



Perth North Primary Health Network

Needs Assessment Reporting Template Summary

The Perth North Primary Health Network (PHN) submitted the following tables to the Commonwealth Department of Health as part of the reporting process following the development of the PHN's Needs Assessment, *Perth North PHN Baseline Population Health Report: 2016 – 2018* (the Needs Assessment). This needs assessment process also included the initial drug and alcohol treatment needs, mental health and suicide prevention.

Section 1 - Narrative

Needs Assessment Overview

The Needs Assessment provides an overview of health care demand patterns and trends, and community service needs in the Perth North PHN region.

The Needs Assessment is informed by community consultation, data and market analysis. This contributes to the development and implementation of an annual Activity Work Plan that addresses national and PHN specific priorities in the Perth North PHN region.

Methodology

Curtin University is the WA Primary Health Alliance's academic partner. The population health planning outlined in the Needs Assessment explored significant service gaps and areas of unmet need; emerging trends; supply and costs of health care and service provision; predictions of future health needs; and recommendations for further investigation.

Raftery and Stevens' needs assessment framework informed the needs assessment model. The model includes:

- Demand for services (e.g. incidence and prevalence of disease);
- Supply of services (including availability and access to services), and
- Priority areas and options analysis (current and future provision of service investments and disinvestment).

The findings were verified through ongoing consultation and engagement with key stakeholders and triangulated with expert groups from across the health system. The Needs Assessment findings and the priorities developed from them, drive the PHN's commissioning activities.

Priorities were identified and aligned to the six pillars identified by the Federal Government which are:

- Chronic conditions;
- Aboriginal health;
- Aged care;
- Mental health;
- Digital Health; and
- Health workforce.

The following priorities were agreed to by the PHN's stakeholders.

- Keeping people well in the community.
- People with multiple morbidities especially chronic co-occurring physical conditions, mental health conditions and drug and alcohol treatment needs.
- Services designed to meet the health needs of vulnerable and disadvantaged people, including those of Aboriginal heritage.
- System navigation and integration to help people get the right services, at the right time and in the right place.
- Capable workforce tailored to these priorities.

¹ Stevens A, Raftery J. Health care needs assessment. Second series. Oxford: Radcliffe Medical Press; 1997

Perth North PHN Demographics

Perth North is the smallest of the three Western Australian PHNs in terms of its geographical boundary, taking up a little over 3,000 square kilometers. Within the region there are 17 Local Government Areas (LGA) of which the City of Swan is the largest at 1,043 Km and the Shire of Peppermint Grove, at 1.1 Km, is the smallest.

In 2014, the estimated resident population of the Perth North PHN was 1,060,011 people, accounting for 21.5% of the State's population. The number of Aboriginal residents in 2011 was estimated at 12,529, accounting for just 1.4% of the Perth North PHN population. Within the region there is also a high proportion of immigrant families, from both culturally and linguistically diverse (CALD) and English speaking backgrounds.

The population of the Perth North PHN is rapidly expanding. Within the region, the City of Wanneroo is the fastest growing LGA in Western Australia and the fifth fastest growing in Australia. The City of Swan is also growing rapidly, due to expansion in the 'Urban Growth Corridor', an area west of the Swan Valley, which has been designated as a primary residential growth area.

While overall the Perth North PHN is a relatively high ranking socioeconomic area, there are pockets of both low socioeconomic and very high socioeconomic areas within the region. Some of the most affluent areas in WA, including the Shire of Peppermint Grove, the Towns of Cottesloe and Cambridge, are located in Perth North, as are the generally lower socioeconomic areas in the City of Swan and the Town of Bassendean.

Health Outcomes

Overall, health outcomes in the Perth North PHN are generally slightly better than Perth South PHN and considerably better than Country WA PHN. However, there are health inequalities by LGA within the region, which can be overlooked when considering the Perth North PHN as a whole. For example, the City of Swan, City of Bayswater and the Town of Bassendean tend to have a higher prevalence of chronic conditions, risk factors for poorer health outcomes and potentially preventable hospitalisations (PPH) than other localities in the Perth North region.

While the overall prevalence of illnesses related to lifestyle factors is lower in Perth North than in WA overall, the rates are still cause for concern. 51.5 out of every 100 people in the Perth North PHN had at least one of the main risk factors (smoking, harmful drinking of alcohol, physical inactivity, obesity) for developing chronic conditions. People who are overweight is a particular concern in the Perth North PHN, with the Towns of Claremont, Cottesloe, Mosman Park, the Shire of Peppermint Grove and the City of Nedlands having a high age standardised rate (ASR) of overweight people per 100 people. Should historical trends continue, rates of those categorised as overweight may rise to above 50% of the population. This increase will impact on the prevalence of chronic conditions linked to obesity including type 2 diabetes, cardiovascular disease and cancers.

Other health concerns in the Perth North PHN include dementia and lower immunisation rates. Currently the region is ranked highest in WA in terms of dementia prevalence, with over 6,000 cases, and these figures are set to rise. In 2015, the Perth North PHN had lower immunisation rates than the overall WA average, both for Aboriginal and non-Aboriginal age groups.

