Brisbane North PHN

Needs Assessment submission to the Department of Health, 2019-2022

phn BRISBANE NORTH

An Australian Government Initiative

Contents

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Section 1 – Regional overview

Context

Brisbane North PHN (the PHN) is one of 31 primary health networks nationally. Established in 2015 by the Federal Government, the key objectives of PHNs are to:

- increase the efficiency and effectiveness of medical services for patients, particularly those at risk of poor health outcomes
- improve coordination of care to ensure patients receive the right care in the right place at the right time.

PHNs have seven key priorities. These priorities include mental health, Aboriginal and Torres Strait Islander health, population health, health workforce, digital health, aged care and alcohol and other drugs.

The 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 part of the Somerset Regional Council, covering around 4000km^2 of urban, regional and rural south-east Queensland. 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 needs assessment outlines the health and service needs present among the population and healthcare system within the PHN region. This assessment records the outcomes of the health and service needs analysis for **general population health**, **primary mental healthcare**, **Indigenous health (including Indigenous chronic disease)** and **alcohol and other drug treatment** needs for reporting to the Department of Health.

The needs assessment is split into three main parts, the regional overview, the needs analysis and the summary table of identified priorities, needs and opportunities.

Regional overview

Population

The Brisbane North PHN region (the PHN region) covers areas north of the Brisbane River, including parts of the Brisbane City and Moreton Bay Local Government Areas, as well as parts of the Somerset Local Government Area (Kilcoy). The PHN region is split into six main subregions, which are used for population health planning purposes. These regions are:

- Brisbane Inner City – 194,542 people
- Brisbane West – 136,363 people
- Brisbane North – 218521 people
- Pine Rivers – 140,815 people
- Redcliffe – North Lakes – 152,356 people
- Moreton Bay North – 162,150 people.

As of June 2017, the Estimated Resident Population (ERP) of the PHN region was 1,004,747 people. Of the region's population, one third (33.1 per cent) are under 25 years of age, 29.5 per cent are aged 25-44 years, 23.5 per cent are aged 45-64 years and 14 per cent are aged 65 years and over[1]. In 2017, the median age in the PHN region was 35.8 years, which is lower compared to the Queensland median of 37.1 years. The median age in the PHN region is projected to be 39.2 years as of 2036, indicating that the PHN region's population is an ageing population. However, this projection is not uniform across the region.

Health risk factors and social determinants

There is a variation in the proportion of the population in the PHN region that are generally exposed to a range of health risk factors, including obesity, alcohol consumption, nutrition, physical activity, smoking and sunburn. While it is known that variation exists within the PHN region, overall in the PHN region:

- one in three adults are overweight and a further one in five are obese[2]
- one in five adults consume alcohol at lifetime risky levels[3]
- two in five adults have an insufficient daily fruit intake, and nine in ten adults have an insufficient daily vegetable intake[4]
- over one in three adults are not sufficiently active[5]
- one in ten adults are current smokers[6].

The population in the PHN region generally have good social determinants of health, including:

- 66.8 per cent of adults have completed year 11 or 12 (compared to 58.9 per cent in Queensland)
- 62.7 per cent of adults have a post-secondary qualification (compared to 59.1 per cent in Queensland)
- 7.5 per cent of families are low income families, compared to 9.4 per cent of families in Queensland
- 10.7 per cent of families are families where no parent is employed, compared to 13.8 per cent of families in Queensland.

While the social determinants of health are reasonably good in the PHN region overall, there are areas within the PHN region that have poor social determinants, resulting in poorer health outcomes. This is most evident in the Moreton Bay North subregion, where there are poorer social determinants, poorer health outcomes and an inequitable distribution of health services, resulting in a range of access barriers.

[1] Australian Bureau of Statistics, 2018
[2] Queensland Health, 2015
[3] Queensland Health, 2015
[4] Queensland Health, 2015
[5] Queensland Health, 2015
[6] Queensland Health, 2015

Ageing population

The Australian population is an ageing population, with almost 15 per cent of the population aged 65 years and over[7]. In the PHN region, 14 per cent of the population was aged 65 years and over as of June 2017, a total of over 140,000 people. The population aged 65 years and over residing in the PHN region increased by 41.5 per cent between 2008 and 2017. This trend is set to continue, with the number of people aged 65 years and over in the PHN region expected to increase to 185,000 people by 2026[8].

People are also living longer, with an average life expectancy in the PHN region of 85.1 years for females and 81.4 years for males in 2014-16[9]. Between 2011-13 and 2014-16, life expectancy in the PHN region increased by 0.7 years for males and 0.6 years for females.

Migration and cultural diversity

The residents of the PHN region are culturally and linguistically diverse. As of the 2016 Census, almost one quarter (24 per cent) of the PHN region's population was born overseas, with one in eight people (12 per cent) residing in the PHN region born in a country where English is not the main language. A large proportion of this population were born in India, China and the Philippines[10].

In 2016, an estimated 116,152 people residing in the PHN region spoke a language other than English at home. This increased from 80,239 people in 2011. As of the 2016 Census, 59,965 people in the PHN region who had a different address five years earlier resided overseas.

Increase in Aboriginal and Torres Strait Islander population

As of the 2016 Census[11], more than 20,000 people in the PHN region identify as Aboriginal, Torres Strait Islander or both[12]. The population identifying as Aboriginal, Torres Strait Islander or both increased by over 40 per cent between 2011 and 2016. The growth rate of the population identifying as Aboriginal, Torres Strait Islander or both in the PHN region is higher than the national growth rate of 18.4 per cent between 2011 and 2016. More than 40 per cent of the PHN region's Aboriginal and Torres Strait Islander population lives in the Moreton Bay North subregion[13].

While not available on the PHN level, life expectancy for Indigenous Australians in Queensland is 68.7 years for males and 74.4 years for females, 10.9 years and 9.7 years less respectively than non-Indigenous population.

[7] Australian Bureau of Statistics, 2018a
[8] Queensland Government Statistician's Office, 2018
[9] Australian Institute of Health and Welfare, 2018a
[10] Queensland Government Statistician's Office, 2018
[11] Australian Bureau of Statistics, 2017a
[12] Australian Bureau of Statistics, 2011
[13] See appendix for a map of the PHN subregions.

Section 2 – Needs analysis

General population health

The PHN's needs analysis indicates a range of needs specific to population health, including increasing rates of chronic disease prevalence, increasing rates of preventable hospitalisations for chronic conditions and increasing demand for chronic disease services across the healthcare system. These needs are leading to poorer health outcomes, service navigation and care coordination issues.

Other population health needs identified by the PHN include poorer health determinants, outcomes and service access patterns in the Moreton Bay North subregion; the need for better coordinated and integrated care systems for people who live with dementia; and the need for better coverage of primary after-hours care across the PHN region. The section below details the evidence supporting these needs.

High rates of preventable hospitalisations for chronic conditions

In the PHN region, the total potentially preventable hospitalisations (PPH) in 2016-17 were 2957 per 100,000 people[14], an increase from 2878 per 100,000 people in 2015-16. PPH rates in the PHN region have been consistently higher than the national rate of 2643 per 100,000 people in 2015-16 and 2732 per 100,000 people in 2016-17[15].

Compared to the national rate, in 2016-17 the PHN region had higher rates of PPH for a range of chronic conditions[16]. These conditions included chronic obstructive pulmonary disease (COPD) (280 per 100,000 compared to 276 per 100,000), angina (160 per 100,000 compared to 121 per 100,000) and asthma (159 per 100,000 compared to 144 per 100,000)[17]. Rates of PPH for chronic conditions in 2016-17 were higher in the PHN region compared to the national rate, at 1316 per 100,000 and 1249 respectively. Between 2013-14 and 2016-17, the rate of PPH for chronic conditions in the PHN region has increased by 14 per cent[18].

PPH represented 7.5 per cent of all hospitalisations for the PHN region in 2016-17[19]. Within the region, the number and rate of PPH for chronic conditions was highest in the Moreton Bay North subregion[20].

In 2016-17, there were a total of 7032 admitted patient episodes for coronary heart disease (CHD)[21]. People aged 65 years and over experience the highest rates of admission for CHD, with 61 per cent of all admitted patient CHD episodes in 2016-17 being for people aged 65 years and over. The number of hospitalisations for CHD in the PHN region increased by 25 per cent between 2014-15 and 2016-17.

In the PHN region, 87,079 people commenced a GP chronic disease management plan in 2016-17[22]. This was an estimated 8.9 per cent of the PHN region's population. Between the period 2012-13 and 2016-17, there was a 70 per cent increase in the number of patients commencing a GP chronic disease management plan in the PHN region[23]. This increase was not uniform across the region.

Trends in GP chronic disease management follow a similar pattern to the average number of GP attendances per person, indicating that a large proportion of people residing in areas of higher socio-

[14] Rates reported are age standardised unless otherwise stated.
[15] Australian Institute of Health and Welfare, 2018b
[16] Australian Institute of Health and Welfare, 2018b
[17] Australian Institute of Health and Welfare, 2018b
[18] Australian Institute of Health and Welfare, 2018b
[19] Queensland Health, 2018a
[20] Australian Institute of Health and Welfare, 2018b
[21] Queensland Health, 2018a
[22] Sourced from Medicare Benefits Schedule data, Department of Health 2017a.
[23] Department of Health, 2017a

economic disadvantage are more likely to require coordinated care to manage their chronic conditions. In 2016-17, people in the PHN region visited the GP 5.8 times on average[24]. This is consistent with the national average of 5.9 visits per person. In the PHN region, the average number of visits per person increased by 4.6 per cent between 2013-14 and 2016-17. While this trend is consistent with the national rate, the increase was not uniform across the region, with significant increases in GP attendances per person in the Caboolture, Bribie – Beachmere, Redcliffe and Narangba – Burpengary SA3 areas.

Updated data for PPH and information from other components of the health system indicate that unnecessary hospitalisations remain a concern. This is expressed through high use of emergency departments for conditions that could be treated by a GP, fluctuating rates of chronic disease management and high rates of PPH.

The PHN has continued to conduct extensive engagement with key stakeholders throughout 2017 and 2018, in support of needs assessment and regional planning efforts. This engagement revealed a number of broad issues present in the region that support the data. These issues include:

- the need for multi-sectoral support for patients to improve care outcomes for patients
- the need for improving the integration and coordination between different parts of the health system to improve patient care
- the need to improve the health literacy of both health professionals and consumers to better manage and coordinate chronic disease care.

Qualitative feedback from stakeholders also highlighted that health literacy and service navigation challenges remain key contributing factors to preventable hospitalisations for disadvantaged people and those with complex and chronic conditions. Equally, the provision of appropriate primary and community health services can help to prevent admissions to hospital.

High rates of chronic disease among people aged 65 years

In 2014-15, one in three Australians aged 65 years and over reported having three or more chronic conditions, compared with just 2.4 per cent of people under the age of 45 years[25]. By 2026, the population aged 65 years and over is expected to increase by 46.9 per cent, a rate significantly higher than the general adult population, which is expected to increase by 12.9 per cent[26]. This indicates that the number of people living with three or more chronic conditions is expected to increase.

