
After Hours Needs Assessment

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An Australian Government Initiative

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Executive Summary

Key Findings

Brisbane North PHN conducted a comprehensive review of available data, consultations with key stakeholders and community. A summary of the findings from the after hours needs assessment are outlined below.

Regional variation in parts of the catchment accessing after hours services

Regional variance exists in the access to primary health after hours services with urban areas receiving adequate coverage and outer parts more frequently noting difficulties in accessing services.



Key points to note:

- Caboolture in Moreton Bay North remains the highest user of primary after hours services

Specific locations with limited access to primary health after hours services include:

- Dayboro and Samford - predominantly younger populations with children.
- Bribie Island - older populations, difficulties for access for Residential Aged Care Facility populations.
- Caboolture Hinterland - access to services is limited for this region particularly for younger population and families with children



Population growth and an ageing population impacts the need for after hours services

When mapping the services available to the needs, the following has been identified:

- Many people still access emergency services for low acuity conditions that do not require admission. Many of these conditions could be addressed more easily and efficiently in primary care.
- Young adults and families with children aged predominantly 0 to 4 years continue to require after hours support for fevers, accidents and viral infections. The Brisbane North planning region currently has the highest number of children, with the greatest areas of expected growth in Moreton Bay North followed by Redcliffe, North Lakes.
- Ageing populations - there is an ongoing need to support clients 75+ years with a particular focus within Residential Aged Care Facilities. As at 2018, there were 61,228 people aged 75 years and over in the region. The majority living in Redcliffe, Chermside, Bribie-Beachmere, Sandgate, Brisbane Inner-North, Caboolture and the Hills District.

Hard to reach populations including Aboriginal and Torres Strait Islanders, culturally and linguistically diverse, homeless and at risk groups accessing after hours services

Consultation highlighted the need for support of hard to reach populations. These populations will not always seek access to after hours services or may access emergency department services due to difficulties accessing other services. There is a highlighted need to support these populations including:



- Homelessness and at risk groups - this has been an ongoing need. The majority reside in Inner Brisbane.
- Culturally and linguistically diverse populations. Over one in five people residing in the region were born overseas.
- Aboriginal and Torres Strait Islanders within our region accessing services. The Aboriginal and Torres Strait Islander population are largely concentrated in the northern areas of the region, particularly in the Caboolture, Morayfield and Deception Bay areas

Report Structure

The structure of this report is designed to provide an outline of the key areas required to understand the after hours needs for the Brisbane North PHN planning region. The report contains the following sections:

- Population needs (snapshot)
- Utilisation of primary health care after hours services
- Service landscape
- Themes from consultation and market research
- Conclusions and proposed solutions



Introduction

Purpose and Scope

The Brisbane North PHN's vision is a community where good health is available for everyone. The PHN supports primary healthcare clinicians and communities in Brisbane's northern suburbs, Moreton Bay Regional Council and parts of the Somerset Regional Council. The objectives of the PHN are to work with others to:

- reorient the health system toward care in the community
- achieve a health and community care system responsive to need
- direct resources to best meet health and community care needs for the region.

This report aims to outline the existing after hours needs within the region, allowing for more effective planning. The scope of this review is predominantly focussed on the after hours support within primary healthcare including but not limited to general practice teams and supporting services in this space. The key objectives of this process and document are to:

- assess the after hours health needs in the region to enable effective health planning and intervention.
- communicate the needs as determined by the assessment
- advocate for the after hours needs of the Brisbane North PHN region
- provide a sound evidence base to enable the investment of resources to best meet the health and community care needs of our community.

For the purposes of this report after hours are defined as after 6:00 pm and before 8:00 am weekdays, before 8am and after 12:00 pm Saturdays and all day Sundays and public holidays. This period is consistent with national standards for after hours healthcare.

Methodology

This document builds on previous work by the PHN in undertaking health service planning and health needs assessments in the region. It should be read in conjunction with the [Joint Population Health Report 2019](#).

Our approach involved a mixture of data collection, data analysis, research and consultation. The following data sources have been analysed to inform an understanding of the after hours needs in the region:

- 13 HEALTH call data¹

¹ (Queensland Health, 2019)

- After hours Medicare Benefit Schedule (MBS) billing data²
- Emergency department (ED) presentation data³
- Australian Institute of Health and Welfare (AIHW) population, demographic and health data
- Service mapping utilising health direct service map

Additional datasets were identified for inclusion in the assessment. These included both Queensland Ambulance Service (QAS) data and data from pharmacies. Unfortunately both datasets were not available for inclusion at the time of this needs assessment.

In addition 21 consultations were held with a range of health service providers including general practitioners, medical deputising services, pharmacists, the Metro North Hospital and Health Service (HHS), the Brisbane North PHN Community Advisory Council and community organisations in the region. A desktop review, previous consultations and market research also informed an understanding of the current service landscape in the region.

² (Australian Institute of Health and Welfare, 2019)

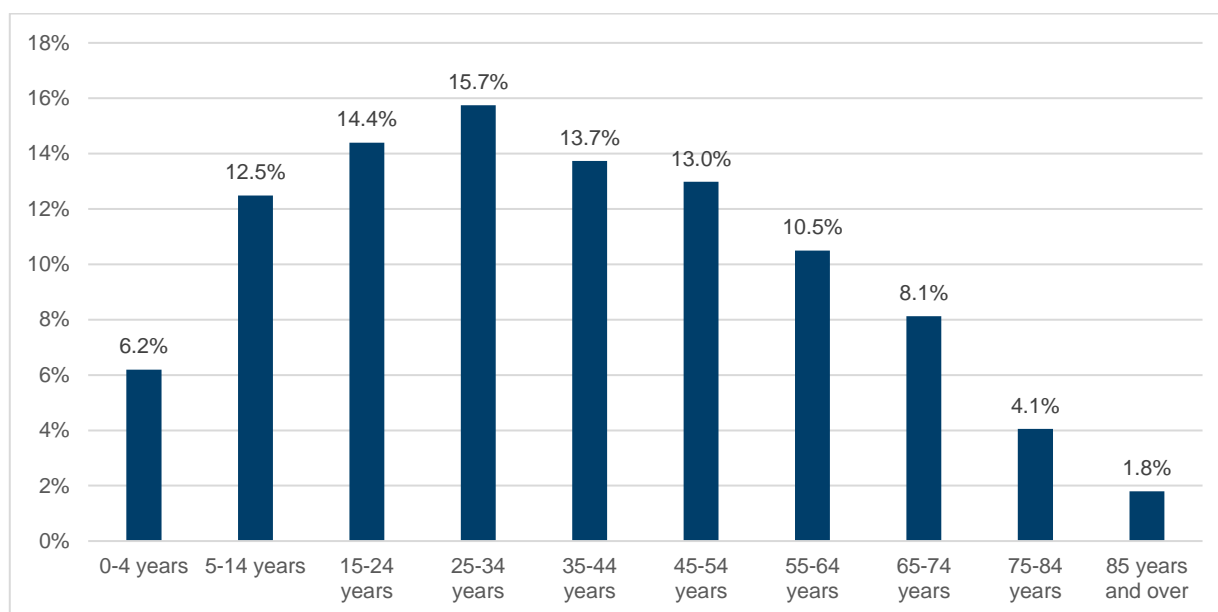
³ (Metro North Hospital and Health Service, 2019)

Population Snapshot

To help inform the after hours needs for the Brisbane North PHN planning region, it is important to have an understanding of the population. This document should be read in conjunction with the [Joint Population Health Report 2019](#). Key parts of this document that help to inform this review include:

As of 30 June 2017, the estimated residential population in our region was 1,004,747 people⁴. Of the region's population, one third (33.1 per cent) are under 25 years of age, 29.5 per cent are aged 35 to 44 years, 23.5 per cent are aged 45 to 64 years and 14 per cent are aged 65 years and over. The age distribution of the region's population is shown in Figure 1.

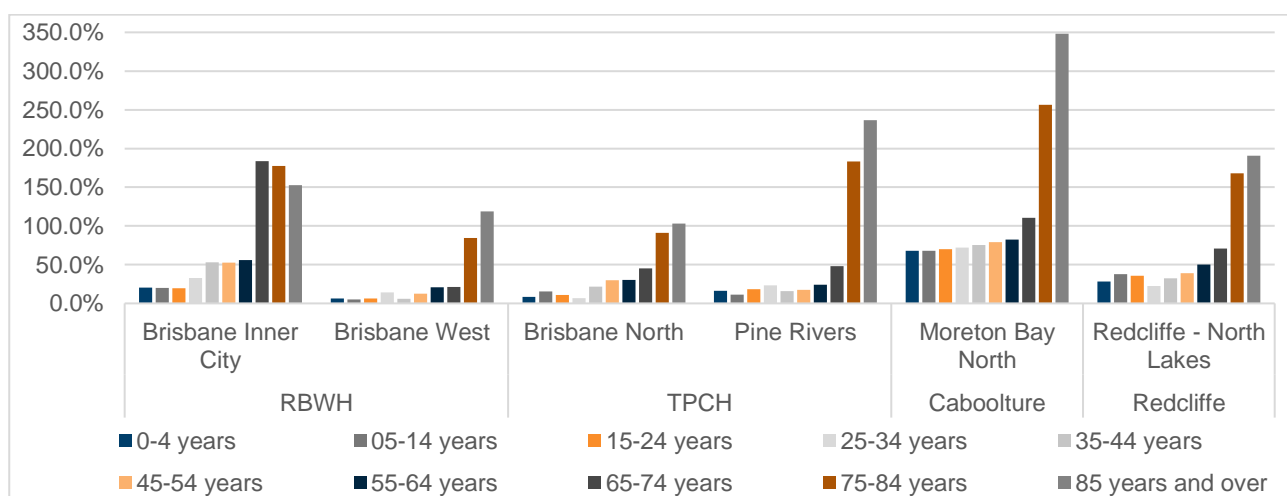
Figure 1. Age distribution of Brisbane North PHN's population, 2018



Source: Australian Bureau of Statistics, 2018

As at 2018, there were 61,228 people aged 75 years and over in the region. The majority living in the Redcliffe, Chermside, Bribie-Beachmere, Sandgate, Brisbane Inner-North, Caboolture and the Hills District. In 2041, the population of the region is projected to reach 1,395,044 people, an increase of 42.03 per cent from 2016⁵. This population growth will not be evenly spread across the region or across age groups, with growth being concentrated in Moreton Bay North, Redcliffe - North Lakes areas and among the over 75s.

Figure 2. Projected population growth by age and sub region, 2016 to 2041



Source: Queensland Government population projections, 2018

⁴ (Australian Bureau of Statistics, 2017)

⁵ (Queensland Government Statistician's Office, 2018)

Priority Populations

When looking at the after hours needs for the region, it is important to consider the needs of populations who often access Emergency Department services after hours because they encounter barriers accessing main stream services. This includes but is not limited to:

Aboriginal and Torres Strait Islanders

As of the 2016 Census, there were 20,118 people of Aboriginal and Torres Strait Islander descent in the region. This represents 2.1 per cent of the region's population⁶. The Aboriginal and Torres Strait Islander population is largely concentrated in the northern areas of the region, particularly in the Caboolture, Morayfield and Deception Bay Statistical Area 2 (SA2) areas. There are also considerable populations of Aboriginal and Torres Strait Islander descent in the North Lakes and Brisbane North Statistical Area 3 (SA3) areas.

Homeless

In 2016, there were an estimated 3,744 people experiencing homelessness within the region. Between 2011 and 2016, the number of people experiencing homelessness increased by over 1,000 people, from 2,589 people in 2011⁷. Within the region, almost one-third of the population experiencing homelessness in 2016 resided in the Brisbane Inner SA3 (31.7 per cent). This was followed by the Caboolture SA3 (13.1 per cent) and the Brisbane Inner – North SA3 (11. per cent).

