

# **Assessing the health service use of Aboriginal and Torres Strait Islander peoples**

Professor John Deeble

## **Background**

In its Interim Report of December 2008, the National Health and Hospitals Reform Commission (NHHRC) made a number of recommendations about the health of Aboriginal and Torres Strait Islander peoples. It pointed to their high level of morbidity and the 17 year gap in life expectancy between Indigenous and non-Indigenous Australians. It noted that although health service expenditures per person for Aboriginal people were about 17 per cent higher than for other Australians, that level was still inequitable because of the higher burden of illness from which they suffered. However, published assessments of what 'should' be spent have varied considerably.

Amongst other things, the NHHRC recommended 'an investment strategy for Aboriginal and Torres Strait Islander Australians that is proportionate to health need ...', with particular reference to primary care. The Aboriginal Community Controlled Health Organisations (ACCHOs) would continue to be supported and measures put in place to strengthen them. However, access to mainstream services should also be improved. To that end, it recommended the establishment of a National Torres Strait Islander Health Authority which would act as a purchaser of health services for Indigenous people in a way similar to the Department of Veterans Affairs programs for the veteran community. It would contract with hospitals, doctors and allied health providers, including the ACCHOs. People who voluntarily identified themselves as Indigenous would be entitled to all of the Authority's services. People who did not so identify would still be entitled to services provided by the ACCHOs, to their present Medicare and Pharmaceutical Benefit Scheme coverage, and to the same public hospital care to which all Australians are eligible. However, they would not receive any additional services for which the proposed authority might contract.

That would be a significant expansion of the Commonwealth Government's role, which is now largely confined to supporting the ACCHOs. Its underlying premise is that Indigenous people cannot, or do not, access health services at a level which fully reflects their health care needs and of a kind which would be of most benefit to them. It is therefore important to know what the present pattern of use may be and what that may mean for future policy.

This paper addresses some of the issues in primary care. Its terms of reference were to:

- (a) examine the current use of primary health services by Aboriginal and Torres Strait Islander peoples, particularly the use of medical services which are supported by Medicare and the ACCHOs; and
- (b) the implications for the types of service for which a National Aboriginal Health Authority might contract.

That is an apparently straightforward task. However, it is impossible to present the results without some background on what is known about Indigenous health care use and the context in which the information has been interpreted.

## **Indicators of Indigenous health care use**

There are no consolidated data of Aboriginal and Torres Strait Islander health service use *per se*. They appear in a variety of forms and in a number of collections which have often been made for other purposes and in reports and articles that address specific but limited aspects. The most comprehensive are in the periodic reports by the Australian Institute of Health and Welfare (AIHW) on Aboriginal Health and Welfare and on Expenditures on Health for Aboriginal and Torres Strait Islander people. The first compiles data from a variety of ABS sources, AIHW collections and published articles on different topics. The second uses all those sources plus data from Commonwealth and State/Territory government programs to estimate Indigenous and non-Indigenous expenditures on health.

The expenditure estimates are most often used as a guide and the NHHRC Interim Report included a summary table from the AIHW's publication for 2004-05. It shows a quite different pattern to that for the non-Indigenous population as a whole. Compared with other Australians, Indigenous people are generally characterised as:

- High users of public hospital services, both in-patient and out-patient, patient transport and public health;
- Low users of medical, pharmaceutical and dental services; and
- Very high users of community health services.

All of these statements are broadly true and they are by now quite well known. However, they need interpretation because the data have a special structure. For comparison and validity, the Indigenous Health Expenditure Accounts are based on the National Health Expenditure accounts. The latter serve several purposes. One is to link expenditures with funding flows. They therefore use classifications which reflect institutional, administrative and political arrangements as well the types of service provided, and that can colour their content. The medical services figure, for example, includes only the cost of private doctor services (which is primarily a Commonwealth government concern). It excludes all publicly provided care and, in particular, the medical care for public patients in public hospitals, both in-patient and out-patient. Those costs are subsumed in the hospital figure, which is mainly a State and Territory responsibility.

The overall consumption of medical services is therefore understated, especially for Indigenous people who are admitted to hospital at over one and a half times the rate of non-Indigenous Australians, almost entirely as public patients. Their use of hospital outpatient services is even higher. The same factors apply to prescription drugs. And similar reporting differences complicate the recording of community health service spending, where the direct identification of Indigenous patients is often poor and services are classified by program and purpose rather than professional content. There the error is more likely to be in over-statement.

In both cases, though, at least some of the differences in recorded expenditures (and implied use) reflect no more than the different sources from which Indigenous and non-Indigenous people get their services and how those providers are funded. More direct measures of use are needed.

Secondly, the overall impression needs a context. Although the pattern of Aboriginal and Torres Strait Islander expenditures clearly differs from the national average, it is very similar to that for other Australians in the same socio-economic position. The AIHW report on Indigenous Health Expenditures in 2004-05 showed that the average income per person of Indigenous people was in the lowest 20-30 per cent of all Australian incomes. For obvious reasons, and in every country, poorer people rely much more on publicly provided services than their better-off counterparts, and are much more likely to present to hospitals, even for primary health care. Per person, government health funding for Aboriginal and Torres Strait Islander people in 2004-05 was 56 per cent higher than for the non-Indigenous population, compared to an overall expenditure difference of only 17 per cent. Indigenous people simply spent much less of their own money on private services. But they were not unique. Public expenditures per Aboriginal person were almost the same as those for all Australians in the same income group (AIHW, 2007, pp.4-5, 21-22). That is a useful and important finding because concepts of equity are often linked to socio-economic status. But again, more direct measures of use are needed. It would be very surprising if both the mix of services and the costs per unit of service were the same.

