Australasian College for Emergency Medicine
Department of Policy, Research and Advocacy

Aboriginal and Torres Strait Islander and Non-Indigenous Presentations to Australian Emergency Departments

Report
May 2018

EXECUTIVE SUMMARY

Cover artwork by Luke Maille

Aboriginal and Torres Strait Islander peoples account for 3.0% of Australia's total population[1], but accounted for 5.6% of the total 7.2 million emergency department (ED) presentations to Australian hospitals in 2014-15.

Aboriginal and Torres Strait Islander peoples accounted for a higher proportion of all ED presentations in very remote (50%) and remote areas (35%), compared to 3% of ED presentations in metropolitan areas; however, they were overrepresented across all of these areas in comparison to their proportion in the general population — 45% of people living in very remote areas, 16% of people living in remote areas and 1.5% of people living in metropolitan areas were Indigenous[1].

The Northern Territory (NT) reported the highest proportion of Aboriginal and Torres Strait Islander ED presentations (45%). In comparison, Aboriginal and Torres Strait Islander ED presentations in other states ranged between 2% and 8% of the total ED presentations. Almost one-third (30%) of people living in the NT were Indigenous in 2014, compared to 5% or less in the other jurisdictions[1].

The age distribution of Aboriginal and Torres Strait Islander ED patients was comparable across all age groups ranging between 7% and 8% of each age group up until 55 years of age. Beyond 55 years of age, the proportion of Indigenous patients decreased as age increased, with only 1.3% (18,586 of 1,432,923) of Aboriginal and Torres Strait Islander ED patients among those who aged greater than 65 years of age.

The Indigenous population has a relatively young age structure — in 2016, 4.8% of the Indigenous population compared with 16% of the non-Indigenous population were aged greater than 65 years of age[2].

A similar percentage of Aboriginal and Torres Strait Islander and non-Indigenous ED patients arrived by ambulance. However, there was significantly higher percentage of Aboriginal and Torres Strait Islander ED patients who arrived by police/correctional service vehicles (2.5%) compared to non-Indigenous patients (0.6%).

A slightly smaller proportion of Aboriginal and Torres Strait Islander ED patients were allocated to Australasian Triage Scale, ATS 2 (Emergency: 10% vs. 12%) and ATS 3 (Urgent: 32% vs. 35%), compared to non-Indigenous patients. In contrast, a slightly higher proportion were allocated to ATS 4 (Semi-urgent: 45% vs. 42%) and ATS 5 (Non-urgent: 12% vs. 10%). A similar percentage (0.7%) of both Indigenous and non-Indigenous ED patients were allocated to ATS 1 (Resuscitation).

Overall 26% of Aboriginal and Torres Strait Islander ED patients and 30% of non-Indigenous ED patients were admitted, with 1% in each group referred to other hospitals for admission. A higher percentage of Indigenous ED patients did not wait (6%) or left at own risk (2.6%) compared to non-Indigenous patients (3% and 1.6%, respectively).

The top 10 most common major diagnostic blocks (MDBs) reported were slightly different between Aboriginal and Torres Strait Islander patients compared with non-Indigenous patients. The MDBs that were more predominant among Indigenous patients included respiratory system illness (9.1% vs. 7.5%); illness of skin/subcutaneous tissue/breast (6.7% vs. 4.3%); psychiatric illness (3.7% vs. 2.7%); alcohol/drug abuse and alcohol/drug-induced mental disorder (2.7% vs. 0.8%); endocrine/nutritional/metabolic system illness (1.4% vs. 1.0%); and social problem (0.9% vs. 0.3%).

PURPOSE AND SCOPE OF REPORT

Aboriginal and Torres Strait Islander people have poorer health outcomes than non-Indigenous Australians due to both social and behavioural factors as well health system factors, and are overrepresented in emergency department (ED) presentations to Australian hospitals[1]. The aim of this report is to examine the experiences of Aboriginal and Torres Strait Islander (Indigenous) patients compared to non-Indigenous patients presenting to emergency departments (EDs) in Australia. The data presented in this report utilises data obtained from the National Non-admitted Patient Emergency Department Care Database (NNAPEDCD) managed by the Australian Institute of Health and Welfare (AIHW) for reporting public hospitals for the period of 1 July 2014 to 30 June 2015.

DATA QUALITY AND DATA INTERPRETATION

Data analysis and interpretation in this report are closely associated with the data quality of NNAPEDCD. Detailed information regarding the data quality of the database, including the quality of Indigenous status data and possible variation in reporting across jurisdictions, are available in the AIHW report[3]. In particular, comparisons between jurisdictions should be made with caution, particularly for NSW due to their higher number and proportion of smaller hospitals reporting ED presentation data, which will impact on their overall case mix and patient acuity. Refer to Table 2.3 (page 12) in the AIHW report[3] for further information regarding the distribution of hospital peer groups by jurisdiction.

RESULTS

ED presentations of Aboriginal and Torres Strait Islander peoples

By remoteness area of reporting EDs

Aboriginal and Torres Strait Islander peoples accounted for 5.7% (406,729) of the total 7,086,405 ED presentations in 2014-15. However, this figure excludes Indigenous presentations to Australian Capital Territory (ACT) and Tasmanian (TAS) EDs as Indigenous status of patients was not provided by these jurisdictions. This was a 5.6% increase on the previous year, where 392,142 Indigenous presentations or 5.4% were recorded[1].

