Australian Government
Department of Health

phn
An Australian Government Initiative

Primary Health Network

Needs Assessment Update 2016 - 2017

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 2016 -2017:

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

The content submitted in this update is provided as an addendum to the work that was completed in NSPHN's initial Baseline Needs Assessment 2015-16. The health priorities, below, as identified in the initial BNA, remain relevant and are a priority for the PHN 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 remains a pertinent and vital resource for the PHN, ***the link to the NSPHN Baseline Needs Assessment 2015 -2016 can be found below:***

http://sydneynorthhealthnetwork.org.au/about-us/commissioning/planning-and-performance/

The Needs Assessment update for 2016 – 2017 does not replace the initial BNA and should be read and considered in conjunction with this year's update to provide a holistic view of the region's public health profile.

Areas for focused investigation for the Needs Assessment Update 2016 – 2017 are as follows:

- **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**

Areas of focused investigation identified for this updated Needs Assessment 2016-2017 were informed by:

- Findings and a gap analysis of the initial BNA 2015-2016
- NSPHN strategic priorities

- NSPHN Clinical and Community Council direction
- National mental health and alcohol and other drugs priorities

In the above areas of focus, this updated Needs Assessment for 2016 – 2017 incorporates:

- **newly released quantitative data**
- **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

The resultant document provides further rich context to support and compliment the BNA 2015-2016 allowing the NSPHN to gain a deeper understanding and context of the complex public health issues that are persistent within our region.

2. Key additions for the 2016 – 2017 Needs Assessment update:

The following are a summary of key observations and new additions for 2016 - 2017 which add to the findings of the BNA 2015 – 2016 regarding the population, health status, and health services in the region.

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.

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, with higher rates of self-harm in young Aboriginal people aged 15-24 years.

Health of the Elderly:

- Undersupply of Level 3 and 4 Home Care Packages, providing optimal care for people with dementia by enabling the patient to stay within their home.
- High rate of suicide among males aged 75+ years.
- Low proportion of those aged 75+ years receiving annual health check.
- Higher rate of fall-related injuries within NSPHN region compared to NSW, increasing over the previous five years.

Mental Health:

- Suicide rates have remained at the same level for the previous ten years, with a high rate of suicide among males within the NSPHN region.
- Higher rate of hospitalisations due to intentional self-harm among females aged 15-24 years compared to NSW.

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.

Culturally and Linguistically Diverse (CALD) Populations:

- Large CALD population within NSPHN region, with 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:

First time LGBTI data has been included into a primary health care based Needs Assessment for the Northern Sydney region.

- An estimated 22,700 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 commissioning co-design sessions undertaken for Mental Health, AOD and Aboriginal Health – providing a rich source of additional qualitative input to inform this year's Needs Assessment update. The consultations were well represented from more than **200 stakeholders** representing a broad cross-section of the local community and service sector, including the following:

- General Practice
- The NSPHN Board

- NSPHN Clinical Council
- NSPHN Community Council
- NSPHN Mental Health and AOD Advisory Committee
- Northern Sydney Local Health District
- Allied Health – public and private
- Non-Government Organisations (local and state)
- People with lived experience and consumers

Information gained from the commissioning co-design sessions and stakeholder engagement was triangulated with existing information from the initial Baseline Needs Assessment 2015 – 2016, relevant literature reviews and Department of Health guidance material to inform the key features of the Needs Assessment update.

Data Analysis:

Quantitative and qualitative data was sourced from the following areas:
•Aged Care Programmes Data, 30 June 2015 and Regional Aged Care Planning Tool
•AIHW analysis of National Hospital Morbidity Database 2013-14
•Australian Aboriginal and Torres Strait Islander Health Survey 2012-13
•Australian Bureaus of Statistics (ABS)- Census of Population and Housing, 2011
•ABS 2012-13: Local Government Areas 2011
•Australian Health Survey 2011-13
•Australian National Infant Feeding Survey 2010
•ATAPS data extracted from MDS, 2015-16
•Causes of Death Data 2009-14
•MBS claims data 2012-15
•National Drug Strategy Household Survey 2013
•Northern Sydney Local Health District (NSLHD) Hospital Admissions Data 2013-14
•NSW Cancer Institute- Reporting for Better Cancer Outcomes Performance Report 2016: Northern Sydney Local Health District
•NSW Cancer Institute- NSW cancer incidence and mortality data set 2008-12
•NSW combined admitted patient epidemiology data 2012-15
•NSW Bureau of Crime Statistics and Research Data 2014-16
•NSW Department of Planning and Environment
•Pat Cat data October 2016
•Public Health Information Development Unit (PHIDU) 2016

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.

Conclusion:

The Northern Sydney PHN maintains a changing demographic which continues to face several challenges across age groups with pockets of disadvantage at Local Government Area (LGA) level and even further by postcode.

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 elderly population.

The findings of NSPHN's initial needs assessment, coupled with the findings from this year's update highlight a significant ageing demographic with complex needs, substantial mental health issues across the age spectrum, but particularly prevalent within the youth of our region, a large CALD population and pockets of high socio-economic disadvantage scattered throughout the region who are impacted by the social-determinants of health. 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.

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.

Section 2 – Outcomes of the health needs analysis

This section summarises the findings of the health needs analysis in the table below. For more information refer to Table 1 in '5. Summarising the Findings' in the Needs Assessment Guide on www.health.gov.au/PHN.