Culturally and linguistically diverse

As of the 2016 Census, over one in five people residing in the region were born overseas (221,963 people or 23.5 per cent). 114,813 people were born in a country where English is not the first language (12.2 per cent of the total population).

Residents from Residential Aged Care Facilities

As at 30 June 2019 there were 82 Residential Aged Care Facilities (RACFs) in the region offering a total of 8,455 residential places. The geographic locations of these RACFs are not equally distributed across the Brisbane North region, as majority are located within built urban areas, in comparison to four per cent of these places which were located in regional areas⁸.

⁶ (Queensland Government Statistician's Office, 2016)

⁷ (Queensland Government Statistician's Office, 2016)

⁸ (Australian Institute of Health and Welfare, 2019)

After Hours Service Data Summary

Below is a brief description of data used in this needs analysis, and highlights features of the services and data which need to be taken into consideration when reading this needs assessment.

After Hour General Practitioner (GP) Services: After hours GP services are offered by either general practices in consulting rooms or provided through arrangements made by a Medical Deputising Service (MDS). Under the Medicare Benefits Scheme (MBS) the Australian Government subsidises a list of after hours items provided by medical practitioners and attendances are billed either urgent or non-urgent.

On 1 March 2018 the Australian Government amended the MBS rules for after hours services. The change was introduced with the aim of ensuring that services were accessed appropriately (for urgent circumstances that required a genuine need for a medical consultation) and that available services were sustainable. The change in schedule was in response to a significant increase in the number of urgent after hours items billed in preceding years. The classification of medical attendance is shown in Table 1 below.

Table 1. Classification of medical attendance⁹.

Attendance	Type of Attendance	Applicable time		
		Monday to Friday*	Saturday*	Sunday/and or public holiday
Standard attendance items	Standard attendance in consulting rooms	8am and 8pm	8am and 12 noon	N/A
Urgent after-hours items	Urgent attendance – sociable after-hours	7am – 8am 6pm – 11pm	Between 7am – 8am and 12 noon – 11pm	Between 7am – 11pm
	Urgent attendance – unsociable hours	Between 11pm – 7am	Between 11pm – 7am	Between 11pm – 7am
Non-urgent after-hours items	Non-urgent after hours at consulting rooms	Before 8am or after 8pm	Before 8am or after 1pm	All day
	Non-urgent after hours at a place other than consulting rooms	Before 8am or after 6pm	Before 8am or after 12 noon	All day

Source: Department of Health: MBS Online

After Hour ED Presentations: EDs comprise an important element of the health care system after hours. In many cases, hospital EDs are the entry point into the health system during the after hours period. However, high volume use of hospital EDs for low acuity conditions potentially limits the effectiveness of EDs to provide appropriate care to people who require it. In this after hours needs assessment, patients triaged as category 4 or 5 are considered low acuity presentations as they are defined as individuals who are not in immediate danger, in severe stress or are presenting with non-emergency health concerns.

13 HEALTH Telephone Service: 13 HEALTH is a Queensland telehealth phone service that provides the general public convenient and confidential access to a registered nurse. The service is provided 24 hours a day, seven days a week. Callers may seek advice related to symptoms, seeking further medical intervention and determining the urgency of the health condition. Based on the enquiry made by the callers, individuals are triaged and protocols are used to address the cause, symptoms and recommended level of care for each case.

⁹ (Department of Health, 2019)

Utilisation of after hours services

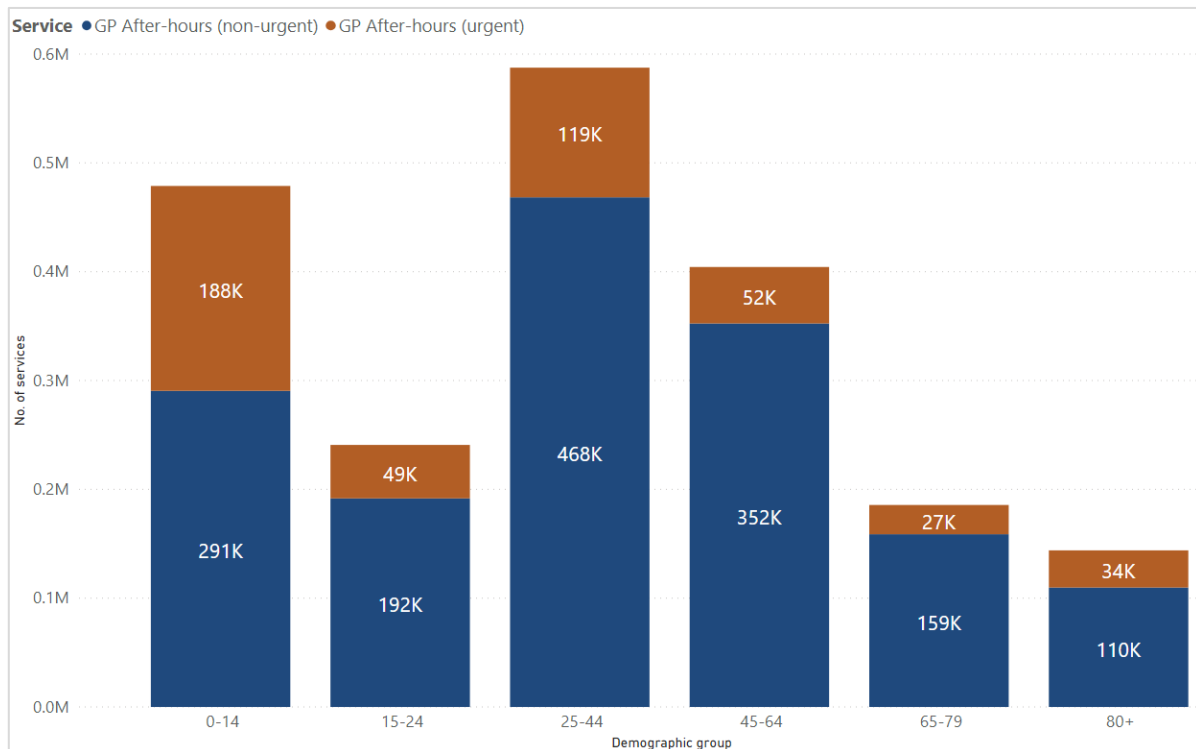
Medicare Benefit Schedule – After Hours Primary Health Services

Demographics

In 2017-2018, the estimated residential population in our region was 1,003,474¹⁰ people. During this period, a total of 471,004 after hours GP services were provided to 239,023 patients residing in the PHN region. This therefore indicates that almost 25 per cent of the population accessed after hours GP or MDS. Within the Brisbane North PHN, females were more likely to use after hours GP services than males, accounting for 55.9 per cent of service usage in comparison to 44.1 per cent in males. This aligns with findings from the National Patient Experience Survey which found that females were more likely to see an after hours GP than males¹¹.

Whilst after hours GP services are being used by all age demographics, **adults aged 25 to 44 years and children aged 0 to 14 were the largest age groups for total after hours services claimed, accounting for 29.4 per cent and 21.8 per cent of total services respectively** (Figure 3). The trend in service use varies slightly once services are classified as non-urgent or urgent attendances. For urgent attendances, **children represent 36.9 per cent of service use**, whilst persons aged 25 to 44 years remain the most frequent claimants (29.6 per cent) of non-urgent attendances.

Figure 3. Number of after hours GP services claimed, by type and age group, 2017-18



Source: AIHW, 2019

People aged 65 to 79 years and 80+ years accounted for a low number of patients in the Brisbane North region. Together, the two age cohorts comprise 13 per cent of total patients in the region. Due to the low percentage of patients, it is the likely reason why they accounted for a low percentage (16.9 per cent) of total after hours GP services claimed.

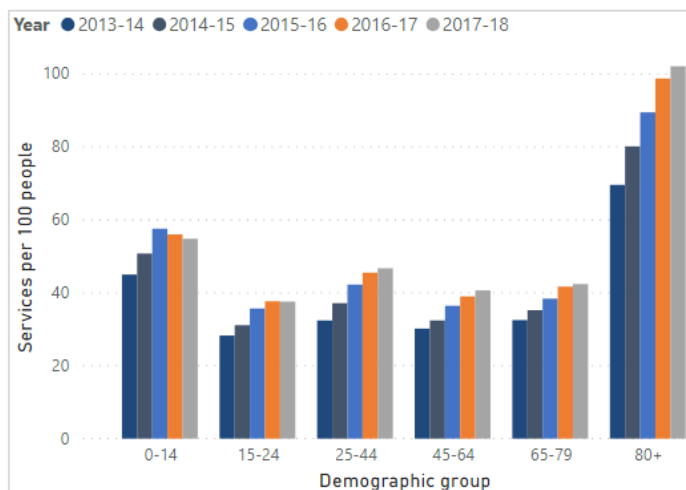
When looking at age-standardised rates (ASR; a method that eliminates the effect of cohort size) of after hours GP claims, children 0 to 14 years and the ageing populations represent the highest use of services per 100 people (Figure 4). Young children and adults aged 80+ years old access 54.8 and 102.2 services per 100 people respectively. This is in comparison to the entirety of Brisbane North PHN region which claimed 46.9 services per 100 people in the same period. Findings from the National Patient Experience Survey state that people with a long term health condition were more likely (9 per cent) to see an after hours GP than

¹⁰ This estimated residential population value was used by AIHW to calculate MBS data.

¹¹ (Australian Bureau of Statistics, 2019)

those without (5.3 per cent), which potentially explains why the ASR for adults aged 80+ years is substantially high.

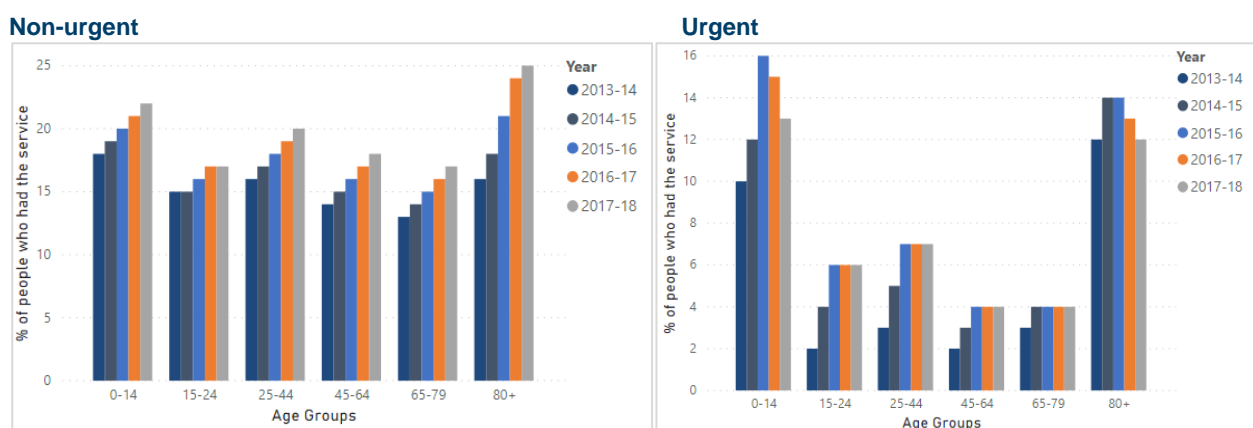
Figure 4. Number of after hours GP services claimed per 100 people (age-standardised), by age group and year



Source: AIHW, 2019

Further, the trends in after hours GP claims in the region differ, once services are broken down into urgent and non-urgent items (Figure 5). Since previous years, the percentage of people who claimed non-urgent items has increased. This is in contrast to urgent items which have maintained the same percentage of use, or in the case of some demographics a reduction in use. Regardless of the difference in trends, children 0 to 14 years and adults aged 80+ years remain the age cohorts who have the highest percentage of use for any type of after hours GP service.

