

Primary Care Access

Data update

NOVEMBER 2021

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Healthy North Coast acknowledges the traditional custodians of the lands across our region and pays respect to the Elders past, present and emerging. We recognise these lands were never ceded and acknowledge the continuation of culture and connection to land, sky and sea. We acknowledge Aboriginal and Torres Strait Islander peoples as Australia’s First Peoples and honour the rich diversity of the world’s oldest living culture.

1 Purpose of This Report

In May 2021, Healthy North Coast published a report: [Health system demand on the North Coast: identifying and addressing primary care access issues through a service planning approach](#). Key findings from this report highlighted concerning increased demand trends, including:

- Younger generations are utilising low urgency care in hospital Emergency Departments (ED) at rates above the national average.
- ED presentations are very high among Aboriginal people in the Mid North Coast (2018–19), particularly in Kempsey.

Since then, Healthy North Coast has been progressing its Primary Care Access project to implement sustainable and innovative solutions to better manage health system demand across the North Coast.

This report is intended to further support the codesign and commissioning process. It includes more recent data now publicly available regarding low urgency ED presentations, general practice (GP) service use and potentially preventable hospitalisations (PPH).

1.1 Primary Care Access Codesign Series

The codesign series commences at the end of November, seeking innovative approaches that vary and re-organise the flow of consumers into primary care making access easier, more engaging and more cognisant of the consumer's cultural and social context and the impact of preventative and consumer self-management frameworks.

Key themes in co-design will include:

- The gamut of primary care offerings for young people, sensitive to and inclusive of their mental health and alcohol and other drug use.
- The provision of care with no out-of-pocket expense to individuals from the cohorts of concern.
- Digital technologies that increase the options for care, including symptom checking services powered by AI, regular primary care across the spectrum of prevention, screening, diagnosis, treatment and management, urgent appointments and after-hours services.
- Face to face urgent primary care services.
- The use of multi-disciplinary approaches to increase access in primary care.
- Embedded capacity in primary care to work closely and productively with social and specialised community services for at-risk population groups, including Aboriginal community-controlled services.
- How efficiencies may be gained across service elements and geographies through innovative service delivery and/or collaborative approaches.

2 Lower Urgency Emergency Department (ED) Presentations

This report follows the AIHW definition¹ for low urgency ED presentations², where the person presenting:

- had a Type of visit to the ED of Emergency presentation
- was assessed as needing semi-urgent (triage category 4: should be seen within 1 hour) or non-urgent care (category 5: should be seen within 2 hours)³
- did not arrive by ambulance, or police or correctional vehicle
- was not admitted to the hospital, was not referred to another hospital, and did not die.

Lower urgency emergency presentations are sometimes used as a proxy measure of access to primary health care. Higher low urgency presentation rates may suggest a lack of access to GPs or other primary health services, which may have been better placed to manage a person's health condition.

Understanding how and when people use EDs can help to improve decision-making, service planning, and care coordination.

¹ Australian Institute of Health and Welfare, (2021). Use of emergency departments for lower urgency care: 2015-16 to 2018-2019. Available at: <https://www.aihw.gov.au/reports/primary-health-care/use-of-ed-for-lower-urgency-care-2018-19/contents/lower-urgency-care/summary>.

² Throughout Section 2, when the data source is the Bureau of Health Information (BHI), the term 'Triage 4 and Triage 5' (T4 & T5) is used, instead of 'low urgency' - which is a more specific AIHW definition.

³ For details on Triage categories in NSW hospitals, see Appendix 1:, section 5.1.

2.1 Low Urgency Presentations AIHW

2.1.1 National Comparison by PHN

People living in regional Primary Health Network (PHN) areas have a higher rate of lower urgency ED presentations (164 presentations per 1,000 people in 2018–19) than their metropolitan counterparts (90 per 1,000 people).

Of all PHNs (31) across Australia, the North Coast region is second highest in low urgency ED presentation rate (261 per 1,000 people in 2018-19), more than double (2.22 times) the national rate (117 per 1,000 people in 2018-19).

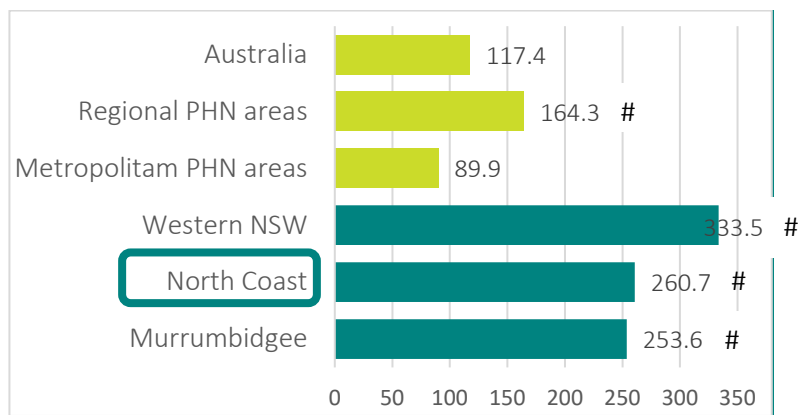


Figure 1: 2018 -19 lower urgency ED presentations per 1,000 people, top PHNs ([Source](#))

Interpret with caution. Results do not include all emergency care provided in public hospitals, which may affect comparability of results.

From 2015 to 2019, the North Coast region is consistently second highest of all PHNs for rates of lower urgency presentation. The number of annual presentations has increased by nearly 10% from 237.7 per 1,000 people in 2015-16, to 260.7 in 2018-19.