The Perth North PHN, supported by WAPHA, is working in collaboration with key partners both government and non-government, and other stakeholders to collectively address health and social needs and regional priorities and to commission integrated approaches to best practice models of care and evidence-based solutions to improve future health outcomes.

Section 2 – Outcomes of the health needs analysis

dentified were across the following Federal Government priority areas: Population Health (Chronic Conditions) Aboriginal Health Mental Health Aged Care Digital Health Health Workforce The Needs Assessment identified that in the Perth North region PPH were seen in a number of local government areas that also have a high prevalence of patients with chronic co-occurring conditions. The Needs Assessment identified that in the Perth North region PPH were seen in a number of local government areas that also have a high prevalence of patients with chronic co-occurring conditions. The LGAs of Swan, Bayswater, Bassendean Source – National Health Performance Author Data Set 2013–14 WA hospitalisation rates and 43% of Perth North PPH adults reported I where several conditions were most prevalent in the LGAs of Bayswater, Bassendean Source – National Health Performance Author Data Set 2013–14 WA hospitalisation rates and 50 source – National Health Performance Author Data Set 2013–14 WA hospitalisations (PPH) due to The LGAs of Swan, Bayswater, Bassendean Source – National Health Performance Author Data Set 2013–14 WA hospitalisations (PPH) due to The LGAs of Swan, Bayswater, Bassendean LGA Swan also have a high prevalence of patients with chronic co-occurring together by area. The LGAs of Mosman Park, Claremont, C average aged-standardised rate (ASR) per Objective to the LGAs of Bayswater, Bassendean LGA had the highest rate of The LGAs of Mosman Park, Claremont, C average aged-standardised rate (ASR) per Objective the mational rate, with all LGAs with the exception of Bassendean (COPD) below the national rate, with all LGAs with the exception of Bassendean LGA had an ASR per 100 of The LGAs of Swan, Wanneroo, Bayswater and Bassendean LGA had an ASR per 100 of The LGAs of Swan, Bayswater, Bassendean LGA had an ASR per 100 of The LGAs of Swan, Wanneroo, Bayswater and Bassendean LGA had an ASR per 100 of The LGAs of Swan and the highest rate of The LGAs of Swan and the highest rate of The LGAs of Swan and the highest r	Description of Evidence	Key Issue	Identified Need
fair/poor self-assessed health status. It	e Local Government Areas (LGAs) of Swan, Wanneroo and Mundaring had the highest rates of potentially eventable hospitalisations (PPH) due to kidney and urinary tract infections. e LGAs of Bayswater and Bassendean had the highest rate of PPH due to diabetes complications. e LGAs of Bayswater, Bassendean, Swan and Wanneroo had highest rate of PPH for Chronic Obstructive Imonary Disease (COPD). e LGA of Swan had the highest rate of PPH due to cellulitis. e LGAs of Swan, Bayswater, Bassendean and Wanneroo had the highest rate of PPH for heart failure. - National Health Performance Authority (NHPA) analysis of Admitted Patient Care National Minimum to 2013–14 WA hospitalisation rates and modelled costings. Is is evidenced across the catchment, further research, analysis and consultation would identify specific as where a high proportion of people have comorbidities. It could also identify the conditions commonly urring together by area. Is of Perth North PHN adults reported having a long term health condition. Local Government Areas (LGAs) ere several conditions were most prevalent, and could be occurring together in the population, include an, Bayswater, Bassendean, Wanneroo and Kalamunda. Detes was most prevalent in the LGAs of Vincent, Wanneroo, Swan, Bayswater, Perth and Bassendean. Detes was most prevalent in the LGAs of Vincent, Wanneroo, Swan, Bayswater, Perth and Bassendean. Detes was most prevalent in the LGAs of Vincent, Wanneroo, Swan, Bayswater, Perth and Bassendean. Detes was most prevalent in the LGAs of Vincent, Wanneroo had the highest prevalence of circulatory system ages. Detections of Bayswater, Kalamunda, Stirling and Wanneroo had the highest prevalence of circulatory system asses. Detections of Bayswater, Kalamunda, Stirling and Wanneroo had the highest prevalence of circulatory system disease. Detections of Bayswater, Kalamunda, Stirling and Wanneroo had the highest prevalence of circulatory system diseases. Detections of Bayswater, Bassendean and Mundaring had rates of Chronic O	The Needs Assessment identified some local government areas in the Perth North PHN had the highest number of potentially preventable hospitalisations (PPH) for specific chronic conditions. The Needs Assessment identified that in the Perth North region PPH were seen in a number of local government areas that also have a high prevalence of patients with chronic co-occurring	The health needs identified were across the following Federal Government priority areas: Population Health (Chronic Conditions) Aboriginal Health Mental Health Aged Care Digital Health
and other drugs (AOD) and chronic condition	LGAs of Swan, Wanneroo, Bayswater and Bassendean have the highest ASR per 100 of persons with a /poor self-assessed health status. It is possible that people with fair/poor self-assessed health have norbidities. - Health outcomes and trends in specific cohorts' e.g. Oral health for people with mental illness, alcohol er drugs (AOD) and chronic conditions; Physical health for people with mental illness; Mental health for with high drug and alcohol risk behaviours pattern and relationship of diagnosis.		

