Australian Government
Department of Health

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# Primary Health Network

## Needs Assessment Reporting Template

***Perth North 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 North PHN's third round of needs assessments have 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, providing the 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 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, community consultation reports, 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 the section 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, specifically in the following locations: within 15km of the Perth CBD including pockets within Stirling SA3 (Balcatta-Hamersley, Stirling-Osborne Park, Tuart Hill-Joondanna), Bassendean SA3, and Cottesloe-Claremont South SA3, and Joondalup.

Mundaring SA3, and Ellenbrook within the Swan SA3 requires further explorations to provide context and/or confirm identified needs in this PHN.

***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)***

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 MedicineInsight
- 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

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| 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 workforce | Includes: Aboriginal Health Practitioners; Dental Practitioners; Nurses & Midwives (total and Aboriginal Health Services); Occupational Therapists; Pharmacists; Physiotherapists. |
| Ambulatory-sensitive hospitalisations | Certain conditions for which hospitalisation is considered potentially avoidable through preventive care and early disease management, usually delivered in a primary care setting. Also called Potentially Preventable Hospitalisations (PPHs). |
| Avoidable mortality | Potentially avoidable deaths comprise potentially preventable deaths and 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 health status | Defined as a person who may or may not be sick encounters the health 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. |
| 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 than the general population and tend to be complex to manage. |
| 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.<br>There is 429 IAREs across Australia. |
| Ill-defined conditions | No classifiable diagnosis. |
| 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. |

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| 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 attendances | Emergency Department visits which are classified as triage category 4 (semi-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 care | Holistic care involving GPs and support services in partnership with the 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 care | 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 care | '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 care | Hospital services provided by both public and private hospitals. |

# Section 2 – Outcomes of the health needs analysis

| Outcomes of the health needs analysis | | |
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| **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 non-Aboriginal population. | **Australia and Western Australia**<br><br>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).<br><br>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.<br><br>**Place-based**<br><br>Places where alcohol and drug use is most likely to result in suicide and serious self-harm are Stirling SA3 and Balcatta-Hamersley, Stirling-Osborne Park, Tuart Hill-Joondanna SA2s within it, Bassendean-Eden Hill-Ashfield Population Health Area (PHA), Chidlow/Malmalling-Reservoir/Mundaring PHA, and Cottesloe-Claremont-South PHA. |
| | 1.2 High alcohol-related mortality due to increased risk of chronic conditions such as liver disease, diabetes, kidney disease, and cancer. | **Western Australia**<br><br>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. |

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| | | **Place-based**<br><br>The death rate for all alcohol-related conditions for North Metropolitan residents was 0.89 times lower than the state rate. Alcohol liver cirrhosis and alcohol-related road injuries were significantly lower than the state rate, by 0.81 times and 0.67 times respectively. |
| | 1.3 Drug-related overdose and deaths. | **Australia**<br><br>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.<br><br>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.<br><br>Opioids[1] 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.<br><br>**Western Australia** |

[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).

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| | | 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 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.<br><br>**Place-based**<br><br>Drug-induced mortality data is at the national and state level only. In this assessment, PBS utilisation of opioids (indicated by ATC2 N02), 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. Stirling, Perth City, Bayswater-Bassendean, and Mundaring have been identified as the SA3 locations where drug overdoses are more likely to occur. Perth City and Mundaring SA3 has higher than national average per capita alcohol consumption by estimated service population in 2011/12, and there has been an upward trend since 2005/06. |
| **HN2. Reduce harmful effects of AOD consumption on the foetus, children and adolescents.** | 2.1 Alcohol consumption in pregnancy and Foetal Alcohol Syndrome (FASD) have been associated with prevalence of developmental delay in children and increased suicide risk in adolescents. | **Western Australia**<br><br>The latest published prevalence estimate for FASD in WA is 0.26 per 1000 births. The majority of reported cases were Aboriginal (89.5%), at a rate of 4.08 per 1000 compared to 0.03 per 1000 in notified non-Aboriginal cases. There was a twofold increase in FASD notifications in Western Australia between 1980-1989 and 2000-2010 due to improvements in diagnosis and notification. Previous international reports have suggested that individuals with FASD are at risk for suicide. An individual with a typical clinical profile for FASD will evidence several risk factors for suicide (for example: impulsivity, a comorbid mood disorder, and substance abuse problems).<br><br>**Place-based**<br><br>Locations where maternal alcohol and drug use is most likely to result in developmental delay in children in the Perth North PHN is Swan View – Greenmount – Midvale SA2 in the Mundaring SA3. |

| Outcomes of the health needs analysis | | |
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| **HN3. Reduce impact of AOD misuse on short-term physical and mental health morbidity and multi-morbidities.** | 3.1 The short-term health consequences of using alcohol and other drugs affect cognitive functioning and increase the risk of injury. | **Place-based**<br>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 North PHN, Mundaring and Joondalup SA3 are locations with the highest likelihood of impact due to short-term health consequences of AOD use. |
| | 3.2 AOD use is associated with the prevalence of bloodborne viruses. | **Australia**<br>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. |
| | 3.3 Health effects of binge drinking. | **Australia**<br>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 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. |
| **HN4. Reduce the impact of AOD misuse on medium and long-term physical** | 4.1 Illicit drug use and excessive alcohol consumption are linked to the development | **Australia**<br>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 |