The proportion of Aboriginal and Torres Strait Islander presentations varied by remoteness area, as measured by the Australian Standard Geographical Classification – Remoteness Area (ASGC-RA) (Table 1). Nationally, a higher percentage of Aboriginal and Torres Strait Islander ED presentations were seen in EDs located in remote (35%) and very remote areas (50%), compared to EDs in major cities (3%).

Table 1 Number (%) of Indigenous ED presentations, by remoteness area of reporting EDs

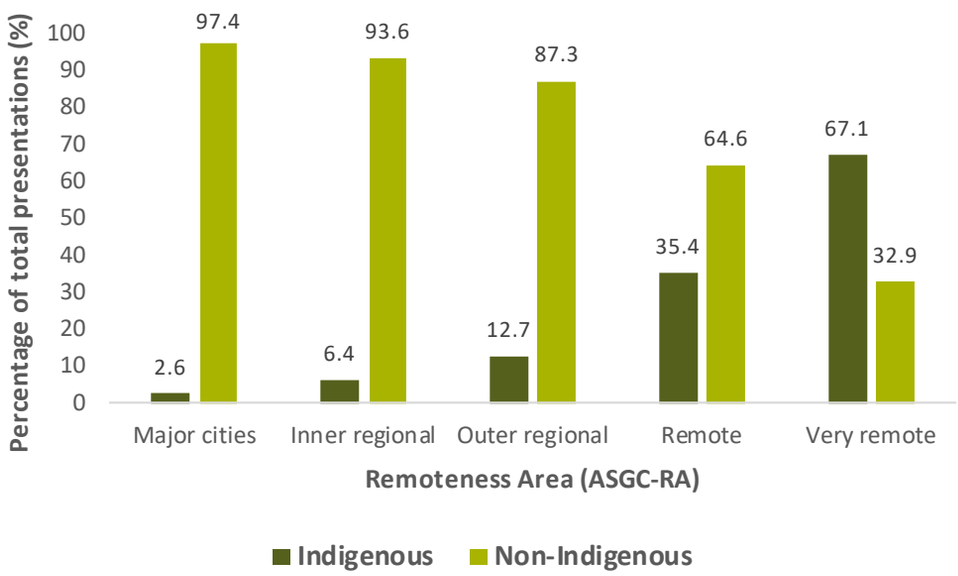
ED Remoteness	Total Presentations	Total Indigenous Presentations	
		No.	%
Major Cities	4,789,227	132,002	2.8
Inner Regional	1,443,902	101,818	7.1
Outer Regional	634,555	93,028	14.7
Remote	196,385	68,628	34.9
Very Remote	22,336	11,253	50.4
Total	**7,086,405**	**406,729**	**5.7**

By remoteness area of patients' usual residences

Similarly, quite a significant difference was found in the distribution of Indigenous and non-Indigenous ED patients by their place of usual residence. Aboriginal and Torres Strait Islander ED patients were more likely than non-Indigenous ED patients to reside in very remote areas (67% vs 33%) (Figure 1). By contrast, only 3% of Aboriginal and Torres Strait Islander peoples who attended an ED in 2014-15 resided in a major city.

According to the AIHW, of all of the people living in remote areas, the proportion who are of Aboriginal and Torres Strait Islander origin is relatively high – in 2011 the most recent available data, 45% of people living in very remote areas and 16% of people living in remote areas were Indigenous[1].

Figure 1 Proportion of Indigenous and non-Indigenous ED presentations, by remoteness area of their usual residence



By jurisdiction

According to the 2016 Census by the Australian Bureau of Statistics (ABS), while the Northern Territory (NT) has Australia's highest proportion of Aboriginal and Torres Strait Islander people (25.5% of the NT population), New South Wales (NSW) is home to the highest number, with more than 216,000 people of Aboriginal and Torres Strait Islander origin[2].

NSW (36%), Queensland (QLD) (22%), the NT (16%) and Western Australia (WA) (15%) accounted for nearly 90% of all Indigenous ED presentations (Table 2). Whilst the NT accounted for the third largest number of Indigenous ED presentations (63,754 (16%)) among the jurisdictions, the number of non-Indigenous ED presentations to NT EDs was the smallest across jurisdictions (78,490 (1%)). Victoria, however, comprised the second smallest number of Indigenous ED presentations (26,799 (7%)), but accounted for the second largest number of ED presentations among non-Indigenous patients (1.58 million (24%)).

Table 2 Distribution of Indigenous and non-Indigenous ED presentations, by jurisdiction

Jurisdiction	Indigenous ED presentations, no (%)	Non-Indigenous ED presentations, no (%)
NSW	145,316 (35.7)	2,536,150 (38.0)
NT	63,754 (15.7)	78,490 (1.2)
QLD	87,508 (21.5)	1,291,375 (19.3)
SA	20,629 (5.1)	448,739 (6.7)
VIC	26,799 (6.6)	1,583,824 (23.7)
WA	62,723 (15.4)	741,098 (11.1)
Total	**406,729 (100)**	**6,679,676 (100)**

As shown in Table 3, the NT reported the highest percentage of Indigenous ED presentations (45%) compared with non-Indigenous presentations (55%). In comparison, Indigenous ED presentations in the other states ranged between 2% (VIC) and 8% (WA). To put this data into context, the AIHW reported that almost one-third (30%) of people living in the NT were Indigenous in 2014, compared with 5% or less in the other states and territories[1].