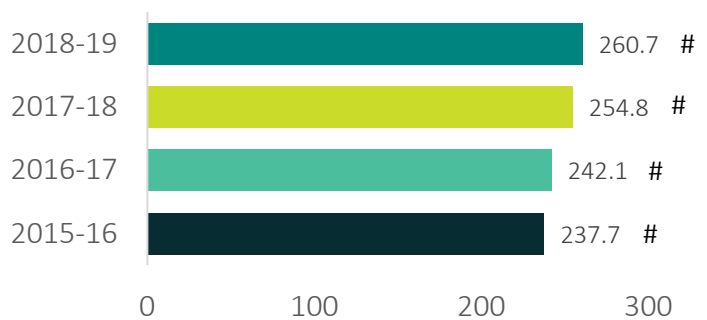


Figure 2: 2015-19 lower urgency ED presentations per 1,000 people at North Coast region ([Source](#))

Interpret with caution.

Results do not include all emergency care provided in public hospitals, which may affect comparability of results.

2.1.2 Healthy North Coast Region

Low urgency ED presentations in the North Coast region are high in per capita terms, also when compared to the NSW average (Figure 3).

- Between 2015-2021, the average per capita rate for low urgency ED presentations in the region (81.1 per 1,000) was 1.8 times higher than the corresponding NSW rate (44.7 per 1,000).
- 2021 data show the converse in post COVID-19 trends. While in NSW there is an increase in ED presentations per 1,000 population the past 6 months, North Coast presentations decreased. This trend might change in time and requires future tracking.

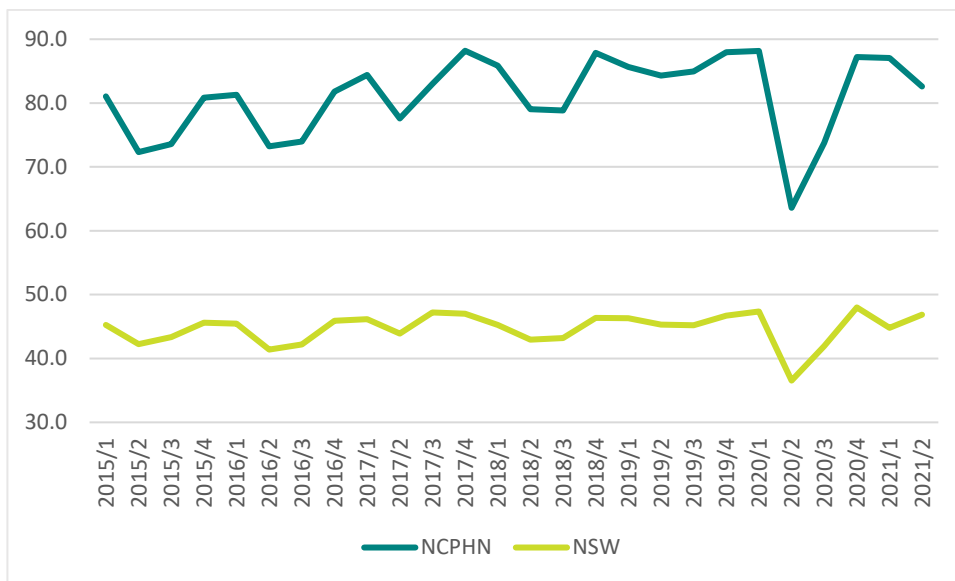


Figure 3: Low urgency ED presentations per 1,000 population in the North Coast Region and NSW, 2015-2021 ([Source](#))

2.1.3 Category T4 and T5 Presentations

Using the NSW Health definitions of T4 and T5 (see Appendix 1) we can see a steady increase in the number of ED presentations (T4 and T5 combined) at the region’s hospitals during 2015-2021 (Figure 4).

- In the first three months of 2021, there were around 46,000 T4 and T5 ED presentations in the Region, an increase of 13.3% on the same period in 2015.
- In general, T4 and T5 ED presentations tend to increase during the warmer months and fall during the colder months.

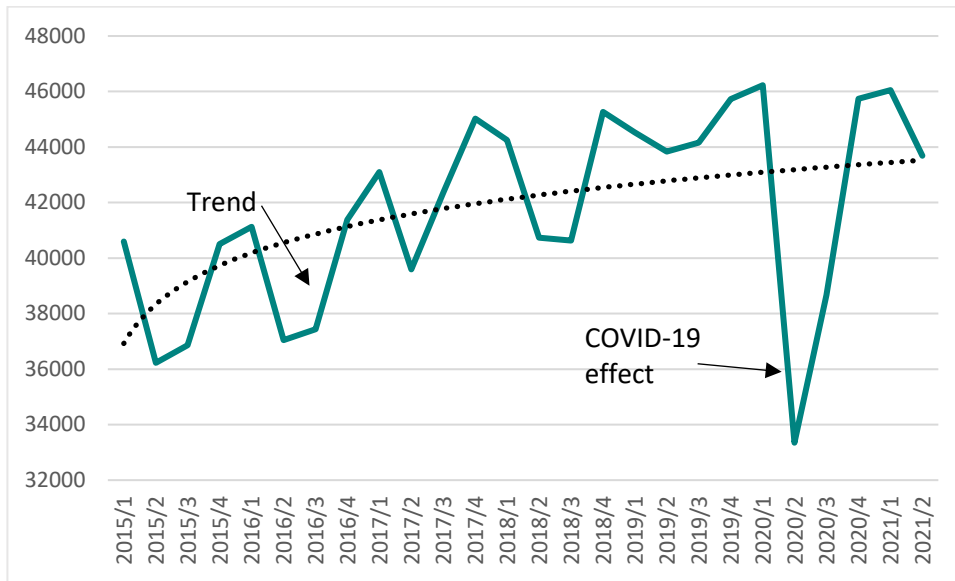


Figure 4: Total number of T4 & T5 ED presentations in North Coast region, 2015-2021 (Source: aggregated data from the [Bureau of Health Information](#), retrieved 15.10.2021)