Figure 5. Percentage of people who claimed after hours service non-urgent (left) and urgent (right) by age group, 2013-14 to 2017-18



Source: AIHW, 2019

Regional Trends

When looking at regional trends, the percentage of after hours GP service use is calculated using the number of services claimed divided by the estimated residential population for the specific SA3 area. Based on this, **Caboolture had the highest percentage of total after hours GP services claimed among Brisbane North regions in 2017-2018**, mostly due to non-urgent presentations, as shown in Figure 6. Other regions that had high use of non-urgent after hours services from its residents were North Lakes, Narangba–Burpengary, Strathpine and Redcliffe, with 27.4 per cent, 24.9 per cent, 24.3 per cent and 22 per cent of its population claiming the services, respectively. This trend has persisted in the last five years. In contrast, Caboolture Hinterland residents were the least likely to use an after hours service for non-urgent presentations, with one in 10 people using the service in the same period.

Other areas that were less likely to use after hours services for non-urgent presentations were residents in the Brisbane Inner West (13.5 per cent), Brisbane Inner (13.3 per cent) and Brisbane Inner–North (12.9 per cent) areas.

Figure 6. Percentage and distribution of non-urgent vs urgent after hours GP services claimed by SA3 regions, 2017-18

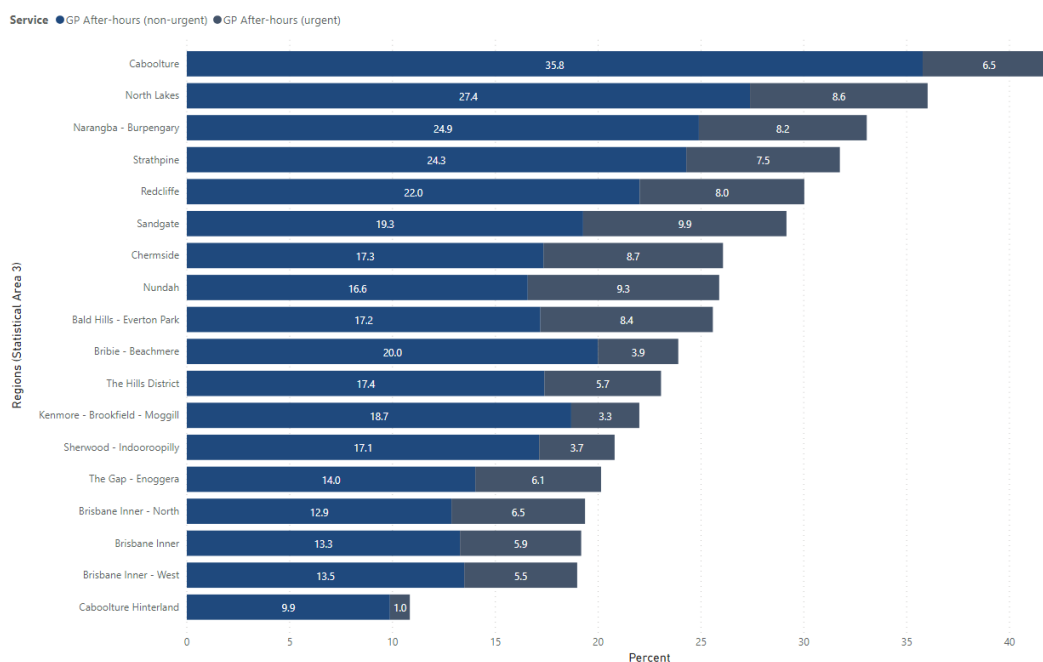
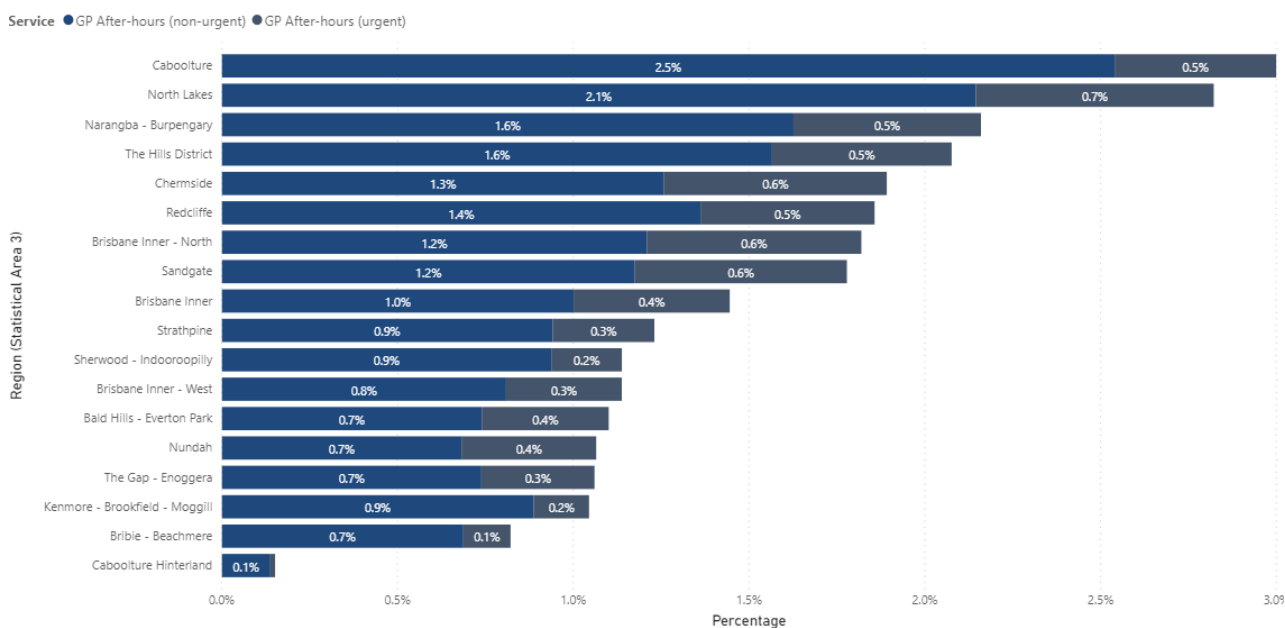


Figure 7. Percentage and distribution of after hours GP services claimed as proportion of total PHN population by SA3 regions, 2017-18



Source: AIHW, 2019

In terms of urgent after hours GP presentations, Sandgate had the highest proportion (9.9 per cent) of its residents using the service. This was followed by Nundah, Chermside and North Lakes with 9.3 per cent, 8.7 per cent, and 8.6 per cent of its residents claiming urgent after hours GP presentations, respectively. Caboolture Hinterland is again the region that utilises after hours GP services least, with only one per cent of its residents accessing a service for urgent presentations.

Other infrequent users reside in the Inner-West suburbs of Sherwood–Indooroopilly (3.3 per cent) and Kenmore–Brookfield–Moggill (3.7 per cent). A break down of service use as a proportion of the total PHN population, is shown in Figure 7 above.

Over the past five years there has been opposing trends in the utilisation of urgent and non-urgent after hours GP services in the Brisbane North region. Since 2015 the volumes of urgent after hours MBS billing have declined in the outer parts of the catchment including Bribie-Beachmere and Caboolture Hinterland. This is in comparison to non-urgent after hours services which have experienced an increase in the same period.

Emergency Department Low Acuity Presentations

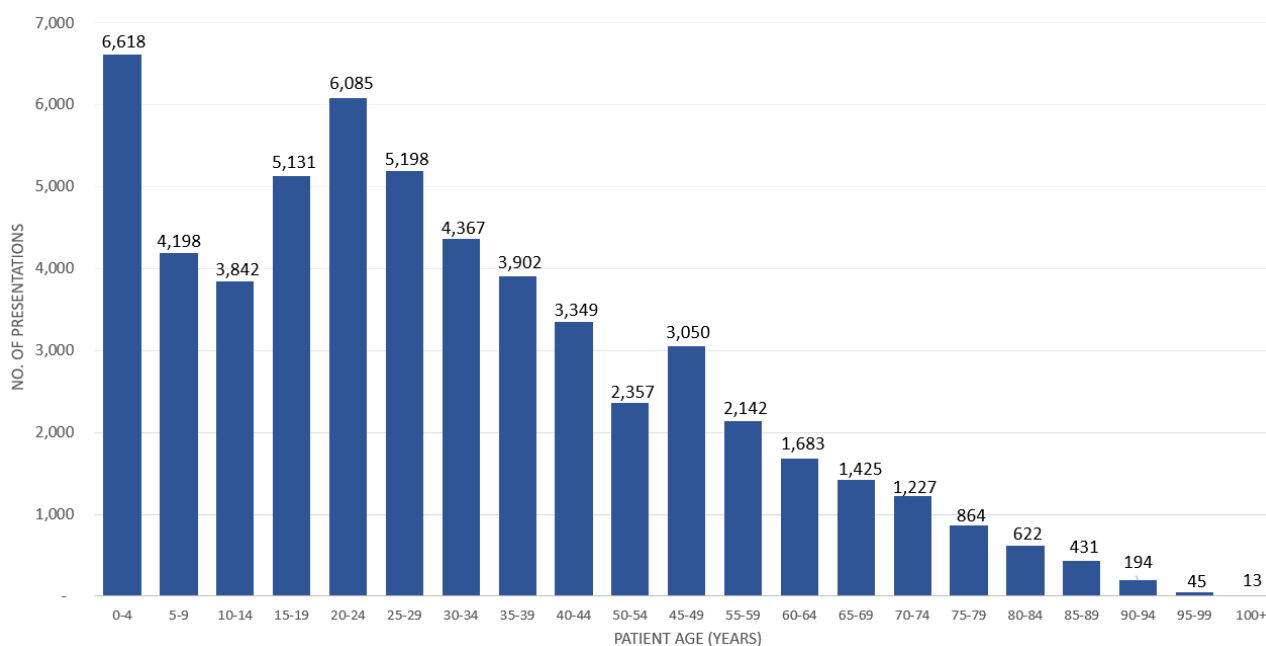
In this after hours needs assessment, patients triaged as category 4 or 5 are considered low acuity presentations as they are defined as individuals who are not in immediate danger, in severe stress or are presenting with non-emergency health concerns. This is contrast to triage categories 1 to 3, which are defined as patients experiencing life-threatening conditions, require very urgent attention or patients with a serious illness or injury who are in a stable condition.

Demographics

In 2018–19 there were a total of 116,847 ED presentations to Metro North HHS facilities that were triaged as low acuity. Of these low acuity presentations, over 48 per cent (or 56,743) occurred during the after hours period and were not admitted.

Low-acuity, after hours patients at Metro North EDs were predominantly young people under 30 years of age, comprising 54.8 per cent of total patients (Figure 8). Children aged 0 to 4 years were the highest presenting group of this cohort (11.7 per cent), followed closely by the 20 to 24 year age group (10.7 per cent). People of Aboriginal and/or Torres Strait Islander decent represented 5.1 per cent of total people presenting to Metro North HHS facilities after hours and were triaged as category 4 or 5 and not admitted. Within Brisbane North PHN, this is a higher representation of the population of Aboriginal and Torres Strait Islanders (2.1 percent).