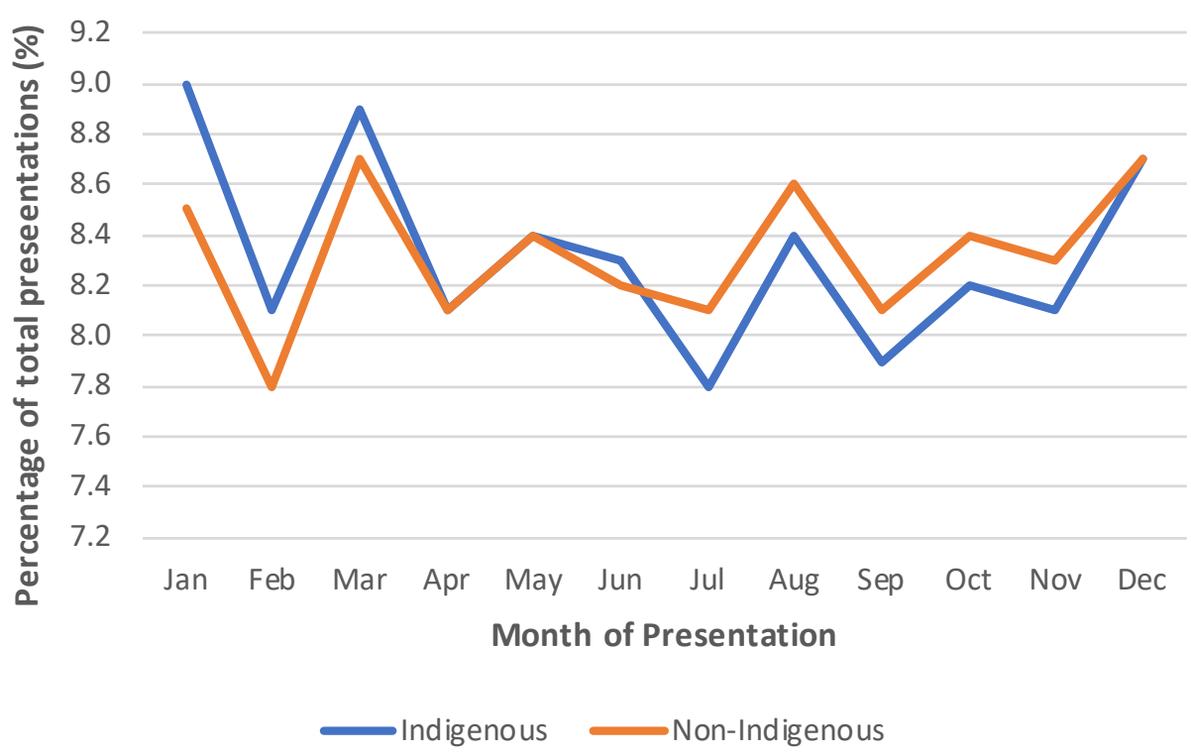
Table 3 Number (%) of Indigenous ED presentations in each jurisdiction

Jurisdiction	Annual ED Presentations	Indigenous Presentations	
		No.	%
NSW	2,681,466	145,316	5.4
NT	142,244	63,754	44.8
QLD	1,378,883	87,508	6.3
SA	469,368	20,629	4.4
VIC	1,610,623	26,799	1.7
WA	803,821	62,723	7.8
Total	**7,086,405**	**406,729**	**5.7**

By month of presentations

There was no difference in the proportion of ED presentations between Indigenous and non-Indigenous patients presenting to reporting EDs across the 12-month period (Figure 2). Throughout the financial year from 1 July 2014 to 30 June 2015, both populations were represented in similar proportions (8-9%) of the total Indigenous and non-Indigenous ED presentations each month.

Figure 2 Proportion of Indigenous and non-Indigenous ED presentations, by month



By type of visit

As shown in Table 4, greater than 97% of total ED presentations in both populations were categorised as emergency presentations, with about 3% categorised as planned returned visits or pre-arranged admissions. Despite a low to negligible percentage, there were 4503 presentations who were reported as dead on arrival among non-Indigenous populations and 130 presentations among Aboriginal and Torres Strait Islander peoples.

Table 4 Distribution of Indigenous and non-Indigenous ED presentations, by type of ED visit

	Indigenous, no (%)	Non-Indigenous, no (%)
Emergency presentation	395,231 (97.2)	6,506,041 (97.4)
Planned return visit	10,059 (2.5)	152,198 (2.3)
Pre-arranged admission	1026 (0.3)	11,803 (0.2)
Patient in transit	128 (0)	1235 (0)
Dead on arrival	130 (0)	4503 (0.1)
Not known	155 (0)	3896 (0.1)
Total	**406,729 (100)**	**6,679,676 (100)**

By major diagnostic block

The top 10 major diagnostic blocks (MDBs) were slightly different for Aboriginal and Torres Strait Islander ED patients compared with non-Indigenous ED patients (Table 5). The most common MDBs reported for Indigenous and non-Indigenous patients were comparable, except psychiatric illness (ranked in the top 10 MDBs among Indigenous patients at 3.7% and outside the top 10 MDBs for non-Indigenous patients at 2.7%); system infection/parasite and urological system illness (both ranked in the top 10 MDBs among non-Indigenous patients, at 3.4% respectively, but were outside the top 10 MDBs for Indigenous patients).

Respiratory system illness and illness of the skin/subcutaneous tissue/breast were slightly more prevalent among Indigenous patients compared to non-Indigenous patients. On the contrary, circulatory system illness was more prevalent among non-Indigenous patients than among Aboriginal and Torres Strait Islander patients.