Figure 5 compares Triage 4 and Triage 5 (T4 & T5) ED presentations between the two Local Health Districts (LHDs) that operate in the North Coast region: Mid North Coast (MNC) and Northern NSW (NNSW):

Of the 163,991 T4 & T5 ED presentations in the North Coast in 2020, 96,609 or 59% occurred in the Northern NSW LHD, while 41% (67,382) occurred in the Mid North Coast LHD.

- T4 & T5 ED presentations increased at a faster rate in the Mid North Coast LHD than in the Northern NSW LHD; between 2015 and 2021, T4 & T5 ED presentations increased by 25.8% in the Mid North Coast LHD compared with 6.1% in the Northern NSW LHD.

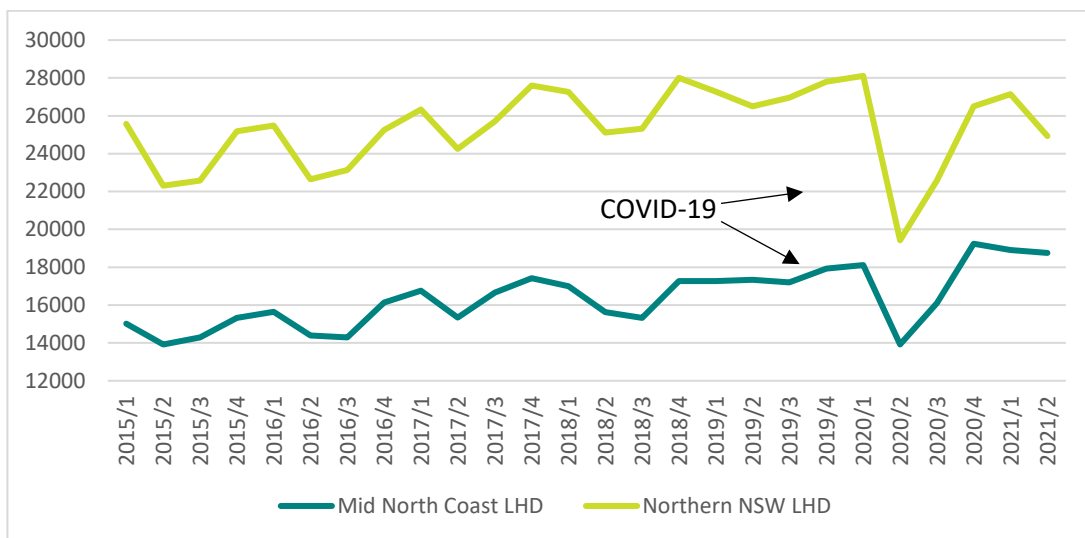


Figure 5: Number of T4 & T5 ED presentations, MNC LHD and NNSW LHD, 2015-2021, (Source: aggregated data from the [Bureau of Health Information](#), retrieved 15.10.2021)

In April-June 2021 there was a 32.3% increase in Triage 4 presentations at Mid North Coast hospitals and 32.2% increase at Northern NSW hospitals, compared to same quarter the previous year. At the same period, Mid North Coast hospitals' Triage 5 presentations increased by 44.9%, while in Northern NSW an 11% increase was reported, compared to same quarter the previous year⁴. The COVID-19 effect is evident in the compared April-June 2020 period.

2.1.4 Selected North Coast Hospitals Data

The trend in T4 & T5 ED presentations at Casino and District Memorial Hospital, Grafton Base Hospital, Kempsey District Hospital and Port Macquarie Base Hospital are presented below and in Figure 6.

- T4 & T5 ED presentations increased at Grafton Base Hospital, Kempsey District Hospital and Port Macquarie Base Hospital, between 2015-2021.
- Only Casino and District Memorial Hospital showed a decreasing trend in T4 & T5 ED presentations over the period.
- Between 2015-2021, Casino and District Memorial Hospital recorded the lowest number of T4 & T5 ED presentations, while Port Macquarie Base Hospital recorded the highest.

In 2020, the average number of T4 & T5 ED presentations per quarter were:

Hospital	2019	2020 ⁵
Port Macquarie Base Hospital	5150	5,531
Kempsey District Hospital	4002	3,704
Grafton Base Hospital	3746	3,260
Casino and District Memorial Hospital	1873	1,650

⁴ Bureau of Health Information. Available at: <https://www.bhi.nsw.gov.au/data-portal>.

