



Primary Health Network Needs Assessment Reporting Template

Perth South PHN - AOD Needs Assessment

Version 2.0, published 28 February 2018

The November 2017 PHN Needs Assessments were constructed using data from a wide range of sources, much of which is in the public domain. WA Primary Health Alliance (on behalf of Country WA PHN, Perth North PHN and Perth South PHN) also enjoys data sharing arrangements with a number of organisations, including WA Health and the Commonwealth Department of Health and Aging. These agencies provide sensitive and confidential data which underpin the Needs Assessments. This document has therefore been amended to remove confidential and sensitive data. The broad content and conclusions remain unchanged from the original document. For any queries relating to the underlying data sources, please contact Dr Christina Read, christina.read@wapha.org.au.

Section 1 – Narrative

Needs Assessment process and issues

Data for Perth South PHN's third round of needs assessments has been split between Core (population health), mental health and alcohol and other drugs (AOD). All three reports are based on the consideration of the holistic needs of people living in places where demand is high and supply inadequate.

This document is the first time the AOD needs assessment is reported independently of the PHN's Core and Mental Health assessments, and provides opportunity to realign AOD related health needs and service needs pertaining to specialised AOD services.

The PHN's third AOD needs assessment consolidates the following sources:

- 1. baseline needs assessment,
- 2. refresh of quantitative data sets,
- 3. observations from ongoing stakeholder engagements,
- 4. early findings from PHN commissioned Integrated System of Care Project for Aboriginal and non-Aboriginal communities

A constant comparative method was applied to refine and realign section 2 (health needs), section 3 (service needs) and section 4 (priorities). Based on the PHN's subject matter analysis and place-based teams, consolidated options have been determined to address identified needs in priority locations. The locations where there are likely to have high demand for AOD related services, and/or gap in specialist AOD services have been identified as distinct priorities in section 4.

The quantitative analysis aims to achieve SA2 level prioritisation; however, most data sets were available at SA3. All datasets were combined to identify location of highest needs at the finest possible granularity.

Datasets listed below were refreshed in this analysis supported by published regional, state, national and international evidence:

- 1. PHIDU Social Health Atlas of Australia: Population Health Atlas (Public Health Area aggregates of SA2)
- 2. Pharmaceutical Benefits Scheme Data PHN data portal (SA3)
- 3. Emergency Dataset WA Department of Health (Postcode)
- 4. National Wastewater Drug Monitoring Program Report 1 March 2017 Australian Criminal Intelligence commission (State)
- 5. Hospitalisations for mental health conditions and intentional self-harm in 2014-15 AIHW (SA3)
- 6. Australian Bureau of Statistics ABS. Stat^{BETA} (SA2)
- 7. Alcohol and other drug treatment services in Australia AIHW (national)
- 8. WA Mental Health and AOD Atlas WA Mental Health Commission (September 2017) (suburbs)

Where direct evidence is not available to support identification of priority locations for an issue identified, published evidence in conjunction with a correlation analysis was performed to filter salient determinants of AOD related health issues. A total of 92 indicators were included in the correlation analysis ranging from population characteristics including social determinants, risk factors, chronic disease prevalence, AOD related ED presentations, acute hospitalisations, MBS and PBS utilisations, potentially preventable hospitalisations by conditions.

Qualitative evidence was collected from consultation reports, notes from community consultations, stakeholder engagement, and meeting records from Clinical Commissioning Committee (CCC), and Community Engagement Committees (CEC).

Alliance Against Depression (AAD) Framing

The WA Primary Health Alliance has endorsed and launched the AAD framework which has been adopted in this needs assessment to structure the consideration of needs and options at place.

The AAD pillars are:

- A. Primary care and mental health care
- B. General public: awareness campaign
- C. Patients, high-risk groups and relatives
- D. Community facilitators and stakeholders

The AAD principles to reflect the Western Australia primary health care context are:

- i. Integration
- ii. Place-based
- iii. Community driven
- iv. Sustainable
- v. Alliance approach

Further Developmental Work

The PHN's understanding of each identified priority locations varied. Whilst the options described in section 4 for priority locations have reached data saturation, at the time this document is compiled they have not been prioritised. The PHN will not necessarily lead all the options but intends to be an integral part of the process, working in collaboration with key stakeholders. The PHN will further consolidate the priorities, in conjunction with those identified in the core and mental health needs assessments, in order to address areas of greatest unmet health needs. Further work is required to co-design place-based solutions / models of care for AOD services within the broader context of primary health care and the community, specifically in the locations of Fremantle, Cockburn, Rockingham, Kwinana, and Mandurah/Murray.

Locations required further explorations to provide context and/or confirm identified needs in this PHN are Armadale, Gosnells, Pinjarra/Waroona, Cannington and Willagee.

Additional Data Needs and Gaps

There is a lack of direct evidence on illicit, prescription, over the counter drug misuse, blood born virus related to illicit drug use, and AOD related injuries, and interpersonal violence.

This analysis has used indicators based on published evidence and the correlation analysis to identify locations most likely to have high needs. The findings from this analysis are subject to the place-based team's knowledge and understanding of the priority locations identified. Further investigation is required to contextualise place-based findings.

Service mapping data for this assessment is based on the WA Mental Health and AOD Atlas updated at September 2017 supplemented by the PHN staff's local knowledge. A digital solution is required to ensure access to service mapping data in real time.

PHN data sets have been a valuable resource to support the needs assessment; however, SA3 level data is insufficiently granular to support place-based analysis.

The PHN will utilise the National Mental Health Planning Framework planning tool for mental health service planning. The tool will be used to translate findings from this needs assessment in the activity planning process between 15th of November 2017 to March 2018.

Additional comments or feedback (approximately 500 words)

WA Primary Health Alliance (WAPHA) oversees the strategic commissioning functions of the three WA PHNs. This state-wide perspective has created substantial benefits in undertaking the Needs Assessments for all WA PHNs. Our analysis considers the differences between the individual PHNs as well as comparisons to overall state trends. Additionally, options to address needs and commissioning activities can be applied and compared across PHN boundaries.

The state-wide approach provides a platform for data sharing across organisations in a way that has not been possible historically or at least not on the current scale. This approach has been further strengthened as more stakeholders become familiar and engaged in our work, including Local Government. We recognise this is an evolutionary process and each PHN has the capacity to adapt as we understand our regions in more depth.

WAPHA has accessed data sharing and collaboration with multiple sources, enabling detailed health analytics to be undertaken and providing a rigorous framework for comprehensive needs assessment and population planning activity. These data sources include:

- WA Department of Health (via Deed of agreement)
- Health Services
- Local hospitals
- WA Mental Health Commission
- Western Australian Network of Alcohol and Other Drug Agencies
- St John Ambulance
- NPS Medicine Insight
- General Practice organisations via the use of PenCS CAT Plus

The role of the Clinical Commissioning Committees and Community Engagement Committees has been fundamental in critically reviewing the needs assessment data on an ongoing basis. This further contributes to our evolving understanding of local place-based priority health needs, and effective and efficient options that can be applied in the local context.

WAPHA engaged Curtin University as its academic partner to work on a number of population health, research and evaluation projects. A notable benefit is the access to specialist skills sets (health economists, spatial analysts etc.) as well as the ability to store and manipulate big data sets. Curtin University will work closely with WAPHA to enable comprehensive understanding of patient profiles and pathways through the health system in WA. Next steps involve predictive risk analysis around key areas, deep dives into specific regions and areas of need, and a focus on evaluating the effectiveness of service provision across the PHN.

Glossary – Needs Assessment

After-hours The after-hours period refers to the time: before 8am and after 6pm

weekdays; before 8am and after 12pm Saturdays; and all-day Sundays and

public holidays.

ASR Age standardised rate: a method of adjusting a crude rate to eliminate the

effect of differences in population age structures.

Allied health Includes: Aboriginal Health Practitioners; Dental Practitioners; Nurses & workforce Midwives (total and Aboriginal Health Services); Occupational Therapists;

Pharmacists; Physiotherapists.

Ambulatory-Certain conditions for which hospitalisation is considered potentially avoidable through preventive care and early disease management, usually sensitive hospitalisations delivered in a primary care setting. Also called Potentially Preventable

Hospitalisations (PPHs).

Avoidable Potentially avoidable deaths comprise potentially preventable deaths and mortality potentially treatable deaths. Potentially preventable deaths are those which

are amenable to screening and primary prevention, such as immunisation, and reflect the effectiveness of the current preventive health activities of the health sector. Deaths from potentially treatable conditions are those which are amenable to therapeutic interventions, and reflect the safety and quality

of the current treatment system.

CALD Those who come from a culturally and linguistically diverse background,

defined as people born in predominantly non-English speaking countries.

DRG Diagnostic Related Group: an Australian admitted patient classification

system which provides a clinically meaningful way of relating the number and

type of patients treated in a hospital to the resources required by the

hospital.

Factors influencing Defined as a person who may or may not be sick encounters the health

health status services for some specific purpose, such as to receive limited care or service

for a current condition, to donate an organ or tissue, to receive prophylactic vaccination or to discuss a problem which is in itself not a disease or injury, or when some circumstance or problem is present which influences the person's health status but is not in itself a current illness or injury.