With those qualifications in mind, the analysis which follows concentrates on the Aboriginal and Torres Strait Islander peoples' use of primary medical care through GP services. That is the source of almost all primary care (only a very small proportion is delivered through hospital emergency departments and other public providers) and one which is unaffected by the different patterns of specialist and hospital use by Indigenous and non-Indigenous people. It is also the sector over which, directly or indirectly, most of the debate over the Indigenous peoples' access to health services occurs.

The paper is in three parts. The first two present some data on what the present use of primary medical services may be. Part 3 discusses the implications for policy.

## Current use

### Basic data and sources of information

Table 1 shows the estimated Aboriginal and Torres Strait Islander population in 2008, by State and Territory and by the ARIA categories of remoteness. At about 520,000 people, it was 2.5 per cent of the Australian population. It was significantly younger than the non-Indigenous one (see Appendix Table 1). Thirty five per cent were under 15 years of age (just under 20 per cent for non-Indigenous people) and less than three per cent were aged 65 years and over, compared with 13 per cent of other Australians. Aboriginal people were much more likely to live outside the major cities. The proportion of them living in remote and very remote areas was eight times the non-Indigenous figure (24 per cent compared with only three per cent) and the proportion living in regional areas was nearly 50 per cent higher (44 per cent compared with 29 per cent). Service availability generally decreases with remoteness. However, 32 per cent of Aboriginal people still lived in the major cities where physical access at least should not be quite as crucial a factor.

**Table 1: Estimated Aboriginal and Torres Strait Islander population, 2007-08, by State/Territory and region of residence**

By States and Territories									
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total
No.	153,571	33,711	145,725	28,228	71,378	18,522	64,376	4,307	519,818
%	29.5	6.5	28.0	5.4	13.7	3.6	12.4	0.8	100.0
By ARIA region									
	Major cities		Inner regional		Outer regional		Remote		Very remote
No.	166,624		111,206		113,900		48,163		79,935
%	32.1		21.4		21.9		9.3		15.4

Medicare is the major source of information about the service use of Aboriginal and Torres Strait Islander people in settings other than the public hospital setting. Its administration records almost every medical service, whether bulk billed or paid for by the patient, and its systems for uniquely registering both doctors and patients allow the two to be linked.

The statistics in this paper come from an interrogation of all the Medicare records for 2006-07 and 2007-08. For 2006-07, that involved nearly 18 million patient records and 258 million services - a truly enormous data base.

There is nothing in the Medicare system which routinely identifies Aboriginal patients. However, they can be traced in other ways. First, Indigenous people have been able to voluntarily identify as such since 2002. Their Medicare number is then 'flagged'. All of the services to them, both primary (non-referred GP) and tertiary (referred specialist) can be identified and all the details (type of service, fee charged, benefit paid, etc) can be consolidated. The scheme was relatively slow to begin but by January 2009, 210,350 people had identified themselves, 40.5 per cent of the Indigenous population. Registration is a one-off but permanent event. Once a person's number has been flagged, their service use can be examined not only in the year of registration and beyond, but retrospectively as well.

The second method is less direct. Medicare does not normally pay benefits for services which are provided by doctors who are employed by a publicly-supported organisation. However, an exception has been made for doctors working in an ACCHO, a system known as 'Section 19.2' exemption. They are allocated a unique provider number for that part of their work and the processing of claims for benefit allows their patients to be identified through Medicare numbers. Because that is also a 'permanent' flag it would, in principle, be possible to trace all the patients who had ever attended an ACCHO doctor but, in practice, it has been limited to those seen in the current year. Not all of the patients attending an ACCHO are Indigenous. Non-Indigenous numbers are not

routinely recorded and the individuals involved cannot be identified. However, some estimates of the overall proportion can be made from ACCHO activity reports.

Finally, some further coverage might be provided through the Aboriginal Health Check items that have only been used substantially since 2004. They are included in the GP sector. For adults, one check can be provided in a year.

About 23,000 people received a health check in 2006-07, over four per cent of the Indigenous population. However, nearly all of them had either identified voluntarily or attended an ACCHO.

The amount of 'new' identification would thus have been very small and for that reason these Indigenous-specific items have simply been included in the service count.

## Results for 2006-07

### For people who have voluntarily identified (VII enrollees)

Table 2 shows the number of people who had identified by January 2009, by State and Territory, by ARIA region of remoteness and as a proportion of the estimated Indigenous population in each state. As can be seen, the proportion varied between the states and territories. It was highest in Queensland, Western Australia and the Northern Territory, lowest in the ACT and in New South Wales, which has the largest number of Indigenous people. However, the New South Wales sample was still substantial.

**Table 2: VII enrolment at January 2009, by States and Territories and ARIA regions of remoteness.**

By States and Territories									
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total
No.	43,850	13,819	73,639	10,658	33,621	5,898	27,716	1,149	210,350
% Indig.pop.	28.4	38.7	50.3	36.3	46.9	31.7	42.8	26.9	40.5
By ARIA region									
	Major cities		Inner regional		Outer regional		Remote		Very remote

No.	58,183	39,444	54,480	22,822	35,421
%	27.7	18.8	25.9	10.8	16.8
% Indig.pop.	34.9	35.5	47.8	47.4	44.3

Table 3 compares the age distribution of VII enrollees with that of the Aboriginal and Torres Strait Islander population.

Children under five years were over-weighted in the VII sample – probably because a birth gave the opportunity to enrol families – but the representation of all children up to 14 years of age almost exactly matched the Indigenous population. Differences in the other age categories were minor.

However, on an ARIA basis, the metropolitan and inner regional areas were clearly under-represented and the usage data show systematic variation between the regions that had nothing to do with differences in age. Adjustment for the differences in regional enrolment is thus important for the representativeness of the VII results. There were no significant differences across the states and territories.

