Australian Government
Department of Health

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An Australian Government Initiative

Primary Health Network

Needs Assessment Update 2017-2018

Name of Primary Health Network

Northern Sydney

When submitting this Needs Assessment Report to the Department of Health, the PHN must ensure that all internal clearances have been obtained and the Report has been endorsed by the CEO.

Section 1 – Narrative

1. Needs Assessment Update 2017-2018:

The **Northern Sydney PHN (NSPHN) Needs Assessment update for 2017-2018** builds upon and compliments findings of the two previous Needs Assessments submitted to the Department of Health in March and November 2016, and reflects the iterative process of the commissioning and planning cycle of NSPHN.

NSPHN has taken great efforts over the past twelve months to develop a more informed and comprehensive understanding of public health issues within the region which has included undertaking a regional ***mental health atlas*** of service needs and gaps to inform mental health service planning, accessing greater numbers of general practice and Local Health District data which informs local activities relevant to identified need and the **ongoing commitment from the NSPHN to engage and consult with key stakeholders**, including community and clinical councils, other key advisory groups and the wider community of consumers, people with lived experience, clinicians and service providers has ensured the NSPHN keeps abreast of continual and key emerging public health themes across the region to inform ongoing primary service delivery.

This Executive Update addresses the four separate Needs Assessment update requirements for submission to the Department of Health this year:

1. **Core**
2. **Mental Health**
3. **Aboriginal Mental Health (included in the main Mental Health template)**
4. **Alcohol and Other Drugs**

The health priorities, below, as identified in the previous NSPHN Needs Assessments, remain relevant and are a priority for the NSPHN region:

1. **Health of the Elderly**
2. **Urgent Care**
3. **Mental Health**
4. **Alcohol and Other Drugs**

The NSPHN initial Baseline Needs Assessment 2015-2016 and NSPHN Needs Assessment Update 2016-17 remain pertinent and vital resources for the PHN, ***the link to the previous Needs Assessments can be found below:***

http://sydneynorthhealthnetwork.org.au/about-us/commissioning/commissioningplanningperformance/

Youth mental health is a focused area of investigation for this 2017-18 NSPHN Needs Assessment Update and has been informed by:

- Findings and a gap analysis of previous NSPHN Needs Assessments
- Alignment to NSPHN strategic priorities
- NSPHN Clinical and Community Council direction
- Significant regional, state and national consultation around Youth Mental Health Needs
- National mental health and alcohol and other drugs priorities

In addition, the following focus areas presented in previous Needs Assessments have updated with the latest available qualitative and quantitative data:

- **Health of the elderly**
- **Socio-economic disadvantage**
- **Homelessness**
- **Culturally and Linguistically Diverse (CALD) population including humanitarian entrants**
- **Lesbian, Gay, Bi-Sexual, Transgender and Intersex (LGBTI)**
- **Mental Health**
- **Alcohol and Other Drugs (AOD)**
- **Aboriginal and Torres Strait Islander people**

Method:

The FOUR updated Needs Assessment for 2017-2018 incorporate:

- **Newly released quantitative data –** including 2016 Census
- **New qualitative information** gained from extensive stakeholder consultation
- **New and updated access to shared regional data** - as result of developed partnerships and relationships with the NGO and community sector
- **NSPHN Mental Health Atlas**

The resultant document provides further rich context to support and compliment the previous Needs Assessments, allowing the NSPHN to gain a deeper understanding and context of the complex public health issues that are persistent within our region.

2. Key areas for the 2017-2018 Needs Assessments update:

The following are a summary of key observations and new additions for 2017-2018 which add to the findings of the previous NSPHN Needs Assessments regarding the population, health status, and health services in the region.

Mental Health:

- Suicide death rates have remained at the same level for the previous ten years, with a high rate of suicide deaths among males within the NSPHN region.

- High rate of suicide and psychological distress among Aboriginal population.
- The SNPHN Mental Health Atlas highlights the limited availability of services for those with a lived experience of chronic and moderate to severe mental illness
- The SNPHN Mental Health Atlas identifies a lower proportion of mental health services provided by NGOs in the region, coupled with funding insecurity.

Youth Mental Health:

- Disparity in service provision and access to services across the NSPHN region
- New Models of Care for a whole of youth mental health system that is integrated should be considered.
- Awareness of mental health illness and ability to navigate the health system – in young people, consumers, parents, schools, clinicians, and the wider community is a significant need
- Identified barriers to accessing services, including, lack of awareness of local health services and uncertainty on where to seek help, with additional barriers for young people from CALD backgrounds.
- Nationally, approximately 14% of children aged 4-17 years were reported having a mental illness, with a higher prevalence among males. The survey was based on responses by parents or carers for children aged 4-17 years with inclusion of self-reported responses for children aged 11 years and over when available.
- Higher prevalence of mental illness among children and young people living in socio-economically disadvantaged, step, blended and single parent families.
- High rate of hospitalisations for intentional self-harm in those aged 15-24 years, with a higher rate among females.
- High rate of hospitalisations for intentional self-harm in socio-economically disadvantaged and Aboriginal young people aged 15-24 years.
- Need for community driven response to improve health literacy and raise awareness of youth mental health and a need to facilitate early intervention.

Aboriginal and Torres Strait Islander People:

- Significant under reporting of Aboriginal status by health care professionals, higher prevalence of chronic disease and low levels of breast screening among Aboriginal women.
- Low proportion of the Aboriginal population receiving MBS 715 health checks.
- High rate of suicide and psychological distress among Aboriginal population.

Alcohol and Other Drugs:

- Females in the NSPHN region have the highest rate of alcohol attributable hospitalisations across NSW.
- Manly LGA has the highest rate of alcohol attributable hospitalisations in the region, 60.5% higher compared to NSW.

Cancer Screening:

- Variation in breast screening rates within NSPHN region.
- Low bowel cancer screening rates across the region and low cervical screening rates in women aged 20-24 years, with regional variation.

Childhood Immunisation:

- Childhood immunisation rates in children aged one, two and five years lower than the national aspirational target, with regional variation in childhood immunisations.

Health of older people:

- Geographic hotspots of high population growth in those aged 65+ years.
- The complex needs of an ageing population will impose an increasing demand on healthcare services within the NSPHN region.
- Financial barriers to older people in the NSPHN region accessing services.
- Growing CALD population in the region facing additional language and cultural barriers to accessing aged care services.
- Low proportion of those aged 75+ years receiving formal annual health check.
- Higher rate of fall-related injuries within NSPHN region compared to NSW, increasing over the previous five years.

Culturally and Linguistically Diverse (CALD) Populations:

- Latest Census data highlights a growing CALD population within NSPHN region, concentrated in specific geographic areas.
- Lower cancer screening rates and specific health literacy needs. Humanitarian entrant population in the region with significant and complex health issues.
- CALD groups present for a range of mental health and health needs, with a higher risk of suicidal behaviours among humanitarian entrants.

Socio-economic disadvantage:

- Pockets of disadvantage within the region, concentrated in Warringah, Ryde and Hornsby LGAs.
- Higher rates of intentional self-harm in socio-economic disadvantaged population.

Lesbian, Gay, Bisexual, Transgender and Intersex (LGBTI) Population:

- An estimated 22,900 LGBTI people (2-3% of the total population) live within the NSPHN region.
- Elevated risk of anxiety, depression, self-harm and suicide compared to non-LGBTI population.
- Suicidal ideation higher among young LGBTI people, partly due to higher rates of violence and harassment.

3. Consultation process:

The NSPHN has undertaken extensive stakeholder consultation and engagement during the development of the Needs Assessment – providing a rich source of additional qualitative input to inform service planning in the region. The consultations were well represented from a broad cross-section of the local community and service sector, including the following:

- General Practice
- The NSPHN Board
- NSPHN Community Council
- NSPHN Clinical Council
- NSPHN Mental Health and AOD Advisory Committee

- Northern Sydney Local Health District
- Allied Health – public and private
- Non-Government Organisations (local, state, national)
- People with lived experience, consumers, and carers
- Local schools, Local Government Councils and Family and Community Services (FACS)

The 2017-18 Needs Assessment is also informed by the extensive consultation and engagement undertaken during the commissioning co-design sessions in September 2016 for Mental Health, AOD and Aboriginal Health. Consultations from the latest Needs Assessment builds upon information gained from the commissioning co-design sessions, represented from more than **300 stakeholders**.

Data Analysis:

Quantitative and qualitative data was sourced from the following areas:

•Australian Aboriginal and Torres Strait Islander Health Survey 2012-13
•Australian Bureaus of Statistics (ABS)- Census of Population and Housing, 2011 & Census of Population and Housing, 2016; Causes of deaths data, 2016
•Australian Institute of Health and Welfare (AIHW): GEN data
•AIHW analysis of National Hospital Morbidity Database 2014-15
•AIHW analysis of the Medicare Benefits Schedule 2010-11 to 2015-16
•ATAPS data extracted from MDS, 2016-17
•MBS claims data 2012-16
•National Drug Strategy Household Survey 2016
•NSW Cancer Institute- NSW Cancer Incidence and Mortality Data Set 2008-12
•NSW Cancer Institute- Reporting for Better Cancer Outcomes Performance Report 2016: Northern Sydney Local Health District
•NSW Department of Planning and Environment- Population Projections, 2016
•NSW Health Centre for Epidemiology and Evidence: NSW combined patient epidemiology data 2001-2016; NSW Population Health Survey
•Pat Cat data October 2017
•Public Health Information Development Unit (PHIDU) 2017: Social Health Atlases of Australia
•PHIDU's analysis of the Australian Health Survey 2014-15
• Primary Mental Health Care (PMHC) Minimum Dataset
•Sydney North Primary Health Network (SNPHN) Integrated Mental Health Atlas 2017
•Stakeholder Consultation-Clinical Council, Community Council
•Stakeholder consultation conducted by Relationships Australia NSW with the Gaimaragal Group
•The Second Australian Child and Adolescent Survey of Mental Health and Wellbeing

This data has been used to assess key issues and their potential impact on the Northern Sydney population, and to present the analysis in a readily accessible format that NSPHN can continue to update and build upon as an iterative process for future need assessments.

Future Considerations:

During the final consultation and review of the updated Needs Assessments, it has become apparent that the composition of the region's CALD population is a complex one with issues pertaining to generational issues, health literacy, methods of accessing health care, gender, culture, language and other factors related to the social determinants of health which are also individual to the many CALD sub-groups across the region and which may require more focused investigation in future Needs Assessments as undertaken by NSPHN.

Conclusion:

With the inclusion of newly available data (including Census 2016 data), this updated Needs Assessment further qualifies that there are significant health issues within the region, which will be further compounded by substantial growth in both the aged and CALD populations. The Northern Sydney PHN maintains a changing demographic which continues to face several challenges across age groups with pockets of socio-economic disadvantage across the region.

Population cohorts, geographic hot spots and specific health issues exist and impact the public health profile of the region. There are issues relating to the impact of the social determinants of health, such as access to primary care, stress and addiction which can impact health outcomes and with an ageing demographic, significant challenges ensue for our older population.

The focus on youth mental health within the latest Needs Assessment highlights cohorts of young people within the region with mental health issues who are impacted by the socioeconomic determinants of health. Extensive consultation with a range of stakeholders identified numerous barriers for young people with mental health issues accessing services within the NSPHN region, including, a lack of awareness of local health services and uncertainty on where to seek help, with additional barriers for young people from CALD backgrounds. Consultation also identified a need for a community driven response to improve health literacy and raise awareness of youth mental health within the region.

Analysis also highlights underreporting of Aboriginal status by health service providers. There is also a large proportion of the population who are overweight or obese in the region. New additions to PHN knowledge of our health profile also indicates that there are discrete cohorts who do not access available preventative and screening measures in the areas of childhood immunisation and cancer screening.

NSPHN has undertaken significant activities since July 2015 to address local issues as identified in this Needs Assessment Update. These activities have been bolstered by the commissioning of multiple primary care based services in the following areas:

Mental Health – vulnerable and hard to reach, youth, severe, CALD, Aboriginal mental health and suicide prevention.
Alcohol and Other Drugs - young people and adults requiring non-residential rehabilitation.

After hours – improving access to social work, hospital discharge support, residential aged care **Aged Care** – dementia care
Aboriginal Health – Integrated Team Care
Behavioural Lifestyle Risk Factors (Smoking, Nutrition, Alcohol, Physical Exercise and Obesity) – targeted interventions for vulnerable population.

NSPHN has also developed a ***Commissioning Evaluation Framework***, which is based on the Quadruple Aim, as a method for evaluating the impact of commissioned services, which will go some way to address elements of needs as identified in this needs assessment and will in the future be an additional source of data to inform subsequent Needs Assessment and planning.

There is evidence and great scope to continue to work towards an improved health status for our community and enhance health service provision to a significant number of our residents. There is strong evidence that within our PHN region there are significant disparities in health outcomes and access to primary health care that require ongoing and proactive efforts to address. The Northern Sydney PHN will continue to build relationships with stakeholders, identify barriers in addressing local health services and serve the community to its fullest capacity by continually assessing and monitoring the complexities of the region's public health profile.

Finally, the NSPHN Board will also consider further the findings and implications of these updated Needs Assessment profiles in their undertaking of the next cycle of NSPHN strategic planning.

Northern Sydney Primary Health Network - Updated Core Needs Assessment 2017 – 2018

Section 1: Core Needs Assessment – Health Needs Analysis; incorporating latest quantitative and qualitative health data

Section 2: Core Needs Assessment - Service Needs Analysis; incorporates heath service utilisation data

Key: Denotes inclusion of new data

Section 1: Core Needs Assessment - Health Needs Analysis

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence

General Population Health – summary

NSPHN's updated Needs Assessment utilises the latest quantitative (including Census 2016) and qualitative data to further highlight that there are significant health issues within the region, which will be compounded further by substantial growth in both the aged and CALD populations. The following update identifies a higher prevalence of obesity concentrated in geographic areas within the region, lower life expectancy in socio-economically disadvantaged groups, regional variation in childhood immunisation and a need to reduce potentially preventable hospitalisations.