Table 5 Top 10 MDBs among Indigenous and non-Indigenous ED presentations

Indigenous ED Presentations (n=406,729)		Non-Indigenous ED Presentations (n=6,679,676)	
Injury (major, single site)	13.7%	Injury (major, single site)	16.3%
Digestive system illness	9.3%	Digestive system illness	11.1%
Respiratory system illness	9.1%	Circulatory system illness	8.6%
Illness of skin, subcutaneous tissue and breast	6.7%	Respiratory system illness	7.5%
Injury (minor, single site)	6.4%	Injury (minor, single site)	6.9%
Illness of ear, nose, throat	5.6%	Neurological system illness	5.0%
Circulatory system illness	5.5%	Musculoskeletal/ connective tissue system illness	4.9%
Musculoskeletal/ connective tissue system illness	5.2%	Illness of skin, subcutaneous tissue and breast	4.3%
Psychiatric illness	3.7%	Illness of ear, nose, throat	4.2%
Neurological system illness	3.7%	System infection/parasites, Urological system illness	3.4%

Other MDBs that were more prevalent among Indigenous than non-Indigenous ED presentations included alcohol/drug abuse and alcohol/drug-induced mental disorder (2.7% compared to 0.8%), endocrine/nutritional/metabolic system illness (1.4% vs. 1.0%) and social problem (0.9% vs. 0.3%).

According to the AIHW report, in 2012–13 the rate of community mental health service contacts for Indigenous people was 3.2 times the rate for non-Indigenous people, and an estimated 15,356 clients of publicly-funded alcohol and/or other drug treatment services were Indigenous, accounting for 14% of clients[1].

The five most commonly reported MDBs among Indigenous ED presentations across each of the jurisdictions data was available for are shown in Table 6. Single-site major injury was the most prevalent MDB in all jurisdictions, except WA. Digestive system illness and respiratory system illness were among the top five MDBs among Indigenous presentations in all states and territories.

Table 6 Top 5 MDBs among Indigenous ED presentations, by jurisdiction

NSW n=1,453,16		NT n=63,754		QLD n=87,508		SA n=20,629		VIC n=26,799		WA n=62,723	
Top 5 MDBs	**%**	**Top 5 MDBs**	**%**	**Top 5 MDBs**	**%**	**Top 5 MDBs**	**%**	**Top 5 MDBs**	**%**	**Top 5 MDBs**	**%**
Injury, single site, major	17.0	Injury, single site, major	13.5	Injury, single site, major	13.7	Injury, single site, major	13.6	Injury, single site, major	14.2	Illness of skin, subcutaneous tissue, breast	10.1
Digestive system illness	10.1	Respiratory system illness	10.9	Injury, single site, minor	10.7	Digestive system illness	8.8	Digestive system illness	10.6	Respiratory system illness	9.9
Respiratory system illness	8.9	Illness of skin, subcutaneous tissue, breast	8.3	Digestive system illness	9.8	Respiratory system illness	7.6	Respiratory system illness	7.8	Injury, single site, minor	9.3
Illness of ear, nose, throat	6.5	Digestive system illness	6.9	Respiratory system illness	8.4	Circulatory system illness	5.4	Injury, single site, minor	6.0	Digestive system illness	8.6
Illness of skin, subcutaneous tissue, breast	5.5	M-skeletal/ connective tissue system illness	6.3	Circulatory system illness	6.8	Psychiatric illness	4.9	Circulatory system illness	5.9	M-skeletal/ connective tissue system illness	8.0

By age group and gender

According to the ABS 2016 Census data, Indigenous Australians have a relatively young age structure, with a median age of 23 years compared to 38 years for non-Indigenous Australians[2]. Aboriginal and Torres Strait Islander peoples also live a proportionally shorter life than non-Indigenous Australians. The proportion of Indigenous Australians aged 65 years and over was considerably smaller (4.8%) than for non-Indigenous people (16%)[2].

With this in mind, Table 7 shows very different age profiles between Indigenous and non-Indigenous ED patients. For Indigenous patients aged 25 years or over, there was a decreasing trend across age groups in the number presenting to EDs, with only 5% of Indigenous ED patients aged 65 years or over. On the contrary for non-Indigenous ED patients, the greatest proportion (21%) were those aged 65 years or over.

The proportion of females across each of the age groups is also shown in Table 7, with a slightly higher overall proportion of females in the Aboriginal and Torres Strait Islander ED presentation population (52%) compared with the non-Indigenous presentation population (49%). The proportion of females was generally higher than males among Indigenous ED presentations across all age groups except for those 14 years of age or less.

Table 7 Distribution of Indigenous and non-Indigenous ED presentations, by age group and gender

	Indigenous ED Presentations		Non-Indigenous ED Presentations	
Aged	**No. (%)**	**% Female**	**No. (%)**	**% Female**
<5	60,334 (14.8)	44.5	754,471 (11.3)	43.7
5–14	49,432 (12.2)	47.0	667,986 (10.0)	44.3
15–24	75,715 (18.6)	56.8	912,854 (13.7)	52.4
25–34	66,745 (16.4)	56.7	907,735 (13.6)	53.7
35–44	59,391 (14.6)	53.8	745,116 (11.2)	49.6
45–54	49,519 (12.2)	50.2	670,792 (10.0)	47.9
55–64	27,000 (6.6)	51.2	606,165 (9.1)	47.3
>65	18,586 (4.6)	56.0	1,414,337 (21.2)	51.0
Total	**406,722 (100)**	**52.1**	**6,679,456 (100)**	**49.3**

Age not reported: Indigenous, n=7; Non-Indigenous, n=220

Analysis of MDB, by age group

The MDB profiles were quite distinctive for very young and older age groups, with the top 5 MDBs for ED presentations in the age groups less than 5 years and greater than 65 years analysed by Indigenous status (Tables 7 and 8).