Identified Need	Key Issue	Description of Evidence
The health needs identified were across the following Federal Government priority areas: Population Health (Chronic Conditions) Aboriginal Health Mental Health Aged Care Digital Health Health Health Workforce	The Needs Assessment identified areas of the PHN region where lifestyle factors lead to a high prevalence of chronic co-occurring conditions.	 In the Perth North PHN, 51.5 per 100 people had at least one of the following – smoking; harmful use of alcohol; physical inactivity; or obesity (modelled estimate). The LGA of Swan had a higher proportion of female smokers than the State average. Bassendean and Swan had higher proportions of male smokers than the State average. The LGAs of Bayswater and Perth had higher rates of people than the State average consuming alcohol at harmful levels. The LGAs of Claremont, Cottesloe, Mosman Park, Peppermint Grove and Nedlands had a high ASR of overweight persons per 100. The LGAs of Kalamunda and Swan had obesity rates considerably higher than other LGAs. In the Perth North PHN, 51.5% of adults were not sufficiently active, nationally the rate is 55.5%. Data by LGA was not available. Detailed data on diet is not available except that in 2007-08. The Perth North PHN had a higher ASR per 100 of children and adults eating two or more serves of fruit per day, than the Australian average. Further research would identify specific areas. Sources - Self-reported data related to health status and risk behaviours, as measured in Australia Health Survey (AHS) and WA Health and Wellbeing Surveillance System (HWSS). Spatial analysis demonstrates direct relationship between lifestyle risk factors and chronic disease prevalence.
	In some areas in the PHN, the Needs Assessment identified as an imperative, the development of, and education of, self-management strategies to increase people's ability to take responsibility for managing their health. It was also identified that the lack of these support strategies was a contributing factor to incidences of, and the continuation of chronic conditions.	This is evidenced across the catchment. Further consultations would identify barriers to self-management and health literacy. Source - Identified through consultation with community/consumers and clinicians/service providers.
	It has been identified in the Needs Assessment that in some areas in the PHN, there is a low proportion of registrants for My Health Record. Increasing registrations will improve the coordination of care and enable people to better manage their personal health information. The Needs Assessment identified that for some people with co-occurring chronic conditions, mental illness and/or problematic alcohol and other drug use, oral health is a problem.	 WA had the lowest proportion of registrants (9%) compared to all other Australian States and Territories. Further analysis is needed to identify and target practices to support the uptake of My Health Record and assist with registration. Source - Adoption/uptake rates. Further research, consultation and analysis is required to identify geographical and population variances. Despite improvements in oral health over the last 20-30 years, one in five WA adults have untreated tooth decay with higher rates experienced by disadvantaged groups including Aboriginal people, regional and remote residents and people on lower incomes. Approximately 12.6% of Western Australian adults have moderate to severe gum disease and prevalence increases with age. Disadvantaged groups, with low income, are more likely to experience gum disease. In 2013, there were 361 new cases and 96 oral cancer deaths in Western Australia. Oral cancer, which may affect the lips, tongue, salivary glands, gums, mouth, or the throat, is more common among older age groups, particularly men, and Aboriginal people (rates are three times higher than the rest of the Australian population). Source - Australian Institute of Health and Welfare Dental Statistics and Research Unit.

Identified Need	Key Issue	Description of Evidence
The health needs identified were across the following Federal Government priority areas: Population Health (Chronic Conditions) Aboriginal Health Mental Health Aged Care Digital Health Health Workforce	The Needs Assessment identified that it is vital that the social and cultural determinants of health are considered when addressing health issues, given the correlation to postcode.	 The LGAs of Bassendean, Bayswater and Swan have the lowest Social Economic Indexes for Areas (SEIFA) scores in the PHN. The Perth, Swan and Wanneroo LGAs had the lowest proportion of children aged 16 years participating in secondary school education and a below State average percentage of children aged 15 to 19 years learning or earning. The Swan, Wanneroo and Kalamunda LGAs have the highest proportion of people who left school at Year 10 or below, or did not go to school. The LGAs of Swan, Bassendean and Bayswater had a percentage of single parent families higher than the State average. Bayswater, Kalamunda, Swan and Wanneroo LGAs had the highest percentage of children developmentally vulnerable on two or more domains. There is a high proportion of households under financial stress from mortgage or rent. The LGAs of Swan, Wanneroo and Bassendean had an above average percentage of households in dwellings receiving rent assistance from the Australian Government. The LGAs of Swan, Wanneroo and Bayswater had a higher proportion of families that are low income, welfare dependent with children and a higher proportion of healthcare card holders than average. Wanneroo, Vincent and Perth LGAs have the highest unemployment rates. Source - Influence of health determinants on health outcomes.
Chronic Conditions	In some areas in the PHN, the Needs Assessment identified as an imperative, the development of, and education of, self-management strategies to increase people's ability to take responsibility for managing their health. It was also identified that the lack of these support strategies was a contributing factor to incidences of, and the continuation of chronic conditions.	Related to patient health literacy levels (granular data on health literacy levels for WA or the Perth North PHN was not available). Source - Identified through consultation with clinicians/service providers. More feedback required.
	The Needs Assessment identified that across the PHN there is a lack of relevant and accessible planned prevention activities and/or early detection strategies and this is linked to an increase in the number of people with chronic conditions.	 This is evidenced across the catchment. Further research, consultation and analysis is required. Qualitative stakeholder feedback collected identified a lack of prevention services and health promotion. Sources NHPA analysis of Admitted Patient Care National Minimum Data Set 2013–14. Evidenced by chronic disease mortality rates and bivariate analysis of cancer screening participation rates and outcomes (detection of abnormalities). Analysis of opportunity for early detection, intervention and treatment by mapping of lifestyle modification programs and services, and timeliness of access to medical practitioners and specialists. WA hospitalisation rates and modelled costings for chronic conditions. Qualitative stakeholder feedback.
	The Needs Assessment showed that services and interactions for some people in the PHN region are not always tailored to meet their individual needs.	This is evidenced across the region identifying a higher burden of disease experienced by disadvantaged groups, further research would identify specific areas. Source - Identified through consultation with community/consumers and clinicians/service providers. More feedback required.