Coordinating care across the health system for people with chronic conditions

The data indicates that people aged 65 years and over are increasingly using all components of the health system. In 2016-17, 38.6 per cent of all hospital admissions in the PHN region were by people aged 65 years and over, increasing from 37.5 per cent in 2014-15[27][28]. During the same time period, people aged 65 years and over attended their GP 12.2 times on average, compared to the PHN average of 5.8 attendances per person[29]. While younger people tend to have less contact with the health system, care coordination is considered a system-wide issue that impacts people of all ages. This represents a significant challenge in ensuring the services people receive are integrated and connected, requiring effective coordination across the whole health sector. Extensive engagement undertaken by the PHN in the development of previous needs assessments revealed a number of broad issues which support the data including:

- improving the integration and coordination between the different components of the health system to improve patient care
- improving the health literacy of health professionals and the older population to ensure that people are accessing the appropriate services
- better supporting families and carers of the PHN region's older population.

[24] Australian Institute of Health and Welfare, 2018c
[25] Australian Bureau of Statistics, 2016
[26] Queensland Government Statistician's Office, 2018
[27] Queensland Health, 2016a
[28] Queensland Health, 2018a
[29] Australian Institute of Health and Welfare, 2018c

High level of service demand and hospitalisations for chronic conditions

In the PHN region, one in five admitted hospital separations were attributed to people aged 65 years and over[30]. Between 2014-15 and 2016-17, the number of hospital admissions attributed to people aged 65 years and over increased by 22 per cent[31].

In 2016-17 there was an average of 17.3 GP attendances to aged care facilities per person in the PHN region. This was higher than the national average of 16.6 GP attendances to aged care facilities per person. Between 2013-14 and 2016-17, the average number of GP aged care attendances per person increased by 15 per cent (14.9 to 17.3), compared to an increase of 13.6 per cent nationally (14.5 to 16.6). Within the PHN region, the trend for GP attendances to aged care facilities in the Hills District and Caboolture is increasing.

Trends in GP chronic disease management are also increasing. In the five years between 2012-13 and 2016-17, there was a 70 per cent increase in the number of patients commencing a GP chronic disease management plan[32]. There was a large variation within the PHN region, with the highest increases occurring in the Kenmore – Brookfield - Moggill, Hills District and Bald Hills – Everton Park SA3 areas. These areas are home to older populations. In 2016-17, the highest number of patients commencing a GP chronic disease management plan in the PHN region resided in the Redcliffe, Narangba – Burpengary and Caboolture SA3 areas.

Increasing number of people with dementia

The PHN has estimated that as of 2016, there were over 12,000 people in the PHN region who had dementia[33]. Of this population, 11,396 people were aged 65 years and over. The estimated population living with dementia in the PHN region is concentrated in areas with the highest ageing population, including the Redcliffe (1283 people), Chermside (1213 people) and Bribie – Beachmere (912 people) SA3 areas.

It is estimated that Queensland will experience a fivefold increase of dementia between 2000 and 2050, considerably faster growth than Australia as a whole[34]. This will accelerate post 2030 due to ageing of the baby boomer generation[35]. It is estimated that by 2050, the number of cases of dementia in Queensland will approach 215,272 people; or a growth rate of 342 per cent from 2011[36]. In the PHN region, projections indicate that over 37,000 people will be living with dementia by 2050. This represents a growth of 304 per cent from 2011[37].

An estimated 52 per cent of people residing in permanent residential aged care in the PHN region have a diagnosis of dementia[38]. This highlights the need for upskilled staff working in residential aged care settings, in order to provide timely, accurate diagnosis, referral, integrated and coordinated care to people living with dementia.

Hospital separations where dementia was the principal diagnosis are also increasing in the PHN region. Between 2014-15 and 2016-17, the number of hospital separations for dementia increased by 48.8 per cent[39]. On average, people hospitalised for dementia stayed in hospital for seven days[40] and this average was higher for patients residing in the Redcliffe, Caboolture and Sandgate SA2 areas. This indicates a need for improved access to appropriate care for people living with dementia, and stronger coordination between the primary, aged care and hospital systems.

[30] Metro North Hospital and Health Service, 2017
[31] Metro North Hospital and Health Service, 2017
[32] Department of Health, 2017a
[33] These estimates were derived from internal modelling completed by the PHN, based on assumptions made in Australian Institute of Health and Welfare 2012 and Alzheimer's Australia Queensland. Base population data were derived from the Australian Bureau of Statistics, 2017b
[34] Access economics, 2005
[35] Alzheimer's Australia (Qld), 2011
[36] Alzheimer's Australia (Qld), 2011
[37] Alzheimer's Australia (Qld), 2011
[38] Australian Institute of Health and Welfare, 2017a
[39] Data obtained from the Metro North HHS, 2018
[40] Data obtained from the Metro North HHS, 2018

Health inequity in Moreton Bay North

The Moreton Bay North subregion experiences high rates of a number of risk factors. In the subregion:

- almost one in three adults are overweight[41]
- one in five adults are current smokers, compared to one in six adults in the PHN region[42]
- one in five women smoke during pregnancy, compared to one in ten women in the PHN region[43]
- there are high rates of high-risk alcohol consumption compared to the rest of the PHN region[44].

The combination of health risk factors and poor social determinants of health in the Moreton Bay North subregion are contributing to poorer health outcomes among the population, including:

- the highest estimated rates of mental and behavioural disorders[45]
- the highest rates of chronic conditions across seven of the eight reported conditions
- higher than average rates of potentially avoidable deaths
- high rates of suicide and self-harm.

The area also has a higher prevalence of arthritis/musculoskeletal conditions, asthma, cardiovascular disease, circulatory system diseases, COPD and diabetes. One in five adults in the Moreton Bay North subregion self-assess their health as 'fair' or 'poor' compared to one in seven people across the PHN region.

One third of people living in the Moreton Bay North subregion are considered to be most disadvantaged. In 2016, the median family income per annum in Moreton Bay North was $73,354 ($1410 per week), which was $26,429 less than the median family income ($99,783 per annum) for the overall PHN region[46].

A high proportion of children in the Moreton Bay North subregion (28.9 per cent) are developmentally vulnerable in one or more domains compared to 23.7 per cent in the overall PHN region. Less than half (49.2 per cent) of the population have completed Year 11 or 12 at school, significantly lower than the PHN region (66.8 per cent)[47]. Unemployment rates among individuals (8.3 per cent) and families with no parent employed (18.6 per cent) are higher in Moreton Bay North[48] than the rest of the PHN region.

Income inequality, health outcomes inequities and poorer access to health services are of considerable concern in the Moreton Bay North subregion. Children are particularly vulnerable and are at risk of inequitable physical and mental health outcomes.

The PHN conducted extensive engagement between July and October 2017. This engagement revealed a number of broad issues present in the region that support the data. These issues include:

- social isolation for people living alone or separated from their communities and its impact on their health
- poor health literacy and lack of service awareness contributes to poorer health outcomes
- structural barriers to service access, including affordability and transport.

These issues prevent many residents of the Moreton Bay North subregion from accessing the right care in the right place at the right time.

High service demand and unequal workforce distribution in Moreton Bay North

The demographics of the Moreton Bay North subregion highlight that this region has significant levels of disadvantage and poorer health status than other subregions. This leads to higher levels of health service needs including the highest level of general practice service usage across the PHN region. In 2016-17, residents of Moreton Bay North visited their GP an average of 6.9 times, higher than the PHN average of 5.8 GP attendances per person[49].

[41] Public Health Information Development Unit, 2016
[42] Public Health Information Development Unit, 2016
[43] Queensland Health, 2015
[44] Public Health Information Development Unit, 2016
[45] Queensland Government Statistician's Office, 2018
[46] Queensland Government Statistician's Office, 2018
[47] Queensland Government Statistician's Office, 2018
[48] Queensland Government Statistician's Office, 2018
[49] Australian Institute of Health and Welfare, 2018c

Within the PHN region in 2016-17, SA3s in the Moreton Bay North subregion had the highest rate of PPH, particularly for conditions such as diabetes complications, COPD, kidney and urinary tract infections, dental conditions, angina and cellulitis[50]. This high demand for health services is offset by the lowest number of healthcare practitioners in the PHN region.

In 2016, there were over 27,000 health professionals in the PHN region, of which, 2443 work in the Moreton Bay North subregion (9 per cent)[51]. Of this health workforce, there were an estimated 146 GPs in the Moreton Bay North subregion, which equates to 92 GPs per hundred thousand people compared to 113 per hundred thousand people for the PHN region as a whole[52].

Health workforce data indicates that the GP health workforce in Moreton Bay North works longer hours per week compared to the PHN region. In 2016, GPs in the Moreton Bay North subregion worked an average of 42 hours per week, over five hours per week more than the PHN average of 36.61 hours[53]. This is likely due to a smaller workforce working longer hours to meet greater demand for services.

The PHN conducted extensive engagement between July and October 2017. This engagement revealed a number of broad issues present in the region that support the data. These issues include:

- primary and community health workforce shortages limit available care options
- difficulties in obtaining same day general practice appointments in the Moreton Bay North subregion
- limited number of home care places in the Moreton Bay North subregion compared to relative need.

These issues contribute to poorer access to appropriate healthcare services, leading to a higher rate of unnecessary hospitalisations.

After-hours needs and service gaps

An extensive revision of the after hours health needs and service gaps for the PHN region has been conducted between August and December 2019. When reviewing the after hours services within the Brisbane North region, data from public hospital emergency departments, primary health after hours usage (MBS data) and 13 Health telehealth phone service have been combined with extensive consultation from a range of stakeholders and consumers. The Brisbane North PHN Community Advisory Committee and Clinical Councils, a range of service providers, the Metro North Hospital and Health Service, the Pharmaceutical Society and Queensland Ambulance Service were all included in the consultation.

In 2018-19, there were over 56,000 non-admitted category four and five presentations to public hospital emergency departments during after hours[54] (this includes after 6pm and before 8am weekdays, before 8am and after 12pm Saturday and all day Sundays and public holidays). This represents over 48 per cent of total ED presentations occurring during these periods.

The majority of after-hours non-admitted category four and five presenters to emergency departments in the PHN region were aged under 30 years of age (54.8 per cent)[54]. Children aged 0-4 years were the highest presenting group of this cohort, followed closely by the 20-24 year age group. Together these two groups combined for over one fifth of all presentations. In addition, a large number of these presentations live in the northern sections of the PHN region.

When reviewing utilisation of after hours primary health services, the most recent MBS data available was collected in 2017-2018. During this time, a total of 471,004 after hours GP services were provided to 239,023 patients residing in the PHN region[55]. After hour services are being used by all age demographics. Adults aged 25-44 years were the largest age group of total after-hours patients, accounting for 29.4 per cent of total services, followed by children aged 0 – 14 years at 21.8 per cent. It is evident in the data that the need for after hours services for children 0-14 years and the aging populations continues to increase from previous years[55]. When looking at after hour GP services claimed per 100 people, young children and people aged 80 years and above access the services the most[55].