NSPHN's previous Needs Assessments highlighted population cohorts with complex needs and identified pockets of high socio-economic disadvantage in the region, impacting on the health profile of the local population. Where possible, this latest Needs Assessment profile provides an update to relevant data for vulnerable and hard to reach populations, reflects national performance indicators on which the PHN will be measured, presenting the latest data for cancer screening, childhood immunisation and potentially preventable hospitalisations.

NSPHN has undertaken significant activities since July 2015 to address local issues as identified in this Needs Assessment Update. These activities have been bolstered by the commissioning of multiple primary care based services in the following areas:

Outcomes of the health needs analysis

- **Mental Health** – vulnerable and hard to reach, youth, severe, CALD, Aboriginal mental health and suicide prevention.
- **Alcohol and Other Drugs** - young people and adults requiring non-residential rehabilitation.
- **After hours** – improving access to social work, hospital discharge support, residential aged care
- **Aged Care** – dementia care
- **Aboriginal Health** – Integrated Team Care
- **Behavioural Lifestyle Risk Factors** (Smoking, Nutrition, Alcohol, Physical Exercise and Obesity) – targeted interventions for vulnerable population.

NSPHN has developed a ***Commissioning Evaluation Framework***, which is based on the Quadruple Aim, as a method for evaluating the impact of commissioned services, which will go some way to address elements of needs as identified in this needs assessment and will in the future be an additional source of data to inform future Needs Assessment and planning.

Identified Need	Key Issue	Description of Evidence
Ageing population 	The NSPHN 65+ years population is projected to increase by 55.2% between 2016-2036, with an estimated increase of 220,000 residents aged 65+ years by 2036.	**Quantitative evidence:** • Between 2016-2036, Ryde (75%), North Sydney (64.3%) and Lane Cove (63.5%) LGAs have a higher projected increase in the population aged 65 years and over compared to NSPHN (55.2%)[1]. The projected increase in Ryde also exceeds the projected increase for NSW (67.1%).

[1] NSW: Department of Planning & Environment 2016. *2016 New South Wales State and Local Government Area population and household projections*. NSW Planning Department of Planning & Environment, Sydney, viewed October 2017

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence
Ageing population	Healthcare for older people will remain an increasing priority for the NSPHN region, with a rise in chronic disease and comorbidity, the complex needs of an ageing population will impose an increasing demand on healthcare services. Successful navigation and access to the health and aged care system is critical for the NSPHN 65+ years population. Older people in the region can face financial barriers to accessing services, previous Needs Assessments highlighted asset rich but income poor cohorts of older people in the region. Navigating the complex aged care system is also a barrier, with a growing CALD population in the region facing additional language and cultural barriers to accessing aged care services.	The latest Core, Mental Health and Alcohol and Other Drugs Needs Assessments utilise a range of data sources and stakeholder consultation to highlight the health needs of an ageing NSPHN population. Please refer to the relevant description of evidence for specific ageing population health and service needs throughout each Needs Assessment.
Lifestyle risk factors 	High prevalence of obesity in Pittwater and Warringah LGAs. High prevalence of obesity identified at a lower geographic level (SA2) within Hornsby and Ryde LGAs. Further investigation required to determine cohorts with high need, to allow provision of targeted local interventions. Trend data unavailable.	**Quantitative evidence:** • Pittwater and Warringah continue to have higher rates of obesity. Rates of obesity higher in Pittwater (21.5 per 100; 95% CI: 20.4-22.6) and Warringah (22.8 per 100; 95% CI: 22.1-23.6) LGAs compared to NSPHN (18 per 100; 95% CI: 17.6-18.4) (2014-15).[2] • Asquith-Mount Colah/Berowra-Brooklyn-Cowan (23.6 per 100; 95% CI: 22.2-25.1) and North Ryde-East Ryde/Ryde-Putney (21.7 per 100; 95% CI: 20.3-23.1) have higher rates compared to NSPHN (2014-15).

[2] Public Health Information Development Unit (PHIDU) 2017. *Social Health Atlas of Australia: Data by Primary Health Network (PHN), June 2017 release*. PHIDU, Adelaide, viewed September 2017

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence
Premature mortality	Cancer is the main cause of premature mortality in the NSPHN region, followed by circulatory system diseases.	**Quantitative evidence:** • Approximately 50% of premature deaths in the NSPHN region attributed to cancer, with almost 20% of all premature deaths attributed to lung, colorectal and breast cancers (2010-14).[3]
Disability 	3.7% of the NSPHN population have severe or profound disability, measured within the Census using the 'core activity need for assistance' variable developed by the Australian Bureau of Statistics (ABS). The proportion of those with profound or severe disability has remained the same level within the region, compared to the 2006 and 2011 Census.	**Quantitative evidence:** • 3.7% of the population have a need for assistance with core activities, lower compared to NSW (5.4%). More than 32,000 people in the region have profound or severe disability. [4] **Severe disability** is defined as a person sometimes needing help with a core activity task (communication, mobility or self-care). **Profound disability** is defined as a person always needing help with a core activity task.
Cancer Screening - Variation in breast cancer screening rates within NSPHN region, low bowel cancer screening rates across the region and low cervical cancer screening rates in women aged 20-24 years.		
Breast cancer	Higher incidence of breast cancer and mortality in NSPHN population compared to NSW.	**Quantitative evidence:** • Breast cancer incidence 70.3 per 100,000 (95% CI: 67.9-72.8) for NSPHN population compared to 60.9 per 100,000 (95% CI: 60.1-61.7) for NSW (2008-12). • Mortality rate for NSPHN 13.4 per 100,000 (95% CI: 12.4-14.5) compared to 11.6 per 100,000 (95% CI: 11.3-12) for NSW (2008-12).[5]

[3] Public Health Information Development Unit (PHIDU) 2016. *Social Health Atlas of Australia: Data by Primary Health Network (PHN), May 2016 Release 2*. PHIDU, Adelaide, viewed October 2016
[4] Census of Population and Housing 2016
[5] Cancer Institute NSW 2016, Cancer in NSW: Online Statistics module 2012, Cancer Institute NSW, viewed October 2016

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence
Breast cancer screening	Regional variation in breast cancer screening rates.	**Quantitative evidence:** • Breast cancer screening rates lower in Mosman (43.4 per 100; 95% CI: 41.8-45) and North Sydney (49.8 per 100; 95% CI: 48.7-51) compared to NSPHN (52.5 per 100; 95% CI: 52.2-52.8) and NSW (51.6 per 100; 95% CI: 51.5-51.7).[6]
Bowel cancer screening	Lower screening rates of bowel cancer in Ryde and Willoughby.	**Quantitative evidence:** • Bowel cancer screening rates for Ryde (35.2 per 100; 95% CI: 34-36.4) and Willoughby (35 per 100; 95% CI: 33.6-36.5) lower compared to NSPHN. • Bowel cancer screening rates for NSPHN population aged 50-74 years 37.1 per 100 (95% CI: 36.7-37.5) higher than NSW (35.1 per 100; 95% CI: 35-35.3). • Bowel cancer screening rate among women aged 50-74 years 38.9 per 100 (95% CI: 38.3-39.5) compared to 35.3 per 100 (95% CI: 34.7-35.8) among men from the same age group (2015). [7] • Further analysis required to understand impact of colonoscopy on screening rates.

[6] Cancer Institute NSW 2016, *Reporting for Better Cancer Outcomes Performance Report 2016: Northern Sydney LHD*, Cancer Institute NSW, Sydney.
[7] Cancer Institute NSW 2016, *Reporting for Better Cancer Outcomes Performance Report 2016: Northern Sydney LHD*, Cancer Institute NSW, Sydney

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence
Cervical cancer screening	Low screening rates among women aged 20-24 years, with regional variation in screening rates.	**Quantitative evidence:** • Cervical cancer screening rates for NSPHN women aged 20-69 years (62.7 per 100; 95%CI: 62.5-62.9) highest in NSW (56 per 100; 95% CI: 55.9-56.1). • Screening rates among women aged 20-24 years lower in the NSPHN region (37.4 per 100; 95% CI: 36.8-37.9) compared to NSW (38.8 per 100; 95% CI: 38.6-39). • Screening participation rates in Ryde (53.5 per 100; 95%CI: 53-54) lower than both NSW and NSPHN.[8]
Childhood Immunisation – Childhood immunisation rates in children aged one, two and five years lower than the national aspirational target, with regional variation in rates.		
Childhood Immunisation	NSPHN childhood immunisation rates lower than the national aspirational target of 95%, with rates remaining at the same level for the previous eight years. Latest data available for 2015. NSPHN continues to work closely with the National Centre for Immunisation research and surveillance (NCIRS) to update the immunisation register and with the Public Health Unit to increase immunisation rates in the region by supporting general practice to implement targeted initiatives.	**Quantitative evidence:** • Immunisation rates for NSPHN children aged one year 92.2%, compared to 92.2% for NSW (2015). • Immunisation rates for NSPHN children aged two years 88.3%, compared to 89.3% for NSW (2015). • Immunisation rates for NSPHN children aged five years 91.4%, compared to 93.1% for NSW (2015).[9]

[8] Cancer Institute NSW 2016, *Reporting for Better Cancer Outcomes Performance Report 2016: Northern Sydney LHD*, Cancer Institute NSW, Sydney
[9] Public Health Information Development Unit (PHIDU) 2017, *Social Health Atlas of Australia: Data by Primary Health Network (PHN), June 2017 release*. PHIDU, Adelaide, viewed September 2017

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence
Childhood Immunisation 	Regional variation in childhood immunisation, with lower immunisation rates in Hunters Hill, Pittwater, Manly and Mosman.	**Quantitative evidence:** • Lower immunisation rates for children aged one year in Hunters Hill (89.3%), Mosman (90.3%) and Pittwater (90.6%). • Lower immunisation rates for children aged two years in Manly (86.1%) and Mosman (86.1%). • Lower immunisation rates for children aged five years in Mosman (87.4%) and Manly (88.3%). [10]
Potentially Preventable Hospitalisations (PPH) – Lower rate of PPHs in the NSPHN region compared to NSW, increasing in the previous five years.		
Potentially Preventable Hospitalisations (PPH) 	Rate of PPHs lower for the NSPHN region compared to NSW, increasing in the previous five years, with a higher rate in Northern Beaches LGA. NSPHN is in the process of finalising a data sharing agreement with the Local Health District to access relevant data to further inform service planning, including generating general practice-level informative data and to identify NSPHN's impact on local hospital avoidance rates.	**Quantitative evidence:** • In 2015-16, rate of PPHs for NSPHN 1,647 per 100,000 (95% CI: 1,621-1,672) compared to 2,126 per 100,000 (95% CI: 2,116-2,136) for NSW. Cellulitis, urinary tract infections and dental conditions accounted for 36.3% of potentially preventable hospitalisations.[11] • The rate of PPH increased from 1,544 per 100,000 (95% CI: 1,518-1,570) in 2009-10 to 1,647 per 100,000 in 2015-16. Changes in the rate of PPH is driven by a range of factors including prevalence of disease, coding standards for hospitalisations and access to primary healthcare. Whilst, increase in hospitalisations between 2013-14 and 2014-15 were partly driven by changes in coding standards for vaccine preventable hospitalisations, further investigation is needed to ascertain the underlying reasons for increases in PPH within NSPHN. • Whilst lower than NSW, Northern Beaches LGA had a higher rate of PPH (1,760 per 100,000; 95% CI: 1,744-1,777) compared to other LGAs in NSPHN; remaining at the same level for the previous ten years.

[10] Public Health Information Development Unit (PHIDU) 2017, *Social Health Atlas of Australia: Data by Primary Health Network (PHN), June 2017 release*. PHIDU, Adelaide, viewed September 2017
[11] Centre for Epidemiology and Evidence 2017, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed October 2016

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence
Potentially Preventable Hospitalisations (PPH) 	Higher rate of PPH among people in the most socio-economically disadvantaged 20% of the population.	**Quantitative evidence:** • In the most disadvantaged 20%, the PPH rate for NSW 2,601 per 100,000 (95% CI: 2,576-2,626) compared to 1,630 per 100,000 (95% CI: 1,610-1,650) for people in the least disadvantaged 20% (2015-16). Potential need within Ryde, Warringah and Hornsby LGAs which have pockets of disadvantage. [12]
Vulnerable population groups		
Underreporting Aboriginal and Torres Strait Islander status	Underreporting of Aboriginal status by service providers leading to lack of Aboriginal-specific programs. Widely reported throughout the region that health professionals do not ask patients regarding their Aboriginal identity. There are significant regional issues relating to a hidden population and the Stolen Generation, with cohorts of the population who do not always self-identify their ethnicity – which impacts on ability to access available health care provision. The **Integrated Team Care** NSPHN commissioned service supports the local Indigenous population who have chronic disease and works closely with general practice to enhance culturally appropriate services to improve patient outcomes, and also to support identification of Aboriginal status.	**Qualitative evidence:** Stakeholder consultation identified under reporting of Aboriginal status by health care professionals in the region, highlighting the question is not always asked, and when it is, there is a need to ask respectively and in a culturally appropriate manner. Underreporting of Aboriginal status leads to lack of identified health and community services for Aboriginal residents in the region, with one Aboriginal-specific GP clinic in the region operating one day per week.