Figure 8. Number of after hours, low acuity presentations to Metro North HHS ED by patient age, 2018-19



Source: Queensland Health, 2019

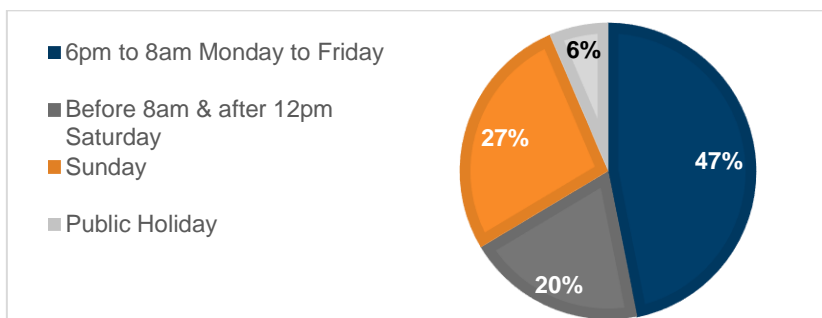
In 2018-19 the most frequent presenting complaint for after hours, low acuity presentations to Metro North HHS EDs related to injury, poisoning and other consequences of external causes, which equated to over 24,000 presentations (or 43 per cent of total presentations). This includes dislocations and sprains of joints, open wounds, fractures, burns and foreign bodies, and was the top presenting complaint across all age groups.

Overall, the second most frequent presenting complaint for all low acuity after hours presentations were categorised as factors influencing health status and contact with health services (12 per cent of total presentations). This is inclusive of individuals who were seeking a specific procedure, follow-up care, or adjustment for medical devices. When looking at specific age cohorts, the second most common complaints differed. In children aged 0 to 14 years infectious and parasitic diseases were the second most frequent complaint. In adults aged 75 to 90 years symptoms, signs and abnormal clinical and laboratory findings not elsewhere classified were the second most frequent complaint.

The distribution of after hours ED presentations is not equally distributed throughout the week. Of total after hours ED presentations, that were considered low acuity and were not admitted, nearly half (46.6 per cent)

occurred on a weekday, 19.7 per cent occurred on a Saturday, 27.3 per cent occurred on a Sunday, and 6.4 per cent occurred on a public holiday (Figure 9).

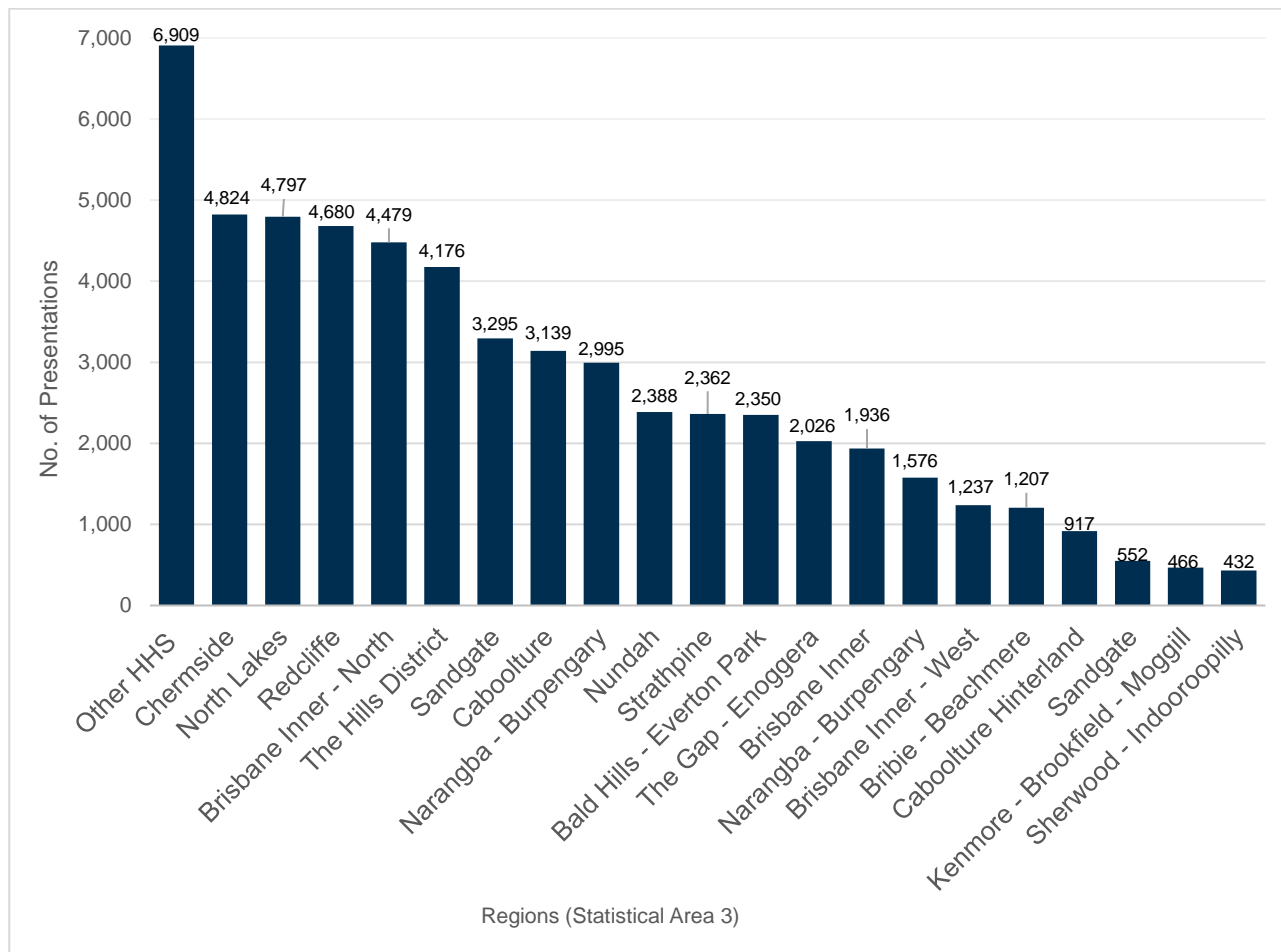
Figure 9. Distribution of after hours, low acuity presentations to Metro North HHS EDs, 2018-19



Source: Queensland Health, 2019

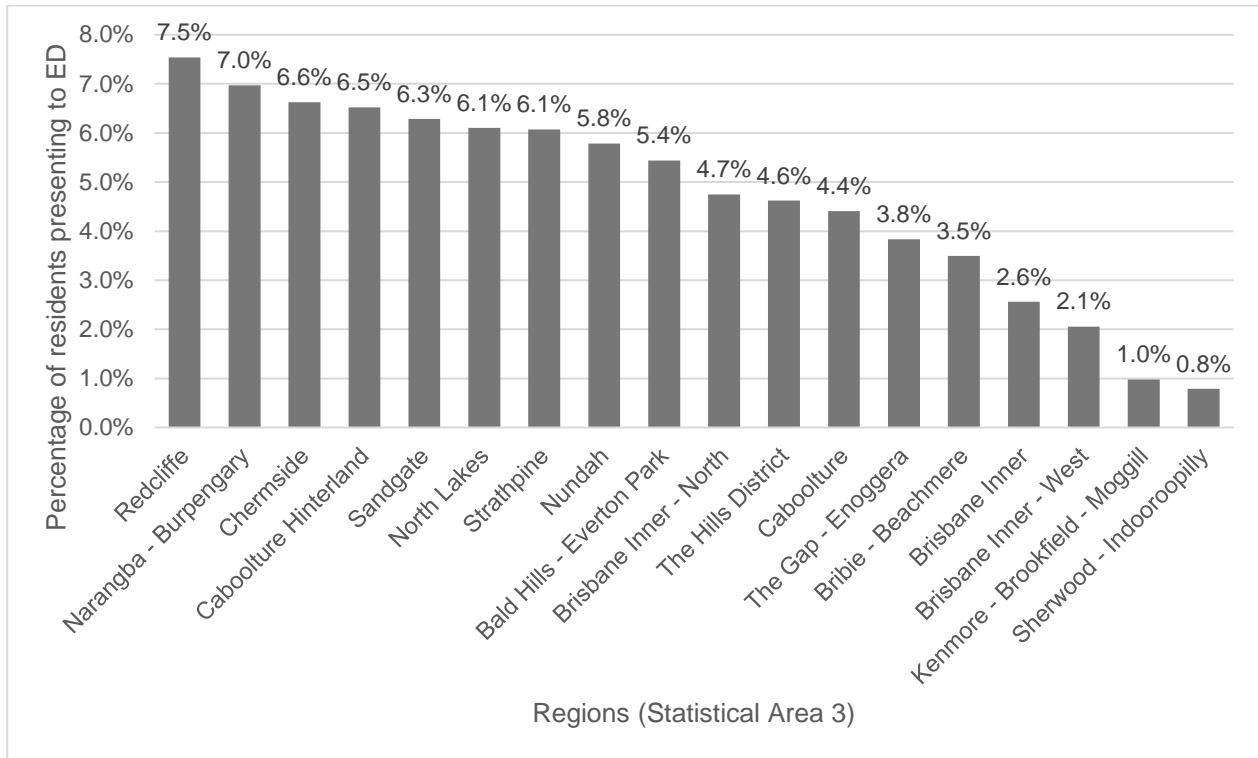
Residents from Chermside, North Lakes and Redcliffe accounted for 8.5 per cent, 8.5 per cent and 8.3 per cent of total after hours, low acuity ED presentations respectively. In contrast, residents of Sherwood–Indooroopilly, Kenmore–Brookfield-Moggill and Sandgate contributed to less than one per cent of total presenters each (Figure 10). A breakdown of ED presentations as a proportion of the SA3 population is also shown in Figure 11.

Figure 10. Number of after hours, low acuity presentations to Metro North HHS EDs, by SA3 in 2018-19



Source: Queensland Health, 2019

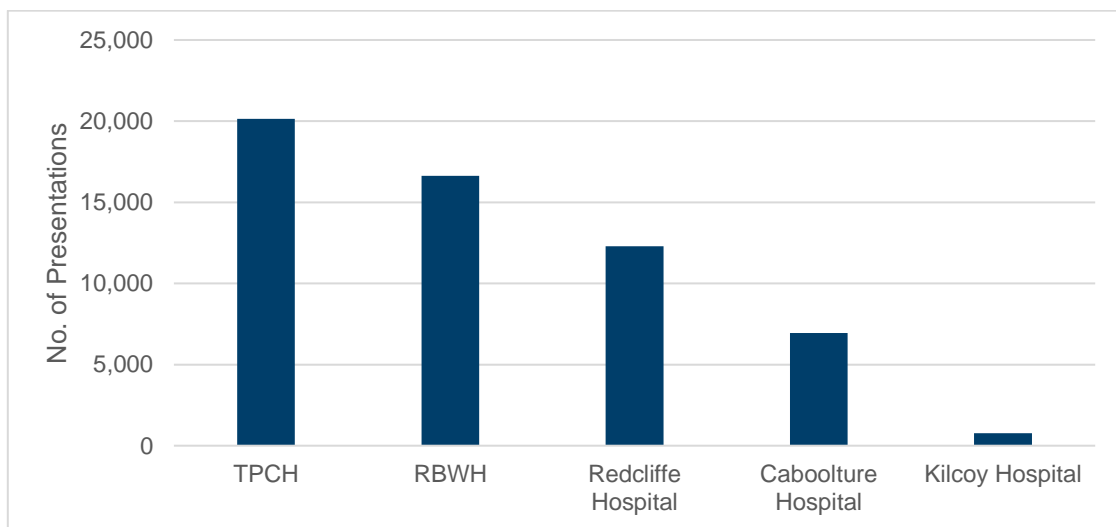
Figure 11. Percentage of SA3 residents attending for low acuity, after hour presentations at Metro North HHS EDs, 2018-19



Of all low acuity, after hours presentations to hospital EDs that were not admitted, the Prince Charles Hospital (TPCH) had the highest volume of presentations at 35 per cent of total low acuity after hours presentations among all Metro North HHS EDs. This was followed by the Royal Brisbane and Women’s Hospital (RBWH) with 29 per cent of total low acuity after hours presentations. The Redcliffe Hospital and Caboolture Hospital received 22 per cent and 12 per cent of total low acuity after hours presentations respectively. A further one per cent of after hours presentations in the Metro North region occurred at Kilcoy Hospital.