Outcomes of the health needs analysis		
Identified Need	Key Issue	Description of Evidence
General Population Health **NSPHN's Baseline Needs Assessment 2015-2016 highlighted a significant ageing demographic within the PHN region, large CALD population and pockets of high socio-economic disadvantage. Initial analysis also highlighted underreporting of Aboriginal status across the region and by health service providers and a large proportion of the population overweight or obese.** **The following update utilises the latest quantitative data and qualitative information to focus on vulnerable and hard to reach populations highlighted within NSPHN's Baseline Needs Assessment. Reflecting the release of national performance indicators on which the PHN will be measured, the following data is presented for cancer screening, childhood immunisation and potentially preventable hospitalisations.**		
Ageing population	The NSPHN 65+ years population has a projected increase of 43.3% by 2031, surpassing those aged 0-14 years for the first time.	**Quantitative evidence:** • Ryde and Pittwater LGAs have the largest projected increase in those aged 65+ years, 51.4% and 50% respectively.[1]
Lifestyle risk factors	Higher prevalence of obesity and smoking in Pittwater and Warringah LGAs.	**Quantitative evidence:** • Rates of obesity higher in Pittwater (22.3 per 100; 95% CI: 20.2-24.5) and Warringah (23.4 per 100; 95% CI: 21.8-25) LGAs compared to NSPHN (17.7 per 100; 95% CI: 17.2-18.3).[2]

[1] NSW: Department of Planning & Environment 2016. *New South Wales State and Local Government Area Population, Household and Dwelling: 2014 Final*. NSW Planning Department of Planning & Environment, Sydney, viewed June 2016

[2] 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
		• Smoking rates in Pittwater: 12.3 per 100 (95% CI: 11.1-13.5) and Warringah: 11.5 per 100 (95% CI: 10.6-12.3) higher compared to NSPHN (10.2 per 100; 95% CI: 9.9-10.5). [3]
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.[4]
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.		
Breast cancer	Higher incidence of breast cancer and mortality in NSPHN female population compared to NSW.	**Quantitative evidence:** • Breast cancer incidence 70.3 per 100,000 (95% CI: 67.9-72.8) for NSPHN female 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]
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]

[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] 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
[5] Cancer Institute NSW 2016, Cancer in NSW: Online Statistics module 2012, Cancer Institute NSW, viewed October 2016
[6] 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
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.
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]

[7] Cancer Institute NSW 2016, *Reporting for Better Cancer Outcomes Performance Report 2016: Northern Sydney LHD*, Cancer Institute NSW, Sydney
[8] 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
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%.	**Quantitative evidence:** • Immunisation rates for NSPHN children aged one year 90%, compared to 90.1% for NSW. • Immunisation rates for NSPHN children aged two years 89%, compared to 90.7% for NSW. • Immunisation rates for NSPHN children aged five years 90%, compared to 92.5% for NSW.[9]
Childhood Immunisation	Regional variation in childhood immunisation in Mosman, Ku-ring-gai, Manly and North Sydney.	**Quantitative evidence:** • Lower immunisation rates for children aged one year in Mosman (88.4%) and Kur-rin-gai (88%). • Lower immunisation rates for children aged two years in Manly (87.1%) and Mosman (88.6%). • Lower immunisation rates for children aged five years in Manly (87%) and North Sydney (86.5%). [10]
Potentially Preventable Hospitalisations (PPH) – Lower rate of PPHs in the NSPHN region compared to NSW, remaining at a similar rate for the previous ten years.		
Potentially Preventable Hospitalisations (PPH)	Rate of PPHs lower for the NSPHN region compared to NSW, remaining at a similar level for the previous ten years, with little variation in rates between LGAs.	**Quantitative evidence:** • In 2014-15, rate of PPHs for NSPHN 1,599 per 100,000 (95% CI: 1,574-1,625) compared to 2,113 per 100,000 (95% CI: 2,103-2,123) for NSW.[11]

[9] 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
[10] 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
[11] 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
Potentially Preventable Hospitalisations (PPH)	Higher rate of PPHs among people in the most disadvantaged quintile.	**Quantitative evidence:** • In the most disadvantaged quintile, the PPHs rate for NSW 2,547 per 100,000 (95% CI: 2,522-2,572) compared to 1,619 per 100,000 (95% CI: 1,600-1,639) for people in the least disadvantaged quintile (2014-15).[12]

[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
Mental Health **NSPHN's Baseline Needs Assessment 2015-2016 highlighted high levels of self-harm and suicidal behaviours in young people, higher prevalence of mental health issues in CALD groups and Aboriginal population, with poor health identified in people suffering from severe mental health illness.** **The following update for mental health utilises the latest quantitative data and qualitative information to provide estimates on the prevalence of mental health illness across different 'needs groups' to understand service need within the stepped care approach and focuses on vulnerable and hard to reach populations highlighted within NSPHN's Baseline Needs Assessment.**		
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**[13]**.**	**Quantitative evidence:** • Applying national estimates[14] 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% (209,519) of NSPHN population with previous illness, risk of relapse or at early stage of developing illness. ○ 9.1% (82,538) with mild mental illness. ○ 4.6% (41,722) with moderately severe mental illness. ○ 3.1% (28,117) with severe mental illness
Prevalence of mental illness	Depression and anxiety account for the largest proportion of diagnosed mental health conditions.	**Quantitative evidence:** • From the Australian Health Survey[15], 12.1 per 100 persons aged 15+ years reported long-term mental and behavioral problems. • Pat Cat data from 120 NSPHN GP practices estimates the prevalence of mental health conditions at 9.6 per 100, with depression and anxiety accounting for the largest proportion of mental health conditions.