[12] Centre for Epidemiology and Evidence 2016, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed October 2016

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence
Cancer screening rates for Aboriginal and Torres Strait Islander women	Low breast screening rates among Aboriginal women in NSPHN region.	**Quantitative evidence:** • Breast cancer screening rates among Aboriginal women in the NSPHN region 27.7 per 100 (95%CI: 21.6-33.8) compared to 52.5 per 100 (52.2-52.8) for all women aged 50-69 years (2014-15).[13]
Aboriginal and Torres Strait Islander lifestyle behaviours 	High smoking prevalence.	**Quantitative evidence:** • According to the National Drug Strategy Household Survey (NDSHS) 2016, 27.4% of Indigenous people in Australia smoked daily compared to 11.9% among non-Indigenous Australians.[14] • Similar to the non-Indigenous population, there has been a decrease in the daily smoking rates in the Indigenous population from 34.8% in 2010 to 27.4% in 2016[15]. However, despite the decrease, compared to the non-Indigenous population, a significantly higher proportion of Indigenous people smoke daily, emphasising the need for targeted smoking cessation interventions in the Indigenous population.
Chronic disease in Aboriginal and Torres Strait Islander population	High prevalence of chronic disease.	**Quantitative evidence:** • Nationally, chronic diseases contribute to 64% of the disease burden among Aboriginal people and 70% of the gap in health outcomes between Aboriginal and non-Aboriginal people. [16] • Nationally, cardiovascular diseases and cancer contribute to 21.9% of the total disease burden among Aboriginal people. [17]

[13] Cancer Institute NSW 2016, *Reporting for Better Cancer Outcomes Performance Report 2016: Northern Sydney LHD*, Cancer Institute NSW, Sydney.
[14] Australian Institute of Health and Welfare (AIHW) 2017, *National Drug Strategy Household Survey 2016: Detailed findings*, cat no. PHE 184, AIHW, Canberra.
[15] Australian Institute of Health and Welfare (AIHW) 2017, *National Drug Strategy Household Survey 2016: Detailed findings*, cat no. PHE 184, AIHW, Canberra.
[16] Australian Institute of Health and Welfare (AIHW) 2016, *Australian Burden of Disease Study: Impact and causes of illness and death in Aboriginal and Torres Strait Islander people 2011*, AIHW, Canberra.
[17] Australian Institute of Health and Welfare (AIHW) 2016, *Australian Burden of Disease Study: Impact and causes of illness and death in Aboriginal and Torres Strait Islander people 2011*, AIHW, Canberra.

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence
CALD population 	There is a growing CALD population with diverse health needs and specific barriers to accessing services within the NSPHN region. There is a subsequent need to develop culturally appropriate interventions to cater for the diverse health needs of a range of CALD groups within the region. Further analysis is required to further understand the complexities of the multiple CALD groups within the region, who have differing health needs and experiences of accessing and utilising primary care.	**Quantitative evidence:** • According to the 2016 Census, NSPHN has a larger proportion of people from culturally and linguistically diverse backgrounds (25.7%) compared to NSW (21.1%), increasing from 22.1% in 2011. • Chinese, Indian and South Korean are the largest CALD groups within the NSPHN. Similar to the national trend, the proportion of people born in China and India has increased compared to the 2011 Census. **Qualitative evidence:** • Complex health needs of CALD groups can be attributed to the distinct needs of each CALD group [18] with variation in needs between successive generations of migrants adding further to the complexity in care provision.[19] • There are specific barriers to accessing health services which subsequently impact the health status of CALD groups. Please refer to page 19 for further detail. • Further investigation needed to understand health issues prevalent within different / specific CALD groups to identify issues that can be managed within primary care in a culturally appropriate manner.
CALD population 	There are specific geographies within the NSPHN region that have a higher proportion of CALD groups, which may benefit from further targeted interventions.	**Quantitative evidence:** • Within NSPHN, Ryde has the highest proportion of its population from a CALD background (42%), increasing from 36.5% in 2011, with 47.7% of the total population in Ryde speaking a language other than English. Mandarin, Cantonese and Korean are the most commonly spoken languages.

[18] The Royal Australian College of General Practitioners (RACGP) 2011, *The RACGP Curriculum for Australian General Practice 2011- Multicultural health*, RACGP, Victoria.
[19] NSW Ministry of Health 2012, *Policy and Implementation Plan for Healthy Culturally Diverse Communities 2012-16*, NSW Ministry of Health, Canberra.

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence
Cancer screening in CALD population	Low breast cancer screening rates among CALD women. Lower rates among CALD women in Mosman and Pittwater LGAs.	**Quantitative evidence:** • In NSPHN, breast cancer screening rates among CALD women: 50.9 per 100 (95% CI: 50.3-51.5) compared to 52.5 per 100 (52.2-52.8) for all women aged 50-69 years (2014-15). • Screening rates among CALD women in Pittwater (38.5%) and Mosman (37.4%) is lower compared to NSPHN (50.9%) and NSW (46.1%).[20]
At risk and hard to reach CALD populations	Higher rates of domestic violence reported in families from CALD backgrounds. Further investigation needed to determine which CALD groups are most likely to be impacted, with a need to deliver culturally appropriate services to the relevant CALD populations.	**Qualitative evidence:** Consultations with service providers highlighted domestic violence in families from CALD backgrounds, not specific to new migrants and humanitarian entrants. This issue is exacerbated by social isolation, poverty, poor awareness of services and limited health literacy.
Refugee population	Refugee population within the region with significant and complex health issues.	**Qualitative evidence:** Northern Sydney currently has a Tibetan refugee population, with the number of Syrian humanitarian entrants expected to increase, however, further work required to understand true population number and health needs.

[20] Cancer Institute NSW 2016, *Reporting for Better Cancer Outcomes Performance Report 2016: Northern Sydney LHD*, Cancer Institute NSW, Sydney.

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence
Socio-economic disadvantage 	Pockets of socio-economic disadvantage.	**Quantitative evidence:** • Pockets of disadvantage within the region, concentrated in Warringah, Ryde and Hornsby LGAs. [21] • Higher proportion of low income families in Ryde (18.3%), Willoughby (14.2%) and Hornsby (13.9%) LGAs compared to NSPHN (12.6%). [22]
Smoking: socio-economic disadvantage 	Higher prevalence of smoking among people in the most disadvantaged quintile.	**Quantitative evidence:** • Nationally, whilst there has been a decrease in the proportion of people smoking daily in the most disadvantaged quintile from 22.4% in 2010 to 17.7% in 2016, the proportion remains significantly higher compared to those in the least disadvantaged quintile (6.5%), warranting a need for targeted interventions.[23]
Life expectancy 	Lower life expectancy among people in the most disadvantaged quintile.	**Quantitative evidence:** • For NSW, people in the most disadvantaged quintile have a life expectancy (81.7 years) 3.7 years lower compared to those in the least disadvantaged quintile (85.4 years) [24] (2015).

[21] Australian Bureau of Statistics (ABS) 2013, *Socio-economic indexes for areas (SEIFA)*, cat 2033.0.55.001, viewed October 2016
[22] Census of Population and Housing 2016.
[23] Australian Institute of Health and Welfare (AIHW) 2017, *National Drug Strategy Household Survey 2016: Detailed findings*, cat no. PHE 184, AIHW, Canberra
[24] Centre for Epidemiology and Evidence 2017, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed September 2017

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence
LGBTI population 	NSPHN LGBTI population with specific lifestyle behaviours and health issues.	**Quantitative evidence:** • An estimated 22,900 LGBTI people (2-3% of the total population) live within the NSPHN region.[25]
LGBTI lifestyle behaviours 	High smoking prevalence among LGBTI population.	**Quantitative evidence:** • Nationally, whilst there has been a decrease in daily smoking rates among homosexual/bisexual Australians from 27.7% in 2010 to 18.7% in 2016; there continues to be a higher prevalence among homosexual/bisexual Australians compared to heterosexual Australians (12.1%)[26]. Smoking prevalence escalates to: ○ 44% among transgender men ○ 35% among transgender women[27] ○ 47.7% among lesbian, bisexual and queer women aged 16-24 years[28]

[25] Aids Council of NSW (ACON), Estimating the prevalence and distribution of LGBTI adults in NSW, ACON, Sydney.
[26] Australian Institute of Health and Welfare (AIHW) 2017, *National Drug Strategy Household Survey 2016: Detailed findings*, cat no. PHE 184, AIHW, Canberra
[27] Berger I, Mooney-Somers, J 2015, *Smoking cessation programs for LGBTI people: A systematic review of content and effect*, Centre for values, ethics and the lay in Medicine, University of Sydney, Sydney.
[28] Mooney-Somers, J, Deacon, RM, Richters, J & Parkhill, N 2015, *Women in contact with the gay and lesbian community in Sydney: Report of the Sydney Women and Sexual Health (SWASH)Survey 2006, 2008, 2010, 2012, 2014,* ACON & VELiM, University of Sydney, Sydney.

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence
LGBTI sexual health 	Higher risk of HIV and Hepatitis C due to high risk sexual practices as well as drug usage patterns.[29]	**Quantitative evidence:** • Nationally, gay men had the highest prevalence of HIV (18%)[30], with 82% (259) of newly diagnosed HIV infection in NSW among men who have sex with men. [31] • Despite the high rate of newly diagnosed infections, HIV education and prevention initiatives by Aids Council of NSW (ACON) have contributed to greater knowledge about HIV testing and awareness among gay and homosexual men.[32] • Expanded PrEP Implementation in Communities in NSW (EPIC-NSW) trial is available in the region through Clinic 16 providing access to Pre-Exposure Prophylaxis (PrEP) for high-risk individuals to reduce the risk of HIV transmission.[33]
LGBTI sexual health	Screening behaviours poorer among homosexual women.	**Quantitative evidence:** • 20% of 1,100 women surveyed through Sydney Women and Sexual Health (SWASH) study never had a pap smear and 40% never underwent STI screening despite being sexually active.[34]

[29] De Wit, J, Mao, L, Adam, P, Treloar C 2014, *HIV/AIDS, hepatitis, and sexually transmissible infections in Australia: Annual report of trends in behaviour 2014*, Centre for Social Research in Health, UNSW, Sydney.
[30] The Kirby Institute 2016, *HIV, viral hepatitis and sexually transmissible infections in Australia- Annual Surveillance Report 2016*, The Kirby Institute, UNSW, Sydney.
[31] NSW Government: Department of Health 2017, *NSW HIV Strategy 2016-2020: Quarter 4 & Annual 2016 Data Report*, Department of Health
[32] ACON 2015, Annual Report 2014/15, ACON, Sydney.
[33] HIV/AIDS and Related Programs (HARP) Unit Northern Sydney LHD (NSLHD) Clinic 16 2016, *Expanded PrEP Implementation in Communities in NSW (EPIC-NSW),* NSLHD, Sydney.
[34] Mooney-Somers, J, Deacon, RM, Richters, J, Parkhill, N (2015) *Women in contact with the gay and lesbian community in Sydney: Report of the Sydney Women and Sexual Health (SWASH)Survey 2006, 2008, 2010, 2012, 2014.* Sydney: ACON & VELiM, University of Sydney

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence
Homelessness	A population in the NSPHN region homeless or at risk of being homeless, with significant and complex health issues.	**Quantitative evidence:** The 2011 Census estimated 1,570 people to be homeless in the NSPHN region. [35] Northern Sydney District Homeless Project[36] snapshot of contacts made to organisations in the region seeking a service found: • 56.2% of clients recorded as homeless compared to 41.2% being at risk. • Single men and women most likely to contact services, followed by families with children. Majority of 'families with children' consisted of single mothers. • 3.3% of clients identified as Aboriginal and 17.2% as CALD.
Homelessness	Access to secure and affordable housing.	**Quantitative evidence:** • A snapshot of homelessness in the region [37] identified the most common presenting issue as financial stress (54%), with mental health (38%) and domestic violence (38%) also featuring predominately. • 33.6% of low-income families experience financial stress from mortgage or rent (NSW: 32.9%) (2011).[38]

[35] Australian Bureau of Statistics (ABS) 2013, *Census of population and housing: estimating homelessness, 2011*, cat no 2049, viewed October 2016
[36] Northern Sydney District Homelessness Project 2016
[37] Northern Sydney District Homelessness Project 2016
[38] Public Health Information Development Unit (PHIDU) 2016. *Social Health Atlas of Australia: Data by Primary Health Network (PHN), May 2016 Release 2*. PHIDU, Adelaide, viewed October 2016.

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence
Health of older people 	Higher rate of fall-related injuries within NSPHN region compared to NSW, increasing over the previous five years with a higher rate among females compared to males.	**Quantitative evidence:** • Whilst the prevalence of falls among people aged 65 years and over within NSPHN (22.1%; 95% CI: 14.9-29.3) is comparable to NSW (22.7%, 95% CI: 20.4-25), the rate of falls-related injury hospitalisations (3,501 per 100,000; 95% CI: 3,408-3,596) is higher in NSPHN compared to NSW (2,995 per 100,000; 95%CI: 2,965-3,026). Disaggregating the rates further by gender, rates are higher for both NSPHN males and females compared to NSW males and females respectively. • The rate of hospitalisations among NSPHN females (3,903 per 100,000; 95% CI: 3,772-4,037) is higher compared to NSPHN males (2,950 per 100,000; 95% CI: 2,819-3,085), indicating a greater burden among females (2015-16). • Falls related injury hospitalisations for people aged 65 years and over within NSPHN has increased from 2,877 per 100,000 (95% CI: 2,788-2,969) in 2009-10 to 3,501 per 100,000 (95% CI: 3,408-3,596) in 2015-16.[39]

[39] Centre for Epidemiology and Evidence 2017, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed October 2017

Section 2: Core Needs Assessment - Service Needs Analysis

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence
General Population Health – summary NSPHN's Needs Assessment update highlights efforts required to improve access to health services for Aboriginal people in the region, with the latest quantitative and qualitative data highlighting significant underreporting of Aboriginal status across the region and a low proportion of Aboriginal people receiving health checks. The update also identifies a lower proportion of bulk-billing GPs in the region, highlighting a potential financial barrier to accessing services for socio-economically disadvantaged groups and a significant growth in local CALD population requiring aged care services, who also face specific barriers to accessing services. NSPHN's previous Needs Assessments highlighted a difficulty in accessing services for individuals with chronic and complex illness, with a lack of Aboriginal and CALD specific health services in the region. Analysis also found a lack of high care services to keep people healthier at home. The following update utilises the latest quantitative and qualitative data to identify barriers to access, with a focus on vulnerable and hard to reach populations highlighted within previous NSPHN Needs Assessments.		
Socio-economic disadvantage Access – availability 	Financial barrier to accessing primary health services due to low number of bulk-billing GPs.	**Quantitative evidence:** • Lower proportion of bulk-billed GP attendances in NSPHN region – 76.4% of GP attendances bulk-billed within the NSPHN region compared to 85.1% nationally (2015-16). North Sydney- Mosman SA3 has lower proportion of bulk-billed GP attendances (59.5%) compared to NSPHN and Australia.[40] Lower rates of bulk billing medical services and practitioners charging higher gap fees providing a financial barrier to access.

