# 16 Encounters with Indigenous people

Indigenous people represent 2.2% of the total population in Australia. They are more likely to live outside urban areas than non-Indigenous people and this may affect their access to, and use of, general practice services. There are some Aboriginal Community Controlled Health Services (ACCHS) available in many parts of the country, including remote areas. Hetter knowledge of the extent to which Indigenous people utilise general practice and the problems that are managed in general practice will assist in the development of an improved understanding of the health of the Indigenous community and in the planning of future health services for this sector of the population.

The participating GPs were instructed to ask the patient whether they identified as an Aboriginal person and/or as a Torres Strait Islander.

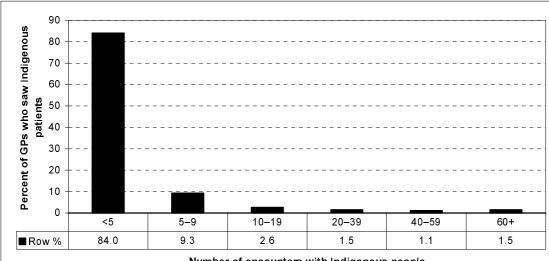
## 16.1 Number of encounters

At 982 encounters (1.0%) the patient responded positively to one or both questions. The vast majority of these (87.1%) stated they were Aboriginal persons while 9.7% stated they were Torres Strait Islanders and 3.2% said they were both.

In terms of the total data set 1.0% is not large. However, a simple extrapolation to the (approximately) 105 million general practice Medicare items of service claimed per year in Australia would suggest that about 1 million GP consultations occur with Indigenous people. It was thought that some of the participating GPs may have recorded activity conducted in Aboriginal Community Controlled Health Services, and claimed through Medicare. If so, this would be an over-estimate of the number of consultations with private general practitioners by Indigenous people. An investigation of the distribution of these encounters across individual GPs was therefore warranted.

The 982 encounters were distributed among 272 GPs, representing 27.7% of the GP participants. The relative number of encounters with Indigenous people was calculated for each GP who recorded at least one encounter with an Indigenous person. The range across these GPs was 1 to 79 consultations with Indigenous persons, the median being 1, the mean 4.4 with a standard deviation of 10.5. The distribution of these encounters across the 272 practitioners is shown in Figure 16.1.

By far the majority of these GPs (84.0%) had less than five of their 100 encounters in which the patient identified as an Indigenous person and only seven GPs (2.6% of those GPs who saw at least one Indigenous person, and less than 1% of the total GP sample) had 40 or more. All seven GPs in the latter category practised in areas in which an (ACCHS) exists. If we assume that these GPS worked either full or part-time in an ACCHS and that these consultations were undertaken in an ACCHS, their recorded encounters with Indigenous persons should be removed prior to extrapolation from BEACH to limit the extrapolation to private general practice. After removal of these encounters the estimated number of consultations with Indigenous persons in the non-ACCHS private general practice environment was considerably reduced, to be approximately 600,000 per annum.



Number of encounters with Indigenous people

Figure 16.1: Distribution of Indigenous encounters by GP

## 16.2 The general practitioners

The characteristics of the 272 GPs who recorded at least one encounter with a patient identifying themselves as Aboriginal or Torres Strait Islander are compared with the those of the total GP sample in Table 16.1. These GPs tended to be younger than the total sample, 13.6% of them being aged less than 35 years (compared with 7.1% of the total sample) and 31.5% being aged 35-44 years (compared with 26.8%). Only marginal differences were apparent in the number of sessions per week, the size of their practice or their place of graduation. However, the distribution of practices by location was markedly different from that of the total GP sample. Only 54.6% of these GPs practised in capital cities, compared with almost 70% of the total sample. In contrast, 4.4% of these GPs practised in remote areas compared with 0.5% of the total sample and one-quarter (24.6%) practised in small rural or other rural areas (compared with 15.4% of the total sample).