[13] 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
[14] 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
[15] 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
Suicide prevention	Suicide rates have remained at the same level for the previous ten years, with a high rate of suicide among males.	**Quantitative evidence:** • 71 deaths due to suicide in the NSPHN region in 2013 averaging one death from suicide every five days (2013). • Suicide rate within the NSPHN region 7.5 per 100,000 (95% CI: 5.8-9.5), similar to the NSW rate of 8.9 per 100,000 (95% CI: 8.2-9.6). [16] • 8.5 per 100 (95% CI: 8-8.9) people aged 18+ years in the NSPHN region reported high or very high psychological distress compared to 10.5 per 100 for NSW (95% CI: 10.3-10.7). [17] • Rate of suicide among NSW males 13.2 per 100,000 (95% CI: 12.1-14.4) compared to 4.8 per 100,000 (95% CI: 4.1-5.5) for NSW females (2013).[18]

[16] Centre for Epidemiology and Evidence 2016, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed September 2016
[17] 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.
[18] Centre for Epidemiology and Evidence 2016, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed September 2016

Outcomes of the health needs analysis		
Identified Need	Key Issue	Description of Evidence
Alcohol and Other Drugs **NSPHN's Baseline Needs Assessment 2015 -2016 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.** **The following update for alcohol and other drugs utilises the latest quantitative data and qualitative information to analyse the high rate of alcohol attributable hospitalisations and illicit drug use in the region, with a focus on vulnerable and hard to reach populations highlighted within NSPHN's Baseline Needs Assessment.**		
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).[19] • Further analysis required to understand prevalence of alcohol consumption vs. better access to private healthcare in the region.
Alcohol consumption	Manly LGA has the highest rate of alcohol attributable hospitalisations in the region.	• 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.[20] • Higher rate of alcohol related crime within Manly (2016)[21]:

[19] Centre for Epidemiology and Evidence 2016, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed October 2016
[20] Centre for Epidemiology and Evidence 2016, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed October 2016
[21] NSW Bureau of Crime Statistics and Research (BOSCAR) 2016, NSW Crime Tool, BOSCAR, viewed October 2016

Outcomes of the health needs analysis		
Identified Need	Key Issue	Description of Evidence
		- The rate of liquor offences in Manly (430.9 per 100,000) 2.96 times higher than NSW (145.4 per 100,000). - 66.7% of non-domestic assaults in Manly alcohol related compared to 33.3% for NSW.
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 be high functioning and often not seeking help until entering the criminal justice system or other crises.
Illicit drug use	Increase in hospitalisations due to methamphetamine usage in NSPHN region.	**Quantitative evidence:** • In NSPHN, the rate of persons hospitalised either for methamphetamine related poisoning or use disorder is lower than the NSW rate. However, the rate has increased substantially from 6.4 per 100,000 (95% CI: 4.6-8.7) in 2009-10 to 24.5 per 100,000 (95% CI: 20.9-28.6) in 2014-15[22].
Illicit drug use	High rate of drug related offences in North Sydney and Manly LGAs.	**Quantitative evidence:** • North Sydney (920.8 per 100,000) has a higher rate of drug offences compared to NSW (790.3 per 100,000). • Ecstasy use/possession in North Sydney (352.2 per 100,000) 7.08 times the rate for NSW (45.9 per 100,000). • Cocaine use/possession higher in Manly (87.1 per 100,000) and North Sydney (64.8 per 100,000) compared to NSW (23.4 per 100,000).[23] • Further analysis required to determine the prevalence of drug use within the region.

[22] Centre for Epidemiology and Evidence 2016, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed October 2016
[23] NSW Bureau of Crime Statistics and Research (BOSCAR) 2016, NSW Crime Tool, BOSCAR, viewed October 2016

Outcomes of the health needs analysis		
Identified Need	Key Issue	Description of Evidence
Aboriginal and Torres Strait Islander People		
General Population Health – Underreporting of Aboriginal status across the region and by health care professionals, low levels of breast screening among Aboriginal women and higher prevalence of chronic disease.		
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.	**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.
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).[24]
Aboriginal and Torres Strait Islander lifestyle behaviours	High smoking prevalence.	**Quantitative evidence:** • 31.6% of Indigenous people in Australia smoked daily compared to 12.4% among non-Indigenous Australians.[25]

[24] Cancer Institute NSW 2016, *Reporting for Better Cancer Outcomes Performance Report 2016: Northern Sydney LHD*, Cancer Institute NSW, Sydney.
[25] Australian Institute of Health and Welfare (AIHW) 2014, *National Drug Strategy Household Survey detailed report 2013*, cat no. PHE 183, AIHW, Canberra.

Outcomes of the health needs analysis		
Identified Need	Key Issue	Description of Evidence
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. [26] • Nationally, cardiovascular diseases and cancer contribute to 21.9% of the total disease burden among Aboriginal people. [27]
Mental Health - High rate of suicide and psychological distress among Aboriginal population, with higher rates of self-harm in young Aboriginal people aged 15-24 years.		
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 2,686 per 100,000 (95% CI: 2,011-3,495) compared to 1,860 per 100,000 (95% CI: 1,832-1,888) for non-Aboriginal people in NSPHN (2014-15). [28]

[26] 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.
[27] 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.
[28] Centre for Epidemiology and Evidence 2016, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed September 2016.