FASD Fetal alcohol spectrum disorders are a spectrum of lifelong physical and

neurocognitive disorders, caused by alcohol use in pregnancy.

than the general population and tend to be complex to manage.

Frequent flyers Defined as having four or more visits per year. These patients have been

shown to have more psychiatric, psychosocial, and substance abuse issues

HealthPathways A web-based information portal supporting primary care clinicians to plan

patient care through primary, community and secondary health care systems

within Western Australia.

IARE Indigenous Area. Medium sized geographical units designed to facilitate the

release of more detailed statistics, with names based on area/community

which the boundary encompasses. There is 429 IAREs across Australia.

No classifiable diagnosis.

conditions

Ill-defined

IRSEO Indigenous Relative Socio-economic Outcome Index. Reflects relative

> advantage or disadvantage at the Indigenous Area level, where a score of 1 represents the most advantaged area and a score of 100 represents the most

disadvantaged area.

Perth South PHN - AOD Needs Assessment v1.0

ITC Integrated Team Care. Program commissioned by WAPHA to contribute to

improving health outcomes for Aboriginal and Torres Strait Islander people with chronic health conditions through better access to coordinated and

multidisciplinary care.

LGBTQI Those who identify as lesbian, gay, bisexual, transgender, queer, intersex

MBS Medicare Benefits Schedule: a listing of the Medicare services subsidised by

the Australian government.

Multimorbid The occurrence of two or more chronic conditions in an individual.

Non-urgent ED Emergency Department visits which are classified as triage category 4 (semiattendances urgent) and category 5 (non-urgent). These categories could potentially be

seen in a primary care setting.

PBS Pharmaceutical Benefits Scheme: information on medicines subsidised by the

Australian Government.

Person-centred Holistic care involving GPs and support services in partnership with the

care people they care for.

PHA Population Health Area. Comprised of a combination of whole SA2s and

multiple (aggregates of) SA2s, where the SA2 is an area in the ABS structure.

Place-based WAPHA commissions services at a place-based level, responding to local

need.

Primary health Primary health care is the entry level to the health system and, as such, is

usually a person's first encounter with the health system.

PHN Primary Health Network

PPH Potentially preventable hospitalisations. An admission to hospital which may

be prevented through the provision of appropriate individualised

preventative health interventions and early disease management usually delivered in primary care and community settings by general practitioners (GPs), medical specialists, dentists, nurses or allied health professionals.

SA2 / SA3 Statistical Areas Level 3 (SA3s) are geographical areas that will be used for

the output of regional data, including 2016 Census Data. There is no

equivalent unit in the Australian Standard Geographical Classification (ASGC). The aim of SA3s is to create a standard framework for the analysis of ABS data at the regional level through clustering groups of SA2s that have similar regional characteristics. There are 351 SA3s covering the whole of Australia without gaps or overlaps. They are built up of whole SA2s. Whole SA3s

aggregate directly to SA4s.

Secondary health 'Secondary care' is medical care provided by a specialist or facility upon

referral by a primary care physician.

SEIFA Socio-economic Index for Areas (SEIFA) defines the relative social and

economic disadvantage of the whole of population within a region.

Tertiary health Hospital services provided by both public and private hospitals.

care

care

care

Section 2 – Outcomes of the health needs analysis

Outcomes of the health ne	Outcomes of the health needs analysis		
Identified Need	Key Issue	Description of Evidence	
HN1. Reduce the harmful effects of AOD consumption on a person's health outcomes.	1.1 There is frequently an increase in alcohol and other drug use in the period before attempted suicide, and the Aboriginal population is at double the risk of the non-Aboriginal population.	Australia and Western Australia There is sufficient evidence that alcohol use disorder (AUD) significantly increases the risk of suicidal ideation, suicide attempt and completed suicide. A meta-analysis found a statistically significant association between AUD and suicidal ideation (OR = 1.86, 95% CI: 1.38, 2.35), suicide attempt (OR=3.13; 95% CI: 2.45, 3.81), and completed suicide (OR=2.59; 95% CI: 1.95, 3.23 and RR=1.74; 95% CI: 1.26, 2.21) among participants of 31 published studies with 420,732 participants. The WA Coroner's database indicated that nearly a third of males and a quarter of females had alcohol or other drug use issues noted three months prior to their deaths. According to the Drug and Alcohol Office Surveillance Report, suicide was the second most prevalent alcohol-related death in Australia (the highest being cancer).	
		Suicide rates are consistently higher in the Aboriginal population. In 2012, there were 22.4 suicides per 100,000 Aboriginal Australians - more than double the rate of 11.0 for non-Aboriginal Australians. Aboriginal suicide is associated with alcohol or other drug use and chronic mental illness, so these are appropriate areas for intervention. The association of excessive alcohol consumption with injuries and social determinants is addressed in HN3.1 and HN6.1 respectively.	
		<u>Place-based</u>	
		Places where alcohol and drug use is most likely to result in suicide and serious self-harm in Perth South are Dawesville-Bouvard/Falcon-Wannanup and Pinjarra PHAs within the Mandurah SA3, Armadale-Wungong-Brookdale, Camillo-Champion Lakes/Kelmscott PHAs within Armadale SA3, Coogee/North Coogee PHA within the Cockburn SA3, East Fremantle/Fremantle within Fremantle SA3, Cooloongup/Rockingham, Safety Bay-Shoalwater/Waikiki/Warnbro PHAs within the Rockingham SA3, and Brookton within Wheatbelt-South SA3.	
	1.2 High alcohol-related mortality due to increased risk of chronic conditions such as liver disease, diabetes, kidney disease, and cancer.	Western Australia From 2007 to 2011, there were 2,690 deaths from all alcohol-related conditions in Western Australia. The leading cause of alcohol-related death was cancer, followed by suicide and 'other alcohol-related diseases'. The age-standardised mortality rate for all alcohol-related conditions was 24.0 per 100,000 person years. Place-based	

Perth South PHN – AOD Needs Assessment v1.0

Version 1. 0 submitted to the Australian Government Department of Health on 15 November 2017

Version 2.0 published 28 February 2018

Outcomes of the health ne	eeds analysis	
		The death rate for all alcohol-related conditions for South Metropolitan was similar to the state rate. Road injuries were significantly lower than the corresponding state rate, by 0.77 times. Alcohol-related health issues have been identified as a key health priority for the City of Belmont.
	1.3 Drug-related overdose and deaths.	Australia There were 1808 drug-induced deaths registered in Australia in 2016. This is the highest number of drug-induced deaths in Australia since the late 1990s. Although the number of deaths is the highest on record, the death rate continues to decrease. About 71.3% of drug-induced deaths in 2016 were due to acute accidental overdose, followed by 22.7% due to suicidal overdoses. Young Australians (under 35 years of age) had lower rates of drug-induced death in 2016 when compared with 1999, while older adults (40 years
		and over) generally had higher rates. This reflects the change in the types of drugs causing death. Death from illicit substances like heroin and methamphetamines tend to occur among younger age groups, while deaths from benzodiazepines and prescription opiates tend to occur among older age groups. In 2016, an individual dying from drug-induced death in Australia was most likely to be male, living outside a capital city, misusing prescription drugs such as benzodiazepines or oxycodone in a polypharmacy, and the death was most likely to be an accident.
		Opioids¹ have historically been the leading class of drug identified in toxicology reports in drug-induced deaths. Depressants (including benzodiazepines and barbiturates) have consistently been the second most common class of drug, with antidepressants the third most common drug present in drug-induced deaths. Age-specific death rates for all common drug classes have shown an upward trend, particularly since 2006. In 2016, one in five drug deaths had a psychostimulant present, with the majority of deaths coded to the category of meth/amphetamines. About 93.1% of drug-induced psychostimulant deaths were unintentional. Methamphetamine deaths have the lowest median age of death at 39.4 years and the average age of initiation for meth/amphetamine use is 22.1 years.
		Western Australia
		National statistics in 2012 reported that Perth had the highest rate of fatal overdose of any Australian capital city. Drug seizures in Western Australia in 2012-13 showed that heroin in WA had a significantly higher level of purity in comparison to heroin seized in New South Wales, Victoria, South Australia, and Queensland during the same time period. The rate of accidental overdose death was significantly higher in Perth, at 5.4 per

¹ Opioids include both illicit and licit substances including heroin; opiate-based analgesics such as codeine, oxycodone, and morphine; and synthetic opioid prescriptions including tramadol, fentanyl, and methadone. Opioid class drugs work by binding to opioid receptors in the brain to inhibit messages of pain sent to the body (Merrer et al., 2009).