Identified Need	Key Issue	Description of Evidence
Chronic Conditions	The Needs Assessment identified that problems associated with unmonitored chronic conditions are often linked to people in the region not having a regular GP and as such, their medication usage is not monitored and/or reviewed, particularly for disadvantaged groups across the PHN.	 This is evidenced across the catchment. Further research, consultation and analysis is required. Related to patient health literacy levels (granular data on health literacy levels for WA or the Perth North PHN is not available). Source - Identified through consultation with clinicians/service providers. Further research, consultation and analysis is required.
	The Needs Assessment showed that there were a lack of targeted promotional activities, barriers to access, and awareness about relevant and accessible services for those people in the PHN region who have multiple risk factors associated with chronic conditions.	 Qualitative feedback collected indicated that improved access was required for self-management programs, particularly those with musculoskeletal issues. The feedback also indicated that there was a lack of awareness of local diabetes services. Population groups experiencing access barriers were listed as: Aboriginal people, people with chronic obstructive pulmonary disease, asthma, cardio vascular disease, musculoskeletal system diseases, respiratory disease, the homeless population and people over 75 years of age. Source - Identified through consultation with clinicians/service providers. Further research, consultation and
Aboriginal Health	The Needs Assessment identified that there is not a targeted and differentiated approach for Aboriginal people with mental illness, despite some areas of the PHN having high populations of Aboriginal people.	 Swan, Bassendean and Mundaring LGAs in Perth North have the highest proportion of people in their catchments that identify as Aboriginal. Perth North PHN's percentage of aboriginal people is 1.61%, which is lower than the National rate of 3.02%. The Aboriginal population in the North Metropolitan area totaled almost 13,400 people in 2011, which represented 17.6% of the total WA Aboriginal population. It is expected to grow to almost 21,000 people by 2025, with the percentage increasing slightly to 18.1 % of the total Aboriginal population residing in the North Metropolitan region.
		 WA hospitalisation rates and modelled costings, by Conditions and Aboriginality. Mortality and morbidity rates. Identified through consultation with community/consumers and clinicians/service providers. More feedback required.
	The Needs Assessment identified that suicide rates for Aboriginal people were significantly higher than for other Australians, and a targeted and differentiated approach is required for Aboriginal people.	Nationally, there were 22.4 suicides per 100,000 Aboriginal and Torres Strait Islander people during 2012, more than double the rate of other Australians (11.0). Source - Australian Bureau of Statistics (ABS).
	The Needs Assessment identified that there is a higher mortality rate of children aged under five years of age among the Aboriginal population.	 The rates of perinatal mortality and low birth weight babies are higher among Aboriginal Australians than non-Aboriginal Australians. In WA, between 2008 and 2012, there were 11.4 perinatal deaths per 1,000 Aboriginal population, compared with 7.5 per 1,000 non- Aboriginal population. Sources Self-reported risk behaviours and exposure in female Aboriginal populations (such as anaemia, poor nutritional status, hypertension, diabetes, genital and urinary tract infections and smoking and alcohol consumption). Prevalence rates of foetal alcohol spectrum disorders (FASD).
		status, hypertension, diabetes, genital and urinary tract infections and smoking and alcohol consumpt