The top 5 most common MDBs for both groups were similar in the less than 5 years age group (Table 8), with only a slight difference in the ranking of MDB frequency.

Table 8 Top 5 MDBs for ED presentations in the age group of less than 5 years, by Indigenous status

Indigenous Population (n=60,334)		Non-Indigenous Population (n=754,471)	
Top 5 MDBs	**%**	**Top 5 MDBs**	**%**
Respiratory system illness	22.6	Respiratory system illness	19.0
Injury (major, single site)	12.2	Injury (major, single site)	15.6
System infection/parasites	11.1	System infection/parasites	12.8
Illness of ear/nose/throat	9.7	Digestive system illness	10.8
Digestive system illness	9.4	Illness of ear/nose/throat	9.3

Likewise, the most common MDBs for those aged 65 years or greater were the same (Table 9); however, respiratory system illness was more common among older Aboriginal and Torres Strait Islander patients whilst single site major injury was more common among older non-Indigenous patients.

Table 9 Top 5 MDBs for ED presentations in the age group of 65 years or greater, by Indigenous status

Indigenous Population (n=18,586)		Non-Indigenous Population (n=1,414,337)	
Top 5 MDBs	**%**	**Top 5 MDBs**	**%**
Circulatory system illness	16.7	Circulatory system illness	17.8
Respiratory system illness	15.4	Injury (major, single site)	10.8
Digestive system illness	9.6	Digestive system illness	10.3
Injury (major, single site)	7.1	Respiratory system illness	10.3
Neurological system illness	6.4	Neurological system illness	8.8

Subgroup analyses on several types of prevalent MDBs among Aboriginal and Torres Strait Islander patients were conducted to explore the distribution of MDBs across different age groups. Table 10 presents the most common MDBs and the age group(s) they were most likely associated with, by Indigenous status.

Single site major injury was the most common cause for ED presentations among Aboriginal and Torres Strait Islander patients in age groups between 5–14 years (22–25%), whereas **single site minor injury** was the most commonly observed MDB for age groups between 10–19 years (10–14%). A similar profile for these MDBs was observed for non-Indigenous patients.

Illness of skin/subcutaneous tissue/breast was most commonly reported for Aboriginal and Torres Strait Islander patients in age groups between 0–14 years (7–10%). However, for non-Indigenous patients Illness of skin/subcutaneous tissue/breast was consistently observed across all age groups.

Alcohol/ drug abuse and alcohol/drug-induced mental disorders were primarily observed among Aboriginal and Torres Strait Islander patients in age groups between 35–49 years (5–6%). Comparatively, these were observed largely among non-Indigenous patients aged 15–49 years (1.5–2%)

Psychiatric illness was most frequently observed among Aboriginal and Torres Strait Islander patients across age groups 15–44 years (5–6%) whilst the MDB **social problem** was consistently observed across all age groups (0.8–1.2%). In comparison, for non-Indigenous patients these were observed equally across all age groups, at a slightly lower rate.

Table 10 Most prominent MDBs by age group and ED patient Indigenous status

MDB	Indigenous Patients (n=406,729)		Non-Indigenous Patients (n=6,679,676)	
	Age group(s)	% range	Age group(s)	% range
Injury (major, single site)	5–14 years	22–25	5–14 years	26–31
Injury (minor, single site)	10–19 years	10–14	10–19 years	12–18
Illness of skin, subcutaneous tissue and breast	0–14 years	7–10	All age groups	3–5
Alcohol/drug abuse and alcohol/drug-induced mental disorders	35–49 years	5–6	15–49 years	1.5–2
Psychiatric illness	15–44 years	5–6	15–49 years	4–5
Social problem	All age groups	0.8–1.2	All age groups	0.1–0.3
Respiratory system illness	<5 years	23	<5 years	19
Circulatory system illness	≥60 years	16–17	≥65 years	17–18
Endocrine/nutritional/metabolic system illness	≥50 years	3–4	≥65 years	1.5–2
Digestive system illness	All age groups	8–11	All age groups	10–13

By mode of arrival

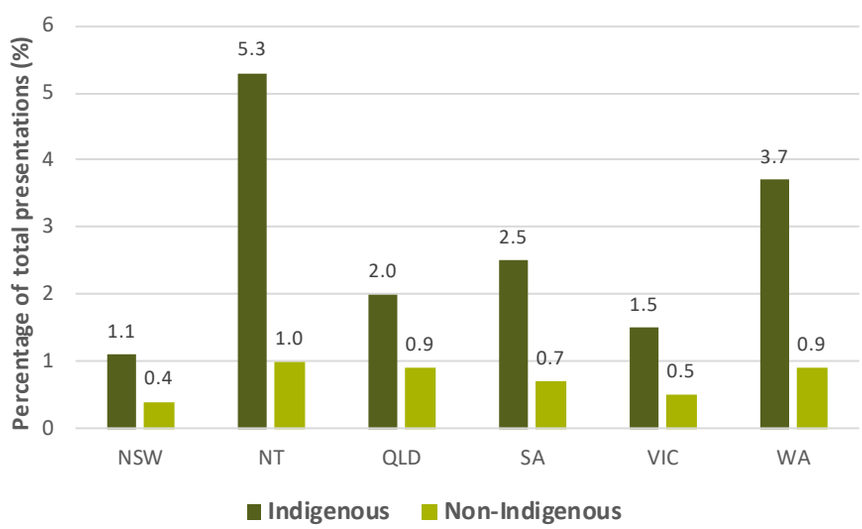
The majority (72% Indigenous vs. 75% non-Indigenous) of presentations to EDs had an arrival mode of Other – indicating that the patient either walked into the ED or came by private transport, public transport, community transport or taxi.