Perth South PHN – AOD Needs Assessment v1.0

Version 1. 0 submitted to the Australian Government Department of Health on 15 November 2017

Version 2.0 published 28 February 2018

Outcomes of the health needs analysis 100,000 persons, in comparison to the rest of Western Australia, at 2.65 per 100,000 persons. It is suggested that users of illicit drugs are ageing, and consequently may be more susceptible to overdose due to a number of age-related health concerns, or the use of prescription opioids for pain relief or other medications. Place-based Drug-induced mortality data is at the national and state level only. In this assessment, PBS utilisation of opioids (indicated by ATC2 NO2), benzodiazepines, barbiturates, and antidepressants (indicated by ATC2 N05) were mapped to the estimated prevalence of mental and behavioural problems and high levels of psychological distress. Prescription medication overdoses are arguably more likely to occur in locations with an average prevalence of mental health conditions and higher levels of prescriptions for analgesics and psycholeptics. Fremantle has been identified as the SA3 location where drug overdose is more likely to occur. In 2011/12 per capita alcohol consumption by estimated service population in Fremantle more than doubled the national and state average and is showing an upward trend. Whilst Bunbury and Wheatbelt-South SA3 are also likely priority locations for drug overdose, available data does not indicate whether these locations would fall within the Perth South PHN boundary. HN2. Reduce harmful 2.1 Alcohol consumption in Western Australia effects of AOD consumption pregnancy and Fetal Alcohol The latest published prevalence estimate for FASD in WA is 0.26 per 1000 births. The majority of reported on the foetus, children and Syndrome (FASD) have been cases were Aboriginal (89.5%), at a rate of 4.08 per 1000 compared to 0.03 per 1000 in notified nonadolescents. associated with prevalence of Aboriginal cases. There was a twofold increase in FASD notifications in Western Australia between 1980developmental delay in 1989 and 2000-2010 due to improvements in diagnosis and notification. Previous international reports have children and increased suicide suggested that individuals with FASD are at risk for suicide. An individual with a typical clinical profile for risk in adolescents. FASD will evidence several risk factors for suicide (for example: impulsivity, a comorbid mood disorder, and substance abuse problems). Place-based Locations where maternal alcohol and drug use is most likely to result in developmental delay in children in the Perth South PHN are Mandurah-East SA2, Armadale-Wungong-Brookdale SA2, Coogee/North Coogee PHA, Thornlie SA2, Port Kennedy SA2, and Waroona SA2. In Cannington – North SA2, about 30% of children in their first year of primary school showed developmental vulnerability in one or more domains. The Department of Child Protection has observed that these issues in babies/children may also include drug withdrawal, disability, trauma-based behaviour, autism, ADHD, and behavioural issues.

Outcomes of the health ne	Outcomes of the health needs analysis		
HN3. Reduce impact of AOD misuse on short-term physical and mental health morbidity and multimorbidities.	3.1 The short-term health consequences of using alcohol and other drugs affect cognitive functioning and increase the risk of injury.	Direct evidence of the short-term health consequences of using AOD is not available. Locations where the short-term health consequences of AOD are most likely to be an issue were identified by examining: (i) the prevalence of excessive alcohol consumption; and (ii) ED presentations for injuries, poisoning, and toxic effects of drugs; substance use and substance-induced organic mental disorders; and mental diseases and disorders. Potential priority locations were those where significantly higher prevalence of excessive alcohol consumption is accompanied by higher than the PHN and/or state average prevalence of ED presentations due to at least one of the above listed reasons, or the co-existence of at least two of the three categories of ED presentations. In Perth South PHN, Fremantle, Bunbury, Kwinana, Wheatbelt – South (the part within Perth South PHN) and Serpentine-Jarrahdale SA3s are locations with the highest likelihood of impact due to short-term health consequences of AOD use. A Curtin University Study found 415 police-recorded serious alcohol-related assaults in 2010-13 in the southern suburbs district including Attadale and Bicton. Serious assaults are defined as murders, manslaughter, aggravated assaults and driving causing death. Causes of death and other harm linked to alcohol include cancers, stroke, falls, drowning, assault, road crashes, alcohol dependence, suicide and liver cirrhosis.	
	3.2 AOD use is associated with the prevalence of blood-borne viruses.	Unsafe injecting drug use is a major route of transmission of blood-borne virus infections like hepatitis B, hepatitis C and HIV. The proportion of Australian Needle and Syringe Program Survey respondents who reported reusing needles and syringes in the last month was stable at between 21% and 24% from 2009 to 2013. Blood-borne virus rates among the prison population who reported injecting drug use in 2010 were 51% for hepatitis C, 1% for hepatitis B, and less than 1% for HIV. Place-based Mandurah have identified a lack of syringe disposal and exchange services to minimise harm from drug use in the area.	
	3.3 Health effects of binge drinking.	Almost half of young Australian adults engage in binge drinking on at least a monthly basis. The Australian Institute of Health and Welfare_report on trends in alcohol availability, use and treatment indicated that 18 to 24 year-olds were most likely to report risky drinking behaviour. About 47% reported drinking more than four standard drinks on a single occasion on at least a monthly basis, 33% consumed 11 or more standard drinks on a single occasion at least yearly, and 18% at least monthly. Remote and very remote areas were	

Outcomes of the health ne	eds analysis	
		more likely to engage in risky drinking than people living in major cities. The short-term health effects of binge drinking contribute to increased ED attendances and potentially avoidable hospitalisations.
AOD misuse on medium and long-term physical health morbidity and multimorbidities including	AOD misuse on medium alcohol consumption are linked to the development of chronic diseases and mental disorders.	Australia It is estimated that 20% to 50% of people with an alcohol or other drug problem also have a co-occurring mental illness. Alcohol consumption is associated with cardiovascular diseases, mental disorders, some cancers, injury, osteoporosis, and oral disease (19). Alcohol interferes with insulin production and worsens conditions associated with diabetes such as advanced neuropathy and liver diseases.
		It has been estimated that 18.1% of the burden of injury and 9.7% of the burden of mental disorders are attributable to alcohol. Although only 3.1% of the total burden of cancer is attributable to alcohol, studies have shown that alcohol directly causes cancers of the liver, bowel, mouth, pharynx and larynx, oesophagus, and breast, and indirectly increases the risk of developing cancer by contributing to the risk of overweight and obesity.
		Illicit drug use accounts for 8.0% of the burden of mental disorders, but only 3.6% of the burden of injury. Methamphetamine use is associated with malnutrition, weight loss, reduced resistance to infection, dental problems/poor oral health, emotional disturbances, paranoia, periods of psychosis with delusional thoughts and behaviour, brain scarring and memory loss, seizure, stroke or heart attack.
		Western Australia
		The population prevalence of excessive alcohol consumption is strongly associated with the prevalence of smoking (r=0.7513) and moderately associated with fair or poor self-assessed health status (r=0.6750), high or very high level of psychological distress (r=0.6148) and obesity prevalence (r=0.6507). Moreover, excessive alcohol consumption is associated with potentially preventable hospitalisations due to cellulitis (r=0.5534), COPD (r=0.5416), diabetes complications (r=0.5691), iron deficiency anaemia (r=0.5014), and kidney and urinary tract infections (r=0.5179) (analysis from WAPHA 2016/17 Needs Assessment by Curtin University).
		<u>Place-based</u>
		Mandurah SA3 (Dawesville-Bouvard, Falcon-Wannanup, Halls Head-Erskine, Mandurah-East, Pinjarra), Armadale SA3 (Armadale-Wungong-Brookdale), Kwinana SA3, Beckenham-Kenwick-Langford SA2, Willagee SA2, Rockingham SA3, Serpentine-Jarrahdale SA3, and Waroona SA2 are locations where excessive alcohol

e health needs analysis	
	consumption is likely to show stronger links to the development of physical and mental conditions. The Mental Health Commission's Alcohol and Health Campaign is due for January and May 2018.
4.2 Excessive alcohol	Western Australia
consumption is linked to severe and persistent mental illness.	AOD-related hospitalisation is strongly associated with hospitalisations for schizophrenia and delusion (r=0.8106), bipolar and mood disorders (r=0.8365), and depressive disorders (r=0.8069) (analysis from WAPHA 2016/17 Needs Assessment by Curtin University).
	<u>Place-based</u>
	Belmont-Victoria Park, Fremantle, and Wheatbelt - South are the SA3s where the hospitalization rates are concurrently higher than the PHN or national averages for AOD related conditions and at least two of the condition groups associated with severe mental illness.
4.3 People who routinely use	Western Australia
excessive amounts of alcohol, OTC and prescription medicines are likely to present to primary care for other reasons.	The increase in the proportion of people using illicit drugs in their 60s is mostly accounted for by the use of pharmaceuticals for non-medical purposes. Careful monitoring of pharmaceutical prescriptions and overthe-counter medicines is part of a harm reduction solution. In 2013, the NDSHS reported that the population in WA was more likely than the rest of Australia to misuse pharmaceuticals (5.7% in WA compared to the national average of 4.7%). In 2014, participants in the WA PWID survey reported a lifetime history of using pharmaceutical stimulants (licit or illicit) at 61% and recent use at 24%. An average of 13 days of use was reported by this sample, which was significantly higher than the mean of four days reported in 2012. The main form was dexamphetamine.
	No data is available for over-the-counter medications; however, correlation analysis suggested a moderate association between AOD-related hospitalisations and supply of general practitioners (r=0.5559) and pharmacists (r=0.5085) (analysis from WAPHA 2016/17 Needs Assessment by Curtin University).
	An upward trend in psychoanaleptic prescriptions was observed between 2011-12 and 2015-16. This is an ATC2 category containing dexamphetamine (N06BA02), amphetamine (N06BA01), methamphetamine (N06BA03), and methylphenidate (N06BA04). At the time of writing, itemised data was unavailable.
	<u>Place-based</u>
	The SA3s of Mandurah, Bunbury, Wheatbelt-South, and Fremantle had average prescriptions per person that were more than 10% higher than the PHN and national average, a statistically significant difference. Fremantle SA3 has a substantially higher supply of GPs and pharmacists.

