

NBMPHN Regional Data to Inform your Quality Improvements

Use of emergency departments for presentations assessed as lower urgency (triage categories 4 and 5): 2015-16 to 2017-18

This Australian Institute of Health and Welfare (AIHW) report 2019 upon use of emergency departments for lower urgency care has been reported recently in the media. While it contains some interesting and challenging data in particular for primary healthcare providers in the NBMPHN region, it is deficient in a number of areas. This data series report provides a summary and critique of the available data.

Background

This Use of Emergency Departments for lower urgency care report 2019 assesses geographic variations across Australia in the rate of presentations to emergency departments which are assessed as lower urgency.

Some emergency department (ED) presentations that are assessed as lower urgency may be avoidable through provision of other appropriate services in the community.

What are presentations that are assessed as lower urgency?

Presentations assessed as lower urgency are **ED presentations at a formal public hospital ED**, where the patient:

- had an Emergency presentation type of visit
- was assessed as needed semi-urgent or non-urgent care – i.e. had a **Triage category of 4 (semi-urgent) or 5 (non-urgent)**
- **did not arrive by ambulance**, or police or correctional vehicle
- **was not admitted** to the hospital, not referred to another hospital, or did not die.

This AIHW identifies these as *potentially avoidable general practitioner (GP)-type presentations*. However, there is **no availability of data** in this report to identify if the patients who presented to the ED for triage

categories 4 or 5 **were referred by a General Practitioner**, or if they presented directly to the ED.

This report presents the all-hours, in-hours and after-hours use of EDs for presentations assessed as lower urgency, **by a person's place of residence**. Findings by gender, age group, by PHN areas and Statistical Areas Level 3 (SA3) are provided. In addition, the **total** number of ED presentations for all triage categories (not only those assessed as lower urgency), arrivals by ambulance and admissions into hospital are also presented.

All information relates to **where a person lived, not where they went to hospital**.

Calculation of in-hours and after-hours periods for this report:

In-hours

- Weekdays from 8:00 am to 7:59 pm (excluding public holidays)
- Saturdays from 8:00 to 12:59pm (excluding public holidays)