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| **health morbidity and multi-morbidities including certain types of cancers and diabetes complications.** | of chronic diseases and mental disorders. | disorders, some cancers, injury, osteoporosis, and oral disease. Alcohol interferes with insulin production and worsens conditions associated with diabetes such as advanced neuropathy and liver diseases.<br><br>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.<br><br>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.<br><br>**Western Australia**<br><br>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).<br><br>**Place-based**<br><br>Joondalup SA3 (particularly Craigie-Beldon SA2 within it) and Mundaring and Swan SA3s are locations where excessive alcohol consumption is likely to show stronger links to the development of physical and mental conditions. |
| | 4.2 Excessive alcohol consumption is linked to severe and persistent mental illness. | **Western Australia**<br><br>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). |

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| | | **Place-based**<br><br>Perth and Stirling 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 excessive amounts of alcohol, OTC and prescription medicines are likely to present to primary care for other reasons. | **Western Australia**<br><br>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 over-the-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.<br><br>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).<br><br>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 were unavailable.<br><br>**Place-based**<br><br>Mundaring SA3 had average prescriptions per person that were more than 10% higher than the PHN and national average, a statistically significant difference. |
| **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 | **Australia**<br><br>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 |

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| | young adults in WA engage in recreational drug use. | 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%).<br><br>**Western Australia**<br><br>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%).<br><br>**Place-based**<br><br>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 national average. The proportion of residents aged 20-29 years in Perth City is more than double the national and PHN average. While the prevalence of mental health conditions is not significantly higher than the national and PHN averages, the rate of analgesics and psycholeptic prescriptions are significantly higher than the PHN averages. Young adults in Perth City SA3 are more likely to experience higher level of non-medicinal use of prescription medication than other locations within the PHN. Alarmingly, in 2011/12, the per capita alcohol consumption by estimated service population (likely to be young adults) in Perth City SA3 was more than triple the national average and more than double the state average, with an upward trend since 2004/05.<br><br>Student Welfare Assistance Team (SWAT) at Corridors College in Midland reported that young people often present with co-occurring mental health and AOD needs with complex psychosocial circumstances. Persons attending are disengaged from mainstream schooling and attendance at |

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| | | Corridors College can be sporadic. The youth worker/school psychologist reported they would benefit from AOD in-reach support, which is not currently available. |
| **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**<br><br>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.<br><br>**Place-based**<br><br>Place-based data on the use of illicit drugs and abuse of prescription medication by older adults is not available. 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 national average. A possible priority location in the Perth North PHN is Mundaring SA3 where per capita alcohol consumption by estimated service population in 2011/12 is higher than the national average and showing an upward trend since 2005/06. Joondalup SA3 had a significantly higher psychoanaleptics prescription rate than the national average (over a quarter of the population aged 50-69 years) and higher than national average per capita alcohol consumption by estimated service population, signaling potential prescription medication and alcohol misuse among older adult residents. |
| **HN7. Future demand for services related to vulnerable persons who are not accessing services.** | 7.1 Vulnerable groups at risk of harm from AOD use are not being identified or are not currently accessing services. | **Australia**<br><br>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.<br><br>**Western Australia**<br><br>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 |

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| | | 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 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.<br><br>North Metropolitan Community Alcohol and Drug Service (NMCADS) have identified a gap for AOD service in supporting persons that disengage from services at point of referral or after initial assessment – 50% of all referrals will go onto assessment, and approximately 35% engage in ongoing treatment. Variation in referral group for engagement was also noted: justice referrals had lower rate of engagement while child protection service referrals had higher level of engagement.<br><br>**Place-based**<br><br>Mundaring SA3, particularly the Chidlow/Mundaring SA2s, are locations within Perth North PHN where vulnerable individuals may not be accessing appropriate treatment services, particularly among those who leave school early and/or are of Aboriginal descent.<br><br>General practitioners have also identified a need around MH and AOD services that are no-cost and accessible for their patients in the local areas of Joondalup, Butler, Banksia, Wanneroo, Clarkson, Wangara, and Yanchep. GPs currently refer to Better Access, which is cost prohibitive for many, while clients needing services often do not meet the intake criteria for state-funded public services such as local clinics. |
| | 7.2 Licit and illicit drug use is more common among LGBTQI individuals. The risk of harm from AOD use can be increased by stigma, discrimination, and lack of support. | **Australia**<br><br>Those who identify as lesbian, gay, bisexual, transgender, queer or intersex (LGBTQI) 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 LGBTQI status, and a lack of support. |

| Outcomes of the health needs analysis | | |
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| | | On 15th 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 to respond to AOD use.** | 8.1 Local communities' capacity 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. | **Western Australia**<br>"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.<br>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. |
| | 8.2 Problematic AOD use has been linked to family, domestic and sexual violence, and to other crimes. | **Western Australia**<br>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.<br>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). |