Table 16.1: Characteristics of GPs who saw Indigenous people compared with the total GP sample

		GPs who sav	GPs who saw Indigenous people				
GP characteristic		Number	Per cent of GPs <sup>(a)</sup> ( <i>n</i> =272)	Per cent of GPs <sup>(a)</sup> ( <i>n</i> =983)			
Sex				10.0			
	Male	171	62.7	64.2			
	Female	101	37.3	35.8			
Age	(missing)	(0)	4.4	(1)			
	<35 years	37	13.6	7.1			
	35–44 years	86	31.5	26.8			
	45–54 years	75	27.5	36.5			
	55+ years	75	27.4	29.5			

(continued)

Table 16.1 (continued): Characteristics of GPs who saw Indigenous people compared the total GP sample

	GPs who saw	Total GP sample	
GP characteristic	Number	Per cent of GPs <sup>(a)</sup> ( <i>n</i> =272)	Per cent of GPs <sup>(a)</sup> ( <i>n</i> =983)
Sessions per week (missing)	(3)		(15)
<6 per week	46	17.0	16.0
6-10 per week	183	68.2	67.8
11+ per week	40	14.8	14.8
Size of practice (missing)	(3)		(4)
Solo	49	18.1	15.3
2–4 GPs	100	37.3	39.7
5+ GPs	120	44.6	44.7
Place of graduation			
Australia	200	73.3	76.1
United Kingdom	23	8.5	7.6
Asia	21	7.9	8.6
Other	28	10.3	7.6
Practice location			
Capital	148	54.6	69.3
Other metropolitan	23	8.3	8.1
Large rural	22	8.0	5.9
Small rural	23	8.4	4.9
Other rural	44	16.2	10.5
Remote central	6	2.3	0.5
Other remote, offshore	6	2.3	0.8

<sup>(</sup>a) Missing data removed

## 16.3 Patient characteristics

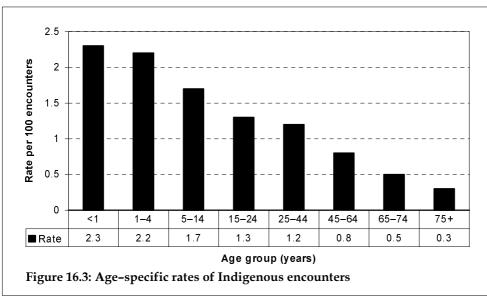
## Age and sex

The patient was male at 40.3% (95% CI: 41.9–43.3) of encounters and this parallelled the result for the total data set (42.3%, 95% CI: 41.9–43.3, Table 6.1). However, the age distribution of the Indigenous patients differed markedly from that of patients at all encounters (Figure 16.2).

Overall, Indigenous patients were significantly younger than the total sample of patients encountered, the proportion of persons aged less than 44 years being 68.2% compared with 48.6% in the total data set. This difference was apparent in all the younger age groups. In contrast the proportion of encounters with older Indigenous people was lower than that of the total data set, 21.9% being between 45 and 64 years of age (compared with 26.3% of the total sample) and only 8.9% being aged 65 years or more (compared with one in four in the total sample).

The age-specific rates of encounters with Indigenous persons are presented in Figure 16.3 and more clearly demonstrate these trends.





# Other patient characteristics

Table 16.2 describes the other characteristics of Indigenous patients and can be compared with Table 5.1 which describes the total sample. There were no statistically significant differences in the other characteristics of this group when compared with the total sample, the small sample size of encounters with Indigenous people providing wide confidence intervals. However, it is interesting to note that almost 70% of Indigenous people held a health care card, compared with 41.9% in the total sample.

The proportion of Indigenous persons who held a Commonwealth Department of Veterans' Affairs card was only slightly less than the proportion in the total data set (2.7% compared with 3.3% in the total data). Patients who had not been seen before at that practice ('new patients') represented 15.0% of the Indigenous sample compared with 9.2% of the total sample. Those patients who reported being from a non-English-speaking background represented 3.1% of the Indigenous subsample and 9.3% of all patients.