[40] Australian Institute of Health and Welfare (AIHW) 2016, *Healthy communities: Medicare Benefits statistics 2010-11 to 2015-16*., AIHW, Canberra.

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence
Aboriginal and Torres Strait Islander People Access – availability 	Low proportion of the Aboriginal population receiving MBS 715 health check. Improving access and navigation of services for Aboriginal people continues to be an area of focus for NSPHN, with significant efforts occurring in the past two years to address this.	**Quantitative evidence:** • In 2015-16, GP usage rate for the Aboriginal population in the NSPHN region 5% compared to 23% for NSW and 25.7% nationally. • There has been an increase in proportion of Indigenous people accessing GPs for their annual health checks from 1.2% in 2012-13 to 5% in 2015-16, however the proportion is still lower compared to NSW and Australia. [41]
Aboriginal and Torres Strait Islander People Access - availability	Limited access to culturally appropriate services.	**Qualitative evidence:** Stakeholder consultation highlighted the need to develop a more culturally aware and appropriate primary care work force to promote access, highlighting the lack of access to cultural competence training and availability of culturally-aware information for staff. Consultations also highlighted need within mental health and AOD services.
Aboriginal and Torres Strait Islander People Access - availability	Need for flexibility in how and where sessions are delivered.	**Qualitative evidence:** Lack of flexibility in provision of health services to Aboriginal population in NSPHN region. Lack of services open to a client's family and a need to provide outreach services within the Aboriginal community. Consultations also highlighted need within mental health and AOD services.
Aboriginal and Torres Strait Islander People Access - availability	Need for holistic focus within health care, current focus on illness rather than wellness.	**Qualitative evidence:** Stakeholder consultation highlighted the need for a holistic approach in primary care services, focusing on the social, emotional, and cultural well-being of the whole community rather than solely on illness. Consultations also highlighted need within mental health and AOD services.

[41] Australian Government: Department of Health 2017, *MBS data by PHN and MBS Item for 2012-13 to 2015-16*, Department of Health, Canberra, viewed September 2017

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence
CALD Access - availability	Limited providers with local CALD language skills.	**Qualitative evidence:** Stakeholder consultation identified the need for better access to interpreters for CALD clients in the NSPHN region. Consultation highlighted health service providers with relevant ethnic background and language-speaking are limited, with a need for sustainable key bilingual GPs and psychologists in the region.
CALD Access - availability	Financial barriers to access.	**Qualitative evidence:** Stakeholder consultation highlighted potential financial barriers for CALD groups accessing primary health services due to visa status.
CALD Access - availability	Need for ongoing and culturally appropriate health promotion.	**Qualitative evidence:** Stakeholder consultation highlighted a need for ongoing and culturally appropriate health promotion for sexual health, nutrition and oral health, highlighting a need to focus on women and older CALD groups.
CALD Access – availability 	A growing CALD population requiring aged care services - language and cultural barriers to accessing aged care services.	**Quantitative evidence:** • 21.7% (2,303) of aged care recipients aged 65 years and over are from CALD backgrounds within NSPHN compared to 19.5% in Australia.[42] The Department of Social Services (2015) highlight language barriers and cultural resistance to aged care services often restrict older people from CALD backgrounds to access aged care services thereby leading to 'hidden carers'. [43]

[42] Australian Institute of Health and Welfare (AIHW) 2017, *GEN data: people accessing aged care*, AIHW, Canberra, viewed October 2017.
[43] Department of Social Services 2015, *National Ageing and Aged Care Strategy for people from culturally and linguistically diverse (CALD) backgrounds*, Department of Social Services, Canberra.

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence
LGBTI	Need for collaboration across different domains of health promotion to ensure inclusivity of the LGBTI population.	**Qualitative evidence:** ACON (2013) highlights a number of service needs for the LGBTI population: • Training of the health workforce to ensure inclusivity • Early intervention • Broader health promotion strategies that include LGBTI people[44]
LGBTI Access - availability	Diverse needs of the LGBTI population under-represented in aged care planning	**Qualitative evidence:** The National Lesbian, Gay, Bisexual, Transgender and Intersex (LGBTI) Ageing and Aged Care Strategy[45], released by the Australian Government in December 2012, is designed to ensure the aged care sector can deliver the appropriate care and inform the way the Government responds to the needs of older LGBTI people by: • Recognising the rights and needs of older LGBTI people. • Empowering older LGBTI people to access high-quality services. • Encouraging LGBTI individuals and communities to be involved in the development of aged care services.
Homelessness Access - availability	Need to increase availability of services focusing on early intervention to prevent people 'at risk' becoming homeless.	**Qualitative feedback:** Stakeholder consultation highlighted the need to increase the availability of early intervention services, including counselling and case management, to stop people 'at risk' becoming homeless.

[44] Aids Council of NSW (ACON) 2013, *Submission to: NSW Mental Health Commission Towards a draft Strategic Plan for Mental Health in NSW- the Life Course and the Journeys*, ACON.
[45] Department of Health and Ageing (DOHA) 2012, National Lesbian, Gay, Bisexual, Transgender and Intersex (LGBTI) Ageing and Aged Care Strategy, DOHA, Canberra.

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence
Homelessness Access - availability	Need for a continuum of care and flexibility in how and where services are provided.	**Qualitative feedback:** Need for a continuum of care from crisis to affordable housing, keeping people independent and involved in the community when housed, with coordination between housing, police, youth justice, health and councils. Need for flexibility in how and where services are provided to build relationship with the client for longevity to prevent homelessness.
Health of older people Ageing population	Reflected by General Practice data (Pat Cat), an ageing population within the NSPHN region will see an increase in co-morbidities and dementia, increasing the need for aged care services.	**Quantitative evidence:** • Nationally, 8.8% of people aged 65+ years at risk of developing dementia.[46] • Ryde (75%), North Sydney (64.3%) and Lane Cove (63.5%) LGAs have higher rate of increase in the 65+ years population compared to NSPHN.
Health of older people Access to primary care	Lower rate of formal annual health assessments performed by GPs for people aged 75 years and over in the NSPHN region. Formal health checks exclude people aged 75 years and over not eligible to receive a health check i.e. those living in a Residential Aged Care Facility.	**Quantitative evidence:** • Rate of health assessments in NSPHN: 18,428 per 100,000 compared to 20,867 per 100,000 for NSW and 19,796 per 100,000 for Australia[47] (2009-10). • Pat Cat data estimates that approximately 75% of people aged 75+years did not receive an annual health assessment by a GP. Further analysis needed to assess regional variation.

[46] Australian Institute of Health and Welfare (AIHW) 2016, *Australia's Health 2016*, cat no. AUS 199, AIHW, Canberra.
[47] Public Health Information Development Unit (PHIDU) 2016. *Social Health Atlas of Australia: Data by Primary Health Network (PHN), May 2016 Release 2*. PHIDU, Adelaide, viewed October 2016.

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence
Aged Care services Access – availability 	Undersupply of Level 1 and 2 Home Care Packages with a large waiting list for people accessing Level 3 and 4 Home care packages. The process to accessing Home Care Packages has now been centralised nationally. The ageing NSPHN population will increase the demand for aged care services across the region. This will have significant strain and impact upon the aged care, primary care, and hospital sectors, with an increase in preventable hospitalisations, residential aged care admissions and carer stress.	**Quantitative evidence** • Previous needs assessment highlighted an undersupply of Level 3 and 4 Home Care packages within NSPHN compared to NSW. There has been an increase in the number of Level 3 and 4 Home Care Packages between 2015-16 resulting in a higher rate of these packages per 1,000 people aged 65+years within NSPHN (8.3 per 1,000) compared to NSW (6.5 per 1,000). However, despite the increase, according to the Home Care Packages Program Data Report (2017), NSPHN has the highest number of people awaiting allocation to a Level 3 and 4 Home Care Package (1,398) in Australia [48] potentially impacting older people with high or complex level care needs requiring immediate assistance. • Whilst there has been an increase in the number of Home Care Packages, the rate of Level 1 and 2 Home Care packages per 1,000 people aged 65+ years is lower in NSPHN (12.8 per 1,000) compared to NSW (14.6 per 1,000). Level 1 and 2 Home Care Packages are aimed at supporting people with low level care needs to avoid premature admissions into residential care.[49] • Further analysis required to ascertain the varying care and service needs of the older population and its subsequent impact on the demand and utilisation of Home Care packages and Commonwealth Home Support Services (aimed at providing care for people with lower level care needs).

[48] Australian Government: Department of Health 2017, *Home Care Packages Program Data Report 27 February-30 June 2017*, Department of Health, Canberra.
[49] Australian Institute of Health and Welfare (AIHW) 2017, *GEN data: services and places in aged care*, AIHW, Canberra, viewed October 2017.

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence
After hours Access – availability 	High availability of after hours providers, with an increase in the number of people accessing after hours services.	**Quantitative evidence:** • High availability of after hours providers- 120 per 100,000 for NSPHN compared to 100 per 100,000 for NSW and 104 per 100,000 for Australia. • Between 2012-13 and 2015-16, there was an increase of 69.7% in the number of patients accessing GPs after hours, higher than NSW (27%) and Australia (33.7%)[50].

[50] Department of Health: Primary Health Networks (PHN) 2016, *MBS data by PHN and MBS Reporting Group, for 2012-13 to 2015-16*, Department of Health, Canberra, viewed September 2016

Northern Sydney Primary Health Network - Updated Mental Health Needs Assessment 2017 – 2018

Section 1: Mental Health Needs Assessment – Health Needs Analysis; incorporating latest quantitative and qualitative health data

Section 2: Mental Health Needs Assessment - Service Needs Analysis; incorporates heath service utilisation data

Key: Denotes inclusion of new data

Section 1: Mental Health Needs Assessment - Health Needs Analysis

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence

Mental Health – summary

NSPHN's Mental Health Needs Assessments have focused on the mental health needs of vulnerable and hard to reach population groups and relevant data is updated where possible and outlines that mental health illness and the impact of mental health is significant in all communities within the NSPHN region, particularly in youth, CALD, aged populations and the local Aboriginal and Torres Strait Islander community.

This latest Needs Assessment identifies significant barriers to accessing services for young people and parents of young people with mental health issues in the region. Barriers to access include, lack of awareness of local health services and uncertainty on where to seek help for consumers, parents, schools and clinicians, with additional barriers for young people from CALD backgrounds. The latest update also highlights cohorts of young people in the region with mental health issues who are impacted by the wider determinants of health.

NSPHN has undertaken significant activities to address Mental Health illness within the region with the commissioning of multiple primary care based services designed on the Stepped Care approach to managing Mental Health.

Outcomes of the health needs analysis

In addition, NSPHN has developed a ***Commissioning Evaluation Framework***, which is based on the Quadruple Aim, as a method for evaluating the impact of commissioned services, which will go some way to address elements of needs as identified in this needs assessment and will in the future be an additional source of data to inform future Needs Assessment and planning.

The following update for mental health builds upon the findings of the previous needs assessments and utilises the latest quantitative and qualitative data to identify mental health needs within young people and Aboriginal people in the region.

Identified Need	Key Issue	Description of Evidence
Prevalence of mental illness across the spectrum of severity. 	Stratification of the population into different 'needs groups', ranging from whole of population needs for mental health promotion and prevention, through to those with severe, persistent and complex conditions is important in understanding the different service responsibilities within the **stepped care approach**[51]**.**	**Quantitative evidence:** • Applying national estimates[52] to the NSPHN population, an estimated 39.9% of the total population have a mental health need pertaining to current or prior illness. This translates to approximately: ○ 23.1% (211,461) of NSPHN population with previous illness, risk of relapse or at early stage of developing illness. ○ 9.1% (83,303) with mild mental illness. ○ 4.6% (42,109) with moderately severe mental illness. ○ 3.1% (28,378) with severe mental illness

[51] Australian Government- Department of Health n.d, PHN Primary Mental Health Care Flexible Funding Pool Implementation Guidance- Stepped Care; Australian Institute of Health and Welfare (AIHW) 2016 review
[52] Australian Government- Department of Health n.d, PHN Primary Mental Health Care Flexible Funding Pool Implementation Guidance- Stepped Care; Australian Institute of Health and Welfare (AIHW) 2016 review

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of evidence
Prevalence of mental illness 	Depression and anxiety account for the largest proportion of diagnosed mental health conditions.	**Quantitative evidence:** • From the Australian Health Survey (2011-12)[53], 12.1 per 100 persons aged 15+ years reported long-term mental and behavioural problems. • Anxiety and depression are one of the most commonly managed mental health conditions in general practice, accounting for 48.7% of mental health related encounters in general practice [54], consultation with local GPs estimates that the prevalence is higher. • Pat Cat data from 124 NSPHN GP practices estimates the prevalence of mental health conditions at 9.1 per 100, with depression and anxiety accounting for the largest proportion of mental health conditions.