The number of after hours, low-acuity ED presentations, were proportionate to the total volume of all Category 4 or 5 presentations at each of the Metro North HHS facilities. The distribution of presentations by facility are shown in Figure 12 below.

Figure 12. Number of after hours, low acuity presentations to Metro North HHS EDs, by facility in 2018-19



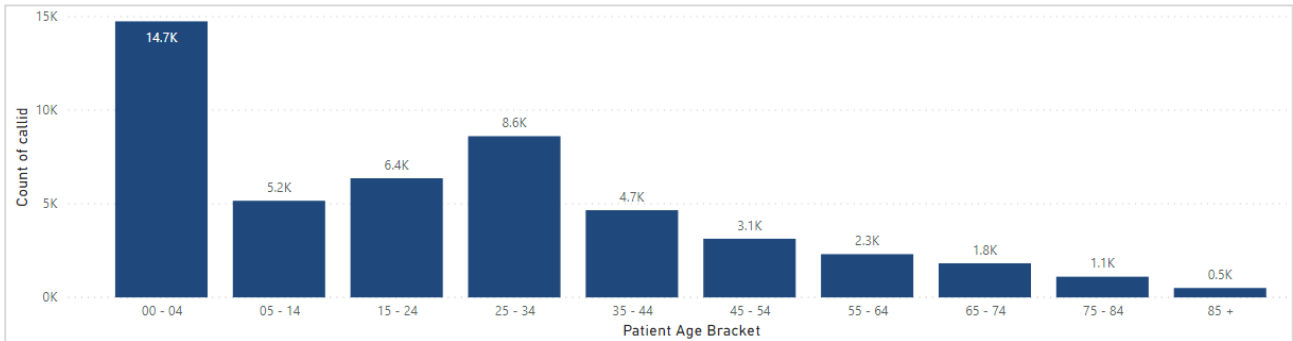
Source: Queensland Health, 2019

13 HEALTH

Demographics

From July 2018 to September 2019, 13 HEALTH received a total of 48,414 calls from the Brisbane North PHN region in the after hours period. Of these phone calls 2,099 were from people who were of Aboriginal and/or Torres Strait Islander descent. The most frequent after hours users of 13 HEALTH are identified as being for young children (0 to 4 years of age) accounting for 30.5 per cent of phone calls, followed by adults aged 25 to 34 years (17.8 per cent). Patients were more likely to be female, comprising 57.2 per cent of total callers. There is a general trend of decline in the usage of 13 HEALTH as people age, demonstrated in the low percentage of use among 75 to 84 years (2.3 per cent), and 85+ year olds (one per cent), as shown in Figure 13.

Figure 13. Number of 13 HEALTH calls received during after hours by patient age, July 2018 to September 2019

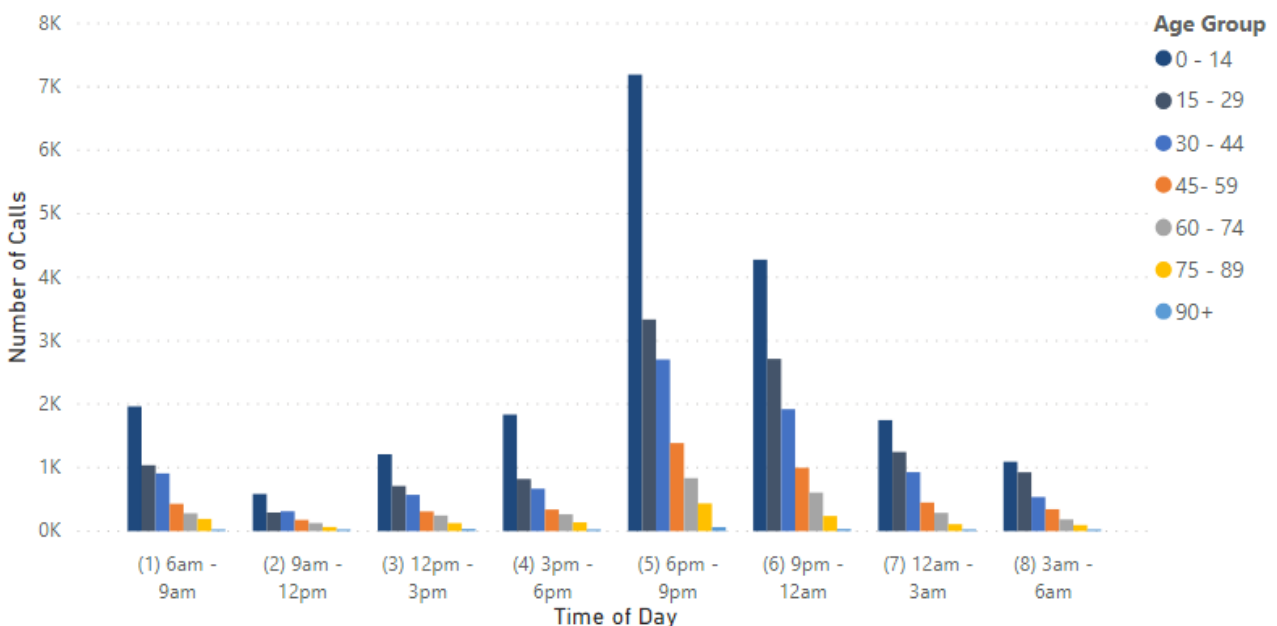


Source: Queensland Health, 2019

Of the 10 most frequent reasons for calling 13 Health, almost a third were related to fever, cough, vomiting or irritability in infants and toddlers. Other frequent reasons people called the service was for symptoms of abdominal pain, chest pain, vomiting, head injuries and headaches.

People who call 13 HEALTH after hours are more likely to call between 6:00 pm and 9:00 pm, with a third of calls being made in this period. The second busiest after hours period is from 9:00 pm to 12:00 am, with almost a quarter (22.3 per cent) of calls falling in this period. Usage of the service gradually reduced to 6.6 per cent between the hours of 3:00 am to 6:00 am. Of total after hours calls received by 13 HEALTH, 44 per cent occur during Saturday and Sundays. Patterns in usage of 13 HEALTH in relation to time of day are shown in Figure 14.

Figure 14. Number of 13 HEALTH calls received during after hours, by time of day and patient age group, July 2018 to September 2019



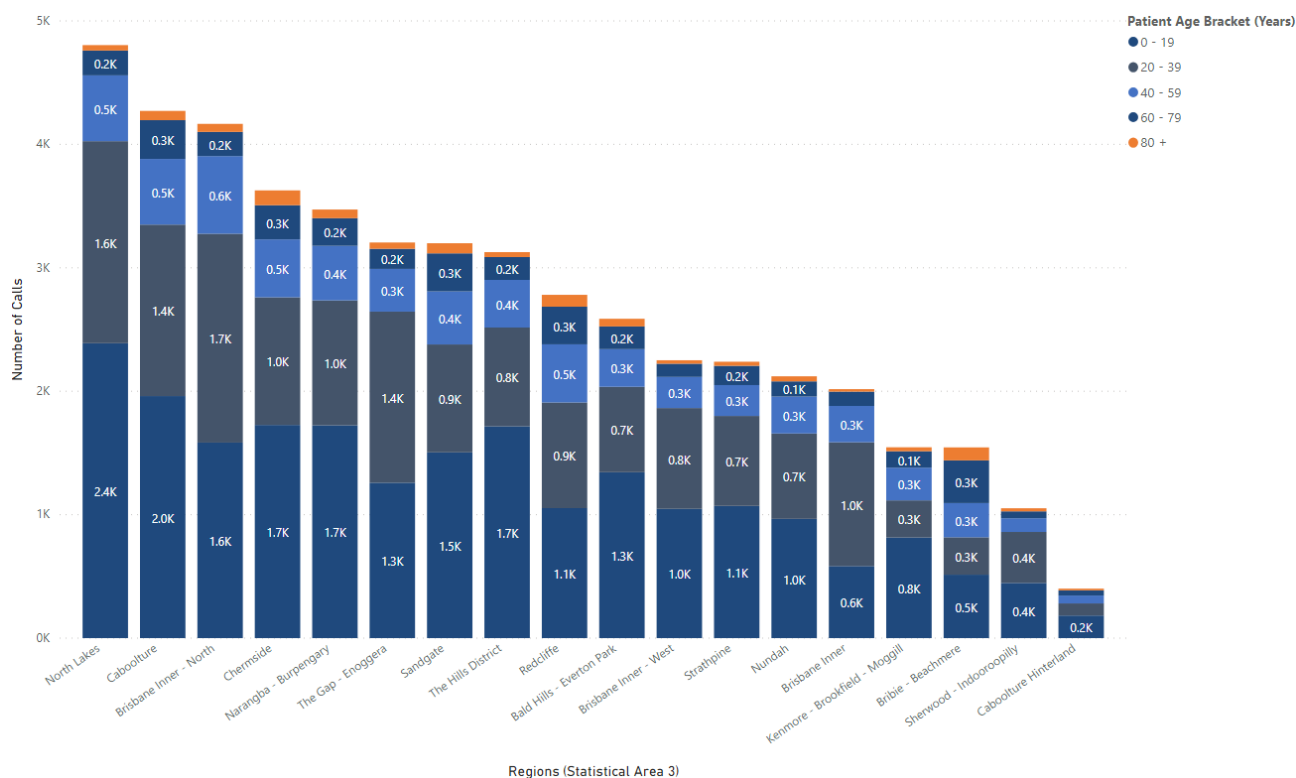
Source: Queensland Health, 2019

Regional Trends

Within the region, the telehealth service was most heavily utilised by residents of North Lakes (SA3) accounting for nearly one in 10 (9.9 per cent) of total calls to 13 HEALTH. Similar, to access of after hours GP services, Caboolture was again a high user of the 13 HEALTH service, accounting for 8.8 per cent of total calls. Brisbane Inner North and Chermerside were the next most frequent users of 13 HEALTH during after hours, accounting for 8.6 per cent, and 7.5 per cent of total calls respectively (Figure 15). Majority of these areas coincide with large communities of young families.

The telehealth service was least utilised in the Caboolture Hinterland, as well as the Western suburbs of Sherwood-Indooroopilly and Kenmore-Brookfield, where their usage accounted for 6.1 per cent of total calls collectively.

Figure 15. Number of 13 HEALTH calls received during after hours by SA3 and patient age distribution, July 2018 to September 2019



Source: Queensland Health, 2019

Unlike most SA3 regions which demonstrated relatively comparable proportions of use among age groups, Chermerside, Redcliffe and Bribie-Beachmere had a higher proportion of callers from 75+ year olds than from younger persons, (Figure 13). These trends are a reflection of the predominant age cohorts that reside in these areas. This is supported by SA2 data which had Bribie Island as the region presenting the highest proportion (7.2 per cent) of calls from residents aged 75 years and above. Distribution of calls across age brackets among SA3 regions are also shown in Figure 15.

Limitations - Additional Data Needs and Gaps

While the data used for this after hours needs assessment has been adequate in providing the trends and landscape of after hours service use within the region, the inclusion of additional data may have further reinforced the evidence or understanding of existing needs and gaps. QAS data and data from pharmacies in the region were not available for inclusion at the time of this needs assessment. Of the data sources that were available for this needs assessment, the variability in the parameters used to reflect age groups has limited the granularity of some analysis, and therefore the comparison of trends between data sources.