Outcomes of the health needs analysis		
Identified Need	Key Issue	Description of Evidence
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 - 12.5 per 100,000 (95% CI: 9.7-15.6) compared to 8.9 per 100,000 for non- Aboriginal people (95% CI: 8.6-9.2).[29] • 29.4% of Aboriginal population in Australia reported high/very high psychological distress compared to 10.8% of non-Aboriginal people.[30]
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.	**Quantitative evidence**: • Rates of hospitalisations in NSW for intentional self-harm among 15-24 years old Aboriginal people 641 per 100,000 (95% CI: 570-719) compared to 300 per 100,000 (95%CI: 289-311) for non-Aboriginal (2014-15). [31]
Alcohol and Other Drugs – Lower prevalence of alcohol consumption, but higher rate of hospitalisations for alcohol.		
Alcohol consumption in Aboriginal and Torres Strait Islander population	Lower prevalence of alcohol consumption, but higher rates of hospitalisations.	**Quantitative evidence:** • Prevalence of alcohol consumption lower among Aboriginal people across NSW, however, rates of hospitalisations for alcohol (1,390 per 100,000; 95% CI: 1,329-1,453) are higher than non-Aboriginal people (639 per 100,000; 95% CI: 634-645). [32]
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, 22.8% of Aboriginal people reported using illicit drugs in the last 12 months compared to 15.1% of non-Aboriginal people. [33] • Nationally, 28% of Aboriginal males reported using illicit substances compared to 17% of Aboriginal females. [34]

[29] Centre for Epidemiology and Evidence 2016, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed September 2016.
[30] 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.
[31] Centre for Epidemiology and Evidence 2016, Health Statistics New South Wales, NSW Ministry of Health, Sydney, viewed September 2016.
[32] Centre for Epidemiology and Evidence 2016, Health Statistics New South Wales, NSW Ministry of Health, Sydney, viewed September 2016.
[33] Australian Institute of Health and Welfare (AIHW) 2014, *National Drug Strategy Household Survey detailed report 2013*, cat no. PHE 183, AIHW, Canberra.
[34] Australian Institute of Health and Welfare (AIHW) 2011, *Substance use among Aboriginal and Torres Strait Islander People*, cat no. IHW 40, AIHW, Canberra.

Outcomes of the health needs analysis		
Identified Need	Key Issue	Description of Evidence
Culturally and Linguistically Diverse (CALD) Populations		
General Population Health – Large CALD population within NSPHN region, with lower cancer screening rates and specific health literacy needs. Refugee population in the region with significant and complex health issues.		
CALD population	Large CALD population, concentrated in specific geographic areas.	**Quantitative evidence:** • Large CALD population within the NSPHN region (22.1%) compared to NSW (18.6%). • Ryde has the highest proportion of its population from a CALD background (36.5%).[35]
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%).[36]
At risk and hard to reach CALD populations	Higher rates of domestic violence reported in families from CALD backgrounds. Further exploration is required to understand which CALD groups.	**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.

[35] 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.
[36] 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
Mental Health – CALD groups present for a range of mental health and health needs, with a higher risk of suicidal behaviours among humanitarian entrants.		
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. [37]
Socio-economic disadvantage		
General Population Health – Pockets of socio-economic disadvantage.		
Socio-economic disadvantage	Pockets of socio-economic disadvantage.	**Quantitative evidence:** • Pockets of disadvantage within the region, concentrated in Warringah, Ryde and Hornsby LGAs. [38]
Smoking	Higher prevalence of smoking among people in the most disadvantaged quintile.	**Quantitative evidence:** • Nationally, people in the most disadvantaged quintile (20.8%) were three times more likely to smoke daily compared to people in the least disadvantaged quintile (6.7%).[39]

[37] Mental Health in Multicultural Australia (MHiMA) 2014, *Framework for Mental Health in Multicultural Australia- Towards culturally inclusive service delivery*, MHiMA, Queensland.
[38] Australian Bureau of Statistics (ABS) 2013, *Socio-economic indexes for areas (SEIFA)*, cat 2033.0.55.001, viewed October 2016
[39] Australian Institute of Health and Welfare (AIHW) 2014, *National Drug Strategy Household Survey detailed report 2013*, cat no. PHE 183, AIHW, Canberra.

Outcomes of the health needs analysis		
Identified Need	Key Issue	Description of Evidence
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 (82 years) 3.4 years lower compared to those in the least disadvantaged quintile (85.4 years) [40].
Mental Health - Higher prevalence of mental illness in those socio-economically disadvantaged.		
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 94.2 per 100,000 (95% CI: 89.3-99.3) compared to 149.4 per 100,000 (95% CI: 143-156) for those in the most disadvantaged quintile (2014-15).[41]
Lesbian, Gay, Bisexual, Transgender and Intersex (LGBTI) Population		
General Population Health - High smoking prevalence among LGBTI population, with higher risk of sexually transmitted disease due to high risk sexual practices.		
LGBTI population	NSPHN LGBTI population with specific lifestyle behaviours and health issues.	**Quantitative evidence:** • An estimated 22,700 LGBTI people (2-3% of the total population) live within the NSPHN region.[42]
LGBTI lifestyle behaviours	High smoking prevalence among LGBTI population.	**Quantitative evidence:** • 23.5% of homosexual/bisexual Australians aged 14 and over smoked daily compared to 12.5% of non-homosexual/bisexual Australians[43]. Smoking rates escalates to: ○ 44% among transgender men

[40] Centre for Epidemiology and Evidence 2016, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed 13 Sept 2016
[41] Centre for Epidemiology and Evidence 2016, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed 13 Sept 2016
[42] Aids Council of NSW (ACON), Estimating the prevalence and distribution of LGBTI adults in NSW, ACON, Sydney.
[43] Australian Institute of Health and Welfare (AIHW) 2014, *National Drug Strategy Household Survey detailed report 2013*, cat no. PHE 183, AIHW, Canberra.