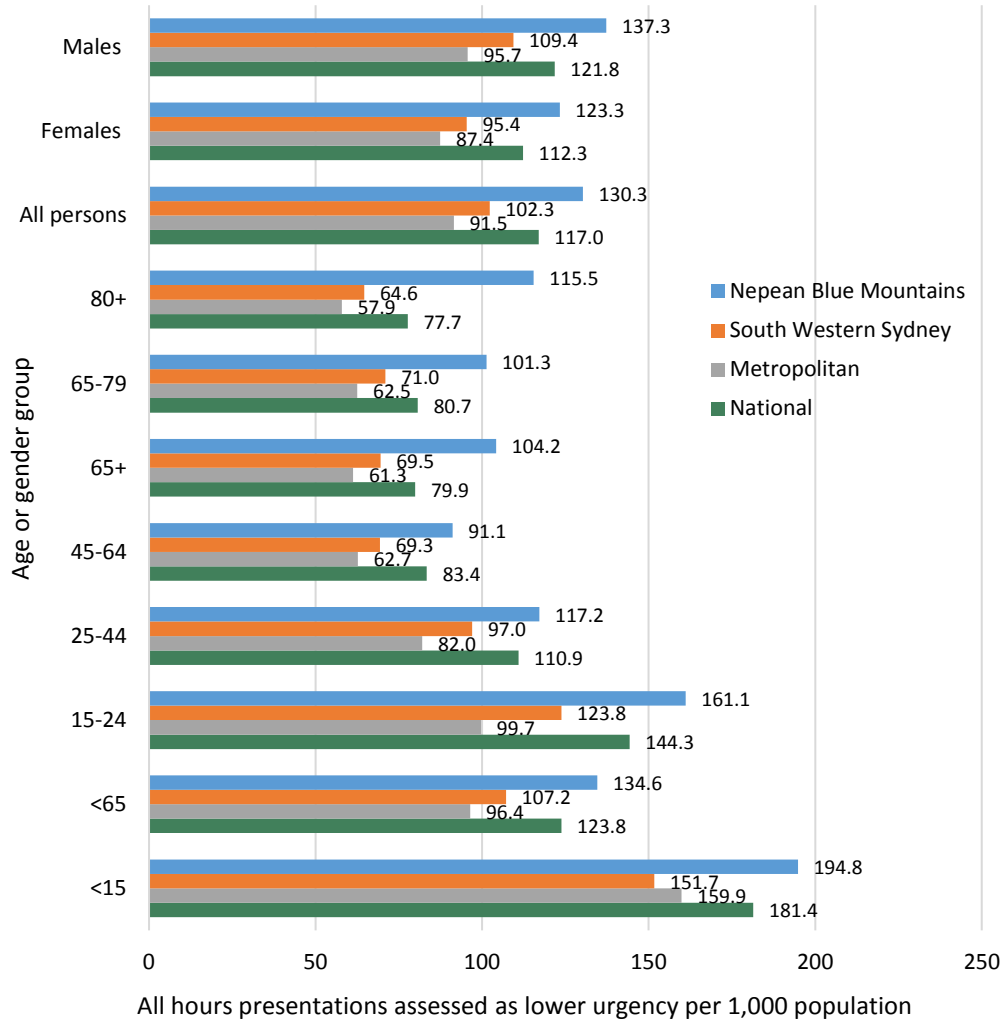
After-hours

- Weekdays before 8:00 am or after 7:59 pm
- Saturdays before 8:00 am or after 12:59 pm
- Sundays all day
- Public holidays

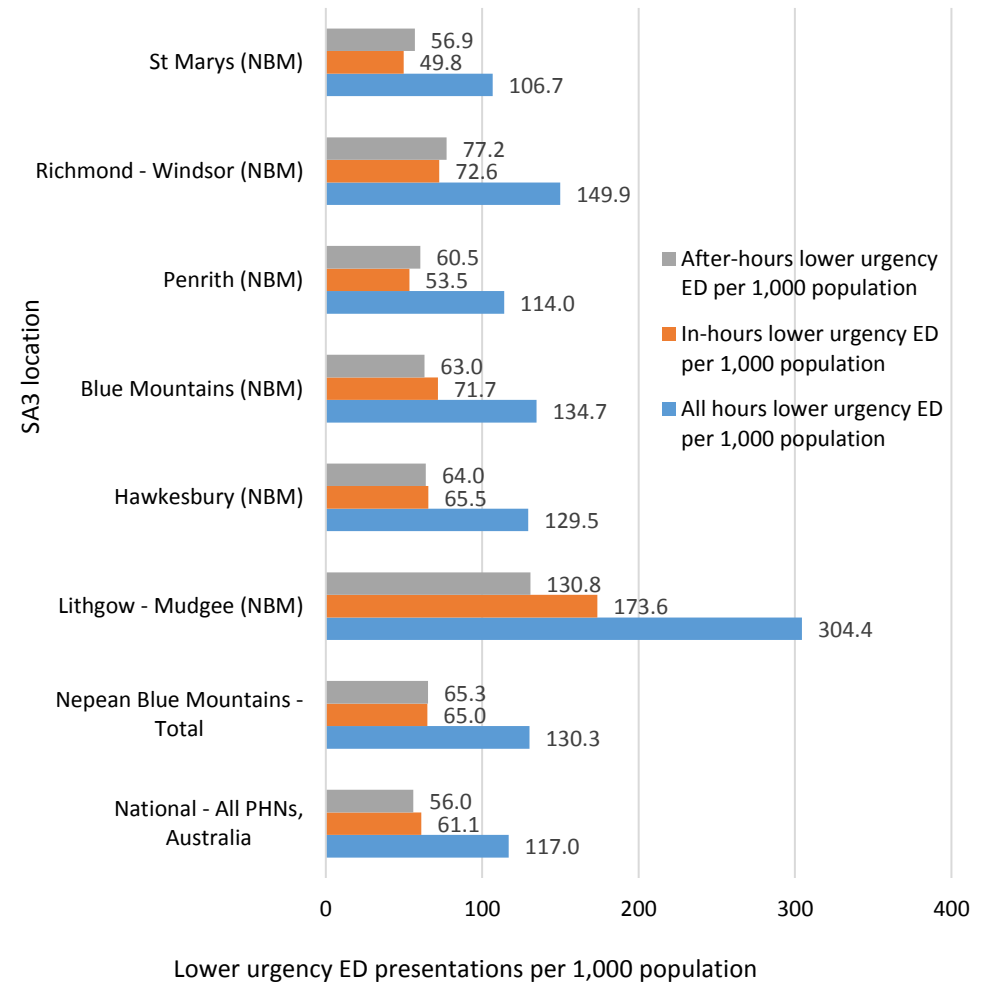
Description of triage category grouping for this report:

- **Triage 1 and 2 combined** (resuscitation: immediate, within seconds; and emergency, within 10 minutes)
- **Triage 3** (urgent: within 30 minutes)
- **Triage 4** (semi-urgent: within 60-minutes)
- **Triage 5** (non-urgent: within 120-minutes)

All hours presentations assessed as lower urgency: NBMPHN vs. SWSPHN, Metropolitan and National PHN regions, 2017-18



All hours lower urgency care ED presentations for all persons within Nepean Blue Mountains region, by SA3 location, 2017-18



Key findings – Nepean Blue Mountains region

- In 2017-18, there was a total of **48,487 presentations assessed as lower urgency** by Nepean Blue Mountains (NBM) residents. **Approximately half** of these presentations (49.9% or 24,191) occurred **in-hours** and the **other half** (50.1% or 24,295) occurred in the **after-hours period**.
- NBM residents had the **highest all-hours ED presentation rate for presentations assessed as lower urgency among metropolitan PHNs in Australia**, at 130.3 per 1,000. In comparison, the rate for all-hours ED presentations assessed as lower urgency for Australian metropolitan PHNs was at 91.5 per 1,000 people.
- Consistent with national trends, more **male** residents presented for lower urgency ED care than females. In 2017–18, males accounted for 52.3% of presentations, at 137.3 per 1,000 males compared with 123.3 per 1,000 females.
- **Children** (<15 years) followed by **young people** (15-24 years) were the **most likely to present for lower urgency ED care**. In 2017–18, presentations for NBM residents aged under 15 were 194.8 per 1,000 people, and residents aged 15-24 years were 161.1 per 1,000 people, compared with 130.3 per 1,000 people for the general population.
- **Older people were among the least likely to present for lower urgency ED care**. In 2017–18, presentations for NBM residents aged 65 and over were 104.2 per 1,000 compared with 130.3 per 1,000 people for the general population.

Within Nepean Blue Mountains – by SA3

- Compared with other NSW Inner Regional smaller geographic (SA3) locations, **Lithgow-Mudgee SA3** within NBM had the **highest rate (304.4 per 1,000 people) of all-hours ED presentations assessed as lower urgency**. Neighbouring Inner Regional SA3 locations Bathurst and Orange also had similarly high rates.
- Compared with other NSW metropolitan SA3 locations with medium socio-economic status (SES), **Richmond-Windsor SA3** within NBM had the **highest rate of all-hours presentations assessed as lower urgency**. This was mainly due a significantly higher rate of after-hours ED presentations assessed as lower urgency.
- All other SA3 locations within the NBM region had **similar** rates of in-hours and after-hours ED presentations as other NSW Inner Regional, or Metropolitan SA3 locations with medium or low SES.

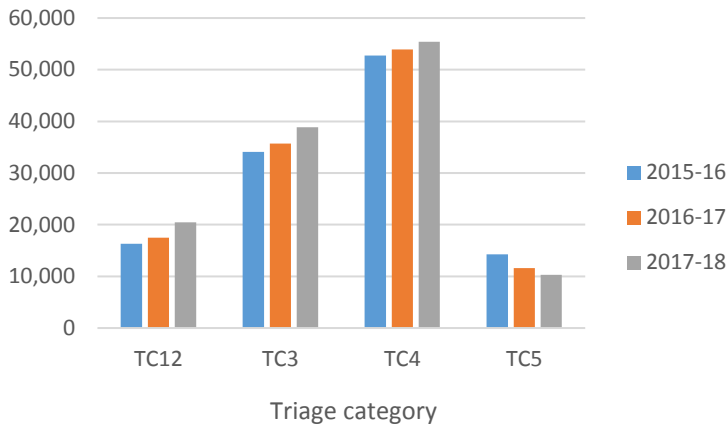
ED use by triage category and time of presentation