Table 16.2: Other characteristics of patients at encounters with Indigenous people

		Per cent of encounters	95%	95%
Patient characteristic	Number	(n=982) <sup>(a)</sup>	LCL	UCL
New patient to practice	137	15.0	8.6	21.3
Health care card holder	666	67.8	58.8	76.9
Veterans' Affairs card holder	26	2.7	0.0	17.9
Non-English-speaking background	31	3.1	0.0	20.3

<sup>(</sup>a) Missing data removed in calculation of rates.

Note: LCL—lower confidence limit, UCL—upper confidence limit

### **Geographic location**

The GPs were asked to record the postcode of the patient's home residence at each encounter. After missing data were removed (n=36) the postcodes were classified according to State and by the Rural, Remote and Metropolitan Area (RRMA) classification.

#### **Distribution by State**

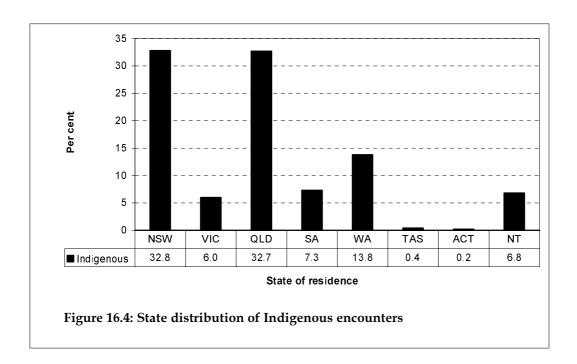
The distribution of Indigenous patient residence by state is presented in Figure 16.4. One-third of the Indigenous patients resided in Queensland and almost as many resided in New South Wales. Over 10% lived in Western Australia and there was only a small proportion living in each of the other States and Territories.

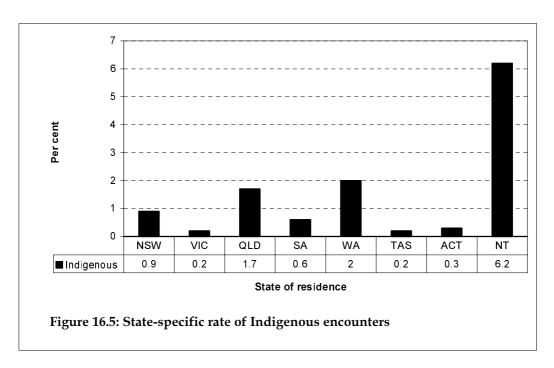
#### State-specific encounter rate

When the number of encounters with Indigenous people was viewed relative to the total number of encounters in each State/Territory it was apparent that their relative frequency was highest in the Northern Territory (6.2%), followed by Western Australia (2.0%) and then by Queensland (1.7%). In each of the remaining States and Territories the rate of Indigenous encounters was below 1.0% (Figure 16.5).

#### Distribution by RRMA

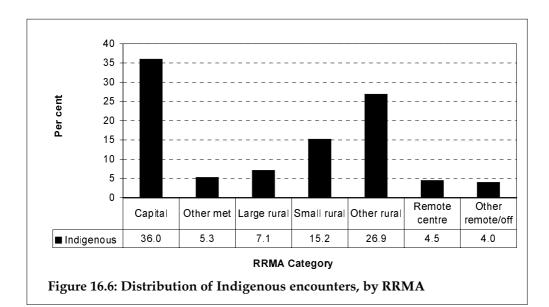
More than one-third (36.0%) of these Indigenous patients lived in capital cities and 26.9% in 'other rural areas'. Those living in remote areas represented 8.5% of the subsample and more than half of these were in remote centres (Figure 16.6).