**Table 3: VII enrolment by age group, and the age distribution of all Aboriginal and Torres Strait Islander people.**

Age group	VII enrollees	% VII population	% ATSI population
0-4	42,454	20.2	12.2
5-14	33,697	15.5	23.3
15-24	51,305	24.4	21.0
25-34	32,873	15.6	14.4
35-44	24,894	11.8	12.7
45-54	15,165	7.2	8.8
55-64	7,725	3.7	4.8
65-74	3,198	1.5	2.0
75 +	1,440	0.1	0.8
Total	210,350	100.0	100.0

Tables 4 and 5 contain the Medicare data on primary medical care use by VII enrollees in 2006-07. They represented one per cent of the Australian population and their use of



primary care services was about 0.8 per cent of the national total. Table 4 shows the number of people who used at least one GP service in the year, (98 per cent) or only saw a practice nurse (two per cent), classified by age and ARIA region.

They were only 0.9 per cent of the 17.54 million Australians who used some primary medical care in 2006-07. Table 5 shows the number of services involved – about 867,000 in a total of over 113 million.

**Table 4: VII enrollees who used a GP or practice nurse service in 2006-07**

Age group	Capital cities	Inner regional	Outer regional	Remote	Very remote	Total	% VII pop
0-4	10,196	7,123	8,635	3,449	4,127	33,930	79.9
5-14	5,777	4,332	5,338	2,113	2,894	20,469	60.0
15-24	12,019	7,887	9,511	3,427	3,984	36,809	71.7
25-24	7,837	4,480	6,324	2,492	3,359	24,491	74.5
35-44	5,733	3,281	4,897	2,064	2,835	18,820	75.6
45-54	3,593	2,117	3,207	1,368	1,900	12,230	80.6
55-64	1,878	1,240	1,641	735	1,000	6,493	84.0
65-74	763	505	677	311	486	2,742	85.7
75 +	339	147	237	126	226	1,071	74.4
<b>Total</b>	<b>48,134</b>	<b>31,142</b>	<b>40,462</b>	<b>16,084</b>	<b>20,748</b>	<b>156,645</b>	<b>74.5</b>
<b>% VII pop.</b>	<b>82.7</b>	<b>79.0</b>	<b>74.3</b>	<b>70.5</b>	<b>58.6</b>	<b>74.5</b>	

**Table 5: Primary care services for VII enrollees, 2006-07**

Age group	Capital cities	Inner regional	Outer regional	Remote	Very remote	Total	Serv per person
0-4	67,404	39,544	44,249	15,288	14,686	181,173	4.27
5-14	21,596	14,154	16,007	6,151	7,054	64,995	1.93
15-24	68,116	38,262	41,355	12,819	12,344	172,897	3.37
25-34	55,380	26,808	32,112	11,253	12,461	137,956	4.33
35-44	44,065	12,105	29,619	11,251	12,695	120,626	4.85
45-54	32,023	16,839	23,800	9,541	10,298	92,527	6.10
55-64	18,966	11,741	14,141	5,677	6,343	56,870	7.36
65-74	8,933	5,807	6,951	2,797	3,427	27,905	8.73
75 +	4,487	1,913	2,737	1,016	1,094	11,247	8.97
<b>Total</b>	<b>321,869</b>	<b>177,112</b>	<b>210,973</b>	<b>75,782</b>	<b>80,938</b>	<b>866,742</b>	<b>4.12</b>
<b>Per person</b>	<b>5.75</b>	<b>4.49</b>	<b>3.87</b>	<b>3.32</b>	<b>2.29</b>	<b>100.0</b>	



The results were very interesting. The main features were:

- About 74.5 per cent of the enrolled population used a GP or practice nurse service in the year. The figure for all other Australians was 83.2 per cent.
- The average number of services per enrolled person was 4.12 a year, compared with a non-Indigenous use of 5.14 services per person. Reported Indigenous use was therefore 80.2 per cent of that by other Australians. Of the 19.8 per cent shortfall, 8.7 per cent came from a lower proportion of Aboriginal people who saw a doctor at all, and 10.2 per cent from a lower frequency of visits (5.53 services per patient compared with 6.18 for other people)

On an ARIA basis, the average number of services per person declined with increasing remoteness, regularly and in a way which was very similar to that for non-Indigenous people. The average Indigenous use in very remote areas was 2.29 GP services a year, less than half of the 5.75 services used by major city residents. That reflected both a lower frequency of visits – 3.90 per user in very remote areas, 6.96 in the cities - and a lower proportion of remote area dwellers who saw a doctor at all (59 per cent compared with 83 per cent).

These were much smaller differences than are commonly believed and they were smaller still when the results were adjusted for the under-representation of major city and inner regional residents in the VII collection. Table 6 summarises the geographically standardised figures for each age group, using three measures:

- Contact rates - the proportion of people who ever saw a GP or a practice nurse;
- Average services per patient; and
- Average services per person covered - VII enrollees in one group, all other Australians in the other. The base data for other Australians are in Appendix Table 2.