Outcomes of the health needs analysis		
Identified Need	Key Issue	Description of Evidence
		○ 35% among transgender women[44] ○ 47.7% among lesbian, bisexual and queer women aged 16-24 years[45]
LGBTI sexual health	Higher risk of HIV and Hepatitis C due to high risk sexual practices as well as drug usage patterns.[46]	**Quantitative evidence:** • Nationally, gay men had the highest prevalence of HIV (17%)[47], with 75.8% (263) of newly diagnosed HIV infection in NSW among men who have sex with men. [48] • 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.[49]
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.[50]

[44] 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.
[45] 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.
[46] 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.
[47] The Kirby Institute 2015, *HIV, viral hepatitis and sexually transmissible infections in Australia- Annual Surveillance Report 2015*, The Kirby Institute, UNSW, Sydney.
[48] NSW Government: Department of Health 2016, NSW HIV Strategy 2016-2020: Quarter 2 2016 Data Report, Department of Health
[49] ACON 2015, Annual Report 2014/15, ACON, Sydney.
[50] 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
LGBTI sexual health Access - availability	Sexual health	**Qualitative evidence:** • 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.[51]
Mental Health - High prevalence of mental illness in LGBTI population		
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.[52]	**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. [53]
Alcohol and Other Drugs- LGBTI people are more likely to engage in risky drinking behaviours, with a higher prevalence of illicit substance abuse.		
Alcohol consumption in LGBTI population	LGBTI people more likely to engage in risky drinking behaviours.	**Quantitative evidence:** • Across Australia, 29.9% of LGBTI people reported engaging in risky drinking behaviours compared to 18.5% for the non-LGBTI population[54].
Illicit drug use in LGBTI population	Higher prevalence of illicit substance abuse among LGBTI population compared to non-LGBTI population.	**Quantitative evidence:** • LGBTI population: ○ 3.8 times more likely to use ecstasy ○ 3.1 times more likely to use methamphetamine

[51] 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.
[52] beyondblue 2010, Clinical practice guidelines: Depression in adolescents and young adults, beyondblue, Melbourne.
[53] 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
[54] Australian Institute of Health and Welfare (AIHW) 2014, *National Drug Strategy Household Survey detailed report 2013*, cat no. PHE 183, AIHW, Canberra.

Outcomes of the health needs analysis		
Identified Need	Key Issue	Description of Evidence
		○ 2.2 times more likely to use cocaine ○ 2.6 times more likely to use pharmaceuticals for non-medical purpose[55]
Homelessness		
Homelessness – Population in the NSPHN region homeless or at risk of being homeless with significant and complex health issues. Access to secure and affordable housing major contributor to homelessness in the region.		
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. [56] Northern Sydney District Homeless Project[57] 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 [58] 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%).[59]

[55] Australian Institute of Health and Welfare (AIHW) 2014, *National Drug Strategy Household Survey detailed report 2013*, cat no. PHE 183, AIHW, Canberra.
[56] Australian Bureau of Statistics (ABS) 2013, *Census of population and housing: estimating homelessness, 2011*, cat no 2049, viewed October 2016
[57] Northern Sydney District Homelessness Project 2016
[58] Northern Sydney District Homelessness Project 2016
[59] 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
Mental Health: Higher prevalence in those homeless or at risk of being homelessness.		
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[60], with 32.4% of people in NSW accessing specialist homelessness services with a mental health problem.
Health of the Elderly		
General Population Health – Higher rate of fall-related injuries compared to NSW, increasing over the previous five years. An ageing population in the NSPHN region will see an increase in co-morbidities and dementia, increasing the need for aged care services.		
Ageing population	Reflected by Pat Cat data, an ageing population within the NSPHN region will see an increase in co-morbidities and dementia, increasing the need for aged care services.	• Nationally, 8.8% of people aged 65+ years at risk of developing dementia.[61] Ryde (51.4%), Pittwater (50%), North Sydney (47.5%) and Hornsby (49.2%) LGAs have higher rate of increase in the 65+years population compared to NSPHN[62] and thus are most likely to be impacted by potential dementia burden.
Health of the elderly	Higher rate of fall-related injuries within NSPHN region compared to NSW, increasing over the previous five years.	**Quantitative evidence:** • Rate of falls-related injury hospitalisations (3,664 per 100,000; 95% CI: 3,568-3,763), higher compared to NSW rate (3,044 per 100,000; 95%CI: 3,013-3,075). • Falls related injury hospitalisations have increased from 2,878 per 100,000 (95% CI: 2,788-2,970) in 2009-10 to 3,664 per 100,000 (95% CI: 3,568-3,763) in 2014-15. [63]

[60] Northern Sydney District Homelessness Project, 2016
[61] Australian Institute of Health and Welfare (AIHW) 2016, *Australia's Health 2016*, cat no. AUS 199, AIHW, Canberra.
[62] NSW: Department of Planning & Environment 2016. *New South Wales State and Local Government Area Population, Household and Dwelling: 2014 Final*. NSW Planning Department of Planning & Environment, Sydney, viewed June 2016
[63] 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
Mental Health - Higher prevalence in males ages 75+ years.		
Suicide in elderly males	High rate of suicide among males aged 75+ years.	**Quantitative evidence:** • Males aged 75+ years (NSW) have the highest rate of suicide – 25.9 per 100,000 (95% CI: 19.6-33.6) compared to 13.2 per 100,000 (95% CI: 12.4-14.4) for men of all ages. The largest number of suicides in those aged 35-54 years (2013). [64]
Mental Health – Vulnerable and hard to reach groups		
Children and Young People - High rate of intentional self-harm in those aged 15-24 years, with a higher rate of hospitalisations due to intentional self-harm among females aged 15-24 years compared to NSW.		
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 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 - 335 per 100,000 (95% CI: 302-371) compared to 103 per 100,000 (95% CI: 97-110) for all ages (2014-15). • Higher rate of hospitalisations for females within NSPHN - 548 per 100,000 (95% CI: 487-614) compared to 133 per 100,000 (95% CI: 105-167) for males (2014-15). [65] • For NSW, age-specific death rate for intentional self-harm in those aged 15-24 years is 9.9 per 100,000. Rate among males - 14.4 per 100,000 compared to 5.4 per 100,00 for females[66].