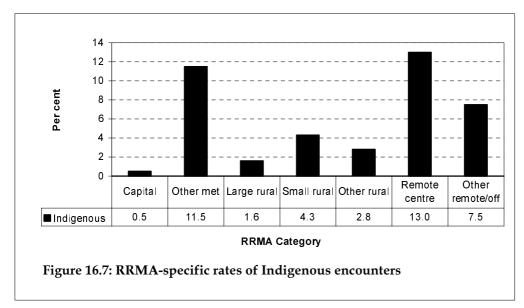




#### **RRMA-specific encounter rates**

However, when the distribution of encounters with Indigenous people was considered in relation to the distribution of all encounters across RRMAs a different picture emerged. Encounters with Indigenous people accounted for 13.0% of the total in remote centres and for 7.5% of those in other remote/offshore locations. There was also a relatively high rate of encounters with Indigenous people in other metropolitan areas (11.5%) but the rate was very low in capital cities (0.5%) (Figure 16.7).





## 16.4 Characteristics of the encounters

There were no significant differences in the distribution of encounters across payment source or by Medicare item number for encounters with Indigenous people (Table 16.3) compared with the total data set (Table 5.2). However, there were some minor trends. A slightly lower proportion of total encounters with Indigenous people were recorded as standard surgery consultations (73.2% compared with 79.0% in the total data set) and encounters related to workers compensation were also less common (1.3 compared with 2.0 in the total data set). A slightly larger proportion of Indigenous encounters were marked as 'no charge' (1.3% compared with 0.6% in the total data set). However, the numbers involved were very small.

Table 16.3: Type of encounter with Indigenous people

		Rate per 100 encounters <sup>(a)</sup>			
Variable	Number	(n=983)	95% LCL	95% UCL	
Direct consultations	916	97.6	96.5	98.6	
No charge	12	1.3	0.0	21.3	
MBS items of service	870	92.7	89.8	95.7	
Standard surgery consultations	689	73.2	67.7	79.1	
Workers' compensation	12	1.3	0.0	25.9	
Other paid (hospital, State, etc.)	22	2.3	0.0	17.7	
Indirect consultations	23	2.4	0.0	5.5	
Missing	44				

<sup>(</sup>a) Missing data removed

# 16.5 Morbidity and management

Table 16.4 summarises the major elements of encounters with Indigenous people. The results can be compared with those of the total data set in Table 5.1. The relative rate of patient reasons for encounter and the rate of problems managed at encounter were almost identical in the Indigenous encounters and in the total data set. There were no statistically significant differences in any of the other encounter variables due to wide confidence intervals generated by the small size of the Indigenous encounter sample. However, there were some trends in the data worthy of comment.

Table 16.4: Summary of morbidity and management at encounters with Indigenous people

		Rate per 100 encounters	0 encounters				
Variable	Number	(n=983)	95% LCL	95% UCL			
Reasons for encounter	1,469	149.5	143.6	155.5			
Problems managed	1,422	144.7	136.8	152.7			
New problems	606	61.7	52.9	70.5			
Work-related	19	1.9	0.0	6.6			
Medications	1,176	119.7	105.5	134.0			
Prescribed	1,001	101.0	85.8	118.0			
Advised OTC	58	5.9	0.9	10.9			
GP supplied	117	11.9	0.0	28.8			
Other treatments	559	56.9	46.9	66.9			
Clinical	427	43.5	35.2	51.8			
Procedural	132	13.4	10.0	16.9			
Referrals	106	11.9	7.6	16.2			
Specialist	62	6.3	3.0	9.7			
Allied health services	35	3.5	0.3	6.8			
Pathology	375	38.1	22.6	53.7			
Imaging	92	9.3	5.4	13.2			

Note: LCL—lower confidence limit, UCL—upper confidence limit, OTC—over-the-counter.

The relative rate of new problems managed was somewhat higher among the Indigenous encounters (61.7 per 100 encounters compared with 55.1 in the total data set) and this may be related to the slightly higher proportion of new patients in the Indigenous sample. The total medication rate of 119.7 per 100 Indigenous encounters was also higher than average across all encounters (104.5 per 100). This was reflected in slightly higher prescribing rates (101.0 per 100 Indigenous encounters compared with 88.0 per 100 on average) and in the rate of GP-supplied medications (11.9 compared with 7.6 per 100 encounters in the total data set). However, it was not reflected in the rate of advised over-the-counter medications which was somewhat lower at Indigenous encounters (5.9 per 100) than average (8.9 per 100).