**Table 6: Adjusted usage rates for primary medical care: VII enrollees and other Australians, 2006-07**

Age group	VII enrollees			Other Australians		
	Contact rate (%)	Services per patient	Services per person	Contact rate (%)	Services per patient	Services per person
0-4	80.8	5.52	<b>4.42</b>	91.7	6.13	<b>5.62</b>
5-14	60.7	3.28	<b>2.00</b>	72.1	3.51	<b>2.52</b>
15-24	72.5	4.86	<b>3.49</b>	74.4	4.50	<b>3.35</b>
25-34	75.3	6.08	<b>4.48</b>	75.9	5.13	<b>3.97</b>
35-44	76.4	6.63	<b>5.02</b>	80.5	5.23	<b>4.21</b>
45-54	81.5	7.83	<b>6.31</b>	84.0	5.87	<b>4.93</b>
55-64	84.9	9.06	<b>7.61</b>	90.1	7.09	<b>6.39</b>
65-74	86.6	10.53	<b>9.03</b>	95.8	9.70	<b>9.29</b>
75+	75.2	12.48	<b>9.28</b>	89.9	12.91	<b>11.61</b>
<b>Total</b>	75.3	5.72	<b>4.29</b>	83.2	6.18	<b>5.14</b>

On average, the adjusted Indigenous use per person was 83.5 per cent of that for other Australians. But, as can be seen, for the 40 per cent of Aboriginal and Torres Strait Islander peoples who had voluntarily identified, the number of primary medical services per person was lower than for non-Indigenous people in only two groups – children up to 14 years of age (by over 20 per cent) and people aged over 65, of which there were very few.

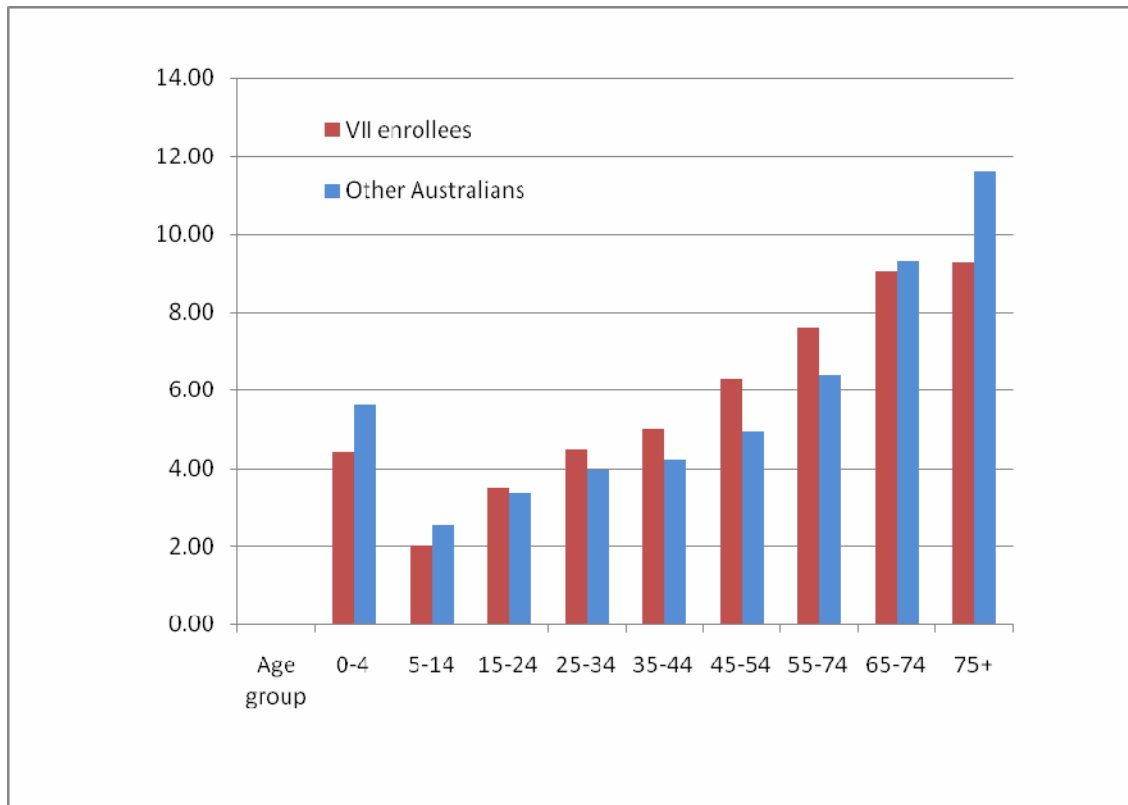
In every other age group, Indigenous use was actually higher, particularly in the 45-64 year categories where the differences between Indigenous and non-Indigenous death rates are greatest.

In fact, the main reason why their average use was less than for other Australians was not because they all used primary care services less but because very few of them survived to an age when health care use and the 'maintenance' costs of longevity are highest.

In the ABS figures for 2008, less than 15,000 Indigenous people had lived to 65 years of age, compared with nearly 2.7 million other Australians.

Figure 1 shows the results graphically.

**Figure 1 Average primary medical service services per person, VII enrollees and all other Australians, 2006-07**



**For services under Section 19.2**

Nearly all of the services for which Medicare pays benefits under Section 19.2 are provided through the ACCHOs. The only exceptions are a relatively few services provided by State clinics in the Northern Territory, northern Western Australia, and remote Queensland. The scope of the data is the same as for both non-Indigenous Australians and those people who voluntarily identify as Aboriginal. However, their interpretation is more complex.

The services themselves are easy to locate and attach to patients. In the Medicare extraction, we defined a 'Section 19.2 patient' as one who had at least one service from a provider working under Section 19.2. They fell into three categories, namely:

- Indigenous patients who had voluntarily identified - 'VII plus 19.2' patients;
- Indigenous patients who had not identified as such – '19.2- only' patients; and
- Non-Indigenous patients.

The first group was included in the VII analysis above, although it will be revisited in outlining provision by the ACCHOs. As mentioned earlier, the third group (non-Indigenous patients) cannot be identified directly. All that can be done is to apply a uniform reduction to the reported figures. The 14 per cent used here is slightly higher than the 12 per cent commonly cited, but it is what a weighted average of the ACCHO activity reports suggest.