⁵ COVID-19 impact is evident in 2020

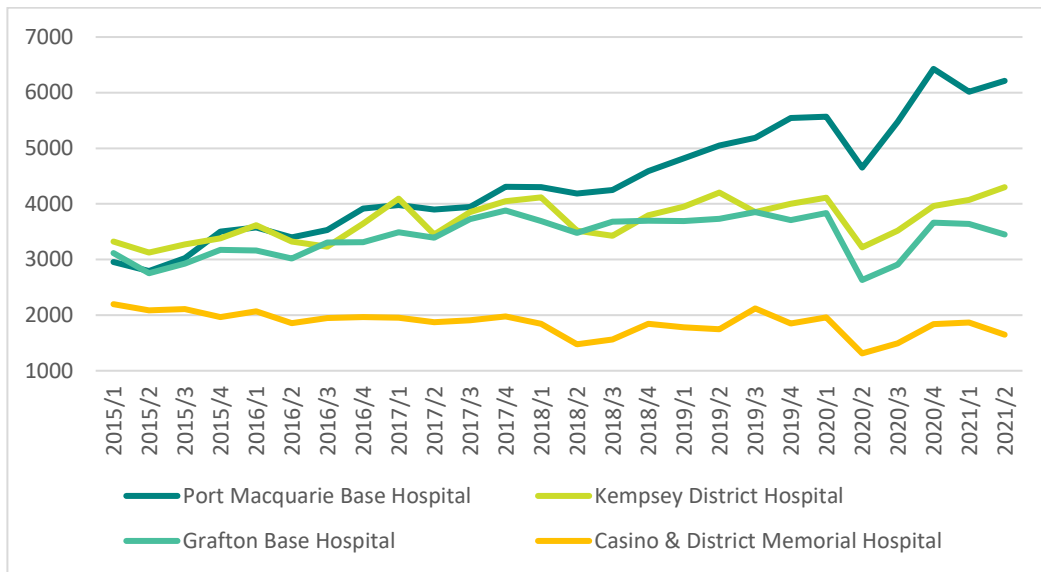


Figure 6: Number of T4 & T5 ED presentations, selected hospitals in the North Coast region, 2015-2021 (Source: aggregated data from the [Bureau of Health Information](#), retrieved 15.10.2021)

2.2 COVID-19 Effect

During the first half of 2020, low urgency ED presentations declined in the North Coast region. This decline followed a generalised decrease in hospital ED presentations across Australia which occurred during the height of the COVID-19 pandemic.

3 General Practices

The following section includes data updates relating to use of general practices services in the North Coast compared to national figures, as well as an analysis by age groups.

3.1 Use of GPs – National Comparison

Figure 7 shows a similar increase in use of GPs nationally and regionally from 2013 to 2021. Across Australia, service use increased in 15.1% from 2013 to 2021, while the increase in the North Coast region was 14.4% for the same period.

Total general practice service use rate is consistently higher in the North Coast region than nationally. In 2020-21, GP service use per 100 people was 717, while nationally the rate is 665 per 100, 8% higher in the North Coast.

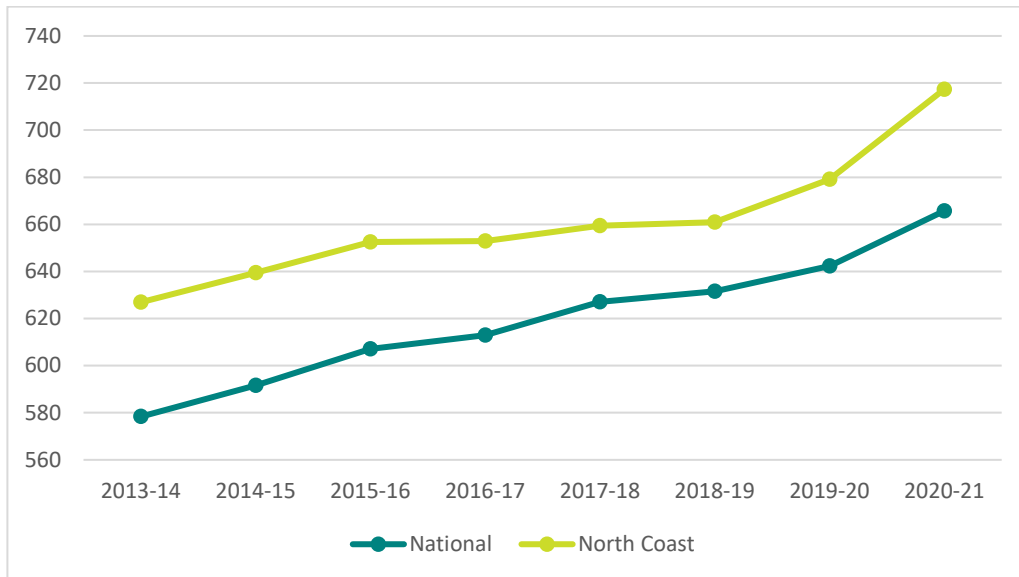


Figure 7: Medicare-subsidised GP attendances per 100 people, NCPHN rate versus national rate, 2013–21 (Source: aggregated data from the [Bureau of Health Information](#), retrieved 15.10.2021)

3.2 GP Services by Age Distribution – National Comparison

- Nationally, the rate for using GP services among over 80 population is the highest of all age groups. Healthy North Coast regional usage is 1.3% higher than the national rate.
- Conversely, the rate for GP use by the 0-14 age group is 34% lower than in the Healthy North Coast when compared with the national rate.
- While GP usage in other age groups, including for younger people, largely follows national trends or is slightly higher, this against a background of very high use of emergency departments by young people in the Healthy North Coast region compared with national rates

(reference May report). This point, in particular, is the subject of further exploration in the Primary Care Access codesign series.

- Females use GP services more than males, nationally and regionally. In both sexes regional use is higher than the national rate.