[53] Public Health Information Development Unit (PHIDU) 2016. *Social Health Atlas of Australia: Data by Primary Health Network (PHN), May 2016 Release 2*. PHIDU, Adelaide, viewed October 2016
[54] Australian Institute of Health and Welfare (AIHW) 2017, *Mental health services in Australia- Mental health-related care in general practice*, AIHW, Canberra

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence
Suicide prevention 	Suicide death rates have remained at the same level for the previous ten years.	**Quantitative evidence:** • 65 deaths due to suicide in the NSPHN region in 2015 averaging one death from suicide every six days (2015). • Suicide death rate within the NSPHN region 6.8 per 100,000 (95% CI: 5.2-8.7), lower than the NSW rate of 10.6 per 100,000 (95% CI: 9.9-11.3). [55] • Suicide death rates have remained at the same level in NSPHN in the past 10 years- 6.6 per 100,000 in 2004 (95% CI:5-8.6) to 6.8 per 100,000 (95% CI: 5.2-8.7) in 2015. • Suicide rates are influenced by coronial processes, methodologies in identifying and determining cases of 'intentional self-harm' and procedures for coding deaths data. Further analysis required to understand the community prevalence of suicide. • 7.3 per 100 (95% CI: 6.8-7.8) people aged 18+ years in the NSPHN region reported high or very high psychological distress compared to 11 per 100 for NSW (95% CI: 10.8-11.2). [56]
Suicide prevention 	High rate of death by suicide amongst males.	**Quantitative evidence:** • Rate of deaths from suicide among NSW males 16.3 per 100,000 (95% CI: 15-17.6) compared to 5.1 per 100,000 (95% CI: 4.4-5.9) for NSW females (2015). Males aged 45-54 years had the highest rate and number of suicides in NSW: 28.6 per 100,000 (95% CI: 24.1-33.8) compared to 16.3 per 100,0000 among males of all ages.[57]

[55] Centre for Epidemiology and Evidence 2017, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed 23rd August 2017
[56] Public Health Information Development Unit (PHIDU) 2017. *Social Health Atlas of Australia: Data by Primary Health Network (PHN), June 2017 release*. PHIDU, Adelaide, viewed 23rd August 2017.
[57] Centre for Epidemiology and Evidence 2017, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed 23rd August 2017

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence
Youth Mental Health Focus of this Mental Health Needs Assessment Update		
Prevalence 	Higher prevalence of mental illness among males and adolescents.	**Quantitative evidence:** • According to the Second Australian Child and Adolescent Survey of Mental Health and Wellbeing, nationally, approximately 13.9% of children aged 4-17 years were reported as having a mental illness in the previous 12 months. The survey was based on responses by parents or carers for children aged 4-17 years with inclusion of self-reported responses for children aged 11 years and over when available. Applying the national estimates to the NSPHN population, approximately 21,000 children were estimated to have a mental illness in the previous 12 months. • Higher prevalence (16.3%) among males compared to females (11.5%). • 14.4% of children aged 12-17 years report having a mental illness in the past 12 months compared to 13.6% of children 4-11 years. [58]
Prevalence based on social-determinants of health 	Higher prevalence of mental illness among children living in step, blended and single parent families.	**Quantitative evidence:** • 18.3% of children in step families, 20.2% in blended families and 22.4% in single parent families report having a mental illness in the past 12 months compared to 10.4% of children in original families.[59] Potential need within Northern Beaches LGA which has a higher proportion of step, blended and single parent families compared to NSPHN.[60]

[58] Lawrence D et al 2015, The Mental Health of Children and Adolescents- Report on the second Australian Child and Adolescent Survey of Mental Health and Wellbeing, Department of Health, Canberra.
[59] Lawrence D et al 2015, The Mental Health of Children and Adolescents- Report on the second Australian Child and Adolescent Survey of Mental Health and Wellbeing, Department of Health, Canberra.
[60] ABS 2017, Census of Population and Housing: 2016

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence
Prevalence based on social-determinants of health 	Higher prevalence of mental illness among children living in socio-economically disadvantaged families.	**Quantitative evidence:** • 20.7% of children living in families in the most disadvantaged quintile report having a mental illness in the past 12 months, higher compared to children living in families in the least disadvantaged quintile (10.9%)[61]. Potential need in Ryde LGA which is ranked as the most socio-economically disadvantaged LGA within NSPHN[62].
Self-harm in young people 	High rate of intentional self-harm in those aged 15-24 years, with a higher rate of hospitalisations in females and socio-economically disadvantaged youth and higher rate of deaths in males.	**Quantitative evidence:** • Higher rate of hospitalisations due to intentional self-harm among those aged 15-24 years within NSPHN region - 255 per 100,000 (95% CI: 226-286) compared to 90 per 100,000 (95% CI: 84-97) for all ages (2015-16). • Higher rate of hospitalisations for females within NSPHN - 400 per 100,000 (95% CI: 348-458) compared to 116 per 100,000 (95% CI: 90-148) for males (2015-16). [63] • Higher rate of hospitalisations among people aged 15-24 years in the most disadvantaged quintile (372 per 100,000; 95% CI: 346-400) compared to those in the least disadvantaged quintile (243 per 100,000; 95% CI: 221-266) in NSW. [64] • For NSW, age-specific death rate for intentional self-harm in those aged 15-24 years is 11 per 100,000. Rate among males – 17.5 per 100,000 compared to 4.3 per 100,000 for females[65].

[61] Lawrence D et al 2015, The Mental Health of Children and Adolescents- Report on the second Australian Child and Adolescent Survey of Mental Health and Wellbeing, Department of Health, Canberra.
[62] ABS 2016, Census of Population and Housing: Socio-economic Indexes for Areas (SEIFA)
[63] Centre for Epidemiology and Evidence 2017, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed 23rd August 2017.
[64] Centre for Epidemiology and Evidence 2017, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed 7th September 2017.
[65] Australian Bureau of Statistics (ABS) 2017, *Causes of Death, NSW, 2016* cat no. 3303, viewed 6th October 2017.

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence
Aboriginal and Torres Strait Islander Mental Health		
Aboriginal and Torres Strait Islander people	Impacts of the Stolen Generations, poor access to preventative health care and higher rates of social disadvantage impact rates of psychological distress amongst the Aboriginal and Torres Strait Islander community.	**Qualitative evidence:** Stakeholder consultations highlighted that mental health issues related to the stolen generation faced by the Aboriginal population in the NSPHN region. Poor access to preventative health care and higher rates of social disadvantage impact rates of psychological distress amongst the Aboriginal and Torres Strait Islander community.
Aboriginal and Torres Strait Islander people 	Higher rate of hospitalisations for mental health disorders among Aboriginal people compared to non-Aboriginal people.	**Quantitative evidence:** • For NSPHN, higher rate of hospitalisations for mental health disorders among Aboriginal people 2,860 per 100,000 (95% CI: 2,260-3,565) compared to 1,972 per 100,000 (95% CI: 1,944-2,001) for non-Aboriginal people in NSPHN (2015-16). [66]
Suicide in Aboriginal and Torres Strait Islander people 	Higher rates of suicide among Aboriginal people compared to non-Aboriginal people.	**Quantitative evidence:** • Rates among Aboriginal people across NSW – 13.8 per 100,000 (95% CI: 11-17) compared to 9.6 per 100,000 for non- Aboriginal people (95% CI: 9.2-9.9) (2011-15).[67] • 29.4% of Aboriginal population in Australia reported high/very high psychological distress compared to 10.8% of non-Aboriginal people.[68]

[66] Centre for Epidemiology and Evidence 2017, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed 1st September 2017.
[67] Centre for Epidemiology and Evidence 2017, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed 1st September 2017.
[68] Australian Bureau of Statistics (ABS) 2014, *Australian Aboriginal and Torres Strait Islander Health Survey: First Results, 2012-13*, cat no. 4727.0.55.001, viewed 13 September 2015.

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence
Self-harm in young Aboriginal and Torres Strait Islander people 	Higher rate of hospitalisations due to intentional self-harm among Aboriginal people aged 15-24 years compared to non-Aboriginal people with rates increasing over the past four years.	**Quantitative evidence**: • Rates of hospitalisations in NSW for intentional self-harm among 15-24 years old Aboriginal people 753 per 100,000 (95% CI: 676-835) compared to 315 per 100,000 (95%CI: 303-326) for non-Aboriginal people (2015-16). [69] • The rates of intentional self-harm among Aboriginal people aged 15-24 years has increased over the past four years from 455 per 100,000 (95% CI: 393-524) in 2011-12 to 753 per 100,000 (95% CI: 676-835) in 2015-16. This is different to the rates for non-Aboriginal people in NSW which has remained stable during 2011-12 to 2015-16[70].
Vulnerable Population Groups		
Prevalence of mental health illness in CALD population	Complex presentations in CALD groups within the NSPHN region.	**Qualitative evidence:** Stakeholder consultation highlighted the complexities of mental health need and service provision for CALD groups in the NSPHN region. CALD groups presenting for a range of mental health and health need e.g. trauma, migration, career change, physical health, social isolation, separated families.
Suicide prevention in CALD population	Higher risk of suicidal behaviours among humanitarian entrants.	**Qualitative evidence:** Overrepresentations are related to lower service utilisation, greater stigma related to mental health, limited knowledge about available services as well as language and cultural barriers. [71]

[69] Centre for Epidemiology and Evidence 2017, Health Statistics New South Wales, NSW Ministry of Health, Sydney, viewed September 2017.
[70] Centre for Epidemiology and Evidence 2017, Health Statistics New South Wales, NSW Ministry of Health, Sydney, viewed September 2017.
[71] Mental Health in Multicultural Australia (MHiMA) 2014, *Framework for Mental Health in Multicultural Australia- Towards culturally inclusive service delivery*, MHiMA, Queensland.

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence
Self-harm in socio-economic disadvantaged population 	Higher rates of intentional self-harm in socio-economically disadvantaged population.	**Quantitative evidence:** • For NSW, rates of intentional self-harm in the least disadvantaged quintile were 89.2 per 100,000 (95% CI: 84.5-94.2) compared to 158 per 100,000 (95% CI: 152-165) for those in the most disadvantaged quintile (2015-16).[72]
Prevalence of mental illness in LGBTI population	Elevated risk of anxiety, depression, self-harm and suicide compared to non-LGBTI population. This risk is further elevated in LGBTI people from CALD backgrounds. Suicidal ideation higher among young LGBTI people, partly due to higher rates of violence and harassment.[73]	**Quantitative evidence:** Australian studies have found that LGBTI people are: ○ 2.9 times more likely to experience post-traumatic stress disorder ○ 2.4 times more likely to experience social phobia. ○ 1.7 times more likely to experience major depression ○ 4.1 times more likely to attempt suicide. [74]
Homelessness	High prevalence of mental health issues in homeless population.	**Quantitative evidence:** • A snapshot of homelessness in the region identified 38% of contacts seeking a homeless service related to mental health issues[75], with 32.4% of people in NSW accessing specialist homelessness services with a mental health problem.

[72] Centre for Epidemiology and Evidence 2017, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed 1st September 2017.
[73] beyondblue 2010, Clinical practice guidelines: Depression in adolescents and young adults, beyondblue, Melbourne.
[74] Ritter A, Matthew-Simmons F, Carragher N 2012, *Monograph 23: Prevalence of and Interventions for Mental Health and Alcohol and other drug problems amongst the Gay, Lesbian, Bisexual and Transgender Community: A review of the Literature*, Drug Policy Modelling Program Monograph Series, National Drug and Alcohol Research Centre, Sydney
[75] Northern Sydney District Homelessness Project, 2016

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence
Mental health of older people 	Mental health issues among older people in residential care facilities. Nationally, males aged 85+ years have higher rates of suicide compared to other age-groups.	**Quantitative evidence:** • According to the Mental Commission of NSW (2017), approximately 50% of older people living in residential aged care facilities report mild, moderate or severe symptoms of depression.[76]
Prevalence of perinatal depression	20% of Australian mother's experience perinatal depression.	**Quantitative evidence:** • Nationally, young mothers (under 25 years), mothers who smoke and mothers from low-income household are at greater risk of experiencing perinatal depression. [77]
Prevalence of perinatal depression	Stigma associated with perinatal depression.	**Qualitative evidence:** Stakeholder consultation highlighted that stigma attached to perinatal depression for women in the NSPHN region, with women being underdiagnosed and falling through gaps in service provision.
People with intellectual disability	Approximately 3% of Australians are diagnosed with intellectual disability of which 74% are under the age of 65.	**Quantitative evidence:** • Comorbidity with mental disorders especially psychiatric and mood disorders is very common. However, diagnosis of these disorders is often difficult especially among people with speech difficulties. [78] • Nationally, 57% of people with intellectual disability also have psychiatric disability.[79]

[76] Mental Health Commission of NSW 2017, *Living Well in Later Life: The Case for Change*, Mental Health Commission of NSW, Sydney.
[77] Australian Institute of Health and Welfare (AIHW) 2012, *Experience of perinatal depression: data from the 2010 Australian National Infant Feeding Survey*, cat no. PHE 161, AIHW, Canberra.
[78] Simpson J 2012, *Healthier Lives- Fact sheets on health and people with intellectual disability for families, advocates, disability workers and other professionals*, NSW Council for Intellectual Disability.
[79] Australia Institute of Health and Welfare (AIHW) 2008, *Disability in Australia: intellectual disability*, Bulletin 67, AIHW, Canberra.