The remaining patients were Indigenous people who used at least one 19.2-type service. However, less than half of the 102,752 patients who attended in 2007-08 used Section 19.2 doctors exclusively. Nearly 58,000 of them visited other private doctors as well and the service usage of that group was higher. In fact, about 43 per cent of all the services to patients who ever attended a Section 19.2 doctor (overwhelmingly in the ACCHOs) were provided by other private doctors working under Medicare.

Tables 7 and 8 show the '19.2-only' data in the same form as for the VII group, except that they are limited to patient information only. Because the service pattern is so complicated, we do not know the population which the ACCHOs can be said to serve. That can only be estimated indirectly. However, it was clearly different to the VII one because the patients came from different places.

As might be expected, the proportion from cities was much lower and those from remote and very remote areas were correspondingly higher.

And there were similar differences in composition by age. Children under five were a very much lower proportion of the ACCHO-based group (7.7 per cent compared with 21.7 per cent) but the proportion of people under 25 was higher and the number of older patients, though still very small, was proportionately much greater.

**Table 7: Section 19.2-only patients who saw a GP or practice nurse, 2006-07**

Age group	Capital cities	Inner regional	Outer regional	Remote	Very remote	Total	%
0-4	1,698	1,637	2,090	1,037	1,488	7,950	<b>7.7</b>
5-14	2,936	3,301	4,944	2,660	4,116	17,960	<b>17.5</b>
15-24	2,803	3,148	3,449	1,867	2,651	13,918	<b>13.5</b>
25-24	3,283	2,953	3,544	2,067	2,988	14,836	<b>14.4</b>
35-44	3,239	2,066	4,154	2,274	3,292	16,027	<b>15.6</b>
45-54	2,800	2,774	4,031	2,111	2,987	14,707	<b>14.3</b>
55-64	1,925	1,931	2,801	1,330	1,930	9,918	<b>9.7</b>
65-74	867	946	1,544	758	930	5,034	<b>4.9</b>
75 +	326	459	743	398	471	2,397	<b>2.3</b>
<b>Total</b>	<b>19,869</b>	<b>20,214</b>	<b>27,302</b>	<b>14,502</b>	<b>20,854</b>	<b>102,752</b>	<b>100.0</b>
<b>%</b>	<b>19.3</b>	<b>19.7</b>	<b>26.6</b>	<b>14.1</b>	<b>20.3</b>	<b>100.0</b>	

**Table 8: Primary medical services for Section 19.2- only patients, 2006-07**

Age group	Capital cities	Inner regional	Outer regional	Remote	Very remote	Total	%
0-4	12,350	9,274	10,382	4,850	5,513	42,368	<b>6.8</b>
5-14	12,755	11,238	15,744	8,025	10,574	58,341	<b>9.3</b>
15-24	17,853	16,657	15,788	6,738	8,289	65,326	<b>10.4</b>
25-24	25,407	20,223	20,138	9,550	11,583	86,904	<b>13.9</b>
35-44	28,478	22,277	26,653	4,800	15,287	104,512	<b>16.7</b>
45-54	25,737	22,420	29,766	13,574	16,257	107,958	<b>17.2</b>
55-64	18,872	18,333	28,547	10,389	12,290	83,440	<b>13.3</b>
65-74	10,643	10,446	15,297	6,994	6,803	50,187	<b>8.0</b>
75 +	4,877	6,676	8,744	3,888	4,011	28,200	<b>4.5</b>
<b>Total</b>	<b>156,972</b>	<b>137,549</b>	<b>166,059</b>	<b>75,988</b>	<b>90,615</b>	<b>627,236</b>	<b>100.0</b>
<b>%</b>	<b>25.0</b>	<b>21.9</b>	<b>26.5</b>	<b>12.1</b>	<b>14.4</b>	<b>100.0</b>	

Table 9 summarises the results and compares them with those from both the VII collection and the very much larger (and completely different) non-Indigenous population. Per patient, the Section 19.2-only figure was 6.10 services per year, 10 per cent higher than the 5.53 services reported for the VII group and seven per cent higher than the standardised figure. However, the age-specific usage rates in the two Indigenous collections were almost the same and, except for the very old and children under five years of age, the service rates for non-Indigenous patients were lower than in both of them.

**Table 9: Usage rates for primary care, Section 19.2-only patients, VII patients and other Australians, 2006-07**

	19.2 only patients	VII patients	Other Australians
Age group	Services per patient	Services per patient	Services per patient
0-4	5.33	5.52	6.13
5-14	3.25	3.28	3.51
15-24	4.69	4.86	4.50
25-34	5.86	6.08	5.13
35-44	6.52	6.63	5.23
45-54	7.34	7.83	5.87
55-64	8.41	9.06	7.09
65-74	9.96	10.53	9.70
75 +	11.76	12.45	12.91
<b>Total</b>	<b>6.10</b>	<b>5.71</b>	<b>6.18</b>

Most of the overall difference thus came from the different mixes of people by age and place of residence. About 22 per cent of the Section 19.2-only patients were not Indigenous and their service use is not known. However, the figures suggest that unless their characteristics were quite peculiar, it would not have made much difference.

### **All Section 19.2 patients**

Table 10 combines the two categories of Section 19.2 patient to show, for each group, all of the GP services they received and their sourcing between the ACCHOs and private providers.



In total, nearly 159,000 patients used nearly 936,000 primary care services, at an average of 5.89 services per patient. Over half (56.5 per cent) were provided by doctors in the ACCHOs, the remainder from other sources.