[64] Centre for Epidemiology and Evidence 2016, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed October 2016.
[65] Centre for Epidemiology and Evidence 2016, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed October 2016.
[66] Australian Bureau of Statistics (ABS) 2014, *Causes of Death, Australia, 2014*, cat no. 3303, viewed October 2016

Outcomes of the health needs analysis		
Identified Need	Key Issue	Description of Evidence
Self-harm in young women	Higher rate of hospitalisations due to intentional self-harm among females aged 15-24 years compared to NSW.	**Quantitative evidence:** • Rate of hospitalisations due to intentional self-harm among females aged 15-24 years within NSPHN 548 per 100,000 (95% CI: 487-614) compared to 464 per 100,000 (95% CI: 445-484) for NSW (2014-15).[67]
Perinatal Depression - An estimated 20% of women suffer from perinatal depression, with comorbidity of mental health disorders for people with intellectual disability.		
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. [68]
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.
Intellectual disability - Comorbidity of mental health disorders for people with intellectual disability.		
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. [69] • Nationally, 57% of people with intellectual disability also have psychiatric disability.[70]

[67] Centre for Epidemiology and Evidence 2016, Health Statistics New South Wales, Sydney: NSW Ministry of Health, viewed October 2016.
[68] 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.
[69] 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.
[70] Australia Institute of Health and Welfare (AIHW) 2008, *Disability in Australia: intellectual disability*, Bulletin 67, AIHW, Canberra.

Section 3 – Outcomes of the service needs analysis

This section summarises the findings of the service needs analysis in the table below. For more information refer to Table 2 in '5. Summarising the Findings' in the Needs Assessment Guide on www.health.gov.au/PHN.

Outcomes of the service needs analysis		
Identified Need	Key Issue	Description of Evidence
General Population Health **NSPHN's Baseline Needs Assessment 2015 - 2016 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 to prevent premature entry into residential care.** **The following update utilises the latest quantitative data and qualitative information to identifying barriers to access, with a focus on vulnerable and hard to reach populations highlighted within NSPHN's Baseline Needs Assessment.**		
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 - 75.9% of GP attendances bulk-billed within the NSPHN region compared to 84.3% nationally.[71] Lower rates of bulk billing medical services and practitioners charging higher gap fees providing a financial barrier to access.

[71] Australian Institute of Health and Welfare (AIHW) 2016, Healthy communities: Medicare Statistics 2014-15, AIHW, Canberra.

Outcomes of the service needs analysis		
Identified Need	Key Issue	Description of Evidence
Mental Health **NSPHN's Baseline Needs Assessment highlighted barriers to help seeking behavior in young people, limited psychological services and lack of Aboriginal-specific programs. Analysis also highlighted support services for young people are fragmented and poorly coordinated.** **The following update for mental health utilises the latest quantitative data and qualitative information to identifying barriers to access, with a focus on vulnerable and hard to reach populations highlighted within NSPHN's Baseline Needs Assessment. Reflecting the release of national performance indicators on which the PHN will be measured, the following data is presented for mental health treatment rates.**		
Access to mental health care	Lower MBS mental health treatment rate compared to NSW and Australia.	**Quantitative evidence:** • In 2014-15, 7.5% of the NSPHN population saw an MBS funded provider (psychiatrist, GP, allied health) compared to 8.7% for NSW and Australia. • Between 2011-12 to 2014-15, NSPHN's mental health treatment rates increased by 1% compared to 1.5% and 1.6% for NSW and Australia respectively. [72] • Treatment rate dependent on prevalence of mental illness and accessibility of mental health services, both public and private.
Access to mental health care	GPs only access point to subsidised mental health care.	**Qualitative evidence:** Stakeholder consultation identified a need to expand the ability to refer beyond GPs, allowing better access to subsidised mental health care. Stakeholder consultation also highlighted the communication feedback pathway between GPs and ATAPS providers can be inconsistent, whilst care coordination and case conferencing is not reimbursed.

[72] Department of Health: Primary Health Networks (PHN) 2016, *MBS Mental Health Data by PHN*, Department of Health, Canberra, viewed September 2016

Outcomes of the service needs analysis		
Identified Need	Key Issue	Description of Evidence
Mental health related hospitalisations	Anxiety and stress disorders account for largest proportion of mental health related hospitalisations. Schizophrenia and delusional disorders account for largest number of bed days.	**Quantitative evidence:** • Anxiety and stress disorders account for 17.3% (1,285) of all mental health hospitalisations in the NSPHN region. • Schizophrenia and delusional disorders account for 20.9% (26,163) of all bed days in the NSPHN region. [73]
Alcohol and Other Drugs **NSPHN's Baseline Needs Assessment 2015 – 2016 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 utilises the latest quantitative data and qualitative information to identifying barriers to access, with a focus on vulnerable and hard to reach populations highlighted within NSPHN's Baseline Needs Assessment.**		
AOD combined morbidity	Drug and alcohol related hospitalisations.	**Quantitative evidence:** • Rates of hospitalisations in NSPHN: 183 per 100,000 compared to 168 per 100,000 nationally and 151 per 100,000 for the metropolitan region (58% public hospitals). • Drug and alcohol hospitalisations accounted for 21.8% of all mental health related overnight hospitalisations in NSPHN. • Rate of bed-days for NSPHN: 1,980 per 100,000 compared to 1,294 per 100,000 nationally and 1,275 per 100,000 for metropolitan cities. Majority of the bed-days in private hospitals (66.5%).[74]

[73] Australian Institute of Health and Welfare (AIHW) 2016, *Healthy Communities: Hospitalisations for mental health conditions and intentional self-harm in 2013-14*, cat no HSE 177, AIHW, Canberra.
[74] Australian Institute of Health and Welfare (AIHW) 2016, *Healthy Communities: Hospitalisations for mental health conditions and intentional self-harm in 2013-14*, 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[75]: ○ 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.
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.