Additionally, there is limited data available that pertains to priority populations in the region and their use of after hours services. This includes Aboriginal and Torres Strait Islanders, homeless and those at risk of homelessness, and culturally and linguistically diverse populations. This was a key component of the consultation, along with residents from RACFs to ensure that these populations were captured.

Service landscape

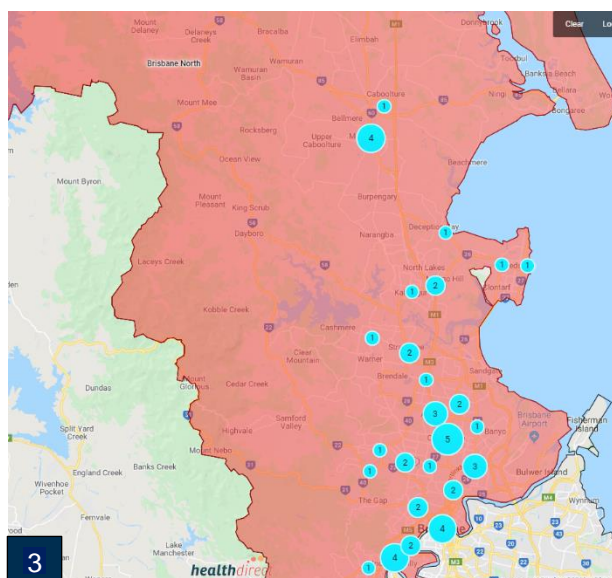
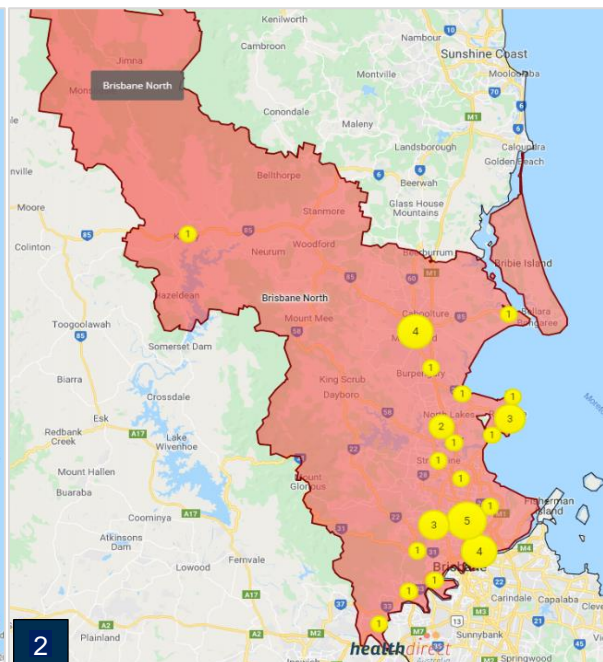
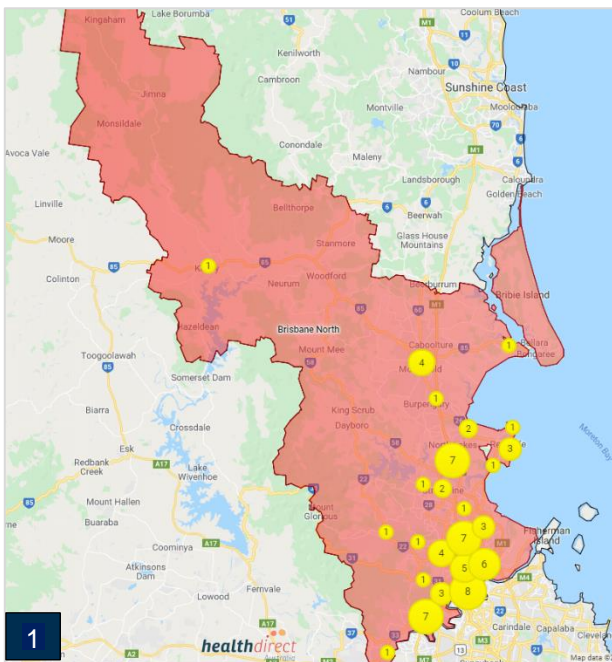
Service mapping and coverage

The availability of services is variable across the region.

Fewer after hours services exist in outer parts of the catchment particularly in the Moreton Bay North region. There is also regional variation evident in the figures below with respect to the GP services, after hours home doctors services and pharmacies available after hours in the region.

Table 2. Summary of after hours services available in the Brisbane North PHN region, by opening time

After hours – Opening Times	Services	No. of Services Available
From 6:00 pm	General Practices (inc. telehealth services)	51
Open to 7:00 pm or later – At least one night per week	General Practices (inc. telehealth services)	26
From 6pm	Medical Deputising Services (MDS)	6
Open to 7:00 pm or later – At least one night per week	Pharmacies	40



Map 1. GP services open from 6pm - 51 general practices listed as being open.

Map 2. Open to 7pm or later at least one night per week - 26 general practices listed as being open.

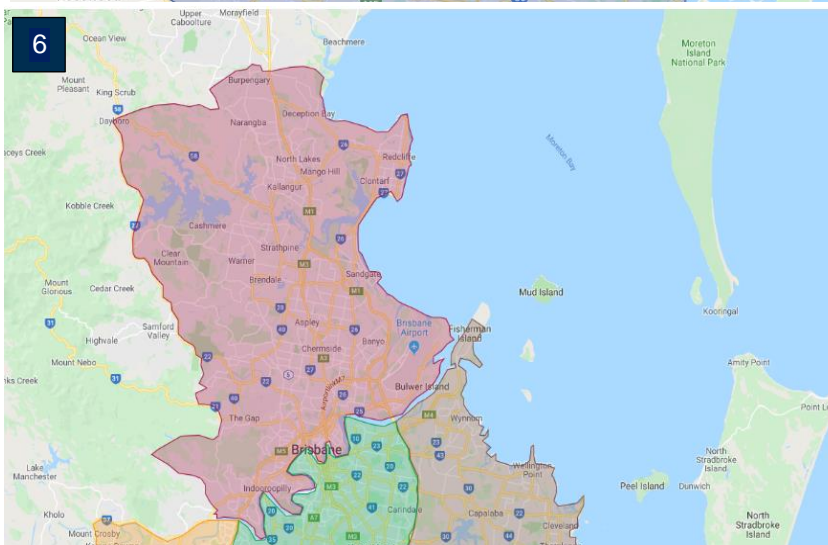
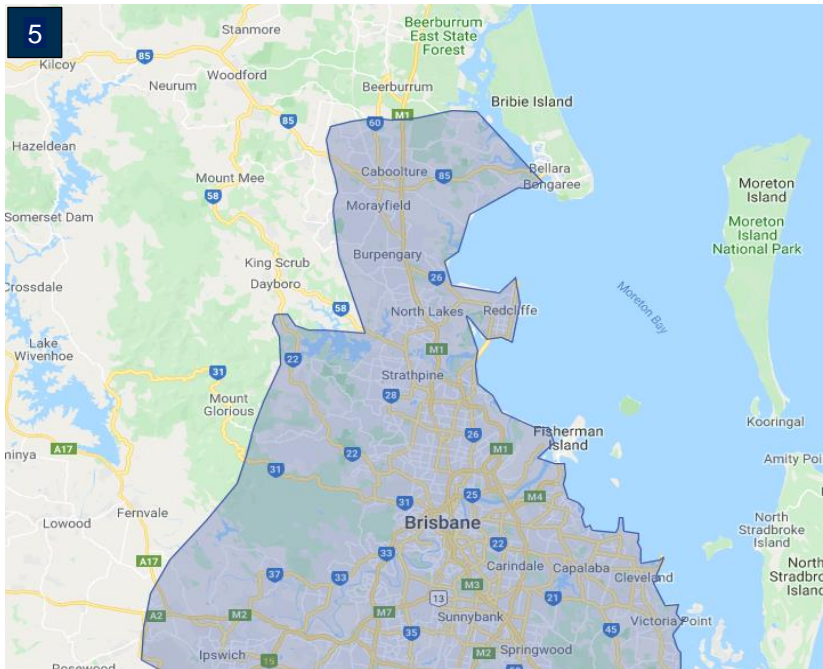
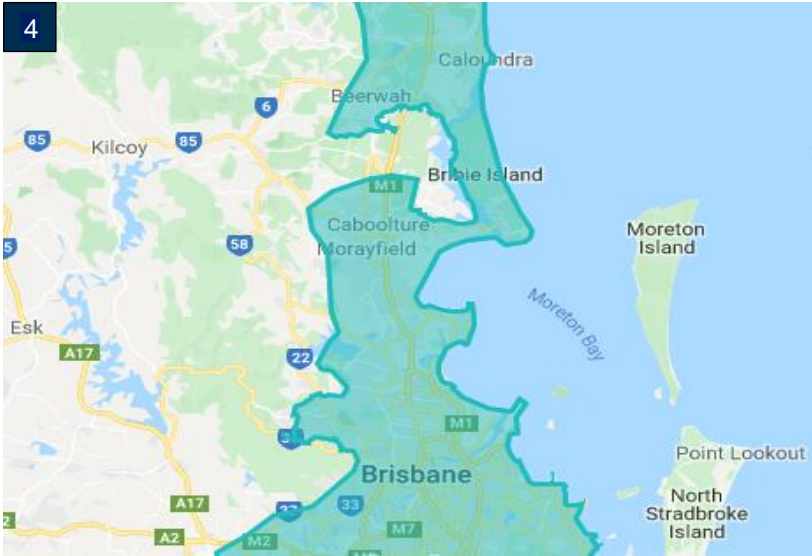
Map 3. Pharmacies listed as open from 7pm

*This is to be used as a guide as this does include telehealth service and some medical deputising services also.

Source: Healthdirect Australia, 2019

After hours' home doctor visiting services do not service parts of the region including Dayboro and Samford.

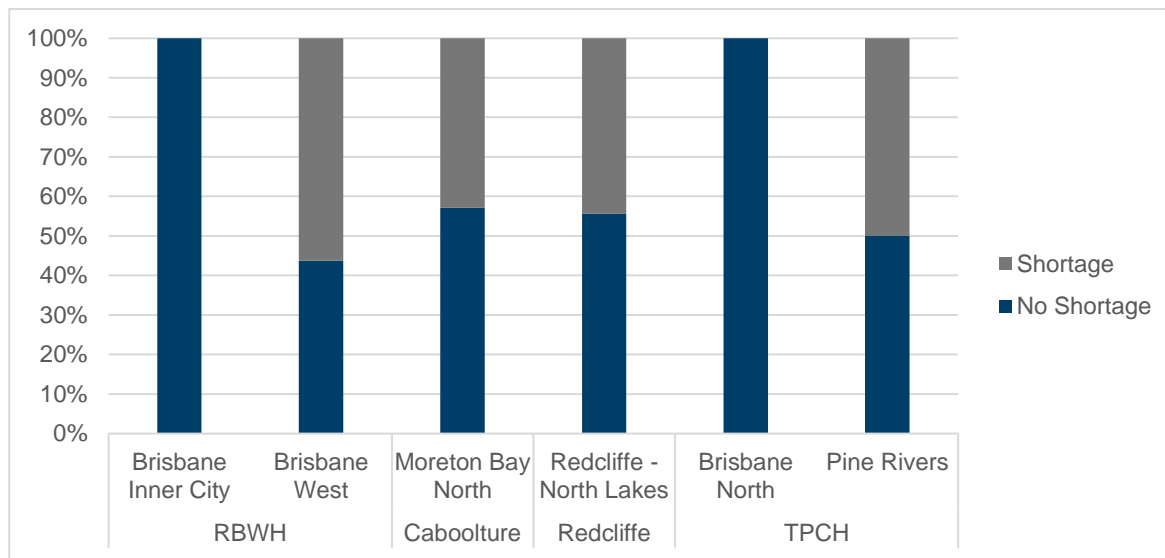
Map 4 - 6: Home visiting doctor's services – Service 1 (4), Service 2 (5) & Service 3 (6)



The distribution of general practice locations across the Brisbane North PHN are proportionately distributed to the population. Over one quarter of general practices (26.1 per cent or 89 practices) are located in the Brisbane Inner City sub region, followed by the Brisbane North sub region, with 19.6 per cent (67 practices). Over 40 per cent of the total population within the Brisbane North PHN region reside in either the Brisbane Inner City and Brisbane North sub regions. In comparison, the Moreton Bay North region which has been identified to have higher health needs and lower social determinants of health have a breakdown of 15.5% (52 practices).