However, the proportions were somewhat different between the two groups and in a way which throws some light on the Indigenous/non-Indigenous division. For VII people (all clearly Indigenous), non-ACCHO doctors provided 36 per cent of services, whereas for the unidentified group - which includes non-Indigenous users - the share was 47 per cent. The ACCHO activity reports show the number of clients that they assessed as non-Indigenous but not their use of services. The figures in Table 13 suggest that a significant proportion of those non-Indigenous patients were casual, rather than regular, users of an ACCHO service. That cannot be proved, of course, but it is consistent with anecdotal evidence.

**Table 10: All Section 19.2 patients and services, by source of service**

	Patients	Services		
		From 19.2 doctors	From other doctors	Total
Identified by VII	56,093	200,567	113,833	314,400
Not identified	102,752	328,138	203,098	621,236
<b>Total</b>	<b>158,845</b>	<b>528,705</b>	<b>406,931</b>	<b>935,636</b>

## Final results and conclusions

The final results for Indigenous people are in Table 11, after adjusting for the estimated number of non-Indigenous patients who attended an ACCHO and standardising for the regional composition of VII enrollees. The 238,882 patients were 46 per cent of the whole Aboriginal and Torres Strait Islander population. On average, they used 5.76 GP-type services in 2006-07 and for 66 per cent of them (those who had enrolled under VII) we know the population from which they came. Three quarters of that population used a GP service in the year.

**Table 11: Estimated use by all identified Aboriginal and Torres Strait Islander people, 2006-07**

	Population	Patients	Services	Serv.per patient	Serv. per person
Through VII	210,350	158,368	906,593	5.72	4.29
19.2 patients	Na	80,514	539,423	6.10	Na
Total	Na	238,882	1,446,016	5.76	Na

The other 80,000 patients clearly came from a different and unknown population. However, their age-specific usage rates were almost identical to those for the identified group. If their 'contact rate' (the proportion of people seeing a doctor in the year) was also the same – and that is not an unreasonable assumption – about 108,000 people would have been covered. The total would then be about 318,000 people, or 61 per cent of the Indigenous population.

That is all of the information that we have. It is, of course, limited to the doctor services for which Medicare pays benefits. That does not include the primary care component of the hospital emergency services that Indigenous people disproportionately use, although the number of these was small relative to ambulatory provision under Medicare. And it clearly understates the overall volume of primary care delivered through the ACCHOs. Recording is not always complete, -a few organisations (including one quite substantial one) do not bill Medicare at all but, more importantly, a much higher proportion of their primary care is provided by nurses who are not 'practice nurses' in the Medicare sense. In many remote-area services, they are the only providers of care, particularly to children. Neither of the available data collections was entirely representative of the Aboriginal people, largely because of geographic biases and it would be hazardous to draw conclusions from either of them alone.

However, the results were very consistent internally and combining them produces a sample of users that is much more like what one would expect it to be.

Data were also extracted on referred specialist services. They are entirely a product of the system.

For GP-requested diagnostic services, Indigenous use was similar to that of other Australians and we know from other sources (mainly the BEACH surveys of GP activity) that mainstream GPs treat their Aboriginal patients no differently to any others. However, specialist consultations were very much lower for Indigenous people – 4.5 per cent of all Medicare services for the 210,000 who had identified voluntarily, compared with 12 per cent for non-Indigenous Australians. Access problems may have contributed to that. There are very few private specialists in the remote areas where a quarter of the Aboriginal and Torres Strait Islander population lives. However, the main reason was that Indigenous people rely overwhelmingly on public hospitals for specialist treatment as both in-patients and out-patients. Although they are admitted to hospital at about 1.6 times the rate for non-Indigenous Australians, very few of them are treated as private patients covered by Medicare. Only 1.6 per cent of the VII enrollees were admitted as private patients in 2006-07 (3281 in total). The figures for non-Indigenous people were 9.2 per cent and 1.863 million respectively.

## **Implications for policy**

The main thrust of the NHHRC recommendations is that, while the Aboriginal Community Controlled Health Organisations should be further supported and strengthened, the use of appropriate mainstream services should also be improved through the creation of a dedicated agency to purchase services on their behalf.

Whether the functions are combined or separated is an administrative matter. However, the findings above can throw some light on what considerations might guide such a body and to what services it might give priority. They concentrated on primary medical care because that is the portal through which people enter the mainstream system and where health problems first present themselves.

The first consideration is about what the major deficiencies appear to be and that depends, in part, upon what the criteria of adequacy are. The NHHRC report (and many others) posits a distribution 'proportionate to health need'. However, it is not always clear just what that means and there are some conceptual issues to be cleared up first. Equity, or fairness, is clearly at its base and, for most Australians, that would simply mean equity of access – a right to services of a uniform quality for whatever illnesses or disabilities people suffer from or are exposed to, without regard to age, gender, race or place of residence. For a sub-population like Indigenous people, the reference point is the larger non-Indigenous group and the indicator of relative need is the prevalence of illness and disability in the two communities. That is what the comparisons in expenditure report, and those above imply.

However, many people and most advocacy groups would also support the wider concept of equity of outcome. If some people have a higher than average prevalence of illness and disability, or a worse outcome in terms of life expectancy, the distribution of services should not just parallel those differences but actively aim to remove them.

That is the underlying application of the 'Burden of Disease' approach. It requires some evidence, or assumptions, about how much the provision of services can alter the incidence or outcomes of illness, and of what kind. For a given resource allocation, the distribution would then be preferential, not equal. In practice, public policy embraces both of these concepts but it is important to highlight them because they can lead to different interpretations and responses.