[50] Australian Institute of Health and Welfare, 2018b
[51] Department of Health, 2017b
[52] Department of Health, 2017b
[53] Department of Health, 2017b
[54] Queensland Health, 2019
[55] Australian Institute of Health and Welfare, 2019

Within the subregions, Caboolture contributed to majority of total after hours GP services. Along with Caboolture, usage rates of GP after-hours services continued to be highest in Narangba – Burpengary, Redcliffe and North Lakes areas[55]. This increase is also in line with population growth rates within these areas, indicating a greater demand for after-hours GP services.

A number of medical deputising services provide after hours services in the Brisbane North PHN region. They cover the majority of the PHN region, however service gaps or inaccessibility are known to exist in some locations including Bribie Island, Samford, Dayboro and Caboolture Hinterland. In addition, current availability of General Practices open after hours in these locations is limited.

High service demand is also evident through analysis of 13 Health (a 24/7 health advice phone line provided by Queensland Health) data. From July 2018 – September 2019, 13 Health received over 48,000 calls from the Brisbane North PHN region in the after hours period (excluding public holidays)[56]. The most frequent calls to 13 Health are identified as being for young children 0-4 years of age, accounting for almost a third of phone calls, followed by young adults aged 20-34 years who collectively account for more than a quarter of calls. There is then a steady decrease in the usage of 13 Health for older age groups[56].

A higher proportion of Aboriginal and Torres Strait Islander people utilised the 13HEALTH phone service[56]. A total of 4.33 per cent of 13HEALTH callers during the after hours period (excluding public holidays) in the PHN region identified as either Aboriginal, Torres Strait Islander or both Aboriginal and Torres Strait Islander. This is compared to 2.04 per cent of the general population in the PHN region who identify as Aboriginal and/or Torres Strait Islander[57].

The PHN conducted extensive engagement between August and December 2019. This engagement revealed a number of broad issues present regarding the after-hours healthcare that support the data. These issues include:

- Improving the coverage of after-hours GP services in more regional parts of the PHN region including Bribie Island, Caboolture Hinterland, Samford and Dayboro.
    - Regular access to primary health after hours services in these locations is limited
    - In November 2019, the Queensland Ambulance Service commenced a Low Acuity Response Unit (LARU) to be stationed permanently on Bribie Island to respond to low acuity call outs.
- Improving a coordinated approach to providing after hours services to vulnerable populations including Aboriginal and Torres Strait Islanders, homeless and at risk of homelessness, culturally and linguistically diverse populations.
    - The complex needs across the range of vulnerable populations was a key point identified throughout the consultation.
- Improving coverage of after-hours GP services to residential aged care facilities particularly in after-hours periods.

[55] Australian Institute of Health and Welfare, 2019
[56] Queensland Health, 2019
[57] Australian Bureau of Statistics, 2016

Indigenous health (including Indigenous chronic disease)

Social determinants, biomedical factors and lifestyle factors all contribute to health outcomes and health status. In the PHN region, poorer social determinants and higher rates of risky behaviours contribute to poorer health outcomes and the poorer health status of the Aboriginal and Torres Strait Islander population, particularly when compared to the non-Indigenous population.

Aboriginal and Torres Strait Islander people in the PHN region have poorer self-assessed health, a higher prevalence of long-term conditions and an increased burden of disease, when compared to the non-Indigenous population in the PHN region. The Aboriginal and Torres Strait Islander population in the PHN region experience higher prevalence of mental disorders, diabetes and chronic respiratory disease when compared to the non-Indigenous population. Aboriginal and Torres Strait Islander people also experience the burden of disease at a much younger age than the non-Indigenous population, along with lower life expectancy.

Gap in health outcomes for Aboriginal and Torres Strait Islander people

Life expectancy for Indigenous Australians in Queensland is 10.9 years less for males and 9.7 years less for females than the non-Indigenous population. While not available on the PHN level, life expectancy for Aboriginal and Torres Strait Islander people in Queensland is 68.7 years for males and 74.4 years for females[58].

Aboriginal and Torres Strait Islander people also experience higher rates of a number of health risk factors compared to the non-Indigenous population including obesity rates at 27.6 per cent compared to 22.1 for non-Indigenous people in the region. Indigenous smoking rates are 2.7 times the rate of non-Indigenous people[59]. Two in every five (41.5 per cent) pregnant Aboriginal and Torres Strait Islander women report smoking at some stage during their pregnancy, 4.5 times the rate for non-Indigenous women (9.2 per cent).

In the region, Aboriginal and Torres Strait Islander people have a higher disease burden across all ages when compared to the non-Indigenous population[60]. The largest burden of disease among the Aboriginal and Torres Strait Islander population in the region was attributable to mental health at 28.6 per cent of the disease burden among Aboriginal and Torres Strait Islander people[61]. This is much higher than the non-Indigenous population in the region, where 16 per cent was attributable to mental disorders. The mental health burden disproportionately affects the population aged 25 years and under.

Over half (51.2 per cent) of the Aboriginal and Torres Strait Islander population reported having two or more long-term health conditions. A further 25 per cent reported having one long-term health condition, giving a total of 76.2 per cent with at least one long-term health condition. This rate is 1.7 times the rate for the non-Indigenous population of the region (44.8 per cent)[6263].

The PHN conducted extensive engagement between July and October 2017. This engagement revealed a lack of agency among Aboriginal and Torres Strait Islander people to take charge of their health is a key issue within the region. This issue contributes to the health gap that exists between the Indigenous and non-Indigenous communities in the PHN region. While progress has been made to reduce the health gap, significant inequities still persist.

Provision of culturally responsive services

Discrimination and racism have been associated with ill health and adverse health outcomes for Aboriginal and Torres Strait Islander people, in particular mental health conditions (like anxiety) and risky health behaviours. Results from the Australian Aboriginal and Torres Strait Islander Health Survey 2012-13 indicate that seven per cent of Indigenous adults (approximately 26,500 people) reported they avoid seeking healthcare because they had been treated unfairly by doctors, nurses or other staff at hospitals or general practices[64]. A further 16 per cent of Indigenous adults (approximately 59,000 people) reported that they felt they were treated badly in some type of situation in the previous year because they were Indigenous.

[58] Queensland Health, 2016c
[59] Australian Bureau of Statistics, 2015
[60] Metro North Hospital and Health Service, 2016
[61] Metro North Hospital and Health Service, 2016
[62] Australian Bureau of Statistics, 2015
[63] National Health Performance Authority, 2015
[64] Australian Institute of Health and Welfare, 2015a

In 2017-18, consultation undertaken by the PHN and the Institute for Urban Indigenous Health (IUIH) for the development of the regional plan focusing on mental health, suicide prevention and alcohol and other drug treatment services identified a range of service gaps for Indigenous people in the PHN region. These gaps include culturally responsive residential rehabilitation services for Indigenous people experiencing problematic substance use; outreach models providing a broad range of services; transport to access healthcare services; safe accommodation for homeless Indigenous people living with mental health and alcohol and other drug issues and services that respond to the needs of Indigenous children and young people experiencing mental health issues, and their families.

Ongoing PHN engagement with the Aboriginal and Torres Strait Islander community has revealed a number of broad issues affecting the Aboriginal and Torres Strait Islander population that support the data. These issues include:

- poor health literacy among health professionals and consumers relating to Aboriginal and Torres Strait Islander health
- lack of agency among Aboriginal and Torres Strait Islander people to take charge of their health
- structural barriers preventing Aboriginal and Torres Strait Islander people from accessing appropriate care.

Primary mental healthcare (including suicide prevention)

The PHN's analysis of mental health, suicide prevention and alcohol and other drug treatment needs is closely aligned to the stepped care approach. The stepped care approach is the Australian Government's response to the National Mental Health Commission's Review of Mental Health Services and Programs and seeks to refocus the mental health system. The stepped care approach seeks to:

- emphasise self-care and early intervention
- increase the use of digital mental health services
- match the level of service to service consumers' needs and adjust services in response to changing needs
- shift the focus of services that help prevent the need for acute and crisis intervention
- offer a full continuum of services from low intensity to acute and crisis intervention
- ensure service consumers can choose from a broader range of services that are better targeted to their needs
- reduce under-servicing and over-servicing of some service consumers
- strengthen support for GPs undertaking assessment to ensure people are referred to the right service or services.

In the stepped care approach, a person seeking support accesses the services that meet their needs. As their needs change, the services change with them.

High prevalence of mild mental health conditions

The national mental health service planning framework's planning support tool estimates that over 94,000 people in the PHN region will have a mild mental health condition in 2019, an estimated 9 per cent of the PHN region's total population[65]. Of this population, it is likely that over 47,000 people will require treatment[66].

Nationally, it is estimated that between 10 to 15 per cent of people aged 65 years and over experience depression and approximately 10 per cent experience anxiety. In 2011, an estimated 19 per cent of the population aged 65 years and over in the PHN region accessed Pharmaceutical Benefits Scheme (PBS) subsidised antidepressants, with 2.6 per cent of the same age cohort accessing Medicare Benefits Schedule (MBS) subsided GP mental health services[67].

People residing outside of the major metropolitan areas in the PHN region are more likely to access PBS subsided antidepressants compared to people residing in the metropolitan areas[68], indicating that a higher need exists in the Moreton Bay North area. The service utilisation data indicates that mild mental illness is of some concern among the older age cohorts in the PHN region, particularly in the more northern sections of the catchment.

In the PHN region, the number of patients commencing a GP mental health plan increased by 51 per cent between 2012-13 and 2016-17[69]. Within the region, increases in patients commencing a GP mental health plan was highest in the Moreton Bay North area, with a 117 per cent increase in the Caboolture SA3 area and a 122 per cent increase in the Bribie – Beachmere SA3 area[70]. An estimated six per cent of the population commenced a GP mental health plan in the PHN region in 2016-17[71].

Ongoing community engagement activities discussing key issues in the mental health, suicide prevention and alcohol and other drug treatment services system has indicated that there is significant demand for low intensity psychological services. Ongoing consultation has also indicated that there is a need for increased awareness of low intensity services and a need for services to be more accessible to the community.

[65] The University of Queensland, 2018
[66] The University of Queensland, 2018
[67] Australian Bureau of Statistics, 2016b
[68] Australian Bureau of Statistics, 2016b
[69] Department of Health, 2017a
[70] Department of Health, 2017a
[71] Analysis of data derived from Australian Bureau of Statistics 2017b and Department of Health 2017

High levels of developmental vulnerability among children parts of region

Healthy early childhood development is fundamentally linked to long-term health outcomes[72]. An increasing body of evidence indicates that the first 1000 days from the start of a woman's pregnancy to her child's second birthday are critical in the social, emotional and physical development of a child[73].

The Australian Early Development Census is an instrument which measures five domains of early childhood development that are predictors of a child's health, education and social outcomes. In the PHN region, almost one in four children (23.7 per cent) are developmentally vulnerable in one domain and a further 12 per cent are developmentally vulnerable across two or more domains[74]. A high proportion of children in the Moreton Bay North (28.9 per cent) and Redcliffe - North Lakes (28 per cent) subregions are developmentally vulnerable in one or more domains, particularly when compared to the region average[75]. Children in the Moreton Bay North and Redcliffe - North Lakes subregions experience higher rates of developmental vulnerability in the physical health, emotional, language and communication domains when compared to the rest of the region[76].