Furthermore, identified districts of workforce shortage are more likely to be in the northern and western areas of the region, particularly in the sub regions of Brisbane West and Moreton Bay – North. The distribution of districts of workforce shortage by sub region can be seen in Figure 16.

Figure 16: Districts of workforce shortage for general practice by sub region and hospital catchment, 2019



Source: Department of Health, 2019

Consultation

21 consultations were undertaken as part of the needs assessment consisting of a range of local service providers (eg. General Practice, Pharmacists, Queensland Ambulance Service, Metro North Hospital and Health Service Emergency Departments). The consultation was designed to supplement and confirm the trends in the data captured during analysis. The full list of the consultations, and supporting documentation from previous efforts to clarify the needs for our region including consumer and service provider market research is available at the end of this section.

Key Themes

Throughout the consultation, a number of themes were identified which supported the data or enriched the needs assessment due to the lack of data available. It was identified that regional variance in the access and utilisation of services, access for hard to reach populations and support for patients from Residential Aged Care Facilities are key needs within the Brisbane North PHN region.

In addition to these key themes, some of the general trends captured by the consultation included:

- for access to primary health and after hours services the busiest period is in the evening up until around 9:00 pm, with it tending to drop off considerably after midnight.
- There was variation regarding the types of reasons for calling a Medical Deputising Service, but common presentations included fevers, nausea, vomiting across age groups.
- Difficulties for MDS accessing all areas across the region is the number of call outs that they may consistently receive in these locations.
- High level of need in Caboolture with many services available in the after hours.

After Hours Market Research 2016 commissioned by Brisbane North PHN, completed by Olgilvy with consumers across the region confirmed many of the general themes that came through. Some key insights to add:

- In situations of heightened anxiety, the ED is perceived as the best option because it's the most well-known, it offers the best care, is a one stop shop and, therefore, is the most trusted choice.
- Although those who do not consider the condition to be urgent are more likely to utilise an after hours doctor or pharmacy, the main service they use continues to be the ED (42 per cent of self-described non-urgent cases)
- Many are open to other services. They are reassured knowing the range of services available.
- Usage of 13HEALTH is much higher among those with young children.
- Other services have lower awareness. Although some have used these, and continue to do so, previous experiences have in some cases not worked to build trust or alleviate anxiety.
- It is essential to continue to work to building awareness of other options, but also trust and confidence. This also involves managing expectations as to what after hours services can deliver. Sometimes it is just a reassuring voice.

Access to services for hard to reach populations

There is a broad range of clients that are considered to be hard to reach populations. These can include but not limited to Aboriginal and/or Torres Strait Islanders, and homeless or individuals living in unstable accommodation. Some of the key themes that have come out from the current providers that are providing services to a range of clients are:

- While the needs for these populations may vary, they are often complex in nature and can include complex chronic disease, mental health, experience of trauma.
 - They may be seen for chronic disease, chest pain, cold and flu systems, skin infections, cellulitis, and wound care
- No regular GP in many instances
 - Limited access of GP services during the day (or at all) and are not accessing other supports (eg. community nursing services). This can in some instances then require access of services in the after hours

- Any health concerns that could not be arranged in normal hours would be referred to after hours.
- Continuity of care for these clients as they can be transient in nature
- A high level of trust needs to be developed (this was noted at various consultation)
 - Cultural sensitivities of seeking out health care are also important considerations.
 - Aboriginal and Torres Strait Islanders and other cultural groups would often seek out family members in the first instance before seeking medical care or to help navigate the system
 - In some instances, organisations take on a quasi-advocacy role for patients when supporting clients to access services. Much of this support may be unfunded.
- Lack of access to transport and difficulties accessing services
 - Some providers have highlighted vans have been a great way to access clients - maintenance of the van to continue the service is a concern.
 - There are potential issues for patients accessing after hours services in locations that are on the outskirts of our region.
- Difficulty in accessing the system, making it hard for people to access it with the gateway pathways that are setup for access.
 - Awareness of the services available and a trust that the service will be available is a very important point.
 - It was identified by an MDS that approximately 20 per cent of their client base across the wider Brisbane area identify as Aboriginal and Torres Strait Islander. They are willing to work closely with other client demographics including clients experiencing or are at risk of homelessness.
- Awareness of available services -a consideration to have marketing targeted to Aboriginal and Torres Strait Islander patients would greatly assist in creating an awareness of the services that are available.

Regional variation in parts of the catchment accessing after hours services

Urban areas generally received regular access to Medical Deputising Services when required. This was noted by consumers, GPs in built up areas and Medical Deputising Services.

- *We called in the after hours doctor to my wife. It took less than 30 minutes for her to arrive. After an initial assessment, it was recommended my wife go to hospital for further tests. She was transported there by ambulance and had to wait some hours in emergency before tests were done and treatment given for her condition. – Carseldine Resident*

Populations identified through the consultation that have limited access to after hours services included:

- Bribie Island
- Dayboro and Samford Valley
- Caboolture Hinterland

Bribie Island and GP after hours Services

The PHN has consulted with a wide range of stakeholders about access to after hours medical services on Bribie Island. Several consistent themes emerged:

- The island has an ageing population. As with other ageing populations this means there is an increased demand for health services¹².
- A potential number of patients needing after hours GP services are not captured by the data because they have been unable to access services previously, so have stopped trying to access them and instead wait to see their own GP in the morning. This can be supported by findings of the National Patient Experience Survey which found that one in five people who required an after hours GP did not see one at all.
- There is a lack of after hours GP services covering the island because MDSs have reduced their coverage due to changes in MBS billing, which make it uneconomical for them to provide services on the island.

¹² (Australian Institute of Health and Welfare, 2018)

- MDSs outlined the difficulties with being able to service patients in the Bribie region. If they are serviced by a MDS, the MDS would often require more than one patient on the Island to be visited for the MDS to head out for the call.
- One GP surgery is open after hours and they are based just off the Island at Ningi. This practice is open until 9:00 pm. The practice is regularly fully booked between 6:00 pm – 9:00 pm. One of the challenges is finding additional doctors to work during the after hours period, which limits the practice's ability to offer more services in the after hours.
- The population have poor access to personal and public transport, which makes travelling to and from services off the island, such as to the Caboolture Hospital ED, difficult¹³.
- The RACFs on Bribie Island and its surrounds have difficulty accessing after hours medical services.
- Difficulties for both MDSs and QAS to get doctors and paramedics (if transporting patients) to the island to respond to after hours needs
- Additional after hours services have recently started covering the island. QAS have stationed a Low Acuity Response Unit (LARU) on the island. LARU services are low response vehicles intended to treat low urgent cases and respond to cases where patients may not need to go to hospital. The Bribie Island LARU has recently commenced on the 4 November 2019,

An account by a local GP based on Bribie Island:

"I had a patient who tried to call an after hours service on Sat when she woke up suddenly unable to weight bear on her right leg, three weeks after having a fracture of this hip repaired. Was told call not possible. She has a frail elderly husband and unable to get help elsewhere so waited till Monday to see me."

A letter from a patient to a Bribie Island GP in response to the need for after hours services, being highlighted in the media, outlined the issues that the patient had with being able to access after hours MDS on the island:

"This is in no way a complaint but what I hope will be useful feedback.

Monday late afternoon, 7th October, a holiday, something lodged in my eye causing severe discomfort. After trying to wash it out with an eye bath and showering it still felt as if grit or some such was stuck in my eye. As well as being painful, it was running constantly as was my nose. I rang the hospital and was put through to a very helpful nurse. She took details and finally suggested I ring one of the doctors that did after hour visits to Bribie. She gave me the following numbers.

The first number was answered by a recording which told me to enter my postcode then said they do not cover this area. The second number was answered by a kindly human voice who after checking also said they did not do Bribie. When I said the hospital had just given me that number she offered another I believe (my writing is hard to read) and the recorded message here was this service no longer operates or some such.

Pure frustration when I was feeling very distressed!

I don't know what course of action I should have taken or what number I could have rung but bottom line must be Bribie needs an after hours service. An article in this week's Bribie Weekly highlights this need and I can only add my voice to this appeal."

Dayboro and Samford GP after hours Services

Similar access issues to after hours services have been highlighted in the consultation that matches the concerns raised for Bribie Island in relation to getting access to services and the area not being serviced by after hours MDSs.

There had been extensive market research previously conducted looking into the needs of the population in Dayboro and Samford supporting the data that has been highlighted above for the region. Market research was conducted in the Samford Valley and Dayboro areas in 2017 with a telephone survey conducted on 300 residents from Dayboro and Samford regions.

- Respondents to the telephone survey indicated almost half (47 per cent) of residents were not confident that they could access an after hours home visiting GP service if they needed to.

¹³ (Moreton Bay Regional Council, 2015)

- Most people contact a telephone helpline when they have no access to after hours GP service and/or are unsure if they should go to the ED.
- Based on this sub-sample demographic, many calls and visits were for children which is supportive of the data above.
- For those residents who have contacted an after hours GP service, 61 per cent were dissatisfied with the experience, while only 28 per cent were satisfied.
 - Almost all those who were dissatisfied reported that the service did not cover their area.
- The high level of need for people in the mid-age range correlates to those with children aged under 12 years living at home.

Reasons for residents of Samford Valley and Dayboro contacting 13 HEALTH (online survey):

“Home Doctor services do not visit our location and I wanted advice on whether take our toddler to emergency as it is also 45 minutes’ drive.”

“It was all that was available and I took the risk that it wasn’t urgent enough for hospital.”

“Needed an after hours doctor as my son was extremely unwell with very high temps.”

“To advise if we needed to visit the hospital after my son suffered a reaction to his vaccinations.”

Anecdotal patient story – Resident from Samford:

A mother in Samford who rang the after hours GP was advised that they were unable to service the area. As she had three children, she was able to drive to her mother’s place in Eatons Hill where they were able to get seen by the service there.

Caboolture Hinterland and GP after hours Services

The consultation also highlighted that Caboolture Hinterland is another location that is not largely serviced by after hours MDSs due to its geographical location. Discussions were identified that access using a telehealth solution may be beneficial in these locations due to the smaller number of residents.

After hours services for Residential Aged Care Facilities across Brisbane North Region

In addition to the current consultations, there have been a number of previous consultations by both the PHN and the Health Alliance relating to RACFs. Incorporated into these discussions have been after hours service provisions for people in Residential Aged Care Facilities.