- The **highest number** of all-hours ED presentations for NBM residents in each of the last 3-years 2015-16 to 2017-18 was for **Triage category 4** (semi-urgent) presentations, while the smallest number was for **Triage category 5** (non-urgent) presentations. Triage category 5 was the only category where ED presentations **decreased** each year from 2015-16 to 2017-18.
- The total number of all-hours ED presentations for Triage category 1&2 combined, category 3 and category 4 **increased** each year between 2015-16 and 2017-18.

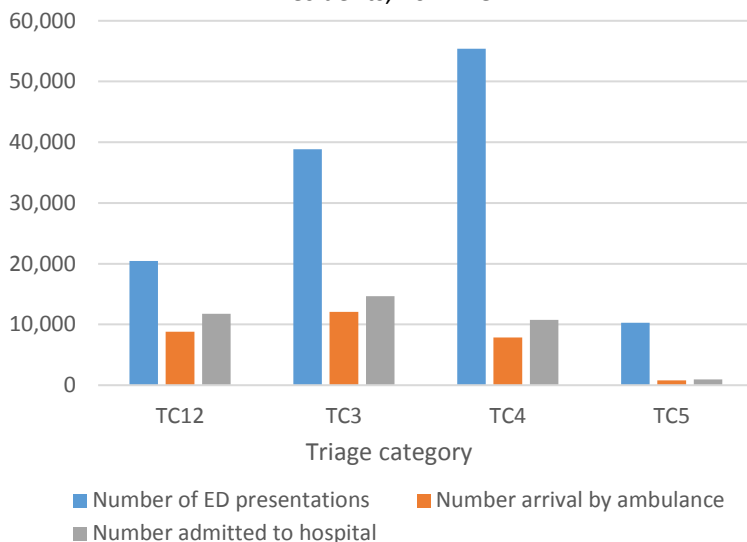
Arrivals by ambulance and admissions to hospital

- While the highest **total number** (55,391) of ED presentations for NBM residents were for **Triage category 4**, only 19.4% (10,747) of those patients were subsequently admitted to hospital.
- In comparison, 57.6% of patients assessed as triage category 1 or 2, and 37.7% of patients assessed to be triage category 3 were subsequently admitted to hospital

Total ED presentations by triage category: Nepean Blue Mountains PHN, 2015-16 to 2017-18



Arrivals by ambulance and admissions to hospital, by triage category for Nepean Blue Mountains residents, 2017-18



Of the presentations assessed as lower urgency (triage category 4 and 5):

1. The number of patients that were referred to the ED by a general practitioner and the name of the referring general practice, or alternatively the postcode of the patient's residential address.
2. The Diagnostic Related Group (DRG) coded or associated with the patient's presentation, or alternatively the patient's primary reason for presenting to the ED.
3. The time of day, day of week and identification of public holidays for the above data, to enable identification of in-hours and after-hours presentations.
4. The array of therapies offered to patients who were assessed as lower urgency? – for example: 1) IV treatments, e.g. IV antibiotics, fluid resuscitation; 2) Diagnostic investigations, e.g. blood, radiology; 3) Therapy, e.g. plasters, fracture reduction, suturing of complex wounds.
5. An overlay of data from this report with After Hours Medicare Item number claiming.
6. Identification of population groups contributing to presentations assessed as lower urgency - e.g. CALD and/or Aboriginal populations.

What data is missing from this report?

The information available in this AIHW report **does not** permit a deeper understanding of the factors that may be contributing to the observed rates of ED presentations assessed as lower urgency by NBM residents, as compared to other regions in Australia.

NBMPHN has requested the following additional hospital ED presentation data from AIHW to assist to explore if the observed presentations assessed as lower urgency are in-fact potentially avoidable GP-type presentations *in practice*.