Identified Need	Key Issue	Description of Evidence
Aboriginal Health	In some areas of the PHN it has been identified that prenatal and postnatal care is not tailored for Aboriginal women and therefore the outcomes for Aboriginal mothers and their children is problematic.	• 13.7% of babies born to Aboriginal mothers in Perth North PHN were low birth rate, compared to 6.4% of the overall population.
	The Needs Assessment highlighted that smoking rates for Aboriginal women living in the region were significantly higher than non-Aboriginal women in the region.	 46.5% of Aboriginal women in the Perth North PHN smoked during pregnancy in 2011-13 whilst only 9% of non-Aboriginal women in the Perth North PHN region smoked during pregnancy. The Bayswater LGA had the highest rate of smoking during pregnancy (65%) and the LGAs of Swan, Stirling and Perth also had high rates. Source - Public Health Information Development Unit (PHIDU).
	The Needs Assessment highlighted that significant health inequities persist for people of Aboriginal heritage, with higher rates of social and environmental factors contributing to poorer health outcomes e.g. poor hygiene, housing overcrowding, access to clean water.	Socio-economic factors such as over-crowded housing, low household income and high imprisonment rates put Aboriginal people at higher risk of poor health.
	High obesity rates and other risk factors including smoking and alcohol consumption were identified in the Needs Assessment as concerns that contributed to poorer health outcomes for Aboriginal people.	 Aboriginal Australians with high and very high levels of physiological distress are significantly more likely to assess their health as fair or poor, smoke daily and have used illicit substances in the previous 12 months. 61% of Aboriginal Australian adults reported they had been sedentary or exercised at low intensity the week before the survey, which is significantly more than for non-Aboriginal adults (1.1 times higher) Australia wide 66% of Aboriginal people aged 15 and over were classified as overweight or obese, which is significantly more likely than their non-Aboriginal counterparts
		Source - Modelled estimates – PHIDU.
	The Needs Assessment showed that Aboriginal people had a higher rate of disability resulting from chronic conditions e.g. foot amputations, blindness.	 Further research, consultation and analysis is required. The LGAs of Bassendean and Joondalup had the highest proportion of Aboriginal people with a profound or severe disability and living in the community.
		Sources - Data divided by Aboriginal area in PHIDU rather than SA3 level Demographics of at risk and disadvantaged populations.
	The Needs Assessment highlighted Aboriginal people are more likely to have a shorter life expectancy, and an earlier onset of multiple	 Aboriginal people tend to have shorter life expectancies, poorer health and unhealthier lifestyle factors than non-Aboriginal people.
	chronic conditions, due to a range of contributing factors relating to health and lifestyle.	Source - Demographics of at risk and disadvantaged populations.
Ageing and Aged Care	The Needs Assessment identified the concerns of the community that older people are entering residential care prematurely because there are not enough tailored services available to support older people to live longer in the community.	• This is evidenced across the catchment. Further research, consultation and analysis is required.

Identified Need	Key Issue	Description of Evidence
Ageing and Aged Care	The Needs Assessment identified that the PHN has the highest rate of PPH for people over 65 years of age due to the lack of tailored services that allow older people to be treated in the local community.	This is evidenced across the catchment, where people over the age of 65 had the highest rates of PPH in each of the five key conditions reviewed by the National Health Performance Authority in 2015. Further research would identify specific areas and explore differences in the experiences of community-dwelling older adults compared to those in aged are residential facilities. Source - National Health Performance Authority: Potentially preventable hospitalisations in 2013–14.
	The Needs Assessment identified that older people in the region are living longer with chronic disease however there is a lack of appropriate models of care and/or the existing models of care are under utilised.	 This is evidenced across the catchment. Further research, consultation and analysis is required. Existing models of care are under utilised or under evaluated.
Alcohol and Other Drugs	The Needs Assessment identified in some areas in the PHN region that there is a high rate of people consuming alcohol and other drugs at harmful levels, which results in some people displaying risky behaviours that may lead to emergency department presentations. Alternative options to stop people presenting at emergency departments have not been explored fully.	 This is evidenced across the catchment. Further research and analyses would identify specific areas where there are correlations. In the Perth North PHN, 51.5 per 100 people had at least one of the following: smoking; harmful use of alcohol; physical inactivity; or obesity (modelled estimate). Swan had a higher proportion of female smokers than the State average. Bassendean and Swan had higher proportions of male smokers than the State average. Bayswater and Perth had higher rates of people than the State average consuming alcohol at harmful levels. Claremont, Cottesloe, Mosman Park, Peppermint Grove and Nedlands had a high ASR of overweight per 100 persons. Kalamunda and Swan had obesity rates considerably higher than other LGAs. In the Perth North PHN, 51.5% of adults were not sufficiently active for good health, nationally the rate is 55.5%. Data by LGA was not available. Detailed data on diet is not available except that in 2007-08, the Perth North PHN had a higher ASR per 100 of children and adults eating two or more serves of fruit per day than the Australian average. Further research would identify specific areas. Sources Incidence of AOD ED presentations Identified through consultation with community/consumers and clinicians/service providers.
	The evidence from the Needs Assessment shows that approximately half of the local government areas in the PHN region had high harmful alcohol consumption levels, and these areas also have high rates of mental illness.	 Areas where there are high harmful alcohol consumption rates also have high rates of psychological distress—Bassendean, Bayswater, Mundaring, Perth, Stirling, Swan, Vincent and Wanneroo have harmful alcohol rates equal to or higher than the average for Perth North. The same LGAs have an ASR per 100 of psychological distress equal to or higher than the average for Perth North. Harmful use of drugs data was not available by LGA, therefore correlation between drugs and mental illness could not be assessed by local level. Source - Modelled estimates - PHIDU.