Overall, a similar proportion of Indigenous and non-Indigenous ED presentations (25.5% and 24.3%, respectively) arrived by ambulance (including air ambulance or helicopter rescue service). When this was compared across states/territories (Figure 3), a higher percentage of Indigenous presentations in the NT, QLD and WA arrived by ambulance.

Figure 3 Proportion of Indigenous and non-Indigenous patients arriving by ambulance, by jurisdiction

A higher proportion of Indigenous presentations (2.5%) arrived by police/correctional service vehicle compared to non-Indigenous presentations (0.6%). This trend was consistently observed in all jurisdictions, and was most significant in the NT, where Indigenous ED patients were five times more likely than non-Indigenous patients to arrive by police/correctional service vehicles (Figure 4).

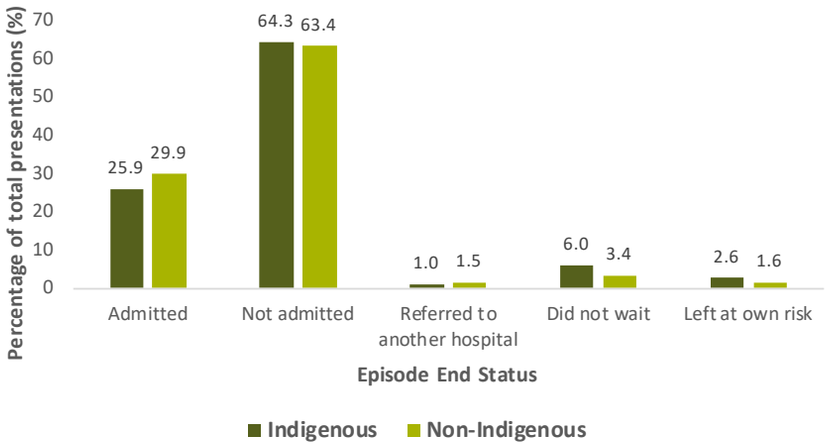
Figure 4 Proportion of Indigenous and non-Indigenous patients arriving by police/correctional service vehicle, by jurisdiction



By episode end status

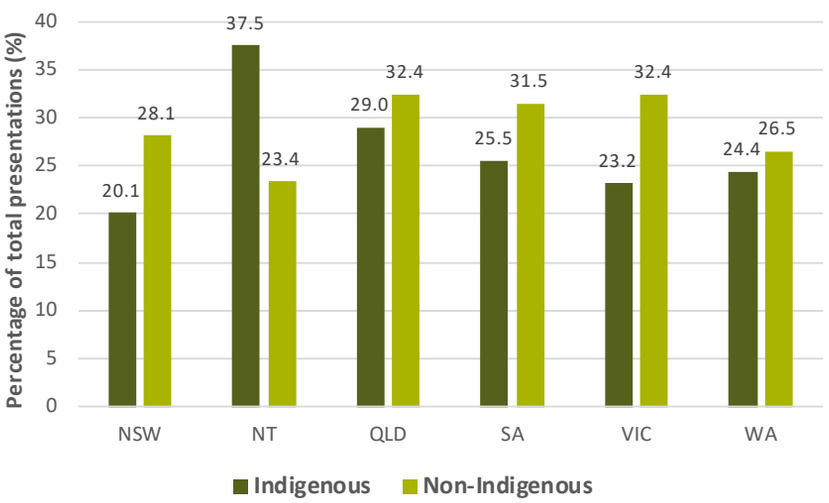
Overall 26% of Indigenous patients compared with 30% of non-Indigenous patients were admitted to the hospital, with 1% in each group transferred to another hospital for admission (Figure 5). Interestingly, a higher percentage of Indigenous presentations did not wait (6%) or left at own risk (2.6%) compared to non-Indigenous presentations (3% and 1.6%, respectively).

Figure 5 Distribution of Indigenous and non-Indigenous presentations, by episode end status.



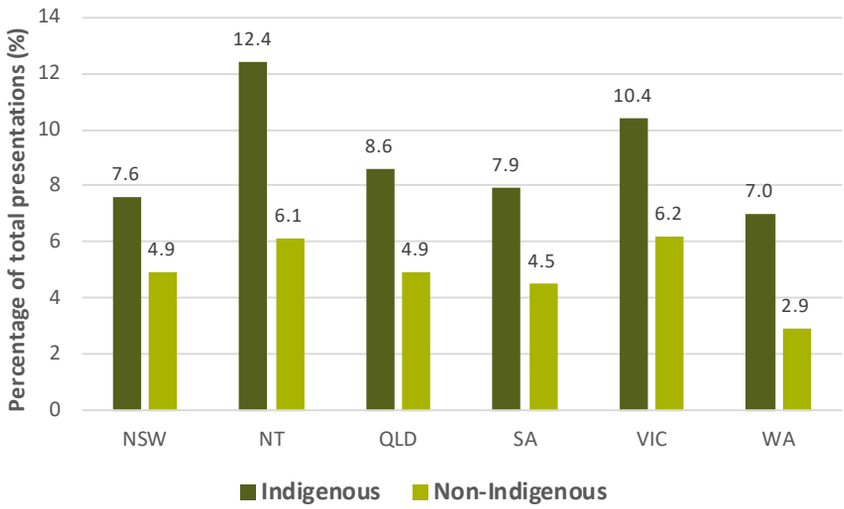
Consistent with the national trend, a lower proportion of Indigenous ED presentations were admitted to the hospital in all jurisdictions, except in the NT (Figure 6) where there was a significantly higher proportion of Indigenous presentations than non-Indigenous presentations admitted (38% compared to 23% respectively).