Section 2: Mental Health Needs Assessment - Service Needs Analysis

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence
Mental Health – summary The latest Mental Health Needs Assessment includes emerging themes from extensive consultation with a range of stakeholders to identify barriers to accessing mental health services in the region for young people and parents of young people with mental health issues. The update also presents results from NSPHN's Integrated Mental Health Atlas, highlighting a lower proportion of mental health services provided by NGOs in the region, coupled with funding insecurity. The Atlas also highlights a limited availability of services for people with moderate to severe mental illness, day services for older adults and information services for children or adolescents. NSPHN's previous Mental Health Needs Assessments focussed on the service needs and barriers to access for vulnerable and hard to reach population groups, highlighting low uptake of mental health services among Aboriginal and CALD people with specific service needs of LGBTI people, people with intellectual disability, women experiencing perinatal depression and people experiencing severe mental illness. The following update builds upon the findings of the previous two needs assessments and incorporates latest quantitative and qualitative data, with a focus on the service needs and access barriers for young people and Aboriginal people within the NSPHN region.		
Access to mental health care 	Lower MBS mental health treatment rate compared to NSW and Australia.	**Quantitative evidence:** • In 2016-17, 8.4% of the NSPHN population saw an MBS funded provider (psychiatrist, GP, allied health) compared to 9.7% for NSW and 9.8% for Australia. • Between 2011-12 to 2016-17, NSPHN's mental health treatment rates increased by 2% compared to 2.5% and 2.8% for NSW and Australia respectively. [80] • Treatment rate dependent on prevalence of mental illness and accessibility of mental health services, both public and private.

[80] Department of Health: Primary Health Networks (PHN) 2017, *MBS Mental Health Data by PHN*, Department of Health, Canberra, viewed November 2017

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence
Mental health hospitalisations	Higher rate of hospitalisations for mental disorders, with rates increasing in the past 10 years and a greater burden among females.	**Quantitative evidence:** • The rate of hospitalisations for mental disorders has increased within NSPHN from 1,587 per 100,000 (95% CI: 1,560-1,615) in 2005-06 to 2,020 per 100,000 (95% CI: 1,991-2,050) in 2015-16; higher compared to NSW (1,801 per 100,000; 95% CI: 1,791-1,810). • Rate of hospitalisations for mental disorders is influenced by prevalence of mental disorders, access to mental health services and coding standards for classification of mental disorders. Further investigation needed to identify the underlying precursors for increasing rates of hospitalisations for mental disorders within NSPHN. • Higher rate among NSPHN females (2,396 per 100,000; 95% CI: 2,351-2,441) compared to NSW females (1,928 per 100,000; 95% CI: 1,914-1,942)[81].
	Anxiety and stress disorders account for largest proportion of mental health overnight hospitalisations. Schizophrenia and delusional disorders account for largest number of bed days.	• Anxiety and stress disorders account for 17.8% (1,323) of all mental health overnight hospitalisations in the NSPHN region. Pittwater and Warringah SA3s have the highest rate of hospitalisations for anxiety and stress disorders. • Schizophrenia and delusional disorders account for 20% (25,384) of all bed days in the NSPHN region. [82]
National Disability Insurance Scheme (NDIS) 	Transition of care for consumers with severe and complex needs under NDIS.	**Qualitative evidence:** Concerns around the time it takes to process an application and receive a package of care under NDIS. Additional concerns around casualisation of the workforce within the NSPHN region and its subsequent impact on care provision associated with instability of funding streams for NGO lead services.[83]

[81] Centre for Epidemiology and Evidence 2017, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed 1st September 2017.
[82] Australian Institute of Health and Welfare (AIHW) 2017, *Healthy Communities: Hospitalisations for mental health conditions and intentional self-harm in 2014-15*, cat no HSE 177, AIHW, Canberra.
[83] The SNPHN Integrated Mental Health Atlas 2017

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence
Integrated Mental Health Atlas: The Integrated Mental Health Atlas provides a standardised, internationally validated tool highlighting gaps in mental health service provision for evidence informed local health planning. The following data highlights patterns of mental health care provision within NSPHN, providing comparisons with other regions and jurisdictions.		
General Mental Health 	Limited alternatives to hospitalisations	**Quantitative evidence:** • Lower proportion of services provided by NGOs (43%) compared to South Western Sydney LHD (54%), coupled with funding insecurity. ***Day care services*** • Lower rates of day care service provision within SNPHN with absence of acute day care services and relatively low levels of non-acute Day care services. • Acute day care services can provide a less restrictive alternative to admission to an acute ward admission for people in crisis. ***Residential care services*** • Absence of acute and sub-acute community Residential Care ***Other services*** • Absence of services associated with both employment and CALD population • Absence of social acute Outpatient Care, and • Relatively low levels of supported accommodation initiatives. ***Further investigation needed to:*** • Determine patterns of care provision of residential rehab, non-acute outpatient care and specialised services for specific groups. • Impact of the private sector on the availability and accessibility of mental health services.

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence
Services in relation to the stepped care continuum 	Limited availability of services for those with a lived experience of chronic and moderate to severe mental illness	• The type of services provided in SNPHN may cover the needs of the two extremes of the lived experience of mental illness- those with mental health problems needing low-level support and those in severe crisis requiring acute care in a hospital setting. However, there is a need for more community-based alternatives for people with chronic and moderate to severe mental illness.
Older people 	Limited day services for older adults	• No provision of day care services for older adults in the SNPHN catchment • Residential services for older adults provided only in a hospital setting. • No Accessibility or Information and Guidance services for older adults identified within the SNPHN region
Children and Young people 	Lack of support services	• No Accessibility or Information and Guidance services for children or adolescents identified within the SNPHN region which could potentially create barriers for vulnerable cohorts in navigating pathways to accessing services.

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence
Youth Mental Health A focus for the Mental Health Needs Assessment Update		
Access to mental health care for children and young people 	Low rate of subsidised mental health treatment in those aged 12-24 years relative to need. Higher service usage in males under 12 years compared to females, but lower for males aged 12-24 years.	**Quantitative evidence:** • Approximately 7.3% of the NSPHN population aged under 25 years accessed MBS subsidised mental health services in 2016-17 compared to 7.9% and 8.1% for NSW and Australia respectively.[84] • Between 2011-12 to 2016-17, the proportion of people aged under 25 years accessing MBS subsidised mental health issues has increased by 2.5% in NSPHN compared to 2.7% and 3% for NSW and Australia respectively. • The ratio of males to females aged under 12 years accessing the services was 1.5:1 compared to 0.7:1 for those aged 12-24 years. [85] • Treatment rate dependent on prevalence of mental illness and accessibility of mental health services, both public and private.
Mental health related hospitalisations in children and young people	Eating and obsessive-compulsive disorders account for the largest proportion of bed days in those aged 0-17 years in the NSPHN region.	**Quantitative evidence:** • Between 2013-14, those aged 0-17 years represented 12.7% (525) of mental health related separations in the NSPHN region. • Eating and obsessive-compulsive disorders account for 38.6% of total bed days (2,845), whilst accounting for only 18.9% of mental health related separations among those aged 0-17 years. • Majority of separations (72.7%) occurred in public hospitals.[86]

[84] Department of Health: Primary Health Networks (PHN) 2017, *MBS Mental Health Data by PHN*, Department of Health, Canberra, viewed November 2017
[85] Department of Health: Primary Health Networks (PHN) 2017, *MBS Mental Health Data by PHN*, Department of Health, Canberra, viewed November 2017
[86] NSLHD Health Services Planning Unit 2016, Hospital Admissions Data 2013-14

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence

Service usage 	Barriers to accessing services	**Quantitative evidence:**
		• The Second Australian Child and Adolescent Survey of Mental Health and Wellbeing highlighted some common barriers among parents or carers of children with mental illness to accessing mental health services:
		  ○ Affordability- 37% of the respondents identified affordability of the service as a barrier preventing them from accessing mental health services. This was a more common issue among parents/carers of children aged 4-11 years compared to parents/carers of those aged 12-17 years, highlighting a need for pathways that facilitate access to services for families who are socio-economically disadvantaged.
		  ○ Uncertainty around 'where to seek help': 39.6% of parent/carers highlighted that they were unsure about where to seek help. [87]

Youth Mental Health services review – in addition to this mental health needs assessment update	**Key themes identified during extensive consultation:** • Disparity in primary health care based youth mental health service provision and access across the region • New Models of Care for a whole of youth mental health system that is integrated should be considered • Awareness of mental health illness and ability to navigate the health system – in young people, consumers, parents, schools, clinicians, and the wider community is a significant need.	**Qualitative evidence:** Thematic analysis from consultations with: • Young people, including headspace Youth Advisory groups • Parents • Schools • NSW Department of Health • Genera Practice • Northern Sydney Local Health District • Family and Community Services • Headspace National Office • Orygen – centre for youth mental health excellence • NSPHN Clinical and Community Councils and Mental Health Advisory Panel

[87] Lawrence D et al 2015, The Mental Health of Children and Adolescents- Report on the second Australian Child and Adolescent Survey of Mental Health and Wellbeing, Department of Health, Canberra.

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence
Stakeholder consultation		
Children and young people Access and awareness 	Lack of awareness of local health services	**Qualitative evidence:** Stakeholder consultation identified young people are often unwilling to share concerns with parents/carers which is compounded by a lack of awareness of local mental health services. These barriers are further exacerbated within CALD and socio-economically disadvantaged groups. Consultation highlighted a need for technology based & cyber-safe access pathways that raise awareness of health services that are available and empower young people to seek help appropriately.
Children and young people Access and awareness 	Additional barriers to access for young people and their families from CALD backgrounds.	**Qualitative evidence:** Stakeholder consultation identified the need for peer or community led services that allow young people and families in need to access culturally appropriate services that best cater their needs.
Children and young people Community response 	Need for a community driven response to improve health literacy and raise awareness about mental health	**Qualitative evidence:** Stakeholder consultation identified the need for educating and empowering parents, GPs, schools, councils, businesses, sports and recreational clubs to identify early signs of mental illness to facilitate early intervention.
Children and young people Self-awareness 	Need for educating and empowering to identify early signs of mental illness	**Qualitative evidence:** Stakeholder consultation identified that often mental illness is diagnosed at later stages resulting in acute psychosis requiring mitigation through pharmaceutical therapy. Consultation identified the need for increasing awareness among young people to allow them to identify early signs/symptoms of mental illness.

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence
Children and young people Prevention and early intervention 	Need to facilitate early intervention	**Qualitative evidence:** Stakeholder consultation highlighted that mental health education in its current form commences in high school. Consultation identified the need for commencing mental health education in concluding years of primary school to provide an opportunity for early intervention and primary prevention.
Children and young people Access - availability	Limited availability of services for children aged under 12 years	**Qualitative evidence:** Stakeholder consultation identified limited availability of services for children aged under 12 years in comparison to those aged 12+ years. Consultation highlighted less recognition of early indicators in those aged under 12 years, with limited availability of mental health services for children with mild to moderate mental health issues.
Children and young people Access	Complex health system a barrier to families accessing mental health services.	**Qualitative evidence:** Stakeholder consultation identified navigating a complex health system as a barrier to families, children and young people accessing services; highlighting services predominantly utilised by proactive and health literate families.
Children and young people Access - availability	Lack of services for young people with moderate to severe mental health issues.	**Qualitative evidence:** Stakeholder consultation identified a service gap for young people whose mental health issues are too severe or complex for Headspace, but level of acuity ineligible for the LHD Child and Youth Mental Health Services (CYMHS).

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence
Children and young people Access - availability	Limited group programs for families.	**Qualitative evidence:** Stakeholder consultation identified a lack of group programs available in the region for families, highlighting the limited availability of family intervention treatments, including integrated child and parent interventions.
Children and young people Access - availability	Lack of outreach services for young people	**Qualitative evidence:** Stakeholder consultation identified the need to provide outreach or in-place, rather than centre-based support to young people. Young people may not engage in a clinical environment, requiring a safe and neutral environment. Consultation highlighted services need to be flexible in where sessions are delivered.
Children and young people Access - availability	Financial barrier to access	**Qualitative evidence:** Stakeholder consultation highlighted financial barriers for socio-economically disadvantaged families and children in the region. Lower rates of bulk billing medical services and practitioners charging higher gap fees providing a financial barrier to access.
Aboriginal and Torres Strait Islander Mental Health		
Aboriginal and Torres Strait Islander People Access – availability 	Low uptake of primary care services.	**Quantitative evidence:** • Between 2016-17, 1.8% of ATAPS referrals were made for Aboriginal people. • 1.5% of clients accessing NSPHN commissioned mental health services were Aboriginal.

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence
Aboriginal and Torres Strait Islander People Access-availability 	Limited access to culturally appropriate services.	**Qualitative evidence:** Stakeholder consultation conducted by Relationships Australia NSW and the Gaimaragal Group identified the need for a culturally competent, trauma informed workforce with 'cultural' accreditation recognising champions in providing care for people from Aboriginal and Torres Strait Islander backgrounds.[88]
Aboriginal and Torres Strait Islander people Access 	Need enhance integrated care of services	**Qualitative evidence:** There is a need for holistic integrated approaches to care that are driven by focus on early intervention to better capacitate young Indigenous people and professionals for crisis management. [89]
Aboriginal and Torres Strait Islander people Access- awareness & Early intervention 	Lack of awareness of health services available	**Qualitative evidence:** Consultations have highlighted that lack of awareness of available health services within the region creates structural barriers for people trying to access health services especially among Indigenous youth who have moved into the region from other parts of the state and country. There is a need for an integrated platform that facilitates dialogue between Indigenous youth and allows seamless transition of care between health services, breaking down silos existing between services. [90]

[88] Relationships Australia NSW and The Gaimaragal Group Pty Ltd 2017, *Indigenous Wellbeing in Northern Sydney Roundtable Report*, Relationships Australia (NSW) Limited, NSW.
[89] Relationships Australia NSW and The Gaimaragal Group Pty Ltd 2017, *Indigenous Wellbeing in Northern Sydney Roundtable Report*, Relationships Australia (NSW) Limited, NSW.
[90] Relationships Australia NSW and The Gaimaragal Group Pty Ltd 2017, *Indigenous Wellbeing in Northern Sydney Roundtable Report*, Relationships Australia (NSW) Limited, NSW.