The relative rate of clinical treatments (such as advice and counselling) was a little higher at encounters with Indigenous people (43.5 per 100 encounters) than in the total data set (38.1 per 100), as were pathology order rates (38.1 compared with 31.0 per 100 encounters on average). Referral rates were similar to those in the total data set, though referrals to specialists were a little less frequent while those to allied health services were a little more common. The latter trends may be a reflection of the higher relative rates in Indigenous encounters in remote areas.

## 16.6 Patient reasons for encounter

Table 16.5: Most frequent patient reasons for encounter at encounters with Indigenous people

		Indigenous enco	unters		All enc	All encounters			
Patient reasons for encounter	Number	Rate per 100 encounters <sup>(a)</sup> ( <i>n</i> =982)	95% LCL	95% UCL	Rate per 100 encounters <sup>(a)</sup> ( <i>n</i> =96,973)	95% LCL	95% UCL		
Prescription—all*	81	8.3	5.2	11.3	9.8	9.2	10.3		
Cough	68	6.9	2.8	11.0	6.5	6.1	6.9		
Check-up—all*	51	5.2	1.2	9.1	13.4	12.7	14.0		
Back complaint*	43	4.4	0.0	9.2	3.8	3.6	4.1		
Test results*	41	4.2	0.0	11.9	4.7	4.4	5.1		
Immunisation all*	41	3.9	0.0	8.3	4.6	4.1	5.1		
Fever	38	3.9	0.0	8.3	2.0	1.7	2.3		
Abdominal pain*	28	2.9	0.0	6.1	2.1	2.0	2.3		
Throat symptom/complaint	27	2.7	0.0	6.5	3.8	3.4	4.1		
Rash*	26	2.7	0.0	7.1	2.8	2.6	3.0		
Diabetes (non-gestational)*	23	2.4	0.0	5.6	1.0	0.8	1.2		
Nasal congestion/sneeze	23	2.4	0.0	6.4	2.3	2.0	2.7		
Asthma	22	2.3	0.0	5.9	2.1	2.0	2.3		
Hypertension/high BP*	22	2.3	0.0	6.5	2.1	1.7	2.4		
Chest pain NOS	22	2.2	0.0	4.7	1.2	1.1	1.4		
Subtotal (n, % of RFEs)	556	37.8			36.8				
Total RFEs	1,469	149.5	143.6	155.5	149.2	147.4	150.9		

Figures do not total 100 as more than one problem can be managed at each encounter

Includes multiple ICPC-2 and ICPC-2 PLUS codes (see Appendix 3)

The fifteen most commonly recorded patient reasons for encounter are provided in decreasing order of frequency of the encounters with Indigenous people, together with the comparative results from the total data set in Table 16.5.

The only significant difference between the more common RFEs at encounters with Indigenous people and the total data set was the rate of requests for a check-up (either of a general nature or of a specific body system) which was significantly lower at Indigenous encounters than average and the difference was very large (5.2 per 100 Indigenous encounters compared with 13.4 per 100 total encounters). Other trends were apparent but these did not reach statistical significance. These included higher rates of presentation for diabetes (2.4 per 100 Indigenous encounters and 1.0 per 100 total) and for fever, chest pain, and abdominal pain. There were slightly lower rates of requests for a prescription, test results and immunisation and of throat complaints.

# 16.7 Morbidity managed

The distribution of the problems managed in encounters with Indigenous people is presented in terms of ICPC-2 chapters and compared with the distributions for all encounters in Table 16.6. Due to the relatively small sample size the confidence intervals around the results for Indigenous people are broad and this rendered any differences in the management rates of no statistical significance.