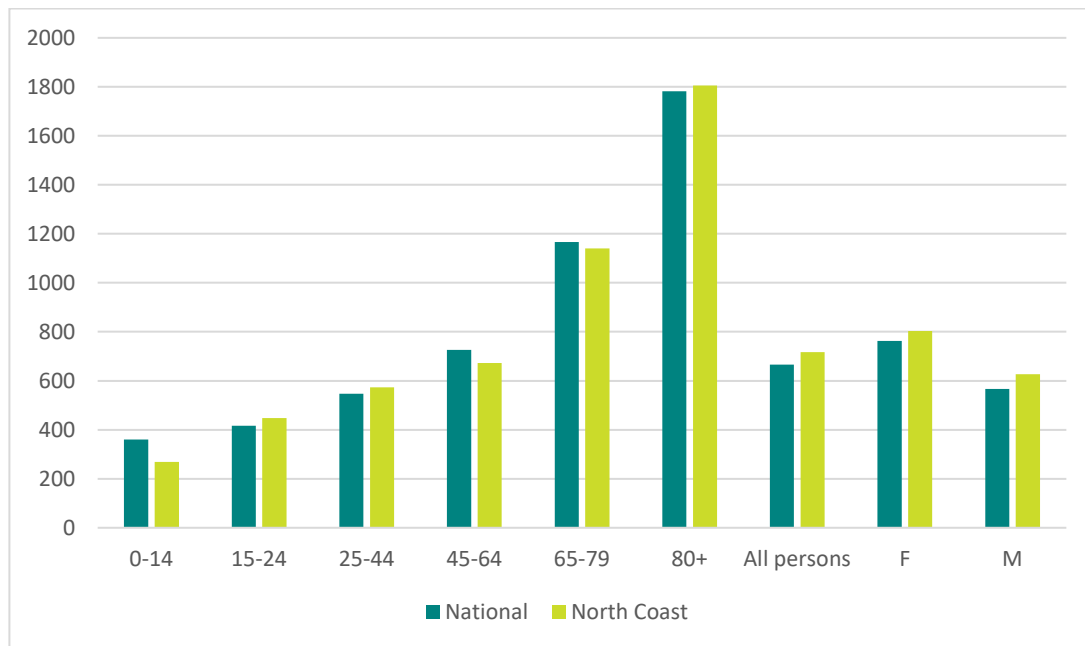


Figure 8: GP services per 100 people in the North Coast region and national by age of patient and sex, 2020-21 ([Source](#))

4 Potentially Preventable Hospitalisations (PPH)

The potentially preventable hospitalisations (PPH) indicator is a proxy measure of primary care effectiveness. PPH are certain hospital admissions that potentially could have been prevented by timely and adequate health care in the community. There are 22 conditions for which hospitalisation is considered potentially preventable, across 3 broad categories: chronic, acute and vaccine-preventable conditions⁶.

The term PPH does not mean that a patient admitted for that condition did not need to be hospitalised at the time of admission. Rather the hospitalisation could have potentially been prevented through the provision of appropriate preventative health interventions and early disease management in primary care and community-based care settings (including by general practitioners, medical specialists, dentists, nurses and allied health professionals). PPH rates are indicators of the effectiveness of non-hospital care. The rate of PPH in a local area may reflect access to primary health care, as well as sociodemographic factors and health behaviours⁷.

4.1 National Data, 2017-18

Rates of potentially preventable hospitalisations varied greatly across local areas⁶. Around 7% of all hospitalisations were classified as potentially preventable. Nearly 10% of all hospital bed days were for potentially preventable hospitalisations.

4.2 Comparing National, State and Local Data

AIHW data from 2017-18 show that while NSW rate (2,483 PPH per 100,000 people) for Potentially Preventable Hospitalisation is lower than the National rate (2,793 PPH per 100,000 people), most SA3 areas in the North Coast region ranked higher than the national average, as presented in Figure 9.

Two of seven SA3 in the North Coast region ranked lower than the National rate (2,793 PPH per 100,000 people): Port Macquarie (2,290 PPH per 100,000 people), and Richmond Valley Coastal (2,339 PPH per 100,000 people)

⁶ Australian Institute of Health and Welfare, (2019). Potentially preventable hospitalisations in Australia by age groups and small geographic areas, 2017–18. Available at: <https://www.aihw.gov.au/reports/primary-health-care/potentially-preventable-hospitalisations>.

⁷ Falster M & Jorm L, (2017). A guide to the potentially preventable hospitalisations indicator in Australia. Centre for Big Data Research in Health, University of New South Wales in consultation with Australian Commission on Safety and Quality in Health Care and Australian Institute of Health and Welfare: Sydney.



Figure 9: Potentially preventable hospitalisations by geographical areas, 2017-18 ([Source](#))

4.3 North Coast Data, 2014-15 to 2019-20

Overall, across the North Coast region, the average annual increase of PPH was 2.39%.

7 of 11 Local Government Areas (LGAs) in the North Coast region, show an increase in number of PPH between 2014-15 and 2019-20. The highest annual increase rate was reported in Nambucca (6.32%).

PPH decreased in the other 4 LGAs. The biggest annual decrease was reported in Ballina (2.64%).

The top three Local Government Areas (LGAs) in 2019-20 with PPH were: Tweed (3,056), Coffs Harbour (2,441 cases), and Port Macquarie-Hastings (2,436). These numbers correlate with the LGAs population figures⁸.

⁸ Australian Bureau of Statistics, (2020). Population estimates by Local Government Area, 2019 to 2020. Available At: <https://www.abs.gov.au/statistics/people/population/regional-population/2019-20#interactive-maps>.