The estimated prevalence of mental health issues among children aged 4-11 years varies from 13 per cent in the Brisbane Inner City subregion to 20 per cent in Moreton Bay North[77]. Similar patterns are observed for young people aged 12-17 years, with estimated prevalence rates varying from 9 per cent in Brisbane Inner City to 16 per cent of young people in Redcliffe – North Lakes and 18 per cent of young people residing in Moreton Bay North experiencing a mental health issue[78]. These patterns reflect trends of socio-economic disadvantage in the PHN region, with higher mental health prevalence rates and developmental vulnerability in areas of higher socio-economic disadvantage.

Children and adolescents in low-income families, with parents and carers with lower levels of education and with higher levels of unemployment generally experience higher rates of mental illness. This is particularly evident in young males who generally experience higher rates across all five characteristics[79].

In 2017-18, there were over 4000 emergency department presentations by people aged less than 25 years of age for mental and behavioural issues in the PHN region[80]. This represents an increase of 6.7 per cent since 2015-16[81]. The most common reason for presentation was suicide ideation, general mental illness, anxiety and depression[82]. Almost one in ten mental health related emergency department presentations were by people residing in socio-economically disadvantaged regions, including Caboolture, Deception Bay and Morayfield. This indicates that young people residing in socio-economically disadvantaged areas in the PHN region have high mental health needs.

Data collated from four headspace centres in the PHN region (Caboolture, Nundah, Redcliffe and Taringa sites) found that in 2017-18, there were 15,875 occasions of services for 3784 young people. Trends also suggest that the number of young people accessing headspace is increasing and will continue to increase in the future. Whilst these services are designed as an early intervention tool to address mild and moderate mental health issues, of those currently presenting to the four headspace centres, more than 75 per cent are identified as having high to very high psychological distress.

Ongoing community engagement has indicated six main priority population cohorts for youth mental health:

- early intervention through family and perinatal support
- vulnerable children aged zero to four
- children aged six to eight with behavioural issues
- vulnerable and complex young people
- suicide and self-harm
- sexually and gender diverse children and young people.

[72] Franks et al, 2015
[73] 1,000 days initiative
[74] Queensland Government Statistician's Office, 2018
[75] Queensland Government Statistician's Office, 2018
[76] Queensland Government Statistician's Office, 2018
[77] Estimates derived from Young Minds Matter, 2014
[78] Estimates derived from Young Minds Matter, 2014
[79] Lawrence, et al., 2015
[80] Queensland Health, 2018b
[81] Queensland Health, 2018b
[82] Queensland Health, 2018b

Consultations also revealed that children living in 'out of home' care experience poorer health outcomes.

Need for early intervention, family and perinatal support for vulnerable children

Appropriate, timely and informative assessment of a child and family's need is a key concern. Current service models across primary health, education and community sectors often focus on assessments for different purposes, without due consideration of the associated social needs. This leads to conflicting assessment outcomes for families.

Between 2012-13 and 2016-17, demand for MBS subsidised mental health services increased among children and young people. The number of MBS mental health patients aged 0-4 years increased by 112.5 per cent, with the number of patients aged 5-11 years receiving MBS mental health services increasing by 76.6 per cent[83]. Similar patterns are present in other primary mental health programs. Between 2011-12 and 2015-16, the number of patients accessing Psychological Therapies for Disadvantaged Groups (previously the Access to Allied Psychological Services Programme (ATAPS)) increased significantly across the younger age cohorts. The number of Psychological Therapies patients aged 5-11 increased by 285 per cent between 2011-12 and 2015-16, with similar trends among patients aged 0-4 years and 12-17 years[84].

The growth rates in children and young people accessing Psychological Therapies during 2011-12 and 2015-16 also indicate significant demand for mental health services in the Moreton Bay North and Redcliffe – North Lakes subregions. While the increase in the number of services delivered in these regions may indicate that needs are being met, there is still evidence of service gaps, particularly within the Moreton Bay North subregion.

Many child and youth mental health services, including headspace centres within the region, usually operate between 9.00 am to 5.00 pm most days during the week. Child and youth services also have limited operating hours during weekends. This has resulted in difficulties accessing services for many children and young people who attend school, university or work.

For young people with or at risk of severe mental illness, the PHN consultation processes and feedback from its Regional Child and Youth Mental Health Advisory Group advise that these young people are 'hard to reach'. Models of service need to maximise youth engagement, be mobile and outreach based through non-clinical settings to improve the possibility of quality treatment outcomes.

Higher rates of distress within disadvantaged areas

Within the PHN region, areas of higher disadvantage and poorer health determinants experience higher rates of psychological distress. Rates of psychological distress are particularly high in the Moreton Bay North and Redcliffe - North Lakes subregions, where rates vary from 16.7 per cent in Caboolture to 13.6 per cent in North Lakes[85].

Both the Moreton Bay North and Redcliffe - North Lakes subregions are predicted to undergo high population growth[86]. Within these subregions, there are an estimated[87]:

- 6800 to 9000 children and young people with a mental health disorder
- 53,077 people receiving MBS mental health services[88]
- 4000 to 6000 people aged 65 years and over with depression and more than 4000 people aged 65 years and over with anxiety.

In the five years between 2011-12 and 2015-16, 59,199 Psychological Therapies were delivered to 11,669 patients[89]. This was an average 11,840 services delivered to 2,399 patients per annum, equating to an average of 5 services per patient[90].

[83] Department of Health, 2017c
[84] Department of Health, 2016
[85] Public Health Information Development Unit, 2016
[86] Queensland Government Statistician's Office, 2018
[87] Department of Health, 2017c
[88] Department of Health, 2017c
[89] Department of Health, 2016
[90] Department of Health, 2016

Within the region, the Moreton Bay North subregion had the highest number of services, with 27,707 services, representing 37 per cent of all services delivered in the PHN region. The number of services delivered in Moreton Bay North has increased considerably[91].

Growth rates in patients accessing Psychological Therapies also indicate significant demand for mental health services in the Moreton Bay North and Redcliffe – North Lakes subregions. While the increase in the number of services delivered in these regions may indicate that needs are being met, there is still evidence of service gaps, particularly within the Moreton Bay North subregion.

Inequitable distribution of mental health services and mental health professionals

High prevalence of psychological distress is evident within the Moreton Bay North subregion, particularly in the areas of Bribie Island, Deception Bay, Caboolture and further south to Redcliffe. This is also the area where there is the least number of psychology services and health workforce. Approximately 16 per cent of the PHN population live in Moreton Bay North however only nine per cent of the PHN health workforce (2443 people) works in this subregion and there are significantly lower rates per 100,000 people for psychologists and GPs than the PHN region as seen below[92]:

- 92 GPs compared to 113 per 100,000 people
- 42.4 psychologists compared to 129.7 per 100,000 people.

Almost 32,200 GP mental health services were delivered in 2016-17 in the Moreton Bay North subregion which is 20 per cent of all GP mental health services delivered in the PHN region[93]. Data on emergency department presentations indicates that the number of mental health related presentations to the emergency department increased by 3.3 per cent between 2015-16 and 2017-18[94]. Emergency department presentation rates tend to be higher in areas of the PHN region where there are recognised service gaps in the primary care setting.

Existing workforce data suggests the distribution of mental health services does not adequately match the need present in the Moreton Bay North subregion[95]. As of October 2018, there were 69 GPs registered to claim focussed psychological strategies (FPS) items through the MBS in the PHN region[96]. Within the PHN region, the distribution of GPs registered to claim FPS items is not even. These GPs tend to be clustered in the Brisbane North, Brisbane Inner City and Brisbane West subregions. A total of 53 (76.8 per cent) of GPs registered to claim FPS items were located in the Brisbane Inner City, Brisbane West or Brisbane North subregions. Of the remaining GPs, 11 (15.9 per cent) were located in the Pine Rivers subregion, three (4.3 per cent) were located in the Redcliffe – North Lakes subregion and two (2.9 per cent) were located in the Moreton Bay North subregion.

These data highlight the unequal distribution of GPs able to provide more advanced mental health treatment, relative to need. It is noted that there is a lack of GPs registered to claim FPS items in the Redcliffe – North Lakes and Moreton Bay North subregions, where there are higher levels of demand for GP mental health services.

The estimated number of allied mental health providers in the Bribie Beachmere (13 per 100,000), Caboolture (44 per 100,000) and Narangba – Burpengary (23 per 100,000) SA3 areas were all below the PHN average of 75 allied mental health providers per 100,000 people, indicating that the Moreton Bay North area is underserviced[97]. Fulltime equivalent rates for psychologists are in the Bribie – Beachmere and Narangba – Burpengary areas are 3.8 and 3.2 times lower respectively than the Australian average[98]. This indicates that mental health services are currently not meeting population needs in the northern parts of the PHN region.

In the PHN region, there are an estimated 336 mental health beds in public hospitals, the majority of which are acute (191 beds or 57 per cent)[99]. Acute beds are mainly located in the Royal Brisbane and Women's

[91] Department of Health, 2016
[92] Department of Health, 2017b
[93] Department of Health, 2017c
[94] Queensland Health, 2018b
[95] Department of Health, 2017b and Brisbane North PHN, 2016
[96] Data supplied by the RACGP, 2018
[97] Department of Health, 2017b
[98] Department of Health, 2017b
[99] Queensland Government, 2015 and individual hospital websites

Hospital (91 beds or 48 per cent) and non-acute beds are mainly located at Prince Charles Hospital (132 beds or 39 per cent)[100]. There are 93 beds in the Caboolture and Redcliffe Hospitals, which service the Moreton Bay North region (40 acute beds and 53 non-acute beds). This is 28 per cent of all acute and non-acute beds[101].

Culturally and linguistically diverse population at higher risk for mental illness

Within the Brisbane North PHN region almost one quarter of the population are born outside of Australia, representing a significant culturally and linguistically diverse population[102]. The Moreton Bay North subregion is home to over 25,653 people from culturally and linguistically diverse backgrounds of which almost one third (8373) speak a language other than English[103].

For people from culturally diverse backgrounds stigma, lack of information about mental illness and mental health services in appropriate and accessible formats, poor communication and cultural differences between clients and clinicians have been reported as major barriers to timely access to mental health services.

Lack of access negates the early intervention and ongoing partnerships with service providers that are essential for relapse prevention[104]. Furthermore, lack of early intervention contributes to the reality that people from some culturally and linguistically diverse communities are overrepresented among involuntary admissions and forensic populations[105].

High mental health needs among people with an experience of homelessness or housing vulnerability

As of 2016, it is estimated that over 4266 people in the PHN region were homeless or at risk of being homeless[106]. While the largest cohort of people who were homeless resided in the Inner City, over 650 people in the Moreton Bay North subregion were officially considered to be homeless[107]. Data from the PHN's outreach services program indicates that a sizeable cohort of people in the Redcliffe peninsula area that are considered homeless also have high mental health needs[108].

National data indicates more than a quarter of homeless people identify as Aboriginal and/or Torres Strait Islander[109]. Of all who are homeless, young Australians aged 12 to 24 years make up 36 per cent[110]. Studies show that between 48 per cent to 82 per cent of homeless young people have diagnosable mental illness and the most common are mood disorders, anxiety disorders like post-traumatic stress disorder and substance misuse disorder[111].