Perth South PHN – AOD Needs Assessment v1.0

Outcomes of the health needs analysis

HN5. Harm reduction for excessive AOD use in young people.

5.1 Young adults are more likely to consume alcohol at risky levels than any other age groups, and over a quarter of young adults in WA engage in recreational drug use.

<u>Australia</u>

The National Drug Strategy Household Survey 2016 indicated a shift in patterns of drug usage in the community. The age of initiation of drug use increased from 18.6 in 2001 to 19.7 years in 2016. Young adults aged 18-24 years were more likely than any other age group to consume alcohol in quantities that placed them at risk of an alcohol-related injury and of alcohol-related harm over their lifetime. However, the survey found that young adults were drinking less—a significantly lower proportion of 18–24 year olds consumed five or more standard drinks on a monthly basis (from 47% in 2013 to 42% in 2016). Also, fewer 12–17 year olds were drinking alcohol and the proportion abstaining from alcohol significantly increased between 2013 and 2016 (from 72% to 82%).

Western Australia

The proportion of young people reporting having drunk alcohol in the past 12 months decreased from 79.7% in 1984 to 44.3% in 2014. In 2013, it was reported that 26% of adults aged 18-30 years in WA had used a pharmaceutical for recreational or non-medicinal purposes at least once in their lifetime. About 17.7% had reported doing so in the previous 12 months. In 2014, WA students in years 7 to 12 reported that cannabis was the most commonly used illicit drug (16.4%), an increase from 14.9% in 2008. Individuals aged 14 years or over who reported using cannabis in the last year increased from 10.8% in 2007 to 13.4% in 2010 and remained higher than the national figure (10.3%).

Place-based

Place-based data on the proportion of young people consuming alcohol is not available. Locations where harmful AOD use in young adults is likely to be an issue were identified by: (i) significantly higher population prevalence of excessive alcohol consumption; and (ii) evidence of non-medicinal use of pharmaceuticals, coupled with the proportion of residents aged 20-29 years being over 20% higher than the PHN and Australian average. The proportion of female residents aged 20-29 years in Kwinana is significantly higher than the national and PHN average. While the prevalence of mental health conditions is not significantly different to the national and PHN averages, the rate of analgesics and psycholeptic prescriptions are significantly higher than the PHN averages.

The data indicates that young adult females in Kwinana SA3 are more likely to experience higher levels of non-medicinal use of prescription medication than other locations within the PHN. In 2011/12, per capita alcohol consumption in Kwinana is marginally higher than the national average but had shown an upward trend since 2004/05. Belmont-Victoria Park, and Canning SA3s both have higher proportions of young adult residents compared to the national, state and PHN averages. The per capita alcohol consumption by

Outcomes of the health ne	eds analysis	
		estimated service population in Belmont-Victoria Park is over 20% higher than the national and state averages in 2011/12 and had shown a declining trend since 2004/05. Despite being lower in per capita alcohol consumption by estimated service population in 2011/12, Canning SA3 had shown an upward trend since 2004/05. These evidence points to these locations as potential hotspots for alcohol misuse in young adults.
		Qualitative evidence points to a high level of community concern in Armadale and Mandurah regarding youth alcohol use. Risk taking and drug use behavior is starting at a younger age for youth in Armadale, while Mandurah has created a Youth Alcohol Strategy to tackle youth drinking rates. Local stakeholders have noticed a decline in youth alcohol use and an increased alcohol consumption for women between 30 and 40 years of age. The Shire of Waroona and Murray are leading the Aboriginal Youth Mental Health Program to improve the capacity of service providers and the community to respond to youth mental health issues by addressing physical, mental, spiritual, cultural, emotional and social well-being.
HN6. Harm reduction for excessive AOD use in older adults and explore factors associated with this emerging issue.	6.1 Harm reduction messages have primarily targeted young people, but since 1999 there has been an increased likelihood of older adults using illicit drugs and abusing prescription medications.	Australia The age profile of drug-induced deaths has changed since 1999 and there is a clear shift from peak rates of drug deaths in younger age groups to middle-aged groups. In 2016, the highest rates of drug-induced deaths were for 35-39 year-old males and 45-49 year-old females. This is reflected in the large shift in average age of initiation for the misuse of pharmaceutical drugs, increasing from 20.1 in 2001 to 25.1 in 2016. Compared with 2001, there was a statistically significant increase in drug use among 35-54 year-olds. The National Drug Strategy identified older adults as a priority population, with unique health circumstances such as pain, co-morbidities, and social circumstances such as isolation being highlighted as important factors in the context of drug use.
		<u>Place-based</u>
		Place-based data on the use of illicit drugs and abuse of prescription medication by older adults is not available. Stakeholder consultations revealed a perceived decline in youth alcohol consumption in Rockingham, where there is increasing community concern over older adults being affected by excessive AOD use.
		Priority locations were determined by identifying areas where there was evidence of medication misuse and where the proportion of residents aged 50-69 years was more than 20% higher than the PHN and Australian average. A possible priority location in the Perth South PHN is Fremantle SA3 where per capita alcohol

Outcomes of the health ne	eds analysis	
		consumption more than doubled the national and state average in 2011/12 and has been trending upwards since 2005/06.
HN7. Future demand for	7.1 Vulnerable groups at risk of	<u>Australia</u>
services related to vulnerable persons who are not accessing services.	harm from AOD use are not being identified or are not currently accessing services.	Australia's Health Report 2016 reported that unemployment, living in a lower socioeconomic area and suffering high emotional distress are all associated with high levels of illicit drug use.
not decessing services.	currently accessing services.	Western Australia
		The population prevalence of excessive alcohol consumption is moderately associated with the percentage of Aboriginal population (r=0.5100), socioeconomic disadvantage (r=-0.6577 with IRSD), no internet connection (r=0.5633), unemployment rate (r=0.5319), estimated prevalence of children in low income, welfare dependent families (r=0.6331), and prevalence of people who leave school at year 10 or below (r=0.63772). However, the AOD-related hospitalisation rate (26) is either weakly or moderately negatively associated with the above factors (analysis from WAPHA 2016/17 Needs Assessment by Curtin University), indicating that vulnerable groups may not be accessing the right services for their AOD-related issues.
		<u>Place-based</u>
		Safety Bay – Shoalwater/Waikiki/Warnbro are locations within the Perth South PHN where vulnerable individuals may not be accessing appropriate treatment services, particularly among those who leave school early, are unemployed, or are living with socioeconomic disadvantage.
		Since the previous needs assessment, the PHN has commissioned Richmond Wellbeing and Relationships Australia to deliver Integrated System of Care to support Aboriginal people with problematic alcohol and drug use and mental illness. Relationships Australia is also commissioned to deliver the Aboriginal Social and Emotional Wellbeing Project, whose aim is to promote social and emotional wellbeing and reduce community distress and suicide in Aboriginal communities.
	7.2 Licit and illicit drug use is	<u>Australia</u>
	more common among LGBTI individuals. The risk of harm from AOD use can be increased by stigma, discrimination, and lack of support.	Those who identify as lesbian, gay, bisexual, transgender or intersex (LGBTI) are at an increased risk of alcohol, tobacco and other drug use and harm from use. In 2013, use of licit and illicit drugs was more common in people who identified as homosexual or bisexual in Australia than for those identifying as heterosexual. These risks can be increased by stigma and discrimination, familial issues, marginalisation within their own community as a result of sexually transmitted infections (STIs) and blood borne viruses (BBVs), fear of identification or visibility of LGBTI status, and a lack of support.

Perth South PHN – AOD Needs Assessment v1.0

Outcomes of the health ne	eeds analysis	
		On 15 th November 2017, the Australian Bureau of Statistics released the results of the Australian Marriage Law Postal Survey. Of the eligible Australians who expressed a view, 61.6% supported changing the law to allow same-sex couples to marry. All states and territories recorded a majority Yes response.
HN8. Community capacity	8.1 Local communities' capacity	Western Australia
to respond to AOD use.	to respond to high rates of AOD use, and engagement, coordination and collaboration between stakeholders with an interest in harm reduction, including health consumers, can be improved.	"AOD issues can be deemed psychosocial rather than a formal mental health issue" (consultant psychiatrist in Perth, 2016). Throughout the community consultation in the Baseline AOD Needs Assessment, participants emphasised the social determinants of the harms raised for people living with AOD issues, whether themselves or those around them. The need for safe, affordable and appropriate housing headed the list.
		Community stakeholders observed that inadequate investment in prevention and mental health promotion programs, primary care services and community-based mental health/AOD services puts pressure on other parts of the system, and other social care systems.
		<u>Place-based</u>
		Since the previous Needs Assessment, the PHN has commissioned the Social and Emotional Wellbeing Programs which have a community-first approach to mental health in Armadale. The National Empowerment Project focusing on cultural, social and emotional wellbeing is based in Gosnells/Kwinana. Additional funding was provided by WAPHA over the period 1st January 2017 to 30th June 2017 to assist in the delivery of a comprehensive response to methamphetamine users and their families in identified high need areas of Peel and Rockingham/Kwinana. This included provision of an immediate response service, specialist youth counselling, individual and family counselling, methamphetamine family support programs, increased afterhours services, outreach counselling to medical services, and increased support to home-based detox services provided by the Drug and Alcohol Withdrawal Network (DAWN).
		Furthermore, the Alcohol Screening and Brief Intervention (ASBI) at Fiona Stanley and Rockingham General Hospital provides early intervention and increases patient awareness. Screening is used to identify those at risk of alcohol-related harms and is combined with brief interventions. Early intervention allows preventive measures or treatment to be initiated before clinical-level disorders and the associated health and social problems develop.