Table 16.6: Distribution of problems at Indigenous encounters by ICPC-2 chapter

		Indigenous enco	unters		All enc	ounters	
Problems managed	Number	Rate per 100 encounters <sup>(a)</sup> ( <i>n</i> =1,163)	95% LCL	95% UCL	Rate per 100 encounters <sup>(a)</sup> ( <i>n</i> =140,824)	95% LCL	95% UCL
Respiratory	221	22.5	17.7	27.3	21.4	20.7	22.0
Skin	163	16.6	12.4	20.8	16.1	15.6	16.8
General & unspecified	143	14.6	9.6	19.6	14.7	14.0	15.5
Circulatory	134	13.6	9.2	18.1	16.1	15.5	16.8
Musculoskeletal	129	13.1	9.4	16.8	17.5	17.0	18.0
Endocrine and metabolic	126	12.9	8.7	17.0	10.4	10.0	10.9
Psychological	106	10.8	6.3	15.3	10.6	10.1	11.2
Digestive	101	10.3	6.9	13.5	9.9	9.6	10.2
Pregnancy, family planning	62	6.3	3.4	9.3	4.0	3.7	4.3
Ear	55	5.6	2.6	8.7	4.2	4.0	4.4
Female genital system	45	4.6	2.1	7.1	6.1	5.8	6.5
Urology	43	4.4	0.0	8.9	2.8	2.7	3.0
Neurological	33	3.4	0.0	7.3	3.7	3.5	3.9
Eye	27	2.8	0.0	6.5	2.5	2.4	2.6
Social problems	14	1.4	0.0	4.4	0.7	0.5	0.9
Male genital system	11	1.1	0.0	4.5	1.3	1.1	1.4
Blood	7	0.8	0.0	3.0	1.3	1.2	1.4
Total problems	1,422	144.7	136.8	152.7	143.4	141.7	145.2

a) Figures do not total 100 as more than one problem can be managed at each encounter

Note: UCL—upper confidence limit, LCL—lower confidence limit

There were however some interesting trends. These included a slightly lower management rate of problems related to the circulatory system at 13.6 per 100 encounters compared with 16.1 per 100 in the total data set (probably reflecting the younger age of the Indigenous encounter sample), and of the musculoskeletal (13.1 and 17.5) and the female genital (4.6 and 6.1) systems. Somewhat higher rates of management appeared for problems related to the endocrine and metabolic system (12.9 per 100 encounters compared with 10.4 on average), pregnancy and family planning (6.3 compared with 4.0), the ear (5.6 and 4.2) and urological problems (4.4 per 100 encounters compared with the average 2.8). However, it must be remembered that the numbers in some of these cells are very small.

Table 16.7: Most frequent individual problems managed

		Indigenous enco	unters		All encounters			
Problems managed	Number	Rate per 100 encounters <sup>(a)</sup> ( <i>n</i> =982)	95% LCL	95% UCL	Rate per 100 encounters <sup>(a)</sup> ( <i>n</i> =96,973)	95% LCL	95% UCL	
Hypertension*	65	6.6	3.1	10.2	9.0	8.6	9.5	
Diabetes*	59	6.0	3.1	8.9	3.1	2.9	3.3	
Asthma	49	5.0	0.0	10.5	2.8	2.6	3.0	
Upper respiratory tract infection	49	4.9	1.0	8.8	6.2	5.8	6.6	
Immunisation all*	45	4.6	0.0	12.2	4.7	4.2	5.1	
Acute bronchitis/bronchiolitis	38	3.9	0.3	7.5	2.7	2.5	3.0	
Depression*	32	3.2	0.0	6.7	3.4	3.2	3.6	
Back complaint*	31	3.1	0.0	8.5	2.6	2.4	2.8	
Acute otitis media/myringitis	29	3.0	0.0	6.1	1.3	1.2	1.5	
Lipid disorder	22	2.3	0.0	5.7	2.9	2.7	3.1	
General check-up*	21	2.2	0.0	6.0	1.8	1.6	2.0	
Urinary tract infection*	20	2.1	0.0	5.8	1.6	1.5	1.7	
Impetigo	20	2.1	0.0	11.0	0.2	0.0	0.5	
Pregnancy*	20	2.0	0.0	5.0	0.9	0.7	1.1	
Subtotal (n, % of total problems	500	35.2	• •		26.9			
Total problems	1,422	144.7	136.8	152.7	143.4	141.7	145.2	

<sup>(</sup>a) Figures do not total 100 as more than one problem can be managed at each encounter. Also only the top ten are included.