High levels of distress among Aboriginal and Torres Strait Islander people

The Australian Aboriginal and Torres Strait Islander Health Survey reported that 12 per cent of Indigenous Australians had reported feeling depressed or having depression, compared to 9.6 per cent of the total Australian population[112]. Nearly one third of Indigenous adults report high or very high levels of psychological distress in their lives, which is nearly three times the rate reported by other Australians[113]. There were significant differences in the proportions of Aboriginal and Torres Strait Islander men and women who had experienced high/very high levels of psychological distress (24 per cent compared with 36 per cent). Rates of high/very high psychological distress were significantly higher for women than men in every age group, apart from those aged 45 to 54 years[114].

[100] Queensland Government, 2015 and individual hospital websites
[101] Queensland Government, 2015 and individual hospital websites
[102] Queensland Government Statistician's Office 2018
[103] Australian Bureau of Statistics, 2017a
[104] Rickwood, 2006
[105] Rickwood, 2006
[106] Australian Bureau of Statistics, 2018b
[107] Australian Bureau of Statistics, 2018b
[108] Brisbane North PHN outreach services program, 2016
[109] Commonwealth of Australia 2008
[110] Mission Australia 2016
[111] Flatau et al. 2015
[112] Australian Bureau of Statistics, 2015
[113] Australian Bureau of Statistics, 2015
[114] Australian Bureau of Statistics, 2015

In the PHN region, it is estimated that 3140 Aboriginal and Torres Strait Islander people aged 15 years and over have high or very high psychological distress and almost two in five live in the Moreton Bay North subregion (1210 people)[115]. This is supported by locally collected data from general practice which highlights 1283 Aboriginal and Torres Strait Islander people have a mental health condition (1.8 per cent of the practice population).

Aboriginal and Torres Strait Islander people are over-represented in emergency department presentations for mental health related conditions in the PHN region. A total of 6.2 per cent of emergency department presentations for mental health related conditions in 2017-18 were by people who identified as Aboriginal and Torres Strait Islander[116], most commonly for suicidal ideation/self-harm and general mental illness. According to the Metro North Hospital and Health Service, almost one third of the disease burden among Aboriginal and Torres Strait Islander people in the PHN region is attributable to mental health. This burden is higher among younger people[117]. The higher mental health burden among Aboriginal and Torres Strait Islander people in the PHN region is linked to the poorer social determinants present among this population group[118][119].

Health needs of people living with a severe mental illness

It is estimated that nationally there are almost 64,000 people aged 18 to 64 years who have a psychotic illness and are in contact with public specialised mental health services in a year[120]. The prevalence of psychotic disorders was higher in males than females (3.7 per 1000 people compared to 2.4 per 1000 people)[121]. Prevalence for males and females is highest for those aged 35 to 44 years and 45 to 54 years respectively[122].

In the PHN region, 30,842[123] people are estimated to have a severe mental illness. This figure includes both people with and without complex needs and includes the cohort of people who are eligible for the National Disability Insurance Scheme. Of the population with severe mental illness, 1532 (4.97 per cent) are aged 0-4 years, 2054 (6.66 per cent) are aged 5-11 years, 1652 (5.36 per cent) are aged 12-17 years, 22,152 (71.82 per cent) are aged 18-64 years and 3453 (11.2 per cent) are aged 65 years and over.

People with severe mental illness experience significantly poorer physical health than the general population. They experience considerably higher levels of obesity, smoking, alcohol and drug use. This puts them at a higher risk of comorbid chronic conditions when compared to the general population.

Hospitalisations related to severe mental illness and lack of integrated care

In 2016-17, there was a total of 32,693 hospitalisations for mental health conditions in the PHN region[124]. This was the most common form of hospital admission in the region and accounted for 6.9 per cent of all hospital admissions. Admissions for mental and behavioural disorders increased 19.7 per cent between 2014-15 and 2016-17[125].

In 2016-17, over one quarter of admitted patient episodes were for people aged between 30 to 45 years, with admitted patient episodes for people aged 40 to 44 years increasing by 15 per cent[126]. There were variations in admitted patient episodes by sex. In 2016-17, females aged 45 to 49 years were the most likely to be admitted to hospital for a mental health condition, with 2033 admitted patient episodes. Males aged 45-49 years also had a high number of admitted patient episodes in 2016-17 (1562 episodes)[127]. These patterns indicate that middle aged adult cohorts are the most likely to be hospitalised with a mental health condition in the PHN region.

[115] Public Health Information Development Unit, 2016
[116] Queensland Health, 2018b.
[117] Metro North Hospital and Health Service, 2016
[118] Public Health Information Development Unit, 2016
[119] Australian Bureau of Statistics, 2015
[120] Australian Institute of Health and Welfare, 2018d
[121] Morgan, et al., 2010
[122] Morgan, et al., 2010
[123] Estimates have been extracted from the National Mental Health Service Planning Framework Planning Support Tool (University of Queensland, 2018). All estimates are set for the year 2019.
[124] Queensland Health, 2018a
[125] Queensland Health, 2018a
[126] Queensland Health, 2018a
[127] Queensland Health, 2018a

Ongoing community engagement through the development of the regional plan for North Brisbane and Moreton Bay focusing on mental health, suicide prevention and alcohol and other drug treatment services revealed that service accessibility, service transition and provision of alternatives to hospital were key issues in the PHN region. Consultation also indicated that increasing the capacity of the workforce to enable accessible and appropriate care for people with severe mental illness is required.

Psychosocial supports for people with severe and complex mental illness

People with severe mental illness are more likely to achieve lower educational attainment, have lower levels of fortnightly income and are at a higher risk of experiencing homelessness when compared to the general population. People with a severe mental illness are also more likely to have higher rates of:

- social isolation
- family breakdown
- stigma.

People's experiences with severe mental illness are not the same. For some people, their illness is episodic, whereas others may experience more persistent severe mental illness[128]. People with severe and persistent mental illness will often have complex multiagency needs. As part of their care, some of the population with severe mental illness should receive psychosocial supports along with their clinical care. The provision of psychosocial supports delivered alongside clinical care are effective in improving functional capacity[129] [130]. Psychosocial supports are non-clinical, community-based supports generally delivered in partnership with families and carers to help people achieve recovery goals[131]. Psychosocial supports are broadly classified as individual support and rehabilitation, individual peer work, individual carer support services and group-based peer work. People aged 65 years and over may also receive other evidence-based physical therapies.

In the PHN region, it is estimated that that 7810 people who are cared from predominantly by the State also require psychosocial support services. An estimated 7613 people who will receive their care from the Commonwealth will also require psychosocial support services. Of the estimated population that require support from the Commonwealth, 118 people (1.54 per cent) are aged 0-17 years, 6225 people (81.34 per cent) are aged 18-64 years and 1270 people (17.12 per cent) are aged 65 years and over.

Previous PHN needs assessments identified a range of service gaps for programs including the Mental Health Nursing Incentive Program (MHNIP). Subsequent commissioning decisions made by the PHN has help address these gaps, particularly for people residing in Moreton Bay North. Between 2011-12 and 2014-15, over 800 patients to the MHNIP program resided in the Caboolture SA3 area[132]. Due to inequitable service distribution, this cohort generally had to travel to access services. The PHN has since commissioned a service in the region, which was accessed by over 200 people in 2017-18. This indicates that a high level of demand still exists in the Caboolture SA3 area. While high needs for clinical mental health services still exist in the Caboolture SA3 and wider Moreton Bay North subregion, engagement undertaken by the PHN to support the review of severe mental health services found that a significant service need for psychosocial support services exists.

A large service support system likely to be required to deliver the necessary psychosocial support services to the estimated 7613 people in scope for the PHN funded National Psychosocial Support Measure (PHN-NPSM). As of 2019, there will be an estimated 115,507 hours of demand per annum[133] for psychosocial support services among the population who will require support under the PHN-NPSM. People aged 18-64 years have the highest levels of estimated demand, with a total of 100,451 hours of demand per annum, with a workforce cost of $5.9 million. This is consistent with the size of the population in scope for the PHN-NPSM aged 18-64.

The types of psychosocial support likely to be required varies by age. The National Mental Health Service Planning Framework (NMHSPF) estimates that 100 per cent of PHN-NPSM in scope population aged 0-17

[128] Department of Health, 2017d
[129] Siskind et al, 2012
[130] Dixon et al, 2010
[131] National Psychosocial Support Working Group, 2017, as cited in PHN NPSM Guidance
[132] Department of Health, 2015
[133] The concept of demand is related to the number of people who will seek, or 'demand' treatment. The NMHSPF defines demand as "the number of people who are diagnosed as mentally ill, AND will seek treatment". For the population with severe mental illness, it is assumed that 100 per cent of people will seek treatment. From this the total hours of client demand can be calculated. Hours of client demand refers to the hours of service each client gets in a 12 month period.

will require individual support and rehabilitation, whereas the population aged 18-64 and 65 years and over require more diverse forms of psychosocial support.

People aged 65 years and over are estimated to have the next highest level of demand for psychosocial support services, with 14,356 hours of demand per annum (at a workforce cost of $950,000), followed by people aged 0-17 years (702 hours of demand per annum at a workforce cost of $40,000). Given the cost associated with the estimated demand, it is anticipated that PHN-NPSM funding will be able to target 10 per cent of total service demand.

Across the population, individual support and rehabilitation services have the highest level of demand, with an estimated 76,215 hours of demand per annum (65.99 per cent) across all ages, followed by group-based peer work with 31,193 hours of demand per annum across all ages (27 per cent).

Suicide prevention

Nationally, the rate of suicide from 2008 to 2017 increased from 11 to 12.7 per 100,000 people (an increase of 787 deaths per annum)[134].

National data estimates more than 7.5 per cent of children and young people attempted suicide in the past 12 months[135]. The proportion is twice as high for females compared to males (10.7 per cent compared to 4.5 per cent)[136]. Suicide attempts were more common among females than among males and for 16 to 17 year-olds compared with younger adolescents (4.7 per cent for females and 2.9 per cent for males aged 16 to 17 years compared with 2.7 per cent for females and 0.8 per cent for males aged 12 to 15 years in the previous 12 months)[137].

In 2015-16, there were 2058 hospitalisations for intentional self-harm in the PHN region at a rate of 215 hospitalisations per 100,000 people[138.] This was higher than the national rate of 170 hospitalisations per 100,000 people[139]. Within the PHN, the SA3 areas of Brisbane Inner, Redcliffe, Brisbane Inner – North, Nundah and Caboolture had the highest hospitalisation rates for intentional self-harm, at 412, 405, 279, 258 and 248 hospitalisations per 100,000 people respectively[140].

Between the years 2012 to 2016, the rate of deaths where suicide was the cause of death in the PHN region was higher than the national rate (12.2 compared to 11.7 deaths per 100,000 people)[141]. However, there is considerable variation at a subregional level. Between the years 2012 to 2016, the Bribie – Beachmere, Caboolture and Redcliffe SA3 areas had a higher than average rate[142] of deaths where suicide was the cause of death, with 15.5, 14.9 and 17.8 deaths per 100,000 respectively[143].