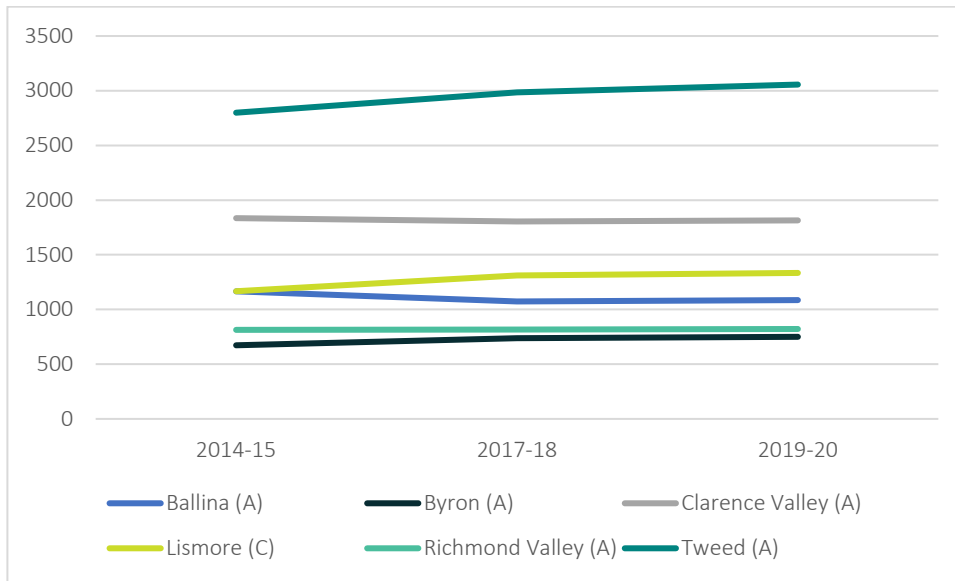


Figure 10: Northern NSW - Number of potentially preventable hospitalisations, 2014-2015 to 2019-2020 ([Source](#))

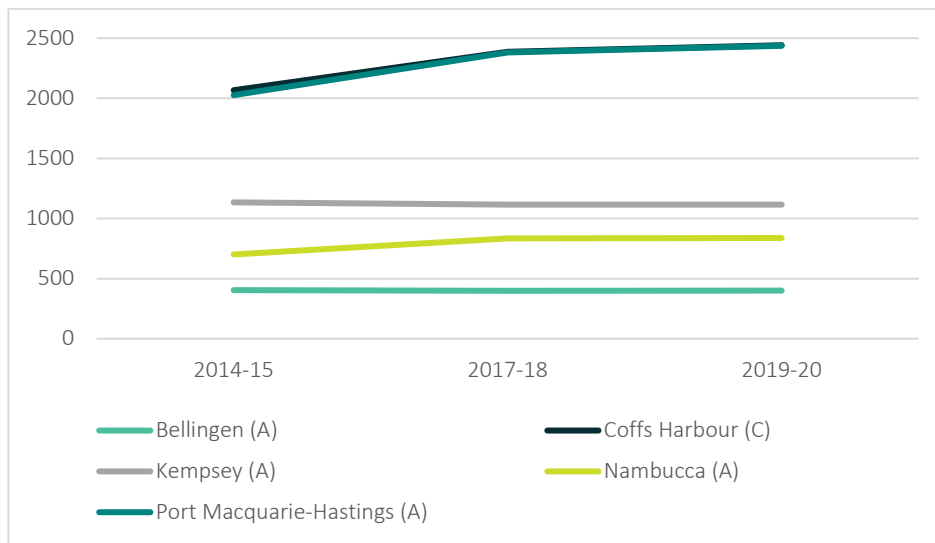


Figure 11: Mid North Coast - Number of potentially preventable hospitalisations, 2014-2015 to 2019-2020 ([Source](#))

In 2019, four Local Area Governments reported above the regional rate of PPH, as detailed in Figure 12.

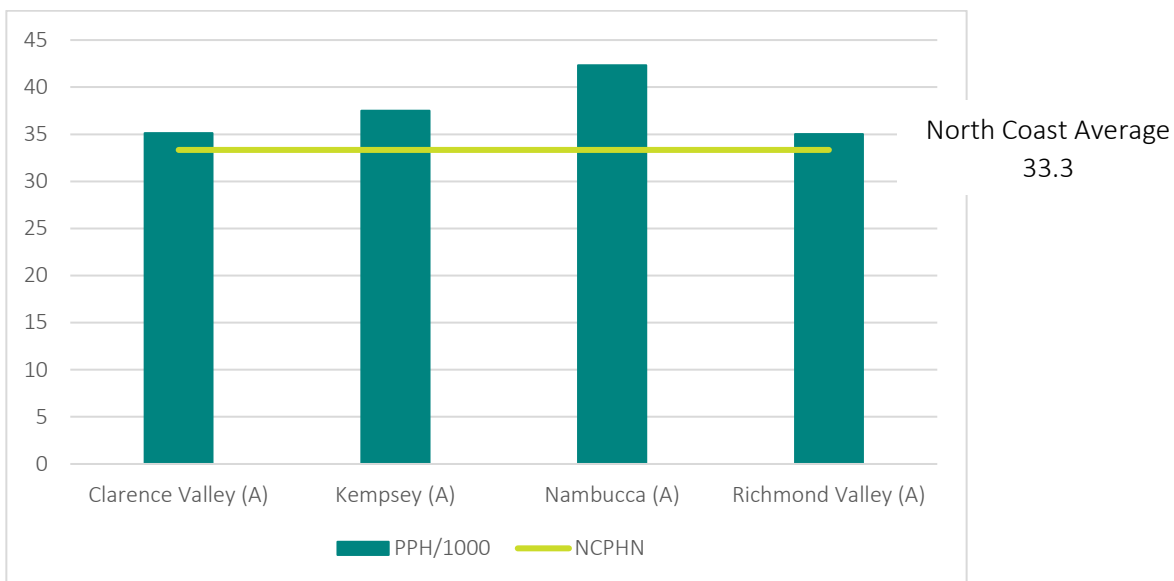


Figure 12: Number of PPH per 1,000 people in the North Coast region, 2019 - **above** North Coast Region average LGAs ([Source](#))

In 2019, seven Local Government Areas reported below the regional rate of PPH, as detailed in Figure 13.