Identified Need	Key Issue	Description of Evidence
Alcohol and Other Drugs	It was identified through the Needs Assessment that there is a lack of connectivity between mental health and alcohol and other drug services. It was also identified that for people with a severe mental illness and problematic drug and alcohol use, the most effective service was care coordination however, this was inconsistent across the region.	 Community consultation in all regions identified concerns about the lack of connectivity between AOD and mental health services and the difficulties experienced by people with comorbid conditions accessing coordinated care and support Individuals reported a lack of awareness of GPs in treatments for co-occurring mental health conditions and AOD use community/consumers and clinicians/service providers.
	The Needs Assessment identified that the use of methamphetamines (ICE) by Aboriginal people in the region is impacting on families, friends and the broader community.	There is strong and consistent anecdotal evidence from stakeholders working with Aboriginal groups that methamphetamine (ICE) usage is increasing in WA. Stakeholders report a 'ripple effect' which starts with users and extends to families, friends and communities.
	·	Source - Identified through consultation with community/consumers and clinicians/service providers.
	The Needs Assessment identified the correlation of suicide and self-harm with excessive alcohol use, and the service response across the PHN is	Community consultation has highlighted the incidence of suicide and self-harm associated with excessive alcohol use
	inconsistent.	Source - Identified through consultation with community/consumers and clinicians/service providers.
Mental Health and Suicide Prevention	The Needs Assessment highlighted that sustained engagement with a GP, for people with a severe mental illness, is associated with better health outcomes. Evidence shows that those people who do not have this, are at risk in relation to their health and social outcomes.	 This is evidenced across the region, more targeted discriminatory analyses required. In 2011-13, Perth had an ASR per 100 of 15.7 for adults with mental or behavioural issues, which equates 2,916 people. The number of GP mental health care plans prepared during the same period was 1,329, meaning less than half of people in the area experiencing issues had an up to date mental health plan (may be due to access issues or GPs not completing plans). Source - Modelled estimates - PHIDU.
	The Needs Assessment identified mental illness as a serious concern in communities, and one which community members are insisting be addressed.	 Bassendean has an ASR per 100 of psychological distress higher than the national and state averages. Bayswater had a rate equal to the national and state averages. All other LGAs in Perth North had rates lower than the national and State average. Perth, Vincent, Bassendean and Stirling have an above average ASR per 100 of its population with diagnosed mental and behavioural problems. Sources Modelled estimates - PHIDU. Identified through consultation clinicians/service providers.
	The Needs Assessment identified that services which take account of the complexity, and episodic nature of mental illness are inconsistently available to people across the PHN.	This is evidenced across the region, more targeted discriminatory analyses required. Source - Identified through consultation with clinicians/service providers.
	The Needs Assessment identified the community are concerned about the lack of early intervention options for children with mental health issues and it was identified that the service system across the PHN was inconsistent.	 Qualitative stakeholder feedback collected by the PHN and the previous Perth North Metropolitan Medicare Local identified a lack of access to youth friendly mental health services. Source - Identified through consultation with clinicians/service providers.

Identified Need	Key Issue	Description of Evidence
Mental Health and Suicide Prevention	The Needs Assessment identified that problems associated with unmonitored chronic conditions are often linked to people in the region not having a regular GP and as a consequence their medication usage is not monitored and/or reviewed, particularly with disadvantaged groups across the PHN.	This is evidenced across the region, more targeted discriminatory analyses required.
	The Needs Assessment identified that people who have a mental illness are much more likely to have poor physical health and reduced life expectancy.	This is evidenced across the region, more targeted discriminatory analyses required.
Notifiable Diseases Aboriginal Health	The Needs Assessment identified that Aboriginal people had a higher rate of sexually transmitted infections and blood-borne viruses.	 In the Aboriginal population of Western Australia the rate of notification was four times (1,382/100,000 population) higher for chlamydia and almost 18 times (894/100,000 population) higher for gonorrhoea when compared to the non-Aboriginal population (361/100,000 population and 51/100,000 population, respectively). Notifications are higher in Aboriginal populations who are reported to have an almost four times higher (12.0 vs. 3.3/100,000 population) and 10 times higher (18.2 vs. 1.9/100,000 population) for infectious and non-infectious syphilis. Source - Notifiable disease registry.
Universal – Evidence based	A challenge in undertaking the Needs Assessment, at this point in time, was the limited availability of high quality, granular level data relating to general practice, primary and secondary care data.	Limited available data for population health planning at the regional and local level.