Within the Caboolture, Redcliffe and Narangba - Burpengary SA3 areas, rates of suicide among males are significantly higher than the national rates, at 25.1, 27.5 and 25.2 deaths per 100,000 respectively[144]. These rates indicate that the high national rates are consistent on the local level[145][146]. This indicates a significant health need among males in more disadvantaged areas of the PHN region.

Lack of responsive follow-up services and appropriate alternatives to ED for people in crisis

It is reported that within nine years of a suicide attempt, three to twelve per cent of individuals will have died by suicide. A UK study reported that 47 per cent of suicide deaths occurred within one month of discharge and 43 per cent of those occurred before their first follow-up appointment.

Anecdotal evidence suggests that similar rates are being reported in Australia. In Western Australia, the Stokes Review identified that over one third of Western Australian men who had died by suicide had been admitted to a psychiatric hospital or a public hospital for psychiatric treatment at some point in their lifetime. Fifteen per cent of men completed suicide on the day of discharge and one third within one month of

[134] Australian Bureau of Statistics, 2018c
[135] Lawrence, et al, 2015
[136] Lawrence, et al., 2015
[137] Lawrence, et al., 2015
[138] Australian Institute of Health and Welfare, 2017b
[139] Australian Institute of Health and Welfare, 2017b
[140] Australian Institute of Health and Welfare, 2017b
[141] Australian Institute of Health and Welfare, 2017b
[142] Age standardised rate per 100,000 people
[143] Australian Institute of Health and Welfare, 2017b
[144] Australian Institute of Health and Welfare, 2017b
[145] Australian Bureau of Statistics, 2018c
[146] Australian Institute of Health and Welfare, 2018e

discharge. Almost one third of men and over half of women who completed suicide had also been hospitalised previously for self-inflicted injuries. This is clear that a failure to provide outpatient follow-up care after suicide attempts is occurring with an associated increase risk of re-attempt and death by suicide.

Across the PHN region, follow-up services are lacking to address the population needs. The PHN has identified a significant service gap of follow-up services are in the Moreton Bay North subregion, particularly in the Redcliffe area, where there is little support for people discharging from acute facilities. The Redcliffe region also has one of the highest rates of suicide and suicidal ideation in the PHN region[147][148].

Ongoing community engagement indicates that emergency and follow-up care continues to be a significant issue within the PHN region. There is also a lack of lived experience peer support co-located within emergency departments, and limited support for families and carers. Community consultation also indicated that there is a need for improved communication and warm referrals between the hospital and health service and community providers, particularly during transition from hospital following a suicide attempt.

Suicide prevention for people that identify as LGBTIQ

Identification of suicides of lesbian, gay, bisexual, transgender, intersex and questioning (LGBTIQ) people often relies on voluntary disclosure by third parties to police or the coroner, as questions about the deceased's personal life and sexual orientation, sex or gender identity may be deemed invasive, insensitive or otherwise inappropriate around the time of death.

In Australia, LGBTIQ people reported higher rates of psychological distress than the general population, a K10 average of 19.6 versus the national average of 14.5[149].

LGBTIQ people have the highest rates of suicidality of any population in Australia with 20 per cent of transgender Australians and 15.7 per cent of lesbian, gay and bisexual Australians reporting current suicidal ideation[150]. The average age of a first suicide attempt is 16 years of age and is often before 'coming out'[151]. Almost half of transgender people have attempted suicide at least once in their lives and same-sex attracted Australians have up to 14 times higher rates of suicide attempts than their heterosexual peers[152]. Rates are six times higher for same-sex attracted young people[153]. Anecdotal evidence also suggests that the rate of suicidal tendencies in intersex people is significantly higher than the general population.

While estimating the prevalence of mental health issues is difficult on a local level, data collected locally for 2014-15 from headspace centres operating in the PHN region reported that one in five (19 per cent or 239 people) young people who accessed services identified as LGBTIQ. Consultation with local mental health service providers also indicates that people who identify as LGBTIQ are also at risk of poorer mental health than the general population in the PHN region.

Persons identifying as LGBTIQ who died by suicide are suspected to have been particularly underreported in the PHN region[154].

Suicide prevention for Aboriginal and Torres Strait Islander people

Data also found that the suicide rate for those identifying as Aboriginal and Torres Strait Islander is twice the rate of the general population and for those aged 15 to 19 years it is more than five times as high[155.] During the period 2014-2016, 2.3 per cent of confirmed suicides were by people of Aboriginal and Torres Strait Islander descent[156].

Suicide prevention for young to middle aged men

National level data indicates that suicide rates are high among older males, particularly males aged 85 years and over. In 2017, the national suicide rate among males aged 85 years and over was 32.8 deaths per 100,000 people, 1.7 times the national rate among males (19.2 deaths per 100,000 people). While age

[147] Australian Institute of Health and Welfare, 2018e
[148] Queensland Health, 2018b
[149] Leonard, 2015
[150] Rosenstreich, 2013
[151] Rosenstreich, 2013
[152] Rosenstreich, 2013
[153] Rosenstreich, 2013
[154] Australian Institute for Suicide Research and Prevention, 2017
[155] Australian Institute for Suicide Research and Prevention 2011
[156] Australian Institute for Suicide Research and Prevention, 2017

specific rates are highest among males aged 85 years, younger and middle aged males had the highest number of deaths[157].

During 2011-2013, there were 358 suicide deaths in the PHN region and males accounted for 74 per cent of suicide deaths. The 45-54 age group also had the highest crude rate of suicide deaths in the PHN region[158]. Rates among males were typically 3.4 times higher than the rates among females, commensurate with the gender ratio in the rates for all Queensland.

Nationally, for both males and females, the age distribution of suicides has shifted in the last three years. Historically, suicides were most represented in age groups between 25 and 44 years. From 2014-2016 this has been more pronounced in those aged between 50 and 69 years of age. In comparing the distribution of suicides with that of the general population, it has been observed that suicide in PHN region most affects persons between 25 and 59 years of age[159].

[157] Australian Bureau of Statistics, 2018c
[158] Australian Institute for Suicide Research and Prevention, 2017
[159] Australian Institute for Suicide Research and Prevention, 2017

Alcohol and other drug treatment

The PHN's analysis indicates that demand for alcohol and other drug (AOD) treatment has consistently increased within the PHN region, particularly in SA3 areas including Caboolture, Redcliffe, Strathpine and Chermside. Alcohol continues to be the principal drug of concern for all ages, with younger age cohorts continuing to consume alcohol at high levels of single occasion and lifetime risk.

The commissioning of AOD treatment services in the region has started to yield positive results, with anecdotal evidence indicating that previous service gaps are starting to be filled. However, there are still significant treatment needs across the PHN region, particularly among vulnerable population cohorts.

Comorbidity of mental health and experiences of alcohol and other drug issues

According to the Australian Institute of Health and Welfare, a significant proportion of people experiencing AOD issues have mental health comorbidity. In 2013, an estimated 24 per cent of people aged 18 years and over diagnosed or treated for a mental illness had used an illicit drug in the previous month[160]. This proportion has increased from 20.4 per cent in 2010[161]. Of this population, an estimated 34.3 per cent of people diagnosed or treated for a mental illness reported using methamphetamines in the previous month[162].

Data from the Australian Institute of Health and Welfare also indicates that people with high levels of psychological distress are more likely to consume alcohol at lifetime and single occasion risky levels. An estimated 13.1 per cent of people with high or very high psychological distress reported drinking more than four standard drinks at least once a week, with 18.2 per cent reporting that they smoked daily[163].

Data from primary care provides an estimate of the prevalence of comorbidity among people experiencing mental health conditions and issues with alcohol or other drugs. Of those diagnosed with a drug related issue, more than half (54.7 per cent) had a coded mental health condition, compared to 12.3 per cent of people who were not diagnosed with a drug related issue[164]. The most common condition for people diagnosed with a drug related issue was depression, representing 35 per cent of the general practice population diagnosed with a drug related issue[165]. This was followed by anxiety (32.5 per cent)[166].

A total of 18.7 per cent of the general practice population diagnosed with a drug related issue were coded with both anxiety and depression, compared to 2.7 per cent of the general practice population that were not diagnosed with a drug related issue[167]. Rates of the less prevalent mental health conditions of bipolar and schizophrenia were also much higher among general practice patients diagnosed with a drug related issue when compared to patients who were not diagnosed with a drug related issue[168]. These figures may be an under estimation for the population as a whole, because people experiencing mental health and alcohol and drug issues may not seek help from a GP.

Age standardised mental health overnight hospitalisations for AOD use in 2015-16 were higher in the PHN region at 202 hospitalisations per 100,000 people compared to 200 hospitalisations per 100,000 people nationally and 180 hospitalisations per 100,000 people in metropolitan areas[169]. On average, someone residing in the PHN region admitted to hospital for an AOD issue in 2015-16 spent seven days in hospital[170].

[160] Australian Institute of Health and Welfare, 2018f
[161] Australian Institute of Health and Welfare, 2018f
[162] Australian Institute of Health and Welfare, 2018f
[163] Queensland Health, 2013
[164] Brisbane North PHN PenCS clinical audit tool data from participating practices in the region
[165] Brisbane North PHN PenCS clinical audit tool data
[166] Brisbane North PHN PenCS clinical audit tool data
[167] Brisbane North PHN PenCS clinical audit tool data
[168] Brisbane North PHN PenCS clinical audit tool data
[169] Australian Institute of Health and Welfare, 2017b
[170] Australian Institute of Health and Welfare, 2017b

Harmful use of alcohol and other drugs among Aboriginal and Torres Strait Islander populations

Nationally, the rate of recent illicit drug use among Indigenous Australians is almost 12 per cent higher than among the non-Indigenous population[171]. In 2016, 27 per cent of Aboriginal and Torres Strait Islander people had recently used an illicit drug, with a further 27.7 per cent an ex-user of an illicit drug[172]. By contrast, 15.3 per cent of the non-Indigenous population had recently used an illicit drug, with 26.6 per cent an ex-user[173]. During the same time period, the rate of lifetime risky alcohol consumption among Aboriginal and Torres Strait Islander people was three per cent higher than for the non-Indigenous population[174].

It is also noted that Aboriginal and Torres Strait Islander people are over-represented in specialist AOD treatment in the PHN region. Between 2012-13 and 2016-17, 7.2 per cent of people who received AOD treatment in the PHN region identified as Aboriginal or Torres Strait Islander, when only 1.6 per cent of the total PHN population identify as Aboriginal and Torres Strait Islander[175].

There is also an over representation of Aboriginal and Torres Strait Islander people who are diagnosed with a drug related issue in a general practice setting. Approximately five per cent of active general practice patients in the PHN region who have been diagnosed with a drug related issue identify as Aboriginal and Torres Strait Islander[176].

Between 2012-13 and 2016-17, the number of AOD closed treatment episodes for Aboriginal and Torres Strait Islander people in the PHN region increased by 108 per cent[177]. The proportional increase in Aboriginal and Torres Strait Islander people accessing AOD treatment in the PHN region was considerably higher when compared to Queensland (24 per cent increase between 2012-13 and 2016-17)[178].