[75] 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 – 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.
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.

Outcomes of the service needs analysis		
Identified Need	Key Issue	Description of Evidence
Aboriginal and Torres Strait Islander People		
General Population Health – Low proportion of the Aboriginal population receiving annual health check, with limited access to culturally appropriate and flexible services.		
Aboriginal and Torres Strait Islander People Access - availability	Low proportion of the Aboriginal population receiving MBS 715 health check.	**Quantitative evidence:** • In 2013-14, GP usage rate for the Aboriginal population in the NSPHN region 1.7% compared to 19.2% for NSW and 21.3% nationally. • 4.6% of the Aboriginal population accessed a GP for their annual health check in 2011-12, reducing to 2.0% in 2012-13 and 1.7% in 2013-14.[76]
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	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-

[76] Australian Institute of Health and Welfare 2016, *AIHW Indigenous health check (MBS 715) source data*, AIHW, Canberra, viewed October 2016.

Outcomes of the service needs analysis		
Identified Need	Key Issue	Description of Evidence
Access - availability		being of the whole community rather than solely on illness. Consultations also highlighted need within mental health and AOD services.
Aboriginal and Torres Strait Islander People Access - availability	No providers of National Aboriginal and Torres Strait Islander Aged Care in the NSPHN region.	**Quantitative evidence:** No providers of National Aboriginal and Torres Strait Islander Aged Care Program in the NSPHN region.[77]
Mental Health – Higher rate of hospitalisations for mental health disorders. Limited access to culturally appropriate and flexible services.		
Aboriginal and Torres Strait Islander People Access - availability	Low uptake of primary care services.	**Quantitative evidence:** • Between 2015-16, 2.6% of ATAPS referrals were made for Aboriginal people of which majority were made for suicide prevention.
Culturally and Linguistically Diverse (CALD) Populations		
General Population Health – Limited access to interpreters for clients and need for ongoing and culturally appropriate health promotion.		
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.

[77] Department of Health 2016, Aged Care Programme Data as at 30 June 2015

Outcomes of the service needs analysis		
Identified Need	Key Issue	Description of Evidence
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	Growing elderly CALD population with differing needs.	**Quantitative evidence:** • 20% (2,041) of aged care recipients from CALD backgrounds.[78] 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'. [79]
Mental Health – Low uptake of ATAPS, with higher acute and involuntary admissions in CALD population related to mental health. Barriers to access due to lack of interpreters, culturally appropriate services, stigma and cost.		
CALD Access - availability	Low uptake of ATAPS within CALD population	**Quantitative evidence:** • Between 2015-16, 4.4% of all ATAPS referrals were made for people from CALD communities and 4.5% of referrals under the ATAPS suicide prevention pathway were made for people from CALD communities.
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.

[78] Australian Institute of Health and Welfare (AIHW) 2015, Regional Aged Profiles Tool, AIHW, Canberra, viewed October 2016.
[79] 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
CALD Access - availability	Financial barrier to access	**Qualitative evidence:** Stakeholder consultation highlighted potential financial barriers for CALD groups who's visa status doesn't allow them to access Medicare (eligibility), including international students wanting to access psychologists.
Lesbian, Gay, Bisexual, Transgender and Intersex (LGBTI)		
General Population Health – Limited access to LGBTI appropriate primary health services, with needs under-represented in aged care planning.		
LGBTI Access - availability	Limited access to LGBTI appropriate primary health services.	**Quantitative evidence:** • 22 GPs in the NSPHN region registered as gay-friendly[80]. A need for GPs to undergo training that allows them to meet the specific and diverse health needs of LGBTI population in the NSPHN region.
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[81]
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[82], 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.

[80] STI in Gay Men's Action Group 2015, Gay friendly GPs List, Aids Council of NSW (ACON), Sydney, viewed October 2016
[81] 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.
[82] 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
		• Empowering older LGBTI people to access high-quality services. • Encouraging LGBTI individuals and communities to be involved in the development of aged care services.
LGBTI – Service gap in provision of LGBTI appropriate mental health services, with broader health promotion strategies that include LGBTI people.		
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.
Homelessness		
General Population Health – Need to increase availability of services focusing on early intervention, with a need for a continuum of care and flexibility in how and where services are provided.		
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.
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.
Mental Health – Barriers to accessing mental health services.		
Access to treatment for homeless population.	Barriers to accessing mental health treatment services.	**Quantitative evidence:** • Between 2015-16, 0.9% of ATAPS referrals made for homeless people in the NSPHN region. People who are experiencing primary or