Section 3 – Outcomes of the service needs analysis

Identified Need	Key Issue	Description of Evidence
The health needs identified were across the following Federal Government priority areas:	The Needs Assessment identified that there was limited and intermittent information available for consumers and clinicians to enable them to effectively navigate the health system.	This is evidenced in qualitative feedback. Further research, consultation and analysis would identify specific areas. Source - Strongly identified through consultation with consumers and clinicians. Variation across region.
 Population Health (Chronic Conditions) Aboriginal Health Mental Health Aged Care Digital Health Health Workforce 	The Needs Assessment identified that access to, and accessibility of, services is difficult for some disadvantaged groups across the region.	 Data not available for specific disadvantaged groups. Further research, consultation and analysis required. Sources Percentage of GP attendances that were bulk-billed - National Health Performance Authority analysis of Department of Human Services, Medicare Benefits statistics 2013–14. Regional disparity in funding based upon population - levels of remoteness and Aboriginal disadvantage.
	A lack of coordination and integration between, and across, the health services in some areas of the PHN region were identified as issues in the Needs Assessment.	Qualitative stakeholder feedback has identified the lack of a single point of reference identifying what services exist and waiting lists for service providers, in particular mental health and services for the homeless. Further research, consultation and analysis would identify specific areas. Source - Identified through consultation with local stakeholders.
	Evidence in the Needs Assessment showed in some key health areas/services in the PHN region there is a shortage of appropriately skilled workers.	Further research, consultation and analysis required. Source - Indicated in qualitative feedback.
	Evidence in the Needs Assessment showed that some key health services do not always have appropriately trained staff to work with, and support vulnerable and disadvantaged groups.	Qualitative stakeholder feedback has identified: • A lack of culturally appropriate services for Aboriginal people, humanitarian entrants, culturally and linguistically diverse (CALD) populations, residents with poor English proficiency and newly arrived immigrants • Access issues have been identified particularly for primary care and for people from CALD backgrounds. Source - Identified through consultation with local stakeholders.
	The Needs Assessment identified that there was limited access to after hours GPs and mental health services in some areas of the PHN region. Evidence also indicated that in some areas in the PHN there is limited access to an appropriate workforce in the primary after hours care sector.	 Some of the following may be as a result of workforce shortage: Bassendean, Bayswater, Cambridge, Claremont, Joondalup, Kalamunda, Stirling, Swan and Vincent have several afterhours GP practices, while all other LGAs have none. There is limited access to afterhours GP or alternative models of care in residential aged care facilities. There is a lack of awareness of after hours options (face to face services, telephone). There is limited after hours mental health services. Source - HealthMap - National Health Service Directory.

Identified Need	Key Issue	Description of Evidence
Chronic Conditions	The Needs Assessment identified that there was limited services and/or services are not always tailored to meet the individual needs of people in the PHN region with multiple risk factors and/or chronic conditions.	This is evidenced across the catchment. Further research, analyses and consultations are required. Source - Identified through consultation with community/consumers and clinicians/service providers.
	The Needs Assessment identified that there is not a strong focus on transition programs to support people moving from one health service to another.	 This is evidenced across the catchment. Further research, consultation and analyses would identify specific areas. Anecdotal qualitative feedback has indicated issues for some in transitioning from child to adult diabetes services and from hospital to home services for older people, people experiencing mental health issues and people who are homeless in the Perth North PHN. Chronic disease management for people transitioning from prison to community provided services has also been identified as an area requiring further focus. Source - Identified through consultation with community/consumers and clinicians/service providers.
	The Needs Assessment identified there is a lack of service coordination for people with co-occurring chronic conditions, and that these people are not managed in a coordinated way.	Lack of access to multidisciplinary primary health care providers in the early intervention and management of chronic conditions was a key theme in the 2014 Medicare Locals' Comprehensive Needs Assessments conducted by Medicare Locals in WA. Source - 2014 Medicare Locals' Comprehensive Needs Assessments conducted by Medicare Locals in WA.
	The Needs Assessment identified that problems associated with unmonitored chronic conditions are often linked to people in the region not having a regular GP and as such their medication usage is not monitored and/or reviewed, particularly with disadvantaged groups across the PHN.	This is evidenced across the catchment, further research, consultation and analysis is required. Perth North PHN had lower rates of people unable to access medical consultation and prescription medication due to costs than state and national averages, however some lower socioeconomic areas within the region had higher proportions of people with difficulties, including the LGAs of Swan, Wanneroo and Bayswater. Sources
		 Identified through consultation with local stakeholders. National Health Performance Authority: Healthy Communities: Frequent GP attenders and their use of health services in 2012–13.
	The Needs Assessment identified the lack of multidisciplinary community based services in some areas of the PHN region, which may impact on the support available to people to assist them to manage their social, cultural and economic circumstances.	This is evidenced across the catchment. Further research, consultation and analysis is required. Source - Service mapping evidence.
	The Needs Assessment identified that the coordination and integration of primary, secondary and tertiary care across the PHN region is not always patient centred and as a consequence there is an impact on waiting times, numbers of referrals, discharge processes and the use of resources.	 This is evidenced across the catchment,: qualitative feedback identified that WA had current inefficiencies in the co-ordination and integration of primary and secondary care services and these have led to a number of system based problems that include: Increased waiting times for treatment in secondary care; High number of inappropriate referrals to secondary care; Inefficient use of resources and lack of system integration; and Poor discharge from secondary to primary care/general practice. Source - Service mapping shows reduced service diversity/number across region, identified through consultation with clinicians/service providers.