Within that context, the evidence on primary medical use appears to be as follows. For the 40 per cent of Indigenous people who have voluntarily identified, plus the estimated 21 per cent whose experience might legitimately be added:

- On average, Indigenous people do not use primary care services as much as the non-Indigenous population. In the VII sample, for which we have full information, the proportion who ever see a doctor was lower and the frequency with which they visit doctors was less;

- However, the pattern is not uniform. The largest difference is in the care of children under five years of age and, to a lesser extent, in the five to 14 age group;
- For almost all other Indigenous people, age-specific usage rates are higher than for other Australians and the differences reflect the pattern of illness which leads to Aboriginal people dying at younger ages than non-Indigenous people. For people aged 65 years and over, non-Indigenous use is higher but very few Aboriginal people live that long; and
- The Indigenous use of specialist services through Medicare is very much lower than for non-Indigenous people. The overall impact is difficult to judge because of their heavy reliance on hospital-based specialist treatment outside the Medicare benefits system but it must have some influence on out-of-hospital care.

Service use and needs can never be judged from statistical analysis alone, particularly when the coverage is not complete. However, some broad observations can be made. The first is that, on the criterion of equity of access, the present levels of primary care use by adults would not appear to be grossly unfair or inadequate. From 15 years of age, Indigenous use per person was between four per cent and 28 per cent higher than for other Australians. Amongst people who had voluntarily identified, the proportion who saw a doctor at all was lower, though not dramatically so, but those who did attend did so more frequently than the average. However, Indigenous usage never reached the level of non-Indigenous people in the age groups when the non-Aboriginal death rate was highest (75 years and more).

In both respects, the position was quite different for children. Use was significantly lower for all up to age 14, particularly those aged under five. The Section 19.2 data suggest an almost identical result, although in both the ACCHOs and the State-provided services, nurse care was an alternative.

On access grounds alone, raising both the coverage of children and their service use would thus appear to be the first priority and, because of its preventive content, that should contribute to more equal outcomes as well.

For non-Indigenous people, at least, the doctor use of very young children is probably less related to illness *per se* than in any other age group. 'Worried mother' would be a common diagnosis, and education a major component of the product. However, it is an important one.

That would also lift the proportion of Indigenous people who ever see a doctor and not only amongst the children. It is commonly believed to be low and the VII data showed a 'contact rate' that was particularly low in the rural and remote areas. ACCHO provision counteracts that to some extent. In the combined collection, the proportion of the Indigenous population that was seen was actually higher in the very remote, remote and outer regional areas than in the city and inner regional zones. However, it was still no higher than the VII results indicated. What the combined figures do show is that the Aboriginal people of whom we know nothing are largely town and city dwellers for whom both mainstream medical and public hospital services are relatively accessible. Their usage may or may not be a problem, but for rural people it clearly is.

Finally, and beyond the primary care services on which this paper has concentrated, the very limited availability of private specialist services in the areas where many Aboriginal and Torres Strait Islander people live raises serious problems of equity in both access and outcome. It is a difficulty shared with other Australians in the same areas but there are, proportionately, eight times as many Aboriginal people living there. They do not have the same resources for travel that non-Indigenous people do, even to the hospitals, and although more is spent on their transport, access is more difficult for them. The disadvantage shows in several ways - outside hospitals in the management of complex conditions and within the hospitals in the well-established evidence that, for the same conditions, Indigenous patients receive significantly less procedures than non-Indigenous ones. There may be a number of reasons for that but the supply of specialists must be amongst them.

The comments above relate almost entirely to equity of access because discussions of outcome involve clinical judgements about the efficacy of services in which the author has no special expertise. There is a great deal of information on the health status of Indigenous people, the conditions from which they suffer, the consequences, and the types of service that might mitigate them. The University of Queensland/AIHW study of the burden of illness in ATSI people has quantified the outcomes in terms of healthy life-years lost and identified the major risk factors that particularly affect the Aboriginal population (Vos et al, 2007). However, one observation should be made in relation to the comparisons between Indigenous and non-Indigenous death rates, disease prevalence rates etc, in almost every official publication. They routinely quote age-standardised rates, with the non-Indigenous population as the base. They all show large differences between the two and those results inform many assessments of comparative need. But that application is conceptually wrong, because the hypothetical Indigenous population with which the all-Australian experience is compared could not possibly exist. Their vastly different age structures come from the factors that are under examination, not independently of them. What the commonly cited measures show is to which people and to what problems health care resources should be preferentially applied, not the volume of them. It is the crude rates that give an indication of the latter, if only an approximate one.

## **The NHHRC proposals**

The NHHRC proposals would extend the Commonwealth government's role in a number of directions, basically by widening its scope to include the purchasing/brokering of services beyond the assistance which it currently gives to the ACCHOs. That would be accompanied by a considerable lift in voluntary identification (which would be a mandatory condition for extra services) and the accreditation of providers. The new authority which it has proposed would, in principle, contract separately with the ACCHOs for the services they give, with the States and Territories for hospital care, and with other providers (including doctors) for an agreed range of medical and supporting services along DVA lines, presumably with financial incentives.

Not all of these proposals are relevant to the primary care issues discussed earlier, but the findings here may have some bearing on their application. Greater Indigenous identification, for example, would clearly be helpful and it is seen as a necessary definition of the population to be served by any widened scheme. But it has risen considerably in the last two years and an immediate lift could be given by simply pushing for it through the ACCHOs. Only one third of their patients had voluntarily done so by January 2009, and better identification there would answer a number of questions. And while it would clearly be desirable to raise the GP use of all Indigenous people, universal purchasing is a major task and it is not immediately clear why it would be necessary when the main deficiencies appear to be in:

- infant and child care, which might be better tackled through more targeted programs; and
- both primary and specialist care in the remote and very remote areas, where the major problems are on the supply side (doctor numbers) rather than systemic flaws, and the major providers are the ACCHOs.