# Section 3 – Outcomes of the service needs analysis

| Outcomes of the service needs analysis | | |
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| **Identified Need** | **Key Issue** | **Description of Evidence** |
| **SN1. Models of care focused on early intervention.** | 1.1 Locations with high AOD-related hospitalisations and AOD treatment services indicate a need for early intervention. | **Australia**<br><br>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 about 10% of Australia's population.<br><br>**Place-based**<br><br>Alcohol and Other Drugs Treatment Services (AODTS) data is only available at the state and national level. Age-standardised 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 Perth City and Stirling is significantly higher than the PHN average. The rate of homelessness in Perth metropolitan locations is strongly associated with AOD-related hospitalisations (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 Perth City SA3. In 2014, amphetamines were reported as the primary drug of concern in 21.5% of all treatment episodes in Western Australia and 22.3% in the North Metropolitan Health Region. This is an increase from 19.7% 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 treatment services is likely to be higher in the 18-30 year age group indicating a need for prevention earlier in the lifespan. | **Australian and Western Australia**<br><br>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 .<br><br>**Place-based** |

| Outcomes of the service needs analysis | | |
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| | | Consultation with the SWAT and youth worker/school psychologist at Corridors College in Midland has pointed to an opportunity to deliver in-reach specialist AOD services in the near future through a service co-location arrangement.<br><br>Swan City Youth and Youth Future runs a local Hub and drop-in centre to support young people aged 12 to 25. A high proportion of youth attending the Hub come from an Aboriginal and/or Torres Strait Islander background. A GP provides in-reach to the Hub while youth and support workers deliver assertive outreach to support young people with MH and AOD issues. Other low intensity options delivered include art, music, cooking, fitness, food and legal service offerings. A gap in specialist MH and AOD clinical services has been noted. Youth Future also provide support services for young people in the City of Wanneroo (and South Metro locations) focusing on homelessness, education, young parents and AOD related issues. Similar interventions are available in the Child and Parent Centre (Midvale Hub), and Mercy Care (Merriwa Hub). |
| | 1.3 Current interventions focus predominantly on adults aged 20 to 49 years; however, the pattern of drug usage has shifted. | **Australia**<br><br>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.<br><br>**Perth North PHN**<br><br>[Content suppressed due to confidentiality] |
| | 1.4 Support for self-management and peer support can be strengthened for those with mild-to-moderate problems and multi-morbidities. | **Perth North PHN**<br><br>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 | | |
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| | | Integrated System of Care consultations across Perth North PHN point to 'The Rise' as a potential partner in Midland to support service access for people living in areas with poor infrastructure or experiencing financial difficulties. The Consumer and Care Groups have also supported home visits under safe circumstances to enhance consumer engagement with specialist MH and AOD services. Assertive outreach to locations with high health needs has also been suggested to build self-management capability of individuals who were previously poorly engaged. |
| **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 North PHN**<br><br>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.<br><br>**Place-based**<br><br>North of Joondalup is a rapidly-growing area comprised of a mixed demographic of high and low socioeconomic residents presenting with complex and chronic health and social issues. The community-based service landscape is segmented and patchy, with providers often working in isolation. Patients with substance dependency issues are not viewed as offering good economic return for general practices. As a result, it is estimated that there are only four opioid substitute prescribing GPs in the region, while the estimated requirement is between 25 and 50 (Perth North PHN multi-agency stakeholder consultation). |
| **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 and MH services. | **Western Australia**<br><br>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. |

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| | 3.2 Care coordination and patient pathways between AOD, MH, health and social support services could be improved to better support people living with multi-morbidities. | For multi-morbidity information, please refer to the Mental Health Needs Assessment HN3.<br><br>**Western Australia**<br><br>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.<br><br>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.<br><br>**Perth North PHN**<br><br>General practitioners have identified a need for care coordination for co-existing complex need patients in the local areas of Joondalup, Butler, Banksia, Wanneroo, Clarkson, Wangara, and Yanchep.<br><br>Integrated System of Care consultations across Perth North PHN have confirmed stakeholder willingness to support increased cooperation across services as well as the potential to form local area networks to facilitate co-location of commissioned services. Other care coordination/patient pathway solutions suggested include common access to clinical documentation such as risk assessment results, removal of exclusion criteria currently in place in specialist MH and AOD services as well as a single access point by all stakeholders referring to the Integrated System of Care Perth North . |
| | 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 North PHN**<br><br>Integrated System of Care consultations have led to the following recommendations.<br><br>• Incorporate MH and AOD treatment into staff skill sets to support a therapeutic relationship with one person and reduce the re-telling of stories.<br>• Commission clinical positions over support/peer worker positions, or co-location of non-state based MH and AOD services within community hubs to promote engagement with specialist MH and AOD services. |