Outcomes of the health needs ar	nalysis	
	roblematic AOD use has	Western Australia
and s	been linked to family, domestic and sexual violence, and to other crimes.	The presence of substance abuse has also been linked to family, domestic and sexual violence and to other crimes. In WA, more than half of all domestic and over a third of all non-domestic assaults are alcohol-related.
		In 2014 in WA, there were 14,603 victims of family and domestic violence recorded by police, equating to a rate of 568 victims per 100,000 people. An additional 544 people were victims of family and domestic violence-related sexual assault, equating to 21 victims per 100,000 people. The majority of domestic violence victims were female. In WA, there were three times as many female victims of domestic violence (n=10,648) as male victims (n=3,860) and seven times as many female victims of family and domestic violence-related sexual assault (n=471) as male victims (n=70). Victims were more likely to be aged 20-34 years (46% of all victims).
		<u>Place-based</u>
		CLAN WA indicated that most of their clients accessing services in Kewdale, Mirrabooka, Armadale and Warnbro have a link to domestic violence and/or AOD misuse. The Pat Thomas House in Mandurah reported that approximately 85% of their clients are seen as a result of methamphetamine-related domestic violence. From July to December 2016, there were 1329 mandatory reports of child abuse in Western Australia. Within Perth South PHN, the locations with the highest numbers of reported child abuse were Armadale (122 reports over 6 months) and Rockingham (109 reports over 6 months).

Section 3 – Outcomes of the service needs analysis

Outcomes of the service	Outcomes of the service needs analysis		
Identified Need	Key Issue	Description of Evidence	
SN1. Models of care	1.1 Locations with high	<u>Australia</u>	
focused on early intervention. AOD-related hospitalisations and AOD treatment services indicate a need for early intervention.	The volume of AOD treatment service episodes has shown a continued upward trend across all age groups, and in particular for counselling, rehabilitation, and information and education since 2008-9. In 2015-16, about 19% of all treatment episodes were delivered in Western Australia, an over-representation considering that WA accounts for only 10% of Australia's population. Place-based		
	Alcohol and Other Drugs Treatment Services (AODTS) data is only available at the state and national level. Agestandardised rates of mental health overnight hospitalisations for AOD use were used to determine locations likely to have the highest demand for services. The age-standardised rate of mental health overnight hospitalisations for AOD use in the SA3s of Belmont-Victoria Park, South Perth, Fremantle, Wheatbelt-South is significantly higher than the PHN average. The rate of homelessness in Perth metropolitan locations is strongly associated with AOD-related hospitalisations (26) (r=0.8051), schizophrenia and delusion (r=0.9306), anxiety and stress (r=0.8166), and depressive disorders (r=0.8441) (analysis from WAPHA 2016/17 Needs Assessment by Curtin University).		
		Higher rates of AOD-related hospitalisations and homelessness are both found in Fremantle and Belmont-Victoria Park SA3s. In 2014, amphetamines were reported as the primary drug of concern in 21.5% of all treatment episodes in Western Australia and 22.5% in the South Metropolitan Health Region. This is an increase from 17.3% in 2011/12. In the same year, the rate of amphetamine-related treatment and ADSL calls doubled (103.3%) from 2009.	
	1.2 Demand for AOD	Australian and Western Australia	
to be higher in th year age group ir need for prevent	treatment services is likely to be higher in the 18-30 year age group indicating a need for prevention earlier in the lifespan.	Young people aged 18-29 years were more likely than any other age group to consume alcohol in quantities that placed them at risk of an alcohol-related injury, and of alcohol-related harm over their lifetime. In 2013, it was reported that 26% of adults aged 18-30 years in WA had used a pharmaceutical for recreational or non-medicinal purposes at least once in their lifetime. About 17.7% had reported doing so in the previous 12 months.	
	3	Perth Metropolitan	
		Improving Perinatal Responses to Alcohol and Drug Use, provided by the St John of God Healthcare Raphael Centre and Drug and Alcohol Withdrawal Network, is an early intervention program. It provides support to build the	

Perth South PHN – AOD Needs Assessment v1.0

Version 1. 0 submitted to the Australian Government Department of Health on 15 November 2017

Version 2.0 published 28 February 2018

Outcomes of the service needs	ls analysis	
		capacity and capability of Raphael Services to provide perinatal mental health services including AOD services. General Practitioners in Perth metropolitan locations have indicated that youth with early psychosis need support for AOD but it has been difficult to access specialist AOD services for youth.
		<u>Place-based</u>
		The following is a summary of qualitative information obtained for Perth South PHN.
		 The closure of youth mental health services at Fiona Stanley Hospital means that patients are now being referred to the Alma Street Centre. This has resulted in long waiting lists. There are no youth or AOD services in Cannington.
		 Headspace reported low attendance rates at meetings and events by CALD clients and their families. In Rockingham, youth have accessed headspace to deal with a critical episode. However, there is a lack of other community services to assist with ongoing therapeutic services and support.
	Current interventions	<u>Australia</u>
adult howe	focus predominantly on adults aged 20 to 49 years; however, the pattern of	In 2015-16, 76% of alcohol and other drug treatment episodes were delivered to people aged between 20 and 49 years. Despite the shift in age and pattern of drug usage in Australia described in HN5, the age distribution of AODTS episodes has not changed since 2006-7.
drug	g usage has shifted.	Perth South PHN
		[Content suppressed due to confidentiality] There is a need to investigate the use of technologies in a stepped care approach to AOD particularly in the South Metropolitan Health Services catchment.
1.4 S	Support for self-	Perth South PHN
supp stren mild-	nagement and peer port can be ngthened for those with d-to-moderate problems multi-morbidities.	Stakeholders participating in the Baseline Needs Assessment identified key system-wide supports that are critical to an efficient and effective prevention, treatment and support system. These include: addressing stigma/social inclusion, consumer engagement and family involvement, workforce development, monitoring, evaluation and research as well as building healthy public policy. Enhanced coordination and capacity building focuses on supporting closer working relationships across sectors (including justice, housing, education and social care) as well as across the primary, secondary and tertiary interfaces of the health sector, including physical and mental health. AOD treatment providers need to provide evidence that services are supporting clients on a recovery pathway and that they have appropriate self-management skills to manage relapses.

Outcomes of the service	needs analysis	
		Refer to Core Needs Assessment for further information.
SN2. Capacity of GPs to recognise and respond to AOD-related presentations.	2.1 GP awareness of signs and symptoms of problematic AOD use and provision of appropriate treatment and support, including harm reduction, could be improved.	Perth South PHN Stakeholder consultation indicated that GPs may not always be aware of possible options for patients living with anxiety/depression, suicidal ideation, and harmful levels of AOD use. Workforce capacity building will ensure that people who come into contact with those on the pathway of problematic AOD use have the necessary skills and knowledge to refer appropriately and to support the treatment needs of relevant cohorts including individuals, their families, and the wider community. This includes improved management of those with more complex problems such as co-occurring mental health, alcohol and other drug issues, or other physical health conditions. A survey of GPs attending the EPYS workshop last May indicated high demand for more AOD training from general practice perspective.
		The Alcohol Screening and Brief Intervention (ASBI) Project has since been commissioned through the South Metro Health Service and National Drug Research Institute at Curtin University and focuses on early intervention, increasing uptake of screening and intervention, improving connections with GPs and support services, and raising the profile of alcohol-related harm and appropriate interventions. ASBI plays a key role in building the capability of primary care practitioners to manage AOD presentations. Edith Cowan University is funded to deliver AOD training to GPs — TADPole, which involves a series of education activities covering general and specific AOD topics and skill-based techniques. WAPHA has also developed an AOD GP Pack to support GPs.

Outcomes of the service needs analysis

SN3. Build capacity of the primary care and generalist health workforce to respond to AOD issues in a coordinated/integrated way.

3.1 Lack of connectivity between AOD, MH and family violence services. Systematic place-based consultation is currently underway and opportunity presents to translate and operationalise potential acute-primary health projects suggested.

Western Australia

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. With respect to linkages needed for consumers moving into, through and beyond AOD treatment, there was generally awareness across all stakeholder consultations forums that the whole range of medical, non-medical and support service providers need to be able to foresee the risk and to act appropriately in order to prevent AOD-related harms.