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence
Vulnerable groups		
CALD Access – availability 	Low uptake of previous *ATAPS* services within CALD population	**Quantitative evidence:** • Between 2016-17, 3.9% of all ATAPS referrals were made for people from CALD communities and 4.9% of referrals under the ATAPS suicide prevention pathway were made for people from CALD communities. • 14.1% of clients accessing NSPHN commissioned services were from CALD backgrounds.
CALD Access - availability	Provision of culturally appropriate services.	**Qualitative evidence:** Stakeholder consultation highlighted the understanding of complexities related to cultural background not always addressed by service providers. Barriers relating to utilisation of psychological services for CALD populations around stigma, including between generations within cultures.
CALD Access - availability	Financial barrier to access	**Qualitative evidence:** Stakeholder consultation highlighted potential financial barriers for CALD groups whose visa status doesn't allow them to access Medicare (eligibility), including international students wanting to access psychologists.
LGBTI Access - availability	Service gap for LGBTI population.	**Qualitative evidence:** Stakeholder consultation highlighted a gap in service provision for LGBTI population with mental health issues, with a lack of culturally appropriate services, specific to the community.

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence
Access to treatment for homeless population. Access 	Barriers to accessing mental health treatment services.	**Quantitative evidence:** • Between 2016-17, 0.6% of ATAPS referrals made for homeless people in the NSPHN region. People who are experiencing primary or secondary homelessness face additional barriers to accessing physical and mental health care services.
Health of the Older People Access – availability 	Low uptake of mental health services in those aged 65+ years.	**Quantitative evidence:** • In 2016-17, approximately 5.6% of people aged 65+ years in NSPHN accessed MBS subsidised mental health services compared to 6.1% and 5.9% for NSW and Australia respectively. [91] • Between 2011-12 to 2016-17, the proportion of people aged 65+ years accessing MBS subsidised mental health services in NSPHN has increased by 1.4% in NSPHN compared to 1.7% for NSW and Australia. • Treatment rate dependent on prevalence of mental illness and accessibility of mental health services, both public and private.
Mental health related hospitalisations in Older People	Mood disorders account for largest proportion of mental health related hospitalisations in those aged 65+ years.	**Quantitative evidence:** Major affective disorders account for 36.6% of separations and 41.8% of total bed days among people aged 65+ years.[92]
Health of Older People Access - availability	Barriers to access	**Qualitative evidence:** Stakeholder consultation identified challenges to those aged 65+ years accessing mental health services when living in a residential aged care facility and those aged 65+ years with comorbidities. Barriers to access intensified for those who lack support from families.

[91] Department of Health: Primary Health Networks (PHN) 2017, *MBS Mental Health Data by PHN*, Department of Health, Canberra, viewed November 2017
[92] NSLHD Health Services Planning Unit 2016, Hospital Admissions Data 2013-14

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence
Health of Older People Integration/ Early intervention 	Need for holistic services that address the concurrent physical and mental health needs of older people	**Qualitative evidence:** Overprescribing of psychotropic medications[93] compounded with social isolation and biological factors associated with ageing[94] presents challenges in addressing co-morbid physical and mental health conditions. This highlights a need for integrated services that address both physical and mental health needs of older people to facilitate early intervention. [95]
People with Intellectual Disability Access – availability	Limited services available for people with intellectual disability.	**Qualitative evidence:** Stakeholder consultation highlighted the limited options available for clients with intellectual disability and a lack of awareness from GPs around suitable services.
People with Intellectual Disability Access – availability	Limited skills and workforce capability in diagnosing mood or psychiatric disorders often delays treatment.	**Qualitative evidence:** Families, disability professionals often struggle to identify signs of mood disorders and there are limited number of psychiatrists specialising in treatment of mental health issues in people affected by intellectual disability. This often leaves diagnosis at the hands of GPs who often find it difficult to make differential diagnosis.[96]

[93] Mental Health Commission of NSW 2017, *Living Well in Later Life: The Case for Change*, Mental Health Commission of NSW, Sydney.
[94] AIHW 2017, *Australia's Health and Welfare 2017*, Australia's welfare series no. 13, AUS 216, AIHW, Canberra.
[95] Department of Health 2017, *The Fifth National Mental Health and Suicide Prevention Plan*, Department of Health, Canberra.
[96] Simpson J 2012, *Healthier Lives- Fact sheets on health and people with intellectual disability for families, advocates, disability workers and other professionals*, NSW Council for Intellectual Disability.

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence
Women experiencing perinatal depression Access – availability 	Low uptake of psychological services.	**Qualitative evidence:** Stigma associated with diagnosis a barrier to accessing support services, exacerbated in women from Aboriginal and CALD backgrounds. Women often self-diagnose and classify symptoms of distress as a 'normal part of childhood' restricting them from accessing services.[97] Majority of women seek assistance from GPs for perinatal depression. However, limitations in dealing with mental conditions particularly in initiating woman-centric emphatic conversations often create a barrier for both women and health professionals. [98] **Quantitative evidence:** For 2016-17, 2.1% of all ATAPS referrals were made for perinatal depression.
Women experiencing perinatal depression Access - availability	Financial barriers to access.	**Qualitative evidence:** Stakeholder consultation highlighted the importance of engaging mothers with perinatal depression at the antenatal stage (if required) as clients will present postnatal at higher acuity. However, financial barrier as not all antenatal care is subsidised with patients unable to determine what services are available privately and publicly.

[97] Austin MP, Highet N, the Guidelines Expert Advisory Committee 2011, *Clinical practice guidelines for depression and related disorders- anxiety, bipolar disorder and puerperal psychosis-in the perinatal period. A guideline for primary care health professionals*, beyondblue, Melbourne.
[98] Australian Institute of Health and Welfare (AIHW) 2012, *Experience of perinatal depression: data form the 2010 Australian National Infant Feeding Survey*, cat no. PHE 161, AIHW, Canberra.

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence
People with severe mental illness and complex needs Access - availability	Financial barrier due to lack of bulk-billing private psychiatrists.	**Qualitative evidence:** Stakeholder consultation highlighted that whilst Northern Sydney has a relatively high supply of psychiatrists, many of them do not bulk bill and charge higher than average gap payments. People with severe mental illness and complex needs who are not clients of public mental health services have difficulty accessing affordable and appropriate psychiatric support.
People with severe mental illness and complex needs Access - availability	Limited number of sessions offered through ATAPS.	**Qualitative evidence:** Limited number of sessions offered through ATAPS may not meet need of people with severe mental illness. People with severe mental illness are more likely to be unemployed or earning a low income so access to private psychological services is often unaffordable.
People with severe mental illness and complex needs Access - availability	Lack of flexibility in how and where sessions are delivered.	**Qualitative evidence:** Stakeholder consultation identified the limited availability of group therapies for family, peers, psychoeducation, psychotherapy, parole clients and AOD clients. Consultation also highlighted the need for flexibility in where services are delivered, providing services that can outreach to people in the community with mental illness.
People with severe mental illness and complex needs Access - availability	Access to mental health services during the NDIS transition.	**Qualitative evidence:** Stakeholder consultation identified the risk of mental health patient's inability to access mental health services during the transition to NDIS, due to the complexities of navigating the new system.

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence
People with severe mental illness and complex needs Access – availability	Limited early intervention treatments.	**Qualitative evidence:** Stakeholder consultation highlighted limited early intervention treatments for patients with severe mental illness and the limited alternatives to hospital. Stakeholders highlighted the management of suicide in public hospital can be very traumatising, leading to marked deterioration in a patient's mental illness.

Northern Sydney Primary Health Network - Updated Alcohol and other Drugs Needs Assessment 2017 – 2018

Section 1: Alcohol and other Drugs Needs Assessment – Health Needs Analysis; incorporating latest quantitative and qualitative health data

Section 2: Alcohol and other Drugs Needs Assessment - Service Needs Analysis; incorporates heath service utilisation data

Key:  Denotes inclusion of new data

Section 1: AOD Needs Assessment - Health Needs Analysis

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence

Alcohol and Other Drugs – summary

This latest Alcohol and Other Drugs (AOD) Needs Assessment builds upon previous AOD Needs Assessments to identify vulnerable cohorts and geographic hotspots of need within the NSPHN region with higher rates of risky drinking and alcohol attributable deaths. Providing further insights to previous Needs Assessments, new data examines higher rates of alcohol attributable hospitalisations identified in socio-economically disadvantaged, Aboriginal, CALD, older people and LGBTI groups. Similar to the trend for NSW, this update identifies a continuing increase in hospitalisations for methamphetamine use, with an increase in Emergency Department presentations in young males for steroid abuse. The latest AOD Needs Assessment highlights a need for early identification, screening, and support to accessing services.

NSPHN's previous AOD Needs Assessments remain valid and highlighted risky alcohol consumption, binge drinking in young people, hidden drinking in CALD groups and increasing use of ice and polysubstance abuse in young people. These themes were further investigated in the Needs Assessment update 2016-17 which sought focus on vulnerable and hard to reach populations, identified in the baseline needs assessment. The following update for alcohol and other drugs builds upon the previous two needs assessment, utilising the latest quantitative and qualitative data.

NSPHN has undertaken significant activities to address Alcohol and Other Drugs within the region with the commissioning of multiple primary care based services designed to meet an identified gap in service provision – namely adult and youth specific non-residential rehabilitation services and a shared care approach to managing AOD in primary care.

Outcomes of the health needs analysis

In addition, NSPHN has developed a ***Commissioning Evaluation Framework***, which is based on the Quadruple Aim, as a method for evaluating the impact of commissioned services, which will go some way to address elements of needs as identified in this needs assessment and will in the future be an additional source of data to inform future Needs Assessment and planning.

Identified Need	Key Issue	Description of Evidence
Alcohol consumption 	Higher rate of risky drinking in Pittwater LGA.	**Quantitative evidence:** • According to the Australia Health Survey (2014-15), higher rate of people aged 15 years and over consuming more than two standard drinks per day in Pittwater LGA (25.2 per 100; 95% CI:18.5-31.9) compared to Australia (16.7 per 100; 95% CI: 16.5-17) and NSW (16.7 per 100; 95% CI: 16.3-17.2)[99].
Alcohol consumption	Higher rate of alcohol attributable hospitalisations compared to NSW. Females in the NSPHN region have the highest rate of alcohol attributable hospitalisations in NSW.	**Quantitative evidence:** • NSPHN's rate of alcohol attributable hospitalisations 759 per 100,000 (95% CI: 741-776) compared to 672 per 100,000 (95% CI: 685-732) for NSW (2014-15). • Rate of hospitalisations among females -709 per 100,000 (95% CI: 685-732), highest in NSW (2014-15).[100] • Further analysis required to understand prevalence of alcohol consumption vs. better access to private healthcare in the region.

[99] Public Health Information Development Unit (PHIDU) 2017. *Social Health Atlas of Australia: Data by Primary Health Network (PHN), June 2017 Release*. PHIDU, Adelaide, viewed October 2016
[100] Centre for Epidemiology and Evidence 2016, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed October 2016

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence

Alcohol consumption 	Manly LGA has the highest rate of alcohol attributable hospitalisations in the region.
	
	NSPHN continues to work with the Northern Sydney Local Health District (NSLHD) to access data that identifies areas and cohorts with higher rates of alcohol related hospitalisations.
		• Manly (1,134 per 100,000) LGA has the highest rates of alcohol attributable hospitalisations in the region, 60.5% (95% CI: 50.5-70.7) higher compared to NSW (2013-15).
		• Manly has a standardised separation ratio of 120.7 (CI: 109.2- 133.4) for alcohol attributable injury hospitalisations, 21% higher compared to NSW.[101]
		• Higher rate of alcohol related crime within Manly (2016-2017)[102]:
		  ○ The rate of liquor offences in Manly (412.2 per 100,000) 2.87 times higher than NSW (143.6 per 100,000).
		  ○ 66.2% of non-domestic assaults in Manly alcohol related compared to 32.1% for NSW.
		• Alcohol related crimes are influenced by a range of factors including policing; regulations around liquor licences and, recording, reporting and classification of offences[103]. Further analysis required to analyse the impact of prevalence of alcohol consumption on alcohol related crime.