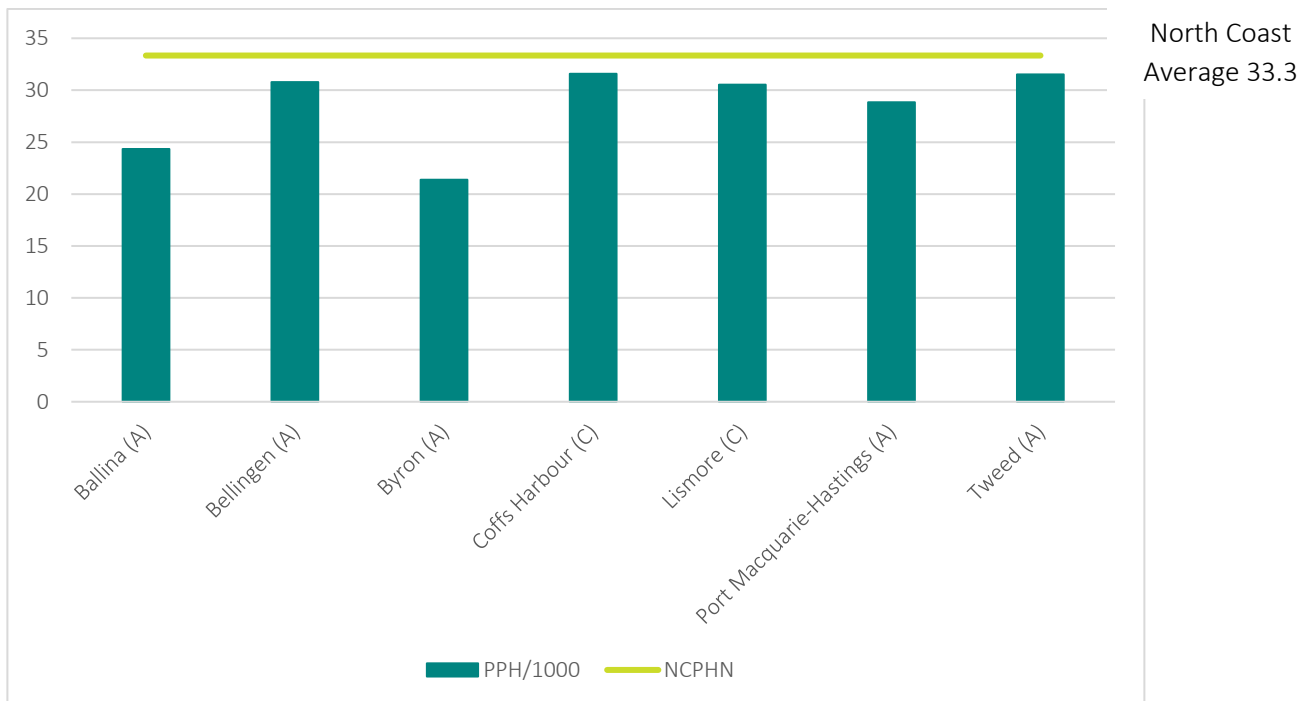


Figure 13: Number of PPH per 1,000 people in the North Coast region, 2019 - **below** North Coast Region average LGAs ([Source](#))

4.4 Top Presenting Clinical Diagnosis

Overall National, State and PHN data of Potentially Preventable Hospitalisation for 2017-18 show quite similar top presenting clinical diagnoses. The top three diagnoses for all areas are COPD, Urinary tract infections, including pyelonephritis and Dental conditions⁹.

Cellulitis is ranked fourth for North Coast and National, and fifth for NSW.

Total vaccine preventable is ranked fifth for the North Coast but does not rank at National and State top ten diagnoses. Pneumonia and influenza (vaccine-preventable) is ranked seventh for the North Coast but excluded from top ten diagnoses for National and State.

	National	NSW	North Coast
1.	Dental conditions	COPD	COPD
2.	Urinary tract infections, including pyelonephritis	Dental conditions	Dental conditions
3.	COPD	Urinary tract infections, including pyelonephritis	Urinary tract infections, including pyelonephritis
4.	Cellulitis	Pneumonia and influenza (vaccine-preventable)	Cellulitis
5.	Iron deficiency anaemia	Cellulitis	Total vaccine preventable
6.	Pneumonia and influenza (vaccine-preventable)	Iron deficiency anaemia	Iron deficiency anaemia
7.	Congestive cardiac failure	Congestive cardiac failure	Pneumonia and influenza (vaccine-preventable)
8.	Ear, nose and throat infections	Ear, nose and throat infections	Convulsions and epilepsy
9.	Diabetes complications	Diabetes complications	Ear, nose and throat infections
10.	Convulsions and epilepsy	Convulsions and epilepsy	Diabetes complications

⁹ Australian Institute of Health and Welfare, (2019). Potentially preventable hospitalisations in Australia by age groups and small geographic areas, 2017–18. Available At: <https://www.aihw.gov.au/reports/primary-health-care/potentially-preventable-hospitalisations/data>.