Note: LCL—Lower confidence limit, UCL—upper confidence limit.

The ten most common problems managed at encounters with Indigenous people are listed in decreasing order of frequency in Table 16.7 with comparative results for the total data set. Although the wide confidence intervals generated by the small sample size rendered none of the differences statistically significant, some interesting patterns emerged. The relative rate of problems related to the endocrine and metabolic system as a whole was earlier demonstrated to be slightly higher at encounters with Indigenous people. This would largely be due to the management rate of diabetes, which was about double the average rate (6.0 per 100 Indigenous encounters compared with 3.1 for the total data set).

In contrast, reflecting the generally lower rate of management of circulatory problems, hypertension was managed at a rate of only 6.6 per 100 Indigenous encounters compared with 9.0 per 100 total encounters. The rate of management of acute otitis media was notable at 3.0 per 100 encounters (compared with 1.3 on average), as was the rate of impetigo (2.1

<sup>\*</sup> Includes multiple ICPC-2 or ICPC-2 PLUS codes (see Appendix 3)

per 100 compared with 0.2), and pregnancy (2.0 compared with 0.9 per 100). It is also interesting to note the slightly lower rate reported for upper respiratory tract infections and the reverse result for acute bronchitis.

## 16.8 Discussion

The proportion of total encounters that were identified as being with Indigenous people (1.0%) was low, relative to the proportion of Indigenous people in the total population (2.2% at 30 June 1999.<sup>44</sup> Nevertheless, this year represents approximately one million private general practice consultations with Indigenous people across the country in the 12 months 2001–02. We do not know the extent to which GPs regularly ask the question and the manner in which they ask it. Nor do we know the extent to which Indigenous people, when asked the question, are willing to identify themselves as such in this environment.

There are also methodological issues that may affect the reliability of these data. Throughout the BEACH program, GPs have been instructed to ask the patient whether they identify as an Aboriginal person and/or as a Torres Strait Islander. In the first year of the study (1998–99) both a 'Yes' and a 'No' box were offered for these and other questions about the characteristics of the patients (such as health care card status and non-English-speaking background). In that year the proportion of total encounters that was identified as being with Indigenous persons was 1.2%. In the second and third years of the program GPs were only offered a 'Yes' box for each of the patient characteristics being measured. This was because the first year's data had suggested that when offered both a positive and negative option they were inclined to tick only the 'Yes' boxes and leave the 'No' boxes blank. It was thought that removing the 'No' box would therefore not affect their responses.

However, between 1999 and 2001 the positive response rate to the Indigenous questions (and to other patient characteristics questions) decreased considerably, though the decrease was not statistically significant due to the small sample involved. In 1999–00 the proportion of total encounters identified as being with Indigenous persons was 0.7% and in 2000–01 it was 0.8%.

In the fourth BEACH year, 2001–02 (here reported), the form again included both a positive and negative option for each patient characteristic. While the GPs still tended to leave the 'No' box blank and only tick the 'Yes' box where appropriate, the proportion of encounters in which the patient responded positively to the questions on Indigenous status rose to 1.0%.

The extent to which these figures merely represent variance over the years in a very small proportion of encounters, or the extent to which the change in format of the recording form has affected these results, is not known. In the fifth year of BEACH a substudy is to be conducted to try to measure the extent to which these figures are likely to be an under-representation of the true attendance rates of Indigenous people.

This brief summary of the characteristics of Indigenous people who visited GPs participating in BEACH and the outline of the morbidity managed provide an indication of the health services provided to the Indigenous population by private general practitioners. The extent to which these services were provided in Aboriginal Community Controlled Health Services can only be roughly estimated from the current data. However, the estimates of the total number of private general practice consultations with Indigenous people in Australia suggest that private general practice has an important role in the care of the Indigenous population. In any assessment of the health of the Indigenous population these services must be considered.