Figure 6 Proportion of Indigenous and non-Indigenous patients who were admitted to the hospital, by jurisdiction



In all jurisdictions, there was a consistently higher proportion of Indigenous ED patients who did not wait or who left at their own risk, compared with non-Indigenous presentations (Figure 7).

Figure 7 Proportion of Indigenous and non-Indigenous patients who did not wait or left at their own risk, by jurisdiction



Analysis of MDB, by hospital admission and mode of arrival

The five most common MDBs leading to hospital admission were slightly different between Indigenous and non-Indigenous ED presentations. Illness of skin/subcutaneous tissue/breast was recorded as the fifth most common MDB that resulted in hospital admission among Aboriginal and Torres Strait Islander patients, but not for non-Indigenous presentations (Table 11).

Table 11 Comparison of top 5 MDBs that resulted in hospital admission, by Indigenous status

Indigenous ED Presentations n=105,368		**Non-Indigenous ED Presentations n=1,999,371**	
Top 5 MDBs	**%**	**Top 5 MDBs**	**%**
Respiratory system illness	13.5	Circulatory system illness	15.7
Digestive system illness	11.3	Digestive system illness	14.7
Circulatory system illness	11.0	Respiratory system illness	11.4
Injury (major, single site)	10.4	Injury (major, single site)	10.1
Illness of skin/subcutaneous tissue/breast	7.4	Neurological system illness	8.6

Among ED patients of Aboriginal and Torres Strait Islander origin, the top 5 MDBs that resulted in hospital admission were also more likely to be associated with **arrival by ambulance**, except illness of skin/subcutaneous tissue/breast.

For the Aboriginal and Torres Strait Islander ED patients who arrived by **police/correctional service vehicle**, the most common MDBs were psychiatric illness (22.9%), single-site major injury (17.6%) and alcohol/drug abuse and alcohol/drug-induced mental disorders (14.3%). This was the same for non-Indigenous patients, however, a difference in the percentage for each type of MDB was observed (psychiatric illness, 42.0%; single-site major injury, 12.5%; and alcohol/drug abuse and alcohol/drug-induced mental disorders, 8.2%).

By Australasian Triage Scale

Table 12 shows the distribution of Aboriginal and Torres Strait Islander and non-Indigenous ED presentations by triage category according to the Australasian Triage Scale (ATS). Similar proportions of both Indigenous and non-Indigenous presentations were classified as ATS 1 (Resuscitation). The proportion of Indigenous ED patients was slightly less in ATS 2 (Emergency) and ATS 3 (Urgent) compared with non-Indigenous presentations. However, a slightly higher proportion of Indigenous patients were classified as ATS 4 (Semi-urgent) and ATS 5 (Non-urgent).

Table 12 Distribution of ED presentations, by triage category and Indigenous status

Triage Category	Indigenous, no (%)	Non-Indigenous, no (%)
Resuscitation (ATS 1)	2648 (0.7)	45,105 (0.7)
Emergency (ATS 2)	40,235 (9.9)	778,800 (11.7)
Urgent (ATS 3)	131,131 (32.2)	2,352,631 (35.2)
Semi-urgent (ATS 4)	183,351 (45.1)	2,823,221 (42.3)
Non-urgent (ATS 5)	49,001 (12.0)	674,687 (10.1)
Not known	363 (0.1)	5232 (0.1)
Total	**406,729 (100)**	**6,679,676 (100)**

Similarly, all jurisdictions reported higher proportions of Indigenous than non-Indigenous presentations were classified as ATS 4 and ATS 5 whilst smaller percentages were in ATS 2 and ATS 3. A slightly different pattern was observed in NT, where very similar proportions of Indigenous and non-Indigenous presentations were classified as ATS 3 (29.1% vs. 28.2%), ATS 4 (49.8% vs. 49.2%) and ATS 5 (9.7% vs. 9.5%).

Analysis of MDBs, by ATS

The most common MDBs associated with patients classified as ATS 1 (Resuscitation) were compared by Indigenous status (Table 13). The types of MDBs associated with ATS 1 classified patients were quite comparable between Indigenous and non-Indigenous patients, except with respect to alcohol/drug abuse and alcohol/drug-induced mental disorders, which were more frequently observed in Aboriginal and Torres Strait Islander patients.

Table 13 Top 5 MDBs associated with ATS 1 (Resuscitation) patients, by Indigenous status

Indigenous ED Patients n=2648		**Non-Indigenous ED Patients n=45,105**	
Top 6 MDBs in ATS 1	**%**	**Top 6 MDBs in ATS 1**	**%**
Injury (major, single site)	24.5	Circulatory system illness	23.1
Neurological system illness	16.7	Injury (major, single site)	16.5
Circulatory system illness	14.3	Neurological system illness	16.4
Respiratory system illness	10.5	Respiratory system illness	14.1
Poisoning	5.9	Poisoning	5.9
Alcohol/drug abuse and alcohol/drug induced mental disorders	4.3	Injury (minor, single site)	2.5

As shown in Table 14, the types of MDBs being allocated to ATS 2 (Emergency) were also slightly different between Indigenous and non-Indigenous patients. Psychiatric illness was among the five most common MDBs being allocated to the emergency triage category for Aboriginal and Torres Strait Islander patients, whilst neurological system illness was more commonly allocated to this triage category among the non-Indigenous population.