Figure 14 presents the top Potentially Preventable Hospitalisation diagnoses in the North Coast from 2012-13 to 2017-18. COPD remains the top ranked diagnosis.

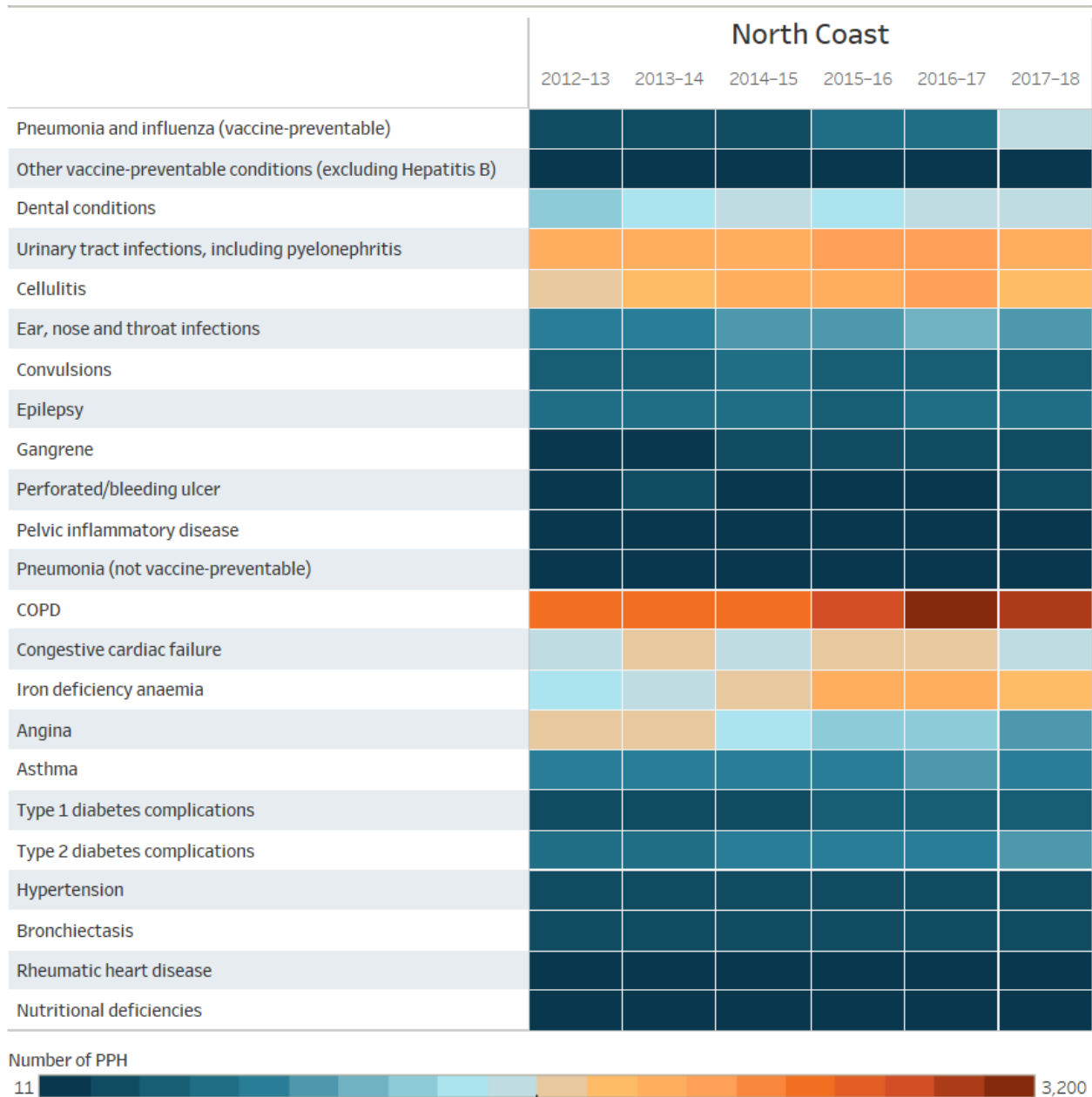


Figure 14: Top PPH rate (per 100,000 persons) in the North Coast 2012-13 to 2017-18 ([Source](#))

5 Appendices

5.1 Appendix 1: Triage Categories in NSW Hospitals

Rather than operating on a 'first come, first served' system, hospital emergency departments use a triage system to sort patients according to the severity of their illness or injuries and ensure those with life-threatening and severe conditions are treated first. In NSW hospital emergency departments, triage is done by a specialised triage nurse as soon as a patient arrives. Patients are allocated a triage category based on the time in which they need medical attention. The five triage categories are:

Triage category 1 – Includes people who have an immediately life-threatening condition who require immediate treatment or within two minutes. Patients in this category are critically ill and require immediate attention. Most would have arrived in emergency department by ambulance and would be suffering from a critical injury or cardiac arrest.

Triage category 2 – Includes people who have an imminently life-threatening condition who need treatment within 10 minutes. Patients in this category are suffering from a critical illness or in very severe pain.

Triage category 3 – Includes people who have a potentially life-threatening condition who need treatment within 30 minutes. Patients in this category are suffering from severe illness, bleeding heavily from cuts, have major fractures or are severely dehydrated.

Triage category 4 – Includes people who have a potentially serious condition who need treatment within one hour. Patients in this category have less severe injuries or symptoms such as a foreign body in the eye, sprained ankle, migraine or earache.

Triage category 5 – Includes people who have a less urgent condition who need treatment within two hours. Patients in this category typically have minor illnesses or symptoms that may have been present for more than a week, such as rashes or minor aches and pains.