Place-based

Since the last needs assessment, the PHN has commissioned Richmond Wellbeing Incorporated program 'Integrated Systems of Care to support Aboriginal people with problematic AOD use and mental illness' and is undergoing place-based consultations to ascertain local solutions. The community consultations are currently underway. An enhanced connection between not-for-profit community services and tertiary hospital services has also been observed. The following is a summary of qualitative information obtained for the Perth South PHN.

- Palmerston is a major stakeholder in the ASBI Project at Fiona Stanley Hospital and Rockingham General Hospital and has also been invited to attend the ASBI GP workshop.
- 'Pathways of Care from Public Mental Health to Primary Care', funded through core funding and run by Curtin University and Cockburn Integrated Health, aims to increase the competency and capability of the primary care workforce in the Perth South West Region to implement best practice drug and alcohol treatment and support.
- HealthPathways has been effective in encouraging multidisciplinary collaboration in the Perth South PHN.

Outcomes of the service needs analysis				
	3.2 Care coordination and patient pathways between AOD, MH, health and social support services could be improved to better support people living with multimorbidities.	For multi-morbidity information, please refer to the Mental Health Needs Assessment HN3. Western Australia Community consultations across WA found the inadequacy of community and service responses to be the main AOD-related service issue. The lack of cohesion among services was a common theme across metropolitan and regional areas, with regional areas facing the additional challenge of distance and widely-dispersed populations. The Western Australian Mental Health, Alcohol and Other Drug Service Plans 2015-25 aim to build capacity in the system to improve coordination and ensure that services are personalised. Individuals will be supported to stay at lower risk of harm and to obtain recovery-focused support earlier in an environment best suited to their needs. Place-based There is strong qualitative evidence that the system is currently disjointed, with competition between service providers. Palmerston is funded to provide South Metro Community Alcohol and Drug Service – Branch Coordination Program to employ coordinators in Fremantle, Rockingham and Mandurah. The Project provides counselling and youth, adult and family programs to support people with problematic drug and alcohol use in the South Metropolitan area, particularly in Fremantle, Mandurah and Rockingham. The coordinators operate locally, and as a team, to deliver improved programs to clients and to develop an effective program for Aboriginal and Torres Strait Islander people in the South Metropolitan area.		
	3.3 Build capability of generalist service providers to recognise and respond to AOD issues to reduce inappropriate referrals and improve person-centred care.	Perth South PHN The Alcohol Screening and Brief Intervention (ASBI) project has been commissioned through the South Metro Health Service and National Drug Research Institute at Curtin University. The project focuses on early intervention, increasing uptake of screening and intervention, improving connections with GPs and support services, raising the profile of alcohol-related harm and appropriate interventions. ASBI plays a key role in building the capability of primary care practitioners to manage AOD presentations.		
SN4. Refocus investment in the AOD sector to reduce duplication and over-reliance on the acute sector.	4.1 Prioritise investment to address gaps in service provision and avoid duplication of services.	Western Australia An AOD non-government organisation representative who attended the WA PHN AOD needs assessment consultation suggested that "any fragmentation in the WA AOD sector is between Commonwealth and the state – not the sector itself. Therefore, co-commissioning with the Mental Health Commission is imperative". Place-based		

Outcomes of the service	needs analysis	
		AOD services are predominantly outpatient and residential services across all MH&AOD Atlas regions in WA. [Content suppressed due to confidentiality]
	4.2 Rebalance investment	<u>Australia</u>
	from high cost, low volume acute care to higher volume community-based services earlier in the care continuum.	Over half of the AOD treatment services delivered in 2015-16 were high cost, low volume including counselling (37%), withdrawal management (11%), rehabilitation (6%) and pharmacotherapy (3%). Only 8% of treatment services involved information or education, which are generally low cost, high volume.
		Perth South PHN
		Seven out of 16 specialist AOD services in Perth South PHN are medium intensity, non-mobile services; three are non-mobile acute outpatient services; and the six remaining services are low intensity information services. Low intensity, high volume services are not available.
	4.3 Lack of local or after-	Perth South PHN
	hours services can result in unnecessary presentations	Substance abuse-related emergency department presentations is lower than the state average. [part content suppressed due to confidentiality]
	to emergency departments.	<u>Place-based</u>
		Operating hours for most services are not specified in Perth South PHN. A trial of Saturday morning services targeted at methamphetamine users who are unable or reluctant to attend services during standard hours, commenced at Rockingham and Mandurah over May/June.
SN5. Continuity of care	5.1 Disruptions to care upon	Western Australia
post treatment.	exit from treatment services hinder recovery and contribute to early relapse or unfavourable outcomes.	"patients [with AOD issues] are often discharged back to their GP (if they have one) or the Community Mental Health Unit if deemed appropriate. They may have to wait days to weeks to be seen. A patient recently attempted suicide six weeks post discharge from the ED (for alcohol and relationship issues) with no formal psychiatric diagnosis. There are limited community resources for these patients - waiting time for Next Step etc. can be months. I see these patients fall between the cracks." (consultant psychiatrist in Perth, 2016).
		Perth South PHN
		Only 30% of treatment for AOD resolves the issues completely, therefore transitional support is required to minimise the chance of relapse post treatment. Given the paucity of residential services in Perth South, it is important that any positive treatment outcomes are sustained when returning to the community.
		<u>Place-based</u>

Outcomes of the service needs analysis			
	Armadale and Gosnells have been identified as locations that are likely to have higher need in terms of prevention of alcohol-related suicide as well as physical and mental health conditions. There is no specialist AOD service in Armadale. It is a location likely to have high AOD service needs, and is approximately 30km away from Murdoch and Perth CBD, where majority of specialist AOD services are located. Gosnells SA3 is another location with a likelihood of high AOD-related service needs. The Harry Hunter Centre provides a 13-week residential Drug and Alcohol addiction recovery program proven to be in demand. The specialist AOD service needs in these locations should be explored.		

Data sources – Core, Mental Health and AOD Needs Assessments for Perth North, Perth South and Country WA PHNs

Anderson C, Bineham N, Carter S, Mukhtar A, Lockwood T. Child and Maternal Health Profile. WA Country Health Service (WACHS); 2017.

Australian Association for the Teaching of English. ESL (English as a second Language), Aboriginal Englishes, n.d.

Australian Bureau of Statistics. 3415.0 - Migrant Data Matrices, 2017.

Australian Bureau of Statistics. ABS celebrates Indigenous languages during NAIDOC, 2017.

Australian Bureau of Statistics. Causes of Death, Australia, 2016 (No. 3303.0) 2017. Available from: http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/3303.0main+features100012012.

Australian Bureau of Statistics. Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA) (No. 2033.0.55.001). 2011 [Available from:

http://www.abs.gov.au/ausstats/abs@.nsf/mf/2033.0.55.001.

Australian Bureau of Statistics. Census of Population and Housing: Estimating homelessness, 2011.

Australian Bureau of Statistics. Defining the Data Challenge for Family, Domestic and Sexual Violence, 2013 (Cat. No. 4529.0) [Online]. Canberra: 2013.

Australian Bureau of Statistics. Prisoners in Australia (No. 4517.0). 2015. Available from: http://www.abs.gov.au/ausstats/abs@.nsf/mf/4517.0.

Australian Bureau of Statistics. Recorded Crime - Victimes, Australia, 2014 (Cat. No. 4510.0) [Online]. Canberra: Australian Bureau of Statistics; 2015. Available from: http://www.abs.gov.au/.

Australian Crime Commission. Illicit Drug Data Report (IDDR) 2012-13. 2014.

Australian Digital Health Agency. My Health Record data set (February 2016 - September 2017) - secure portal, 2017.

Australian Health Ministers' Advisory Council. Aboriginal and Torres Strait Islander Health Performance Framework 2014 Report. Canberra: AHMAC; 2015.

Australian Health Practitioner Regulation Agency (AHPRA). National Health Workforce Dataset (NHWDS),. In: Australian Government Department of Health, editor. Canberra2017.

Australian Institute of Health and Welfare. 2010 Australian National Infant Feeding Survey: indicator results. Canberra: AIHW; 2011.

Australian Institute of Health and Welfare. Aboriginal and Torres Strait Islander Health Performance Framework 2017 report: Western Australia. Cat. no. IHW 185. Canberra: AIHW; 2017.

Australian Institute of Health and Welfare. Admitted patient care 2015–16: Australian hospital statistics. Canberra: AIHW; 2017.

Australian Institute of Health and Welfare. AIHW analysis of the National Hospital Morbidity Database (2014–15).

Australian Institute of Health and Welfare. Alcohol and other drug treatment services in Australia 2015-16, Drug treatment series no.29. Cat. no. HSE 187,. Canberra: AIHW; 2017.

Australian Institute of Health and Welfare. Australian Burden of Disease Study: Impact and causes of illness and death in Australia 2011. Series no. 3. BOD 4. Canberra: AIHW; 2016.

Australian Institute of Health and Welfare. Australia's Health 2016. Cat. no. AUS 199. 2017.

Perth South PHN – AOD Needs Assessment v1.0

Australian Institute of Health and Welfare. Comorbidity of mental disorders and physical conditions 2007. Canberra: AIHW; 2012.