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| | | • Build staff skills in supporting marginalised groups including Aboriginal, LGBTQI, and CALD populations.<br><br>**<u>Place-based</u>**<br><br>Integrated System of Care consultations in the Midland, Kalamunda, and Mundaring areas pointed to a need to deliver education to stakeholders on strategies available for people with co-occurring MH and AOD issues, provide comorbidity training that takes into account the requirements of staff in different service settings, and provide information on available MH and AOD services to enable appropriate referral to specialist services. |
| **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. | **<u>Western Australia</u>**<br><br>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".<br><br>**<u>Place-based</u>**<br><br>In WA, AOD services are predominantly outpatient and residential services. Except for one AOD information service delivered from a hospital, all 11 other services are provided by non-government organisations. Perth and East Perth are the only suburbs in the PHN with an AOD information service and a residential service. Outpatient services are also predominantly located in the vicinity of Perth CBD. There are two services in Perth and one service in each of Northbridge, East Perth and Subiaco. Outside of the Perth CBD, there are outpatient services in Joondalup, Midland and Warwick.<br><br>Transport options to enable clients to access services have been identified as a service need across the Wanneroo, Clarkson, Midland, Kalamunda and Mundaring areas. Access to home-based services, detox and/or respite services have also been identified as a service need in the Wanneroo and Clarkson areas. |
| | 4.2 Rebalance investment from high cost, low volume acute care to higher volume community-based services earlier in the care continuum. | **<u>Australia</u>**<br><br>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. |

| Outcomes of the service needs analysis | | |
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| | | **Perth North PHN**<br><br>Seven out of 12 specialist AOD services in the PHN are medium-intensity, non-mobile services. There is one high-intensity home and mobile service. Only two services are low-intensity and both are information services.<br><br>**Place-based**<br><br>Co-location options have been raised as an option to be explored in order to increase the flexibility and accessibility of available MH and AOD services across the care continuum. |
| | 4.3 Lack of local or after-hours services can result in unnecessary presentations to emergency departments. | **Perth North PHN**<br><br>Substance abuse-related emergency department presentations in Perth North PHN is lower than the state average of 59%. [part content suppressed due to confidentiality]<br><br>**Place-based**<br><br>Six out of 12 services operate during business hours, one is a 24/7 residential service, while the operating hours for the remaining services are not specified.<br><br>Provision of flexible after-hours outreach services has been identified as a high priority service need in the Wanneroo and Clarkson areas, and a service need in the Midland, Kalamunda, Mundaring areas.<br><br>Concerns related to lack of infrastructure and lack of extended service provision in the upper North regions (north of Joondalup), and the gap of assertive outreach beyond the Adult Community Teams for the difficult-to-engage groups were identified by the GPs and Public Mental Health Service participants interviewed. The North Metropolitan Community AOD Service and Joondalup Mental Health Services partnership to provide in-reach into the Mental Health Unit and EDs reported effectiveness in promoting engagement with specialist MH and AOD services. The potential to expand similar NMCADS co-location initiatives to St John of God Hospital in Midland and EDs within the Swan catchment area has been suggested. |
| **SN5. Continuity of care post treatment.** | 5.1 Disruptions to care upon exit from treatment services hinder recovery and contribute | **Western Australia**<br><br>"….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 |

| Outcomes of the service needs analysis | | |
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| | to early relapse or unfavourable outcomes. | 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).<br><br>**Perth North PHN**<br><br>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 restricted number of residential services available in Perth North (only one time-limited, non-acute residential service), it is important that any positive treatment outcomes are sustained when returning to the community.<br><br>**Place-based**<br><br>There is no local AOD service around the Chidlow and Mundaring SA2s. The service gap in AOD-related suicide prevention and relapse prevention should be explored as a matter of priority particularly among Aboriginal people and young people from low income and welfare-dependent families.<br><br>The Public Mental Health Services reported a service gap for individuals exiting services in relation to transition, care coordination and longer-term community-based support. This is a primary symptom of system fragmentation across services. There is a need for relationship building and improvement in communication across relevant services. EDs in the Perth North PHN and Sir Charles Gairdner Hospital – ED Mental Health Observation Area (MHOA) reported a potential referral pathway to non-acute services for patients who do not meet the criteria for inpatient stay or ongoing state-funded mental health services. |

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