AOD issues among young people aged 25 and under

In 2016, over eight per cent of people nationally aged 12 to 17 years and 28 per cent of people aged 18 to 24 years reported having used an illicit drug in the previous 12 months[179]. Younger people are also more likely to consume alcohol at risky levels. In Queensland, an estimated 50.3 per cent of people aged 18 to 24 are at risk of injury on a single occasion of drinking (consuming more than four standard drinks at least once a month)[180] . Additionally, 10 per cent of people in Queensland aged 12 to 17 consume alcohol at single occasion risky levels[181]. The rate of people in Queensland aged 12 to 24 who consume alcohol at single occasion risky levels is higher than the national rate (8.7 per cent for people aged 12 -17 and 47 per cent for people aged 18 to 24)[182].

In the PHN region, 13.3 per cent of people who received specialist AOD treatment in 2016-17 were aged 10 to 19 years of age, with a further 24.9 per cent of people who received treatment aged 20 to 29 years[183]. This represents two in five people who accessed specialist AOD treatment in the PHN region during 2016-17. Between 2012-13 and 2016-17, there has been a consistent increase in the number of younger people accessing AOD treatment, with the number of people aged 10 to 19 years of age accessing treatment increasing by 76 per cent[184]. Stakeholder engagement indicates that there is a need for schools to be better resourced to assist with ‘light touch’ on demand AOD treatment.

While a number of youth specific services operate within the PHN region, the high number of younger people aged 25 years and under experiencing AOD issues remains a significant health issue.

[171] Australian Indigenous HealthInfoNet 2010
[172] Australian Institute of Health and Welfare, 2018g
[173] Australian Institute of Health and Welfare, 2018g
[174] Australian Institute of Health and Welfare, 2015b
[175] Australian Institute of Health and Welfare, 2018g
[176] Brisbane North PHN PenCS clinical audit tool data collect
[177] Australian Institute of Health and Welfare, 2018g
[178] Australian Institute of Health and Welfare, 2018g
[179] Australian Institute of Health and Welfare, 2018g
[180] Australian Institute of Health and Welfare, 2015b
[181] Australian Institute of Health and Welfare, 2014
[182] Australian Institute of Health and Welfare, 2014
[183] Australian Institute of Health and Welfare, 2018g
[184] Australian Institute of Health and Welfare, 2018g

Lack of aftercare and outpatient care services

The service landscape within the PHN region indicates that AOD services are primarily delivered through the hospital and health service. According to discussions with key stakeholders including the Queensland Network of Alcohol and Other Drug Agencies and the Metro North Hospital and Health Service, support services for patients undergoing withdrawal management, rehabilitation and AOD counselling are lacking. Qualitative evidence suggests that stronger outpatient care is required for people who receive AOD treatment.

Service capacity

In Queensland, alcohol is the principal drug of concern representing 31.3 per cent of all treatment episodes across both hospital and community-based treatment[185]. In the PHN region, alcohol is also the most common drug people receive treatment for, with 36.7 per cent of treatment episodes in 2016-17 attributed to alcohol as the principal drug of concern[186]. The number of closed AOD treatment episodes[187] increased by 36.7 per cent between 2012-13 and 2016-17. As of 2016-17, 26.3 per cent of all closed treatment episodes in Queensland occurred in the PHN region[188].

Within the non-government sector, treatment is primarily geared towards AOD counselling, education and information. Rehabilitation facilities outside of the hospital sector are primarily residential, with five residential rehabilitation facilities in the PHN region. Of these facilities, three are state-wide, catering to all of Queensland.

Only a small number of specialist alcohol detoxification and withdrawal management services exist within the PHN region, with one non-residential detoxification and rehabilitation facilities. The AOD services planning model indicates that there are significant unmet needs for alcohol specific services in the PHN region, further evidenced by emergency department service events for alcohol intoxication.

In 2016-17, there were 7670 emergency department presentations for AOD issues. Eighty four per cent of episodes were not admitted to hospital. Mental and behavioural disorders due to use of alcohol, acute intoxication is by far the most common reason for presenting (2178 presentations), followed by other and unspecified drugs, medicaments and biological substances (1167), mental and behavioural disorders due to use of alcohol, withdrawal state (1024) and mental and behavioural disorders due to multiple drug use and use of psychoactive substances, dependence (834)[189]. This represents a steady increase in the number of emergency department presentations for AOD issues and highlights the ongoing issue of service capacity.

Regional equity of access

Previous assessments undertaken by the PHN identified both Caboolture and Redcliffe as areas of high needs in a number of health and welfare domains. Caboolture is also home to the majority of the PHN's Aboriginal and Torres Strait Islander population and is also home to a younger population. The lack of AOD services, coupled with high at-risk population groups has been identified as both a health and service need.

A small number of outreach services are also delivered in Redcliffe and Caboolture by Queensland Injectors Health Network (QUIHN) and DrugARM, catering to disadvantaged populations. There is currently only one specialist AOD rehabilitation service across both of these regions.

To address the regional equity of access, the PHN has recently commissioned a range of AOD services. Treatment data suggests that demand for AOD services has continued to increase in Caboolture and Redcliffe. Between 2012-13 and 2016-17, the number of closed treatment episodes increased by 232 per cent in Caboolture and 39.5 per cent in Redcliffe, highlighting the significant demand for services in these regions[190]. Stakeholder engagement also indicates that there is a need to upskill the mental health workforce to deal with increased demand for various AOD treatment services.

[185] Australian Institute of Health and Welfare, 2018g
[186] Australian Institute of Health and Welfare, 2018g
[187] Treatment episodes where assessment only and other were the main treatment type were excluded.
[188] Australian Institute of Health and Welfare, 2018g
[189] Queensland Health, 2018b
[190] Australian Institute of Health and Welfare, 2018g

Fragmentation of specialist AOD treatment across sectors

Detoxification and treatment of people who have AOD issues is highly specialised, requiring intervention at a number of levels and in a number of settings. Currently no comprehensive understanding of how patients transition between different areas of the AOD sector is present. A key need arising from analysis indicates that extensive engagement is required with the whole AOD sector to determine the makeup of the service landscape.

Discussions with key stakeholders from the non-government and hospital based AOD sector indicates that referral pathways are lacking between the different sectors, resulting in poor continuity of care for AOD patients. Data collection in primary care suggests that significant development is required to connect the sector in with the broader AOD sector. However, data gaps exist regarding the capacity of primary care to provide AOD treatment. Improved data collection and quality to determine treatment levels and referral pathways in primary care is required to make informed AOD treatment decisions.

Section 3 – Summary of identified priorities and needs

General population health

Number	Issue	Health needs	Service needs	Priority
GP1	Impact of chronic disease among older people	High rates of chronic disease among people aged 65 years and over	High level of service demand and hospitalisations for chronic conditions such as CHD	**Coordinated care for older people**
GP2	Dementia care	Increasing number of people 65 years and over with dementia in the PHN region	Provision of quality integrated and coordinated care for people with dementia	**Coordinated care for older people**
GP3	Health inequity in Moreton Bay North	Poor social determinants and health risk factors contributing to poorer health outcomes among residents of Moreton Bay North	High service demand and unequal workforce distribution in Moreton Bay North	**Improved access to health and community care in Moreton Bay North**
GP4	Coordinated and integrated care	Identified issues with coordinating care across the health system for people with chronic conditions	High rates of preventable hospitalisations for chronic conditions within the PHN region	**Better support for people with chronic and complex conditions across the care continuum**
GP5	After-hours service gaps	High need for after-hours services, particularly low to medium priority services	Gaps in coverage of primary after-hours services in particular locations and a need for alternative services to Emergency Departments for vulnerable populations in PHN region	**After-hours healthcare**
ATSI1	Aboriginal and Torres Strait Islander health	Gap in health outcomes for Aboriginal and Torres Strait Islander people for health	Provision of culturally responsive services across the care continuum.	**Culturally responsive services for Aboriginal and Torres Strait Islander people**

Number	Issue	Health needs	Service needs	Priority
		status, chronic disease and mental health		

Primary mental healthcare

Number	Issue	Health needs	Service needs	Priority
MH1	Low intensity mental illness	High prevalence of mild mental health conditions including anxiety and depression	Inadequate coverage of low intensity mental health services	**Mental health and suicide prevention**
MH2	Children and young people's mental health	High levels of developmental vulnerability among children in socio-economically deprived areas of the PHN region Higher levels of mental illness among young people in socio-economically deprived areas of the PHN region	Need for early intervention, family and perinatal support for vulnerable children under four years of age Increase in demand for services, especially after hours	**Mental health and suicide prevention**
MH3	High mental health distress in underserviced areas	Higher rates of psychological distress within disadvantaged areas with poorer health determinates	Inequitable distribution of services and health professionals	**Mental health and suicide prevention**
MH4	Mental health issues among vulnerable population groups	Higher levels of mental health needs among LGBTIQ, culturally and linguistically diverse populations and people with an experience of	Barriers to access which contribute to a lack of access to early intervention and support services	**Mental health and suicide prevention**

Number	Issue	Health needs	Service needs	Priority
		homelessness or housing vulnerability		
MH5	Aboriginal and Torres Strait social and emotional wellbeing	High levels of distress among Aboriginal and Torres Strait Islander people	Barriers to access and increasing service demand for social and emotional wellbeing issues	**Mental health and suicide prevention**
MH6	Severe mental illness	Provision of adequate wrap around supports to improve the health and wellbeing of people with severe and complex mental illness	Hospitalisations related to mental and behavioural issues and a lack of integrated care across the sector Inequitable distribution of services catering to people with severe mental illness	**Mental health and suicide prevention**
MH7	Comorbidities for people with severe mental illness	High risk of comorbid conditions for people with severe mental illness Financial burden of managing co-morbidities potentially contributing to poorer health outcomes among this cohort	Lack of integrated care contributing to high service demand	**Mental health and suicide prevention**
MH8	Psychosocial supports for people with severe mental illness	Lack of adequate and affordable psychosocial supports potentially contributing to poorer health outcomes among people with severe mental illness who do not qualify for the NDIS	Projected demand for psychosocial support services expected to outstrip supply, resulting in significant service gaps	**Mental health and suicide prevention**

Number	Issue	Health needs	Service needs	Priority
MH9	Suicide prevention for at risk population groups, including LGBTIQ, Aboriginal and Torres Strait Islander people and young to middle aged men	Subregional variation in suicide and self-harm rates with higher levels in Moreton Bay North Same-sex attracted Australian's rate of attempted suicide is 14 times higher than their heterosexual peers Higher rates of suicide among people of Aboriginal and Torres Strait Islander decent High number of suicide deaths among males aged 45-54 years	Lack of responsive follow up services and inadequate supports to provide appropriate alternatives to the ED for people in a suicidal crisis. National Suicide Prevention Trial requires a community driven and owned, systems approach to suicide prevention, in line with the National LGBTI Mental Health, ATSISPEP and Suicide Prevention Strategy recommendations	**Mental health and suicide prevention**