Outcomes of the service needs analysis		
Identified Need	Key Issue	Description of Evidence
Access		secondary homelessness face additional barriers to accessing physical and mental health care services.
Health of the Elderly		
Health of the Elderly-Lower rate of annual assessments for those aged 75+ years and undersupply of Level 3 and 4 Home Care Packages.		
Access to primary care	Lower rate of annual health assessments by GPs for people aged 75 years and over in the NSPHN region.	**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[83] (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.
Aged Care services Access - availability	Undersupply of Level 3 and 4 Home Care Packages which can provide optimal care for people with dementia by increasing their sustainability to stay at home.	**Quantitative evidence:** • Whilst the region has highest number of aged care places in NSW, lower proportion of level 3 and 4 Home care packages within NSPHN (21.1%) compared to NSW (22.3%). This translated to a lower rate of level 3 and 4 Home care packages per 10,000 people aged 65+ years for NSPHN (41 per 10,000) compared to NSW (43 per 10,000)[84]. • Further analysis required to determine validity of data.
Mental Health - Low uptake of mental health services in those age 65+ years, with barriers to access for those living in residential aged care facilities.		
Health of the Elderly Access - availability	Low uptake of mental health services in those aged 65+ years.	**Quantitative evidence:** Between 2014-15, 5.1% (6,949) of people aged 65+ years accessed MBS subsidised mental health services compared to 5.4% for NSW.[85]

[83] 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.
[84] Australian Institute of Health and Welfare (AIHW) 2015, Regional Aged Profiles Tool, AIHW, Canberra, viewed October 2016.
[85] Department of Health: Primary Health Networks (PHN) 2016, *MBS Mental Health Data by PHN*, Department of Health, Canberra, viewed September 2016

Outcomes of the service needs analysis		
Identified Need	Key Issue	Description of Evidence
Mental health related hospitalisations in the Elderly	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.[86]
Health of the Elderly 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.
Mental Health – Vulnerable and hard to reach groups		
Children and Young People - Higher service usage in males under 12 years compared to females, but lower for males aged 12-24 years. Limited availability of services for children under 12 years and those with moderate to severe mental health issues. Complexity of health care system, lack of outreach and bulk-billing GPs barrier to children and young people accessing mental health services.		
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 6.1% of the NSPHN population aged under 25 years accessed MBS subsidised mental health services in 2014-15 (24.7% of total MBS services).[87] • 9% of persons aged 12-24 years accessed MBS subsidised mental health services. Ratio of females to males accessing the services was 1.4:1. • 2.9% of persons under 12 years accessed MBS mental health services. Ratio of males to females accessing the services was 1.6:1.[88]

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

Outcomes of the service needs analysis		
Identified Need	Key Issue	Description of Evidence
		• 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.[89]
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).

[89] NSLHD Health Services Planning Unit 2016, Hospital Admissions Data 2013-14

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.
Young people Access – availability	Limited education for young people across the region	**Qualitative evidence:** Stakeholder consultations identified a need for AOD education for children and young people across the region, as education in schools in its current form is inconsistent.
Intellectual Disability - Limited availability of services and workforce capability in diagnosing intellectual disability.		
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.

Outcomes of the service needs analysis		
Identified Need	Key Issue	Description of Evidence
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.[90]
Perinatal depression - Low uptake of psychological services, stigma a barrier to women accessing services.		
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.[91] 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. [92] **Quantitative evidence:** For 2015-16, 3.5% of all ATAPS referrals were made for perinatal depression.
Women experiencing perinatal depression	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

[90] 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.
[91] 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.
[92] 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
Access - availability		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.
People with severe mental illness and complex needs – Financial barriers from limited bulk-billing psychiatrists and ATAPS sessions. Need for better access to early intervention and flexibility in how and where services are delivered.		
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.

Outcomes of the service needs analysis		
Identified Need	Key Issue	Description of Evidence
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.
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.
General Population	Need to understand pattern of mental health care provided in NSPHN region to highlight gaps in service provision and allow planning informed by local evidence.	Incomplete mapping of existing mental health services in NSPHN region. Currently undertaking the Integrated Mental Health Atlas of NSPHN, analysing the pattern of mental health care provided within the region using a standard, internationally validated tool to describe and classify services. The integrated mental health atlas provides a tool for evidence-informed planning and analysis of the pattern of adult mental health care, enabling comparison with other regions and jurisdictions. Due for completion in 2017.
Urgent care/after hours		
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- 114 per 100,000 for NSPHN compared to 97 per 100,000 for NSW and 100 per 100,000 for Australia.

Outcomes of the service needs analysis		
Identified Need	Key Issue	Description of Evidence
		• Between 2012-13 and 2014-15, there was an increase of 39.3% in the number of patients accessing GPs after hours, higher than NSW (16.6%) and Australia (19.9%)[93].
After hours Access - availability	Underutilisation of available after hours services.	**Quantitative evidence:** • Despite the increase, the average number of after hours services utilised per patient is lower in NSPHN (1.75 per patients) compared to NSW (1.9) and Australia (1.92)[94], with the average number of attendances per person lower for NSPHN (0.41) compared to the national average (0.43)[95]. • Underutilisation potentially driven by financial barrier. The out of pocket costs per service in NSPHN ($3.17 per service) higher compared to NSW ($1.38) and Australia ($2.71).[96]

[93] Department of Health: Primary Health Networks (PHN) 2016, *MBS data by PHN and MBS Reporting Group, for 2012-13 to 2014-15*, Department of Health, Canberra, viewed September 2016
[94] Department of Health: Primary Health Networks (PHN) 2016, *MBS data by PHN and MBS Reporting Group, for 2012-13 to 2014-15*, Department of Health, Canberra, viewed September 2016
[95] Australian Institute of Health and Welfare (AIHW) 2016, Healthy communities: Medicare Statistics 2014-15, AIHW, Canberra.
[96] Department of Health: Primary Health Networks (PHN) 2016, *MBS data by PHN and MBS Reporting Group, for 2012-13 to 2014-15*, Department of Health, Canberra, viewed September 2016