Identified Need	Key Issue	Description of Evidence
Aboriginal Health	Evidence in the Needs Assessment identified that in some key health and social services in the PHN region there is a lack of culturally relevant services to address both better health outcomes and social determinants for Aboriginal people.	• A holistic and integrated approach to Aboriginal health is required to address social determinants and better health outcomes. Culturally appropriate services and programs are necessary in partnership with the Australian Aboriginal Community Controlled Health Organisations (ACCHO) and other providers. Source - Evidenced by under utilisation of non-Aboriginal health workforce in some regions. Service population ratios. Mapping of Aboriginal Health Services.
	The Needs Assessment identified that there is limited numbers of services tailored to meet the health, social and cultural needs of Aboriginal people living in the PHN region.	 Qualitative feedback has indicated the following areas of need in the Perth North PHN: Mental Health – limited culturally appropriate services; low workforce of Aboriginal mental health practitioners Alcohol and other drugs – no specific support services available or delivered in the community. Prison Health –increased numbers of Aboriginal Health Workers needed within the prisons to provide a culturally appropriate and secure service. Aboriginal Aged Care – limited services available for older Aboriginal people (55+) Low numbers of Aboriginal people employed in the health workforce. Sources Evidenced by underutilisation of non-Aboriginal health workers in some regions. Service population ratios. Mapping of Aboriginal Health Services. Identified through consultation with community/consumers and clinicians/service providers. Further research, consultation and analysis is required.
	Evidence in the Needs Assessment identified that within some areas in the PHN region, there is a lack of culturally relevant services	 Funding for a maternal and child health program Moort Boodjari Mia in Midland will cease post June 2016. Sources Australian Aboriginal HealthInfoNet. Demographic profiles of Aboriginal and non-Aboriginal populations. Projected growth rates of older populations.
Ageing and Aged Care	Evidence in the Needs Assessment showed that in some aged care services in the PHN region the workforce is not always appropriately trained to work with, and support, older people who are living longer in the community and/or in residential aged care facilities.	This is evidenced across the catchment. Further research, consultation and analysis is required.
	The Needs Assessment identified that GPs and allied health professionals are reimbursed at low levels which may restrict them from working in residential aged care facilities.	 This is evidenced across the catchment. Qualitative feedback collected indicated GP shortages and difficulty recruiting GPs in residential aged care facilities. Sources Identified through consultation with community/consumers and clinicians/service providers. Analysis of available aged care workforce providers report impacted by low levels and reimbursement. Further research, consultation and analysis is required. Qualitative feedback collected.

Identified Need	Key Issue	Description of Evidence
After Hours	The Needs Assessment showed that there was a lack of knowledge and awareness regarding after hours services available across the PHN region, which results in some people presenting to emergency departments for treatment.	 Further research, utilisation of data on specific providers/patients, consultation and analysis is required. Lack of awareness of after hours options (face to face services, telephone). Sources ED after hours attendance rates, by triage category, by primary condition. Number and proportion of primary care services available in after hours time period. Corroborated by consultations with local consumers and health professionals.
Alcohol and Other Drugs	The Needs Assessment identified that access to, and/or the number of, relevant drug and alcohol services and facilities in the PHN region is not meeting the demand of people seeking help and support.	 Significant undersupply of non-residential AOD services – less than 40% of full time equivalent (FTE) need is currently being met. There is a significant gap in staffing required (estimated at meeting 30% of the current need) at a Statewide and regional level to assist communities who wish to prevent and reduce AOD harm. Stakeholder feedback - estimates that only 30% of the current need for post residential rehabilitation supported accommodation is currently being met. Currently there is limited information relating to appropriate community supports for AOD problems. Sources Identified through consultation with community/consumers and clinicians/service providers. Data supplied by the WA Mental Health Commission.
Mental Health and Suicide Prevention	The Needs Assessment identified that services that take account of the complexity, and episodic nature, of mental illness are inconsistently available to people across the PHN region. The Needs Assessment identified in the PHN region that there is an increasing number of people with mental illness presenting to emergency departments. Alternative options to stop people presenting at emergency departments have not been explored fully.	 This is evidenced across the catchment. Further research, analyses and consultations are required. Source - Identified through consultation with community/consumers and clinicians/service providers. The LGAs of Perth, Vincent, Swan and Wanneroo saw an increasing trend in mental health related hospital attendances from 2002 to 2014. The rate of mental health related emergency department attendances per 10,000 person years who are at risk, has steadily increased in the Perth North Metro Health Service since 2002. Source - WA hospitalisation rates and modelled costings.
	The Needs Assessment recognised the importance of early intervention when treating people with mental illness and/or alcohol and drug problems, as the acuity of the illness increases with delays in treatment, which can result in hospital admissions. However it was recognised that in some areas of the PHN there are limited early intervention services available for people with mental illness and behavioural issues.	 This is evidenced across the catchment. In 2012, the Stokes Review identified that in WA delays in access to treatment were causing mental health, alcohol and drug problems to worsen (leading to the need for higher cost treatment). Limited number of psychologists operating in Mundaring, despite the area having an ASR of 13 people per 100 with mental and behavioural issues. Sources Identified through consultation with mental health clinicians. WA hospitalisation rates and modelled costings. Stokes, B, (2012) Review of the admission or referral to and the discharge and transfer practices of public mental health facilities/services in Western Australia (the Stokes Review), 2012. Stakeholder feedback indicates long waiting lists where services are available.