It could, of course, be argued that, as the Interim Report suggests, more of the same is not enough and that a more comprehensive and dedicated approach is the only way to solve the current problems. In that event, the DVA model is certainly relevant.

However, there are some important differences. The veterans treatment population is about half of the Aboriginal one but it is very old, geographically stable, and declining. In 2006, 75 per cent were aged 70 years and over, with only nine per cent aged under 55. Its needs are overwhelmingly personal, well defined and well known by the recipients, whereas those of the Aboriginal community are not. And even though most DVA beneficiaries live where the doctors are, the system cannot always deliver the services it aims to provide. Almost all GPs participate, but many specialists do not, and in some places participating allied health providers are scarce.



Despite these qualifications, there is a clear case for a greater Commonwealth presence in the mainstream provision of Indigenous health services that goes beyond the relatively passive access rights which Medicare, the PBS and the Commonwealth-state agreements give. Wherever located and however titled, the relevant body should be empowered to deal with the various provider groups directly, including the State and Territory authorities, which not only provide a range of services themselves but also support the ACCHOs in a variety of ways. And it should also have the human and material capacity to collect, interpret, publish and, hopefully, improve the information that comes from a variety of sources, many of which are other government agencies. Although its objectives might be similar to those of the DVA, it would not necessarily operate in the same way. .

That may not require that all services be purchased and paid for separately - but there are certain areas where contracting should be pursued now. Creating a body of participating specialists may be one of them, perhaps in collaboration with the states. However in my view, the most important need is for culturally appropriate allied health and supportive services. That is what distinguishes the ACCHOs from mainstream practice and it may well be the reason why so many of the patients who also see mainstream GPs attend an ACCHO for particular needs. It is an efficient practice that extends the scope of scarce medical personnel and recognises both the complexity of Indigenous health needs and the Aboriginal peoples' right to choose. But comprehensive organisations need to be of a certain size and they cannot be everywhere. What is needed is a kind of 'virtual ACCHO' which can support the Aboriginal and Torres Strait Islander patients of mainstream GPs in a defined area. The NHHRC report pointed to a limited example of brokerage in North Queensland but there are also examples of small-scale cooperation between the ACCHOs and a number of the Divisions of General Practice, particularly in Western Australia. These are inter-organisational arrangements, not contracts for services, and the costs are currently small, usually met from the Division budgets. They may well provide some models but they are unlikely to expand spontaneously without both policy support and more resources.

All this must, of course, be considered in the context of an almost universal agreement that, ultimately, the biggest contribution to Aboriginal and Torres Strait Islander health must come from preventive programs and the modification of known risk factors, particularly in the development of chronic diseases. Personal medical care does neither function well.

These are very brief observations, but commenting on the recommendations was subsidiary to my main term of reference, which was to document the Aboriginal and Torres Strait Islander peoples' use of services through Medicare. I hope that the paper will be of some value to the Commission.

**John Deeble**

**June 2009**

**Appendix Table 1: Age distribution of the estimated Aboriginal and Torres Strait Islander population, 2008.**

<b>Age group</b>	<b>Number</b>	<b>%</b>
<b>0-4</b>	63,179	12.2
<b>5-9</b>	59,959	11.5
<b>10-14</b>	61,221	11.8
<b>15-19</b>	59,284	11.4
<b>20-24</b>	49,856	9.6
<b>25-29</b>	39,535	7.6
<b>30-34</b>	35,093	6.8
<b>35-39</b>	36,053	6.9
<b>40-44</b>	29,936	5.8
<b>45-49</b>	26,099	5.0
<b>50-54</b>	19,687	3.8
<b>55-59</b>	15,120	2.9
<b>60-64</b>	9,287	1.8
<b>65-69</b>	6,466	1.2
<b>70-74</b>	4,038	0.8
<b>75 +</b>	4,167	0.8

Source ABS, Experimental estimates of the Aboriginal and Torres Strait Islander population, 2009, Cat. 3238.0

**Appendix Table 2: Primary medical service use by people who were neither VII nor Section 19.2, 2006-07**

<b>Age group</b>	<b>Patients (000)</b>	<b>Services (000)</b>
<b>0-4</b>	1,216.9	8,076.3
<b>5-14</b>	2,013.5	7,470.1
<b>15-24</b>	2,184.9	10,870.2
<b>25-34</b>	2,291.4	12,355.7
<b>35-44</b>	2,520.8	13,477.9
<b>45-54</b>	2,484.3	14,838.6
<b>55-64</b>	2,145.8	15,416.5
<b>65-74</b>	1,402.7	13,847.0
<b>75 +</b>	1,206.1	15,911.4
<b>Total</b>	<b>17,437.6</b>	<b>112,246.1</b>

## References

Australian Bureau of Statistics, Population, by age and sex, Australia, June 2008, Cat.no.3201.0

Australian Bureau of Statistics, Experimental Estimates of Aboriginal and Islander Australians, June 2006, Cat. No. 3238.0.55.001, 2008

Australian Institute of Health and Welfare, Expenditures on health for Aboriginal and Torres Strait Islander peoples, 2004-05, Feb.2008, Cat.no HWE 40

Australian Institute of Health and Welfare, The Health and Welfare of Aboriginal and Torres Strait Islander peoples, 2008

Cory, MD and Walsh, WF, Rates of percutaneous coronary interventions and bypass surgery after acute myocardial infarction in Indigenous patients, Medical Journal of Australia, 182(10): 507-512, 2005

Cunningham, J, Diagnostic and surgical procedures among Australian hospital patients identified as Indigenous, Medical Journal of Australia, 176(2): 56-62, 2002.

Vos T, Barker B, Stanley L and Lopez ,A, The burden of disease and injury in Aboriginal and Torres Strait Islander peoples 2003, University of Queensland, 2007