While there is limited available data in relation to the number of after hours services received by patients within RACFs, there has been extensive consultation in this review and previous that has identified the issue of accessing after hours care by RACF’s. As part of the Ageing Well Initiative undertaken by the Health Alliance within Brisbane North in 2018, some key themes included:

- RACFs find it difficult to access primary care especially after hours. Long wait times for after hours deputising services are currently being experienced by RACFs. Many after hours doctors who attend RACFs are not experienced in geriatrics or palliative care, and are hesitant to prescribe medications, in particular end-of-life pain medications. In instances, they spend little to no time reassuring or supporting family and carers. All of these factors contribute to unnecessary hospital presentations by RACF residents.

In addition to this, some of the key themes that have come through from this review:

- The Residential Aged Care District Assessment and Referral Unit (RADAR) is currently supporting the region in providing advice and support to RACFs across the region. Difficulties in instances getting a GP or MDS to attend when required.
 - Biggest demand time for RADAR is the weekend.
- A gap in the services that are provided to RACFs in the after hours space was identified in many locations across our region, although some providers indicated that they can generally access after hours services in an urban location.

- A capability framework for nursing staff within the RACFs that are rostered on in the after hours could support the care of patients when incidents occur during this timeframe.
 - Review of RACF service models could be a consideration
- Access to after hours services has also been raised at previous Caboolture and Redcliffe collaboratives which has also focussed on the importance of palliation for the patients.

A sample from the Bribie region depicts the challenges that were faced in relation to getting access to an after hours doctor in a regional location.

“An elderly man with Parkinson's and dementia in an RACF. This guy had two falls on Sat 5th Oct. The RN at the facility strongly suspected a UTI so faxed me for info and called the OOH service (13SICK). Fax from the next day reports he being "very unsettled" with another fall and confusion (OOH "unavailable"). Monday was a public holiday. I received all these faxes on Tuesday morning, made arrangements on the phone to test the urine and treat the probable infection so treatment started Tues or Wed, a delay of 3-4 days. The patient took some time to recover. It is impossible to assess the additional distress caused to him and, of course, the significant impact on relatives and RACF staff caused by the delay.”

Consultations and Market Research List

Internal Teams

- Primary Care Liaison Officers
- Health Alliance team
- Aged and Community Care Team
- Priority Communities Team

PHN Committees

- Clinical Council (Follow up meetings with several committee members)
- Community Advisory Committee – consumers included on this committee

External Engagement

- Queensland Ambulance Service – Matt Green, Director of Operations
- Metro North Hospital and Health Service– Emergency Departments – Dr Chris May
- Pharmaceutical Society – Martin Lock
- Community Pharmacists – Keith Rand, Chris Campbell
- General Practice
 - Dr James Martin, GP Liaison Officer/GP (Pebble Beach Medical Centre)
 - Goodwin Drive Medical Centre
 - Ningi Doctors
 - Dr Srishti Dutta, GP Liaison Officer/GP (Warner Medical Centre)
- Hard to Reach Populations Service Providers
 - Micah Projects
 - Queensland Injectors Health Network
 - Footprints
 - Ethnic Communities Council of Queensland
 - Kurbingui Youth Service
- Medical Deputising Services
 - National Home Doctor
 - 13 Sick
 - Hello Home Doctor Service
- Residential Aged Care Facility after hours access
 - The Residential Aged Care District Assessment and Referral Unit (RADAR)
 - Anglicare Southern Queensland

Additional documents used

- Market Research Samford and Dayboro – After hours, 2017 commissioned by Brisbane North PHN, completed by Footprints Market Research
- After hours Market Research 2016 commissioned by Brisbane North PHN, completed by Olgilvy
- Health Alliance Ageing well Consultations
- Aged Care Collaboratives – Caboolture and Redcliffe
- Contract reports for after hours service providers – Hard to reach populations

Analysis

A review of the data and consultation produced from this after hours needs assessment has revealed trends in service use and potential gaps that exist within the Brisbane North PHN. This segment aims to draw from the consultations and data collected, to consolidate the findings from this needs assessment.

In this assessment, several age groups continually exhibited high after hours service use comprising of after hour GP attendances, emergency department presentations and 13 HEALTH calls. These age groups were predominantly children aged 0 to 14 years and adults aged 25 to 44 years and were noticeably from regions that largely consist of young families, including Redcliffe – North Lakes and Brisbane North planning regions. While there is high use from these aforementioned regions, residents from Samford and Dayboro were aware of the services available, but had limited access to after hours GPs or MDS in their area. Consultations found that due to this gap in service provision, parents of children alternatively accessed 13 HEALTH and ED.

These findings are indicative of the widespread awareness for after hour services available, and the ability for majority of areas to readily access them. The increasing use of emergency departments in the after hours for low acuity conditions, in addition to the increasing use of non-urgent after hour GP services however, has raised concerns regarding the sustainability of delivering such services. The anticipated growth in population, particularly for younger age groups, reinforces the need to address avoidable after hour service use and the associated burden placed on services.

The older age groups have also presented as a cohort that are experiencing unmet needs for after hour service delivery. Health service use associated with long-term or age-related health conditions are expected to be proportionately high in the ageing population. Based on the review of data and consultations, the need to improve after hours services to the ageing population is evident; particularly for those residing in outer areas of the region and RACFs.

Bribie – Beachmere was an identified area of interest during the assessment. While it displayed its low rates of after hour service use, accounts provided during consultation supported that this may have been due to access issues rather than limited need. In comparison to other regions Bribie - Beachmere is substantially smaller in population size however has the oldest population (based on mean age) in the Brisbane North PHN. Low uptake of services is suggestive of the poor availability of services or that access to services is problematic to this community. The underlying cause of this is likely due to its geographical location being outside of a major urban center. This was supported by consultations with MDSs who reportedly faced cost-effective barriers when delivering services, following changes to MBS billing. In response to such barriers, MDSs had reduced their coverage to Bribie Island and required several call outs to warrant an attendance from a practitioner to the area. Similar accounts and difficulties were also reported for older populations in RACFs. While RACFs were not reported on in data sets used, consultations found that after hour care involved long wait times and that there were difficulties faced by the workforce when supporting the care for geriatric or palliative patients.

Lastly, priority populations have also been identified as an area of interest during the consultations as they were reported to experience barriers in accessing health care. These populations are inclusive of Aboriginal and Torres Strait Islander people, homeless and those in unstable accommodation, and individuals who are culturally and linguistically diverse. Consultations revealed that these populations experience challenges in receiving culturally appropriate health care; continuity of care; lack access to transport and have reduced abilities to enter the healthcare system using typical pathways. While these consultations provided evidence, data for these populations are limited. Of the data available, it was identified that the proportion of Aboriginal and Torres Strait Islander people accessing ED and 13 HEALTH during after hours is higher than the percentage in the PHN region. Further investigation would be required to further inform how these populations access after hour services.

Conclusion - Proposed Solutions

Below is a list of some of the solutions that emerged during the consultation or are currently underway within the region. The PHN's Activity Work Plan outlines the activities that are currently taking place.

After Hours Healthcare

- Look at a systems approach to providing sustainable after hours services with the impending population growth.
- Deliver an integrated community education campaign to improve awareness of after hours health services including targeted campaign for Aboriginal and Torres Strait Islanders
- Develop a range of adequate care pathways specific to after hours services

Hard to reach populations

- Look at ways of increasing in hours access to primary health services.
- Commission outreach after hours healthcare services catering to homeless and hard to reach population groups and support to connect providers within the region, including GPs and primary care

Regional variation in access to services

- Improve access to after hours services in underserved areas through commissioning of after hours primary care providers and health system improvement project involving key local stakeholders, such as consumers, GPs, MDSs, Queensland Ambulance Service and our local Hospital and Health Service

Supporting access to after hours services for residents from Residential Aged Care Facilities

- Training for after hours doctors to improve service delivery in aged care facilities and palliative care situations.
- Consider workforce profile supporting RACF patients in the after hours (eg. Identify availability of after hours doctors, potential for a dedicated MDS to service RACFs, further access to Nurse Practitioners and Allied Health professionals)

This After Hours Needs Assessment has identified gaps in service provision for certain populations and regions that are complex in nature. The scope of identified gaps is such that a community approach will be essential. This will require funding beyond that which can be provided by Brisbane North PHN. The PHN will engage with providers and stakeholders to look at a system wide approach, supporting the provision of after hours services within the region.

Acknowledgement

Brisbane North PHN thanks all stakeholders that have contributed in the development of this After Hours Needs Assessment.

References

- Australian Bureau of Statistics. (2017). *Census of Population and Housing 2016*. Retrieved from <http://www.abs.gov.au/census>
- Australian Bureau of Statistics. (2018). *Regional Population by Age and Sex, Australia 2017 Cat. No. 3235.0*. Retrieved November 2019, from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3235.02017?OpenDocument>
- Australian Bureau of Statistics. (2019). *Patient Experiences in Australia: Summary of Findings, 2018-19. Cat. no 4839.0*. Canberra: ABS. Retrieved November 2019, from <https://www.abs.gov.au/ausstats/abs@.nsf/mf/4839.0>
- Australian Government. (2019). *Settlement Reports*. Retrieved November 2019, from Department of Home Affairs: <https://www.data.gov.au/dataset/ds-dga-8d1b90a9-a4d7-4b10-ad6a-8273722c8628/details?q=>
- Australian Institute of Health and Welfare. (2019, September). *Aged care service list: 30 June 2019*. Retrieved from GEN Aged Care Data: <https://www.gen-agedcaredata.gov.au/Resources/Access-data/2019/September/Aged-care-service-list-30-June-2019>
- Australian Institute of Health and Welfare. (2018). *Older Australia at a glance*. Retrieved November 2019, from <https://www.aihw.gov.au/reports/older-people/older-australia-at-a-glance>
- Australian Institute of Health and Welfare. (2019). *Medicare-subsidised GP, allied health and specialist health care across local areas: 2013–14 to 2017–18. Cat. no. PHE 254*. Canberra: AIHW. Retrieved October 1, 2019, from <https://www.aihw.gov.au/reports/primary-health-care/medicare-subsidised-gp-allied-health-and-specialis>
- Brisbane North PHN. (2019). *Population Health Report*. Retrieved November 2019, from http://www.brisbanenorthphn.org.au/content/Document/Engagement/Joint%20PHRrefresh%202019_Final.pdf
- Department of Health. (2019). *Health Workforce Data*. Retrieved November 2019, from <https://hwd.health.gov.au/datasets.html#part-3>
- Department of Health. (2019). *Medicare Benefits Schedule - Item 5020*. Retrieved November 2019, from MBS Online: <http://www9.health.gov.au/mbs/fullDisplay.cfm?type=item&q=ItemID&q=5020>
- Healthdirect Australia. (2020). *National Health Services Directory*. Retrieved November 2019, from <https://studio.healthmap.com.au/#/fQv>
- Metro North Hospital and Health Service. (2019). Emergency department low acuity after hour presentations (unpublished). *Emergency Department Information System*. Queensland Health.
- Moreton Bay Regional Council. (2015). *Transport Networks & Corridors Strategy 2012-2031*. Retrieved from <https://www.moretonbay.qld.gov.au/Services/Reports-Policies/Transport-Networks-and-Corridors-Strategy>
- Queensland Government Statistician's Office. (2016). *Queensland regional profiles: Indigenous Profiles for PHN region - Indigenous*. Queensland Treasury.
- Queensland Government Statistician's Office. (2016). *Queensland regional profiles: resident profile for the PHN-HHS region*. Queensland Treasury.
- Queensland Government Statistician's Office. (2018). *Queensland Government population projections, 2018 edition: Queensland SA4s*. Retrieved from <https://www.qgso.qld.gov.au/statistics/theme/population/population-projections/regions>
- Queensland Health. (2019). 13 Health call data July 2018 - September 2019 (unpublished). Queensland Health. Retrieved October 2019

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