Alcohol and other drug treatment

Number	Issue	Health needs	Service needs	Priority
AOD1	Comorbidity of mental health and experiences of alcohol and other drug issues	High rates of people experiencing AOD issue have high rates of mental health comorbidity	High rates of service need for people AOD issues that have high rates of mental health comorbidity	**Alcohol and other drugs**
AOD3	AOD issues among young people aged 25 and under	Higher prevalence of AOD use among younger people	Young people account for significant AOD treatment demand	**Alcohol and other drugs**

Number	Issue	Health needs	Service needs	Priority
AOD4	Treatment needs	Increasing demand for AOD treatment services	Lack of aftercare and outpatient care services	**Alcohol and other drugs**
AOD5	Service capacity	Alcohol is the principal drug of concern	Demand for AOD treatment is higher than current capacity, especially for mild and moderate detoxification services	**Alcohol and other drugs**
AOD6	Regional equity of access	Vulnerable population groups in Moreton Bay North	Lack of AOD treatment in Moreton Bay North	**Alcohol and other drugs**
AOD7	System design		Fragmentation of specialist AOD treatment across sectors	**Alcohol and other drugs**

Section 4 – Options for prioritised needs

General population health

Priority	Options	Outcomes	Potential lead
Coordinated care for older people	Improved integrated management and capacity building for chronic wound care	Improve the integrated management of chronic wounds in the PHN region	Brisbane North PHN to lead through a commissioning process
Coordinated care for older people	Enhance care options for people who have dementia	Provision of better diagnosis, referral, integrated, coordinated care and management of dementia	Brisbane North PHN to lead through a commissioning process
Coordinated care for older people	Improve the capacity of service providers to increase access to quality, coordinated and integrated palliative care	Improve access to safe, quality, coordinated and integrated palliative and end of life care across all care settings	Brisbane North PHN to lead through a commissioning process
Coordinated care for older people	Improve quality of care for residents of residential aged care facilities with acute healthcare needs	Reduced number of preventable admissions to hospital emergency departments and better health outcomes for residents	Brisbane North PHN to lead through a commissioning process
Coordinated care for older people	Improve region-wide access to appropriate care and support for residents of residential aged care	Improved access to residential aged care services for people who require them	Brisbane North PHN to lead through a commissioning process
Improved access to health and community care in Moreton Bay North	Outreach healthcare to vulnerable children	Improved access to allied health services in high need areas and improved knowledge and awareness of emotional techniques and improvements in behaviour regulation	Brisbane North PHN to lead through a commissioning process
Improved access to health and community care in Moreton Bay North	Improving health and social wellbeing for children in Moreton Bay North	Improved coordination and support for young people and their families in Moreton Bay North to access appropriate health and wellbeing supports	Brisbane North PHN to lead through a commissioning process
Better support for people with chronic and complex conditions across the care continuum	Work in partnership to improve access to primary healthcare for refugee populations	Improved access to primary healthcare for refugee populations	Brisbane North PHN to work in partnership with Brisbane South PHN, Mater Hospital and general practices

Better support for people with chronic and complex conditions across the care continuum	Work in partnership to increase childhood immunisation rates across the PHN region	Improved population health outcomes resulting from lower incidence of vaccine preventable health conditions	Brisbane North PHN to lead through a commissioning process
Better support for people with chronic and complex conditions across the care continuum	Management of frequent emergency department attenders	Improved patient outcomes by providing viable and sustainable alternatives to emergency departments	Brisbane North PHN to lead through a commissioning process
Better support for people with chronic and complex conditions across the care continuum	Work in partnership with local stakeholders to improve outcomes for people with complex health and social needs	Improve the coordination of care for people who frequently attend emergency departments and are at risk of frequently attending emergency departments	The Health Alliance
Better support for people with chronic and complex conditions across the care continuum	Develop and deliver a general practice nurse support program.	Upskill nurses to provide improved care to people with chronic and complex conditions.	Brisbane North PHN to lead through a commissioning process
Better support for people with chronic and complex conditions across the care continuum	Develop a quality improvement program to support and upskill general practice staff in quality improvement activities	Improve outcomes for patients with chronic and complex conditions	Brisbane North PHN
After-hours healthcare	Commission outreach after-hours healthcare services catering to homeless and vulnerable population groups	Improved links to primary care services for vulnerable population groups and reduced reliance on emergency departments and ambulance services after-hours	Brisbane North PHN to lead through a commissioning process
After-hours healthcare	Deliver an integrated community education campaign to improve awareness of after-hours health services including targeted campaign for Aboriginal and Torres Strait Islanders	Reduction in inappropriate emergency department presentations. Patients are empowered to make informed decisions about after-hours healthcare	Brisbane North PHN to lead through a commissioning process
After-hours healthcare	Develop a range of adequate care pathways specific to after-hours services	Ensure the availability of adequate care pathways specific to after-hours services	Brisbane North PHN
After-hours healthcare	Improve access to after-hours services in underserviced 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 HHS	Improved provision, coordination and availability of after-hours healthcare services and adequate coverage is provided to all parts of the region.	Brisbane North PHN to lead through a commissioning process

After-hours healthcare	Training for after-hours doctors to improve service delivery in aged care facilities and palliative care situations.	Reduced presentations to hospital for patients who could be managed at RACFs or other community environments.	Brisbane North PHN to lead planning and delivery activity through commissioning process.
Culturally responsive services for Aboriginal and Torres Strait Islander people	Delivery of a school readiness and allied health screening program for Aboriginal and Torres Strait Islander children	Improved developmental and health outcomes for Aboriginal and Torres Strait Islander children transitioning to school	The Institute for Urban Indigenous Health and Koobara Kindergarten in partnership with Brisbane North PHN
Culturally responsive services for Aboriginal and Torres Strait Islander people	Development of a capacity building mentoring program for Aboriginal and Torres Strait Islander people with lived experience	Improved health and wellbeing within community through life coaching and counselling services	Brisbane North PHN to lead through a commissioning process
Culturally responsive services for Aboriginal and Torres Strait Islander people	Development of an Aboriginal and Torres Strait Islander Health and Wellbeing Regional Plan	Development of a plan, supported by stakeholders, that outlines key service directions to enable better care for the PHN region's Aboriginal and Torres Strait Islander population	Brisbane North PHN to lead in partnership with service providers and Metro North Hospital and Health Service

Primary mental health care

Key priority/issue	Options	Outcomes	Potential lead
Low intensity mental illness	Commission a range of low intensity psychological services	Building resilience of people through a range of interventions	Brisbane North PHN to lead through a commissioning process
Children and young people's mental health	Deliver better perinatal, infant and child support	Early detection of issues leading to more effective resolution	Infant, Child and Youth Mental Health Partnership Group
Children and young people's mental health	Commission more effective services for young people	Improved access to services for young people, including 'hard-to-reach' young people	Brisbane North PHN to lead through a commissioning process
Mental health issues among vulnerable population groups	Better align PHN funded psychological therapies with consumer preferences and needs, including for specific population groups that cannot access appropriate options	Improved service delivery based on consumer need	Brisbane North PHN to lead through a commissioning process
High mental health distress in underserviced areas	Develop, diversify and geographically redistribute the workforce delivering psychological therapies	Increased delivery of psychological services in underserviced areas	Psychological Therapies Advisory Group
Mental health issues among vulnerable population groups	Assist people experiencing severe and complex mental illness to access and sustain safe, secure and affordable housing	Improved health and wellbeing outcomes for people experiencing severe and complex mental illness	Collaboration in Mind in partnership with Brisbane North PHN
Mental health issues among vulnerable population groups	Improve access to mental health services for people from culturally and linguistically diverse backgrounds	Improved access to mental health services for people from culturally and linguistically diverse backgrounds	Strategic Coordination Group
Mental health issues among vulnerable population groups	Ensure mental health and suicide prevention services are inclusive of LGBTIQ+ people and respond effectively to their needs	Provision of higher quality service delivery ensuring non-discriminatory approaches	Strategic Coordination Group
Aboriginal and Torres Strait Islander emotional health and wellbeing	Continue to procure integrated social and emotional wellbeing services from Aboriginal community controlled organisations	Improved access to mental health services for Indigenous people	Brisbane North PHN to lead through a commissioning process

Aboriginal and Torres Strait Islander emotional health and wellbeing	Increase cultural responsiveness amongst services and healthcare practitioners	Improved service delivery appropriate to Indigenous people	Aboriginal and Torres Strait Islander Engagement Steering Group
Aboriginal and Torres Strait Islander emotional health and wellbeing	Strengthen integration between services working with Indigenous people	Improved referral, assessment and case management across sectors to ensure better holistic, person-centred care	Aboriginal and Torres Strait Islander Engagement Steering Group
Severe mental illness **Psychosocial supports for people with severe mental illness**	Procure clinical and psychosocial services for people with severe mental illness, through the development of regional service hubs	Provision of appropriate care in the right place at the right time for people experiencing severe and complex mental illness	Brisbane North PHN to lead through a commissioning process
Severe mental illness	Establish alternatives to hospital emergency departments for people experiencing severe and complex mental illness who are distressed	Reduce unnecessary hospital presentations	Collaboration in Mind in partnership with Brisbane North PHN
Severe mental illness	Improve the experience of people transitioning between hospital and the community	Better connected and integrated care systems for people experiencing severe and complex mental illness	Collaboration in Mind in partnership with Brisbane North PHN
Severe mental illness	Improve services for people experiencing borderline personality disorder	Improved services for people experiencing borderline personality disorder	Collaboration in Mind in partnership with Brisbane North PHN
Comorbidities for people with severe mental illness	Development and promotion of activities that improve the physical health of people experiencing severe and complex mental illness	Improved physical health outcomes for people experiencing severe and complex mental illness	Collaboration in Mind in partnership with Brisbane North PHN
Suicide prevention for at risk population groups	Improve and integrate suicide prevention responses on a systems-wide basis in the PHN region	Improved suicide prevention responses in the PHN region	Suicide Prevention Strategic Partnership Group
Suicide prevention for at risk population groups	Increase accessibility of care after a suicide attempt for vulnerable population groups	Improved access to care after a suicide attempt	Brisbane North PHN to lead through a commissioning process
Suicide prevention for at risk population groups	Improve access to high quality local suicide prevention services, information and resources	Enhanced support for families and carers and others bereaved by suicide	Suicide Prevention Strategic Partnership Group

Alcohol and other drug treatment

Key priority/issue	Options	Outcomes	Potential lead
Alcohol and Other Drugs	Continue to commission AOD treatment services to increase availability of AOD treatment within the PHN region	Delivery of services and support for priority populations to access appropriate and sustainable AOD treatment services	Brisbane North PHN to continue to lead through a commissioning process
Alcohol and Other Drugs	Improve collaboration between alcohol and other drug treatment services	Better coordinated referral pathways and access to specialist AOD treatment	Alcohol and Drug Partnership Group
Alcohol and Other Drugs	Skill up the AOD treatment workforce	Increased capacity and capability of AOD treatment providers, resulting in better quality of care	Alcohol and Drug Partnership Group
Alcohol and Other Drugs	Improve services for at risk groups	More culturally responsive, integrated services that are equipped to care for at risk groups	Alcohol and Drug Partnership Group

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Appendix one – Map of PHN subregions