Table 14 Top 5 MDBs associated with ATS 2 (Emergency) patients, by Indigenous status

Indigenous ED Patients n=40,235		Non-Indigenous ED Patients n=778,800	
Top 5 MDBs in ATS 2	**%**	**Top 5 MDBs in ATS 2**	**%**
Circulatory system illness	29.0	Circulatory system illness	34.6
Respiratory system illness	15.2	Respiratory system illness	12.7
Injury (major, single site)	9.0	Injury (major, single site)	9.6
Digestive system illness	5.6	Neurological system illness	6.0
Psychiatric illness	5.6	Digestive system illness	5.8

Tables 15 to 17 show the most common MDBs associated with patients classified as ATS 3 to ATS 5. The MDBs for ATS 3 (Urgent), ATS 4 (Semi-urgent) and ATS 5 (Non-urgent) triage categories were relatively similar between Indigenous and non-Indigenous ED patients. The five most common MDBs were the same for both patient populations in ATS 3 and ATS 5, whilst there was a slight difference between Indigenous and non-Indigenous patients being ATS 4. For patients classified as ATS 4, illness of ear/nose/throat was more common among Indigenous presentations, whereas musculoskeletal/connective tissue system illness was observed more among non-Indigenous patients.

Table 15 Top 5 MDBs associated with ATS 3 (Urgent) patients, by Indigenous status

Indigenous Population n=131,131		Non-Indigenous Population n=2,352,631	
Top 5 MDBs in ATS 3	**%**	**Top 5 MDBs in ATS 3**	**%**
Digestive system illness	13.1	Digestive system illness	15.5
Respiratory system illness	13.0	Injury (major, single site)	11.8
Injury (major, single site)	10.7	Respiratory system illness	10.0
Neurological system illness	6.0	Circulatory system illness	9.3
Circulatory system illness	5.4	Neurological system illness	7.5

Table 16 Top 5 MDBs associated with ATS 4 (Semi-urgent) patients, by Indigenous status

Indigenous Population n=183,351		Non-Indigenous Population n=2,823,221	
Top 5 MDBs in ATS 4	**%**	**Top 5 MDBs in ATS 4**	**%**
Injury (major, single site)	16.3	Injury (major, single site)	20.7
Illness of skin/subcutaneous tissue/breast	9.3	Digestive system illness	11.1
Digestive system illness	9.2	Injury (minor, single site)	9.8
Injury (minor, single site)	8.5	Musculoskeletal/connective tissue system illness	6.5
Illness of ear, nose and throat	7.5	Illness of skin/subcutaneous tissue/breast	6.1

Table 17 Top 5 MDBs associated with ATS 5 (Non-urgent) patients, by Indigenous status

Indigenous Population n=49,001		Non-Indigenous Population n=674,687	
Top 5 MDBs in ATS 5	**%**	**Top 5 MDBs in ATS 5**	**%**
Injury (major, single site)	15.7	Injury (major, single site)	21.4
Illness of skin/subcutaneous tissue/breast	9.4	Injury (minor, single site)	8.6
Musculoskeletal/connective tissue system illness	7.2	Illness of skin/subcutaneous tissue/breast	7.2
Injury (minor, single site)	6.9	Musculoskeletal/connective tissue system illness	6.6
Illness of ear, nose and throat	5.5	Illness of ear, nose and throat	4.4

ED waiting time to treatment

ED waiting time for Indigenous and non-Indigenous patients was adequately reported by the AIHW[3], however, some of the main findings are presented in the following section. Nationally, the median waiting time for Indigenous Australians was the same as that for non-Indigenous Australians (18 minutes)[3]. The overall median waiting time for Indigenous Australians was lower than those for other Australians in Queensland, Western Australia, South Australia and the Northern Territory, but was higher in Tasmania, Victoria and the Australian Capital Territory[3].

The proportion of presentations seen on time for Indigenous Australians (75%) was similar to the proportion of presentations seen on time for non-Indigenous Australians (74%)[3]. There was some variation among the states and territories, with Queensland, Western Australia, South Australia and the Northern Territory all reporting a higher proportion of Indigenous Australians seen on time compared with non-Indigenous Australians[3].

THE ROLE OF ACEM

There are some pertinent differences in the experiences of Indigenous patients and non-Indigenous patients attending EDs in Australia as highlighted within this report. The Australasian College for Emergency Medicine through its Indigenous Health Subcommittee and Reconciliation Action Plan will use these findings to inform aspects of work relating to:

- promoting awareness and respect of Aboriginal and Torres Strait Islander cultural needs in EDs;
- advocating for more Indigenous Health Liaison Officers to be employed in EDs;
- advocating for improved data collection of ED patient ethnicity; and
- improving emergency medicine physician and trainee knowledge of Aboriginal and Torres Strait Islander health issues and outcomes.

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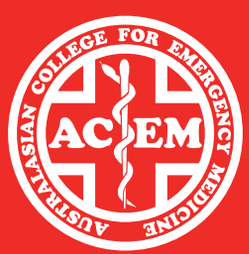

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