Australian Institute of Health and Welfare. GEN Aged Care Data. Information and data on aged care in Australia. 2017 [Available from: https://www.gen-agedcaredata.gov.au/.

Australian Institute of Health and Welfare. Mental health services - in brief. Canberra: AIHW; 2015.

Australian Institute of Health and Welfare. My Healthy Communities. Web update: Hospitalisations for mental health conditions and intentional self-harm in 2014–15; 2017. Available from: https://www.myhealthycommunities.gov.au/our-reports/mental-health-and-intentional-self-harm/february-2017.

Australian Institute of Health and Welfare. MyHealthy Communities: Potentially preventable hospitalisations (2015-16). 2017 [Available from: http://www.myhealthycommunities.gov.au.

Australian Institute of Health and Welfare. National Drug Strategy Household Survey detailed report 2013. Canberra: Australian Institute of Health and Welfare, 2014.

Australian Institute of Health and Welfare. Older people. 2017 [Available from: https://www.aihw.gov.au/reports-statistics/population-groups/older-people/overview.

Australian Institute of Health and Welfare. Participation in Australian cancer screening programs in 2015-2016. 2017.

Australian Institute of Health and Welfare. The health of Australia's prisoners 2015. Cat. no. PHE 207. Canberra: AIHW; 2015.

Australian Institute of Health and Welfare. Trends in alcohol availability, use and treatment 2003-14 to 2014-15. Canberra: AIHW, 2016.

Australian Institute of Health and Welfare. The health and welfare of Australia's Aboriginal and Torres Strait Islander peoples: 2015. Canberra: AIHW; 2015.

Ballestas T, Xiao J, McEvoy S, Somerford P. The Epidemiology of Injury in Western Australia, 2000-2008. Perth: Department of Health WA; 2011.

Begg S, Vos T, Barker B, Stevenson C, Stanley L, Lopez AD. The burden of disease and injury in Australia 2003. 2007.

Bolden G, Jackson S. Goldfields Clinical Engagement Report 2016. Estellar Consulting Pty Ltd.; 2016.

Booth A, Carroll N. The health status of Indigenous and non-Indigenous Australians. Australian National University, 2005 Contract No.: Discussion Paper No. 1534.

Butler T, Callander, D., & Simpson, M.,. National Prison Entrants' Bloodbourne Virus Survey Report 2004, 2007, 2010, and 2013,. Sydney: Kirby Institute (UNSW Australia), 2015.

Chronic Disease Prevention Directorate. WA Health Promotion Strategic Framework 2017-2021. Perth: Department of Health Western Australia; 2017.

Closing the Gap Clearinghouse (AIHW & AIFS). Strategies to minimise the incidence of suicide and suicidal behaviour. Resoruce sheet no. 18. Produced for the Closing the Gap Clearinghouse. Canberra: 2013.

Commonwealth Department of Health. 2014 Australian Child and Adolescent Survey of Mental Health and Wellbeing (Young Minds Matter survey) - not for public release. PHN secure data area.

Commonwealth Department of Health. Acute admissions (2016-17), PHN secure data area. 2017.

Commonwealth Department of Health. Immunise Australia Program. Vaccination Data Hub. 2017 [Available from:

http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/vaccination-data

Perth South PHN - AOD Needs Assessment v1.0

Version 1. 0 submitted to the Australian Government Department of Health on 15 November 2017 Version 2.0 published 28 February 2018 Commonwealth Department of Health. Medicare Benefit Schedule Data (2014-15), PHN secure data area. 2017.

Commonwealth Department of Health. Mental Health MBS (2014-15), PHN secure data area. 2017.

Commonwealth Department of Health. Mental health-related PBS data (2015-16) 2017.

Commonwealth Department of Health. MindSpot (1st January 2016 - 31st December 2016), PHN secure data area. 2017.

Commonwealth Department of Health. National Health Workforce Dataset (2013-15). 2017.

Commonwelath Department of Health. Primary Mental Health Care Minimum Data Set 2017.

Curtin University, Health Systems and Health Economics, School of Public Health. Initial alcohol and other drug needs assessment: Perth North, Perth South and Country WA PHNs. 2016.

Curtin University, Health Systems and Health Economics, School of Public Health. Population Health Needs Assessment: Perth North, Perth South and Country WA PHNs. Perth: WA Primary Health Alliance; 2016.

Darvishi N, Farhadi M, Haghtalab T, Poorolajal J. Alcohol-related risk of suicidal ideation, suicide attempt, and completed suicide: a meta-analysis. PLoS One. 2015;10(5):e0126870.

Davis J, Toll K, Robinson S. Can better access to coordinated, multidisciplinary care really close the gap in life expectancy for indigenous people with complex chronic conditions? Evaluation of the Integrated Team Care Program. Perth: Curtin University, Health Systems and Health Economics, School of Public Health. 2017.

Department for Child Protection and Family Support. Mandatory reporting information as at December 2016.

Department of Health Western Australia. The Emergency Department Data Collection (1st July 2013 - 30th June 2015), 2016.

Department of Health Western Australia. WA Health Promotion Strategic Framework 2012-2016. Perth: Chronic Disease Prevention Direcotrate, 2012.

Department of Social Services. Settlement Reports (2010-15) - Local Government Areas by Migration Stream. 2015.

Drug and Alcohol Office WA and Epidemiology Branch of Department of Health WA. Alcohol-related hospitalisations and deaths in Western Australia: State profile. Perth: Drug and Alcohol Office, 2016.

Drug and Alcohol Office WA. Alcohol and Other Drug Indicators Reprot - South Metro Region 2006-2010. Perth: Drug and Alcohol Office WA, 2013.

Duckett S, Griffiths K. Perils of place: identifying hotspots of health inequalities. Grattan Institute; 2016.

Estellar Consulting Pty Ltd. Clinical Engagement Reports: Country WA PHN regions. Prepared for WAPHA; 2016.

European Alliance Against Depression. Targeting depression and suicide globally 2017. Available from: http://eaad.net/.

Falster M, Jorm L. A guide to the potentially preventable hospitalisations indicator in Australia. Sydney: Centre for Big Data Research in Health, University of New South Wales in consultation with Australian Commission on Safety and Quality in Health Care and Australian Institute of Health and Welfare; 2017.

Fetherston JL, S. Western Australia Drug Trends 2014: Findings from the Illicit Drug Reporting System (IDRS). Australian Drug Trend Series No. 133. Sydney: National Drug and Alcohol Research Centre, UNSW Australia,, 2015.

Fitzpatrick JP, Elliott EJ, Latimer J, Carter M, Oscar J, Ferreira M, et al. The Lililwan Project: study protocol for a population-based active case ascertainment study of the prevalence of fetal alcohol spectrum disorders (FASD) in remote Australian Aboriginal communities. BMJ Open. 2012; 2(3) DOI:10.1136/bmjopen-2012-000968.

Fowler C. Domestic violence on rise. North West Telegraph. 2016 July 6 2016.

Gay and Lesbian Medical Association. Healthy People 2010: Companion Document for Lesbian, Gay, Bisexual and Transgender Health 2010. Available from:

https://www.med.umich.edu/diversity/pdffiles/healthpeople.pdf.

Georgeff M. Digital technologies and chronic disease management. Australian Family Physician. 2014; 43(12):842-846. Available from: https://www.racgp.org.au/afp/2014/december/digital-technologies-and-chronic-disease-management/.

Glaser B, & Strauss, AL. The Discovery of Grounded Theory: Strategies for Qualitative Research. New York: Aldine De Gruyter; 1967.

Goggin L, & Birdle, R. Young Adult Drug and Alcohol Survey (YADAS): Results for Western Australia, 2013. Perth: Drug and Alcohol Office, 2013.

Headspace. Headspace PHN Reporting Suite 3.2A Summary (1st July 2016 - 30th June 2017). 2017.

HealthPathways WA. Project Management. WAPHA; 2017 [Available from: https://waproject.healthpathways.org.au/.

Holman CDJ, Joyce SJ. A Promising Future: WA Aboriginal Health Programs. Review of performance with recommendations for consolidation and advance. Perth: Department of Health Western Australia; 2014.

Hopkins J, Bell T, Wood L, Mendoza J, Salvador-Carulla L, Karklins L, Bryne A, Hackett M & Alberto Salinas J, 2016. The Integrated Atlas of Mental Health and AOD for Western Australian Primary health Alliance. ConNetica and Mental Health Policy Unit, Brain and Mind Centre, University of Sydney. ConNetica. Caloundra, Qld. ISBN: 978-1-74210-385-3

Liaw S, Hasan I, Wade V, Canalese R, Kelaher M, Lau P, et al. Improving cultural respect to improve Aboriginal health in general practice: a multi-methods and multi-perspective pragmatic study. Australian Family Physician. 2015; 44(6):387-392.

Lipio K. CALD Community Health Katanning: Client Survey. WA Country Health Service (WACHS). 2017.

Lobelo F, Trotter P, Healther AJ. White Paper: Chronic Disease is Healthcare's Rising Risk. 2016. Available from: http://www.exerciseismedicine.org/assets/page_documents/Whitepaper%20Final%20for%20 Publishing%20(002)%20Chronic%20diseases.pdf.