Alcohol related mortality 	Higher rate of alcohol attributable deaths among those who are socio-economically disadvantaged.	**Quantitative evidence:** In NSW, there is a lower proportion of people consuming alcohol at levels posing long-term risk in the most disadvantaged quintile (22.6%; 95% CI: 20-25.2) compared to those in the least disadvantaged quintile (28.6%, 95% CI: 25.9-31.3). However, the rate of alcohol attributable deaths is higher among people in the most disadvantaged quintile (17.9 per 100,000; 95% CI: 16.5-19.5) compared to those in the least disadvantaged quintile (10.9 per 100,000; 95% CI: 9.8-12.1). [104]

[101] Centre for Epidemiology and Evidence 2016, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed October 2016
[102] NSW Bureau of Crime Statistics and Research (BOSCAR) 2017, NSW Crime Tool, BOSCAR, viewed September 2017
[103] Goh D, Holmes J 2017. *New South Wales Recorded Crime Statistics 2016*, NSW Bureau of Crime Statistics and Research, Department of Justice, Sydney.
[104] Centre for Epidemiology and Evidence 2017, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed 13th September 2017

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence
Alcohol consumption	Cultural acceptance of alcohol.	**Qualitative evidence:** Stakeholder consultation highlighted the cultural acceptance of alcohol can create challenges in identifying a need to seeking help, highlighting people are able to be high functioning and often not seeking help until entering the criminal justice system or other crises.
AOD misuse- population prevalence 	The National Drug and Alcohol Clinical Care & Prevention (DA-CCP) tool estimates the prevalence of alcohol and other drugs misuse disorder to provide an understanding of the health needs of the population which can inform subsequent planning of AOD services.[105]	**Quantitative evidence:** Applying the national estimates from the DA-CCP tool to the NSPHN regional population[106], it can be estimated that 119,000 people residing within NSPHN report alcohol and other drug misuse in the past 12 months. This can be further stratified into: • 80,800 with alcohol misuse • 6,000 with amphetamine misuse • 4,300 with benzodiazepine misuse • 21,000 with cannabis misuse • 7,200 with opioids misuse
AOD mortality 	Drug related deaths within the NSPHN region	**Quantitative evidence:** • Approximately 200 drug related deaths within NSPHN between 2011-15 with the highest numbers in Warringah and North Sydney-Mosman SA3[107]. • Further analysis required to understand the prevalence, underlying causes and confounders of drug related deaths and identify cohorts that are at greater risk of drug related mortality.

[105] Ritter et al 2014, New Horizons: The review of alcohol and other drug treatment services in Australia, Drug Policy Modelling Program, National Drug and Alcohol Research Centre, Sydney.
[106] Ritter et al 2014, New Horizons: The review of alcohol and other drug treatment services in Australia, Drug Policy Modelling Program, National Drug and Alcohol Research Centre, Sydney.
[107] Penington Institute 2017, NSW SA3 all drug related deaths 2011-15, Penington Institute, Melbourne, viewed November 2017.

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence
Illicit drug use 	Significant increase in hospitalisations due to methamphetamine usage in NSPHN region. Latest data available is from 2015-16. NSPHN is working with the Local Health District to access latest regional data to further identify need and inform service planning.	**Quantitative evidence:** • The rate of person hospitalised for methamphetamine related poisoning/use disorder in NSPHN has increased significantly from 6 per 100,000 (95% CI: 4.3-8.2) in 2009-10 to 31.3 per 100,000 (95% CI: 27.2-35.8) in 2015-16. • The rate is lower compared to NSW (87.2 per 100,000; 95% CI: 84.7-89.6).
Illicit drug use 	High rate of drug related offences in North Sydney and Manly LGAs.	**Quantitative evidence:** • North Sydney (868 per 100,000) has a higher rate of drug offences compared to NSW (773 per 100,000) (2016-2017). • Ecstasy use/possession in North Sydney (369 per 100,000) 6.79 times the rate for NSW (54.3 per 100,000). • Cocaine use/possession higher in Manly (46.3 per 100,000) and North Sydney (86.8 per 100,000) compared to NSW (30.9 per 100,000).[108] • Further analysis required to determine the prevalence of drug use within the region.

[108] NSW Bureau of Crime Statistics and Research (BOSCAR) 2017, NSW Crime Tool, BOSCAR, viewed October 2017

Outcomes of the health needs analysis		
Identified Need	Key Issue	Description of Evidence
Vulnerable population groups		
Alcohol consumption in Aboriginal and Torres Strait Islander population 	Higher rate of alcohol related hospitalisations	**Quantitative evidence:** • Higher rate of hospitalisations for alcohol (1,390 per 100,000; 95% CI: 1,329-1,453) compared to non-Aboriginal people (639 per 100,000; 95% CI: 634-645). [109] • The prevalence of daily or weekly alcohol consumption among Aboriginal people across NSW is similar to estimates among non-Aboriginal people. However, among Aboriginal people, a greater proportion of those who drink engage in risky drinking posing long-term risk to health (44.1; 95% CI: 34.7-53.6) in comparison to the non-Aboriginal population (29.5%; 95% CI:28.1-30.8)[110], potentially contributing to the higher rate of hospitalisations (2016). • Further investigation needed to evaluate the impact of drinking patterns on the rate of alcohol related harm and hospitalisation.

[109] Centre for Epidemiology and Evidence 2016, Health Statistics New South Wales, NSW Ministry of Health, Sydney, viewed September 2016.
[110] Centre for Epidemiology and Evidence 2017, Health Statistics New South Wales, NSW Ministry of Health, Sydney, viewed October 2017.

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence
Illicit drug use in Aboriginal and Torres Strait Islander population 	Higher usage of illicit substances among Aboriginal population, particularly among Aboriginal males.	**Quantitative evidence:** • Nationally, 25.6% of Aboriginal people reported using illicit drugs in the last 12 months compared to 15.7% of non-Aboriginal people. [111] • Cannabis is the most commonly used illicit drug with 16.7% of Aboriginal people reporting cannabis use in the past 12 months compared to 10.7% of non-Aboriginal people. • Nationally, 28% of Aboriginal males reported using illicit substances compared to 17% of Aboriginal females. [112] • Higher rate of accidental drug related deaths among Aboriginal people (18.3 per 100,000) compared to non-Aboriginal people (5.9 per 100,000)[113] (2015).
Alcohol consumption in LGBTI population 	LGBTI people more likely to engage in risky drinking behaviours.	**Quantitative evidence:** • Across Australia, 28.4% of LGBTI people reported engaging in risky drinking behaviours compared to 17.1% for the non-LGBTI population[114]. • Whilst the prevalence of risky drinking among LGBTI people did not show significant changes between 2010-2016, the proportion of those who engaged in risky drinking reduced significantly among the non-LGBTI population.

[111] Australian Institute of Health and Welfare (AIHW) 2017, National Drug Strategy Household Survey 2016: Detailed findings, cat no. PHE 184, AIHW, Canberra
[112] Australian Institute of Health and Welfare (AIHW) 2011, *Substance use among Aboriginal and Torres Strait Islander People*, cat no. IHW 40, AIHW, Canberra.
[113] Penington Institute 2017, Australia's Annual Overdose Report 2017, Penington Institute, Melbourne.
[114] Australian Institute of Health and Welfare (AIHW) 2017, *National Drug Strategy Household Survey 2016: Detailed findings*, cat no. PHE 184, AIHW, Canberra.

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence
Illicit drug use in LGBTI population 	Higher prevalence of illicit substance abuse among LGBTI population compared to non-LGBTI population.	**Quantitative evidence:** • LGBTI population: ○ 4.1 times more likely to use ecstasy ○ 5.1 times more likely to use methamphetamine ○ 2.7 times more likely to use cocaine ○ 2.8 times more likely to use pharmaceuticals for non-medical purpose[115] • Methamphetamine usage has remained at the same level among LGBTI people between 2010-2016, contrary to prevalence among non-LGBTI people which reduced significantly in 2016 compared to 2013. [116]
Alcohol consumption among older people 	Daily drinking in people aged 70 years and over.	**Quantitative evidence:** Nationally, the prevalence of daily drinking is higher among those aged 70+ years (13.6%) compared to people in other age groups (ranging 1.8% among those aged 25-29 years to 10.2% among 60-69-year olds).[117]
Illicit drug use among young people 	Overrepresentation of people aged 15-34 years in methamphetamine related hospital admissions and ED presentations[118].	**Quantitative evidence:** In 2015-16, hospitalisations for people aged 16-34 years in NSW accounted for 56% of all methamphetamine related hospitalisations and 61% of all methamphetamine related ED presentations.[119]

[115] Australian Institute of Health and Welfare (AIHW) 2017, *National Drug Strategy Household Survey 2016: Detailed findings*, cat no. PHE 184, AIHW, Canberra.
[116] Australian Institute of Health and Welfare (AIHW) 2017, *National Drug Strategy Household Survey 2016: Detailed findings*, cat no. PHE 184, AIHW, Canberra.
[117] Australian Institute of Health and Welfare (AIHW) 2017, *National Drug Strategy Household Survey 2016: Detailed findings*, cat no. PHE 184, AIHW, Canberra.
[118] NSW Government: Department of Health 2017, *NSW Youth Health Framework 2017-2024*, NSW Ministry of Health.
[119] Centre for Epidemiology and Evidence 2017, Health Statistics New South Wales, NSW Ministry of Health, Sydney, viewed October 2017.

Outcomes of the health needs analysis

Identified Need	Key Issue	Description of Evidence
Steroid use among young men 	Increasing steroid use among young men. NSPHN is currently awaiting the Local Health District data to quantify information.	**Quantitative evidence:** In 2016, 30.6% of young people aged 15-19 years in NSW highlighted that they were extremely concerned or very concerned about their body image[120]. **Qualitative evidence:** Stakeholder consultations highlighted growing perception of 'self-image' among young men is contributing to increasing prevalence of steroid use with combined steroid and methamphetamine usage imposing a burden on ED presentations. Consultation identified social media, advertising projecting 'ideal' body types and peer pressure as potential drivers.

[120] NSW Government: Department of Health 2017, *NSW Youth Health Framework 2017-2024*, NSW Ministry of Health.

Section 2: AOD Needs Assessment - Service Needs Analysis

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence
Alcohol and Other Drugs – summary This AOD Needs Assessment presents the latest drug and alcohol related hospitalisations for the region, with barriers to accessing services for hard to reach and vulnerable groups identified in previous Needs Assessments also presented. NSPHN's previous Needs Assessments highlighted an undersupply of detox beds relative to need, no Aboriginal-specific drug and alcohol services and Residential Aged Care Facilities poorly equipped to meet the needs of older people. The following update for alcohol and other drugs builds upon the findings of the previous two needs assessment and utilises the latest quantitative and qualitative data to highlight the changing needs of population groups within NSPHN.		
AOD combined morbidity	Drug and alcohol related hospitalisations.	**Quantitative evidence:** • Rates of hospitalisations in NSPHN: 184 per 100,000 compared to 180 per 100,000 nationally and 161 per 100,000 for the metropolitan region (63.5% in public hospitals). Within NSPHN, Manly SA3 had the highest rate of mental health related overnight hospitalisations for drug and alcohol use (292 per 100,000), higher than both NSPHN and national rates. • Drug and alcohol hospitalisations accounted for 22.1% of all mental health related overnight hospitalisations in NSPHN. • Rate of bed-days for NSPHN: 1,915 per 100,000 compared to 1,369 per 100,000 nationally and 1,333 per 100,000 for metropolitan cities. Majority of the bed-days in private hospitals (63.2%).[121]

[121] Australian Institute of Health and Welfare (AIHW) 2017, *Healthy Communities: Hospitalisations for mental health conditions and intentional self-harm in 2014-15*, cat no HSE 177, AIHW, Canberra

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence

Alcohol	Alcohol a leading contributor to self-harm and overdose related ambulance attendances in NSW.	**Quantitative evidence:**
		• Alcohol intoxication (NSW) involved in[122]:
		  ○ 18% of suicide attempts cases
		  ○ 28% of accidental overdose cases
		  ○ 20% of suicide attempts involving overdose

Integration	Limited coordination and integration between services.	**Qualitative evidence:** Stakeholder consultation highlighted the need for coordination and integration between services as silos currently exist between services, with a need for collaboration across multiple services.
Access	Lack of bulk billing GPs provides financial barriers to accessing AOD services	**Qualitative evidence:** Stakeholder consultations identified a financial barrier to AOD clients accessing AOD services due to the lack of bulk billing GPs. Majority of AOD services supplied through private healthcare. People in this cohort who are not clients of public AOD services have difficulty accessing affordable and appropriate support.
Access	Limited recognition of appropriate screening and referral pathways amongst primary health care providers.	**Qualitative evidence:** Stakeholder consultation identified confusion for clients around AOD services available and access pathways. Complex health care system, navigation challenging for clients and service providers.

[122] Lloyd B, Gao C X, Heilbronn C, Lubman DI 2015, *Self-harm and mental-health related ambulance attendances in Australia: 2013 Data*, Turning Point, Victoria.

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence
Access	Limited early intervention programs for AOD.	**Qualitative evidence:** Limited early intervention programs for AOD, service gap around female clients presenting at the emergency department.
Access – availability	Lack of day/out-patient programs.	**Qualitative evidence:** Stakeholder consultations identified a need for bulk-billing day/out-patient programs in the region.
Access – availability	Undersupply of residential rehabilitation beds.	**Qualitative evidence:** Stakeholder consultation identified the demand for residential rehabilitation beds placement outstrips supply and people seeking residential rehabilitation either face long wait times or travel out of area to access support. This acts as a barrier to people obtaining support for AOD misuse disorders.
Access – availability	Services have limited capacity to provide AOD support outside of business hours.	**Qualitative evidence:** Stakeholder consultation identified most non-residential AOD services in the region only provide service during business hours. This makes access to specialist support difficult for people who attend work or education and for the families of people receiving AOD treatment.
Access – availability; Service coordination	Poor coordination between detox and availability of residential rehabilitation.	**Qualitative evidence:** Stakeholder consultation identified people seeking to access residential rehabilitation are often required to go through detox first. This creates delays in accessing treatment and can serve to diminish peoples' willingness to pursue rehabilitation.

Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence
Access – availability; Service coordination	Lack of services skilled in addressing co-occurring AOD and mental health issues.	**Qualitative evidence:** Stakeholder consultation identified clients with complex presentations (esp. with trauma) and multiple needs can experience barriers to service/insufficient service. While the AOD services in the region receiving state funding are required to service people with co-occurring AOD and mental health issues, stakeholder reports highlighted the need for the wider service sector to respond better to people with co-morbid conditions. Many services address one issue to the exclusion of the other.