmaceutical Benefits Scheme, by Indigenous status, 2006–07	2002
Table 3.13.3:	Estimated average health expenditures per person on pharmaceutical benefits, for Aboriginal and Torres Strait Islander people, by remoteness, 2006–07	2003
Table 3.13.4:	Average PBS health expenditure (constant prices) per person by the Australian Government, 1995–96, 1998–99, 2001–02 and 2004–05	2004
Table 3.13.5:	FTE employed pharmacists per 100,000 population, by areas of low through to high proportions of Indigenous population, 2003	2006
List of fig	jures	
Figure 3.13.1:	Estimated average health expenditures per person on pharmaceutical benefits, for Aboriginal and Torres Strait Islander people, by remoteness, 2006–07	2002
Figure 3.13.2:	Average PBS health expenditure (constant prices) per person by the Australian Government, 1995–96, 1998–99, 2001–02 and 2004–05	2004
Figure 3.13.3:	FTE employed pharmacists per 100,000 population, by areas of low through to high proportions of Indigenous population, 2003	2005