Marion Wands, Alex Stretton, John Mendoza. Towards One System, One Team. Hospital Transition Pathways Project: Final Report. Prepared for the WAHPA and Mental Health Commission of WA. Sunshine Coast, Qld: ConNetica Consulting, 2017.

Marmot M, Atinmo T, Byers T, Chen J, Hirohata T, Jackson A, et al. Food, nutrition, physical activity, and the prevention of cancer: a global perspective. 2007.

Mathews B, Lee XJ, Norman RE. Impact of a new mandatory reporting law on reporting and identification of child sexual abuse: a seven year time trend analysis. Child abuse & neglect. 2016;56:62-79.

Memedovic S IJ, Geddes L, & Maher L,. Australian Needle and Syringe Program Survey - Prevalence of HIV, HCV and injecting and sexual behaviour among NSP attendees, National data report 2012-2016. Sydney: The Kirby Institute for infection and immunity in society, 2017.

Mental Health Commission. Alcohol Use Statistics Mount Lawley WA: Mental Health Commission; 2014. Available from: http://alcoholthinkagain.com.au/Resources/Alcohol-Use-Statistics.

Mental Health Commission. Suicide Prevention 2020: Together we can save lives, 2017.

Miller J BR, Goggin L, Christou A,. Australian school student alcohol and drug survey: illicit drug report 2011 – Western Australian results. Drug and Alcohol Office Surveillance Report: Number 9. . Perth: Drug and Alcohol Office WA,, 2012.

Moore TG, Arefadib N, Deery A, West S. The First Thousand Days: An Evidence Paper. Parkville, Victoria: Centre for Community Child Health, Murdoch Children's Research Institute; 2017.

Munro JM. A case of language spread and shift in Northern Australia. In: Siegel J, editor. Processes of language contact: Studies from Australia and the South Pacific. Montreal: Fides; 2000. p. 245-270.

Mutch RC, Watkins R, Bower C. Fetal alcohol spectrum disorders: notifications to the Western Australian Register of Developmental Anomalies. Journal of Paediatrics and Child Health. 2015; 51(4):433-436.

National Aboriginal Health Strategy Working Party. A national Aboriginal health strategy / prepared by the National Aboriginal Health Strategy Working Party. [Canberra]: [National Aboriginal Health Strategy Working Party]; 1989.

National Health and Medical Research Council (NHMRC). Australian Guidelines to Reduce Health Risks from Drinking Alcohol, 2009. Available from:

https://www.nhmrc.gov.au/_files_nhmrc/publications/attachments/ds10-alcohol.pdf.

NPS MedicineWise. NPS MedicineInsight data (1st July 2012 - 30th June 2015). 2016.

O'Brien J, Grant S, Mueller J, Tscharke B, Gerber C, White J. National Wastewater Drug Monitoring Program Report. Australian Criminal Intelligence Commission: The University of Queensland, University of South Australia 2017.

Ombudsman Western Australia. Investigation into ways that State government departments and authorities can prevent or reduce suicide by young people. 2014.

Penington Institute. Overdose death rates higher in regional and rural areas than capital cities for first time. 2014.

Primary Health Care Research & Information Service. PHCRIS Getting Started Guides: Introduction to: Primary Health Care. 2017 [Available from: http://www.phcris.org.au/guides/about_phc.php.

Public Health Information Development Unit (PHIDU). Aboriginal and Torres Strait Islander Social Health Atlas of Australia. 2017 [Available from: http://phidu.torrens.edu.au/social-health-atlases/data.

Public Health Information Development Unit (PHIDU). Social Atlases. 2017 [Available from: http://phidu.torrens.edu.au/social-health-atlases/data.

Radomiljac A, Joyce S, Powell A. Health and Wellbeing of Adults in Western Australia 2016, Overview and Trends. Department of Health Western Australia; 2017.

Rene` Reddingius Transcend Initiatives Pty Ltd. Aboriginal Community Consultation in Carnarvon regarding health services for WAPHA. 2016.

Richmond Wellbeing. Integrated System of Care to support Aboriginal people with alcohol, drug, and mental health issues. Engagement and Co-design Workshop Reports; 2017.

Richmond Wellbeing. Integrated System of Care to support people with alcohol, drug, and mental health issues. Engagement and Co-design Workshop Reports; 2017.

Road Safety Commission. Regional Statistics: Regional Overview, 2017.

Rural Health West. Rural General Practice in Western Australia: Annual Workforce Update, November 2016. Perth: Rural Health West; 2017.

SANE Australia. Growing older, staying well: mental health care for older Australians: A SANE Report. 2013.

Shire of Leonora. Formal Stakeholder Letter to WA Primary Health Alliance, 2017.

Stokes B. Review of the admission or referral to and the discharge and transfer practices of public mental health facilities/services in Western Australia. 2012.

Strauss AC, J. Basics of Qualitative Research: Grounded Theory Procedures and Techniques. Newbury Park, CA: Sage Publications; 1990.

Streissguth A, Barr H, Kogan J, Bookstein F. Understanding the occurrence of secondary disabilities in clients with fetal alcohol syndrome (FAS) and fetal alcohol effects (FAE). Final report to the Centers for Disease Control and Prevention (CDC). 1996:96-06.

The University of Queensland (O'Brien J, Grant, S., Mueller, J.) & University of South Australia (Tscharke, B., Gerber, C., White, J.). National Wastewater Drug Monitoring Program Repot. Australia: Australian Criminal Intelligence Commission, 2017.

The University of Queensland. The National Mental Health Service Planning Framework – Technical Manual – Commissioned by the Australian Government Department of Health. Version AUS V2.1. Brisbane: The University of Queensland; 2016.

Vohma V, Xiao A, Shao C, Somerford P. Potentially Preventable Hospitalisation Hotspots in Western Australia. Perth, Western Australia: Department of Health Western Australia and WA Primary Health Alliance; 2017.

WA Country Health Service (WACHS). Annual Report 2016-17. 2017.

WA Country Health Service (WACHS). GP survey on electronic discharge summaries, 2017.

WA Country Health Service (WACHS). Health Profile Summary. 2017.

WA Country Health Service (WACHS). Manjimup Chronic Conditions Mapping 2017 - Data Analysis. 2017.

WA Country Health Service (WACHS). Wheatbelt Community Diabetes Consultation 2016.

WA Country Health Service (WACHS). Wheatbelt Primary Health Service Delivery Model 2016-2020. DRAFT. 2016.

WA Primary Health Alliance (WAPHA). Aboriginal Health Worker Conference, Kimberley, 2017.

WA Primary Health Alliance (WAPHA). Expression of Interest. Greater Choice for at Home Palliative Care measure, 2017.

WA Primary Health Alliance (WAPHA). Goldfields Regional Clincal Commissioning Committee, Meeting Minutes, 2017.

WA Primary Health Alliance (WAPHA). Indigenous Health - Integrated Team Care (ITC). 2017 [Available from: http://www.wapha.org.au/commissioning/wapha-funded-programs/indigenous-health/.

WA Primary Health Alliance (WAPHA). Integrated Team Care (ITC) Country to City Health Links Project: Improving patient transitions. Consultation write-up: Kimberley. 2017.

WA Primary Health Alliance (WAPHA). Midwest Regional Clincal Commissioning Committee, Meeting minutes, 2017.

WA Primary Health Alliance (WAPHA). Pilbara Regional Clincal Commissioning Committee, Meeting minutes, 2017.

WA Primary Health Alliance (WAPHA). Primary Health Care Data Collection, 2017.

WA Primary Health Alliance (WAPHA). Stakeholder feedback, Kimberley Region, 2017.

WA Primary Health Alliance (WAPHA). The Alliance Against Depression 2017. Available from: http://www.wapha.org.au/primary-health-networks/alliance-against-depression/.

WA Primary Health Alliance and Rural Health West. Digital Readiness Project. 2017 [Available from: http://www.wapha.org.au/health-professionals/digitalhealth/digital-readiness-project/.

Wendy Loxley WG, Paul Catalano, Tanya Chikritzhs. National Alcohol Sales Data Project (NASDP) Stage Five Reports. Perth Western Australia,: National Drug Research Institute,, 2016.

Western Australian Network of Alcohol & other Drug Agencies (WANADA). High overdose rates - aging population and drug purity factors. 2014.

Western Australia Mental Health Commission. Alcohol trends in Western Australia: Australian school student alcohol and drug survey. Perth: Drug and Alcohol Office WA,, 2014.

Western Australia Mental Health Commission. Better Choices. Better Lives. Western Australian Mental Health, Alcohol and Other Drug Services Plan 2015-2025. Perth: 2015.

Western Australia Mental Health Commission. Illicit drug trends in Western Australia: Australian school student alcohol and drug survey. Perth: Drug and Alcohol Office WA, 2014.

Wheatbelt Digital Health Implementation Advisory Group Meeting. Minutes of Meeting, 2017.

World Health Organisation. Prevention of Mental Disorders: Effective Interventions and Policy Options. 2004.

Wright C, Hendrie D, Davis J, Robinson S. An independent review of the Southern Inland Health Initiative evaluation. Curtin University: Health Systems and Health Economics, School of Public Health; 2016.