Australian Government
Department of Health

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Primary Health Network Program Needs Assessment

Western NSW Primary Health Network

This Needs Assessment report is for a three-year period and covers 1 July 2019 to 30 June 2022 and includes a general population, mental health (including suicide prevention), alcohol and other drug treatments, and Aboriginal people's health (including chronic disease).

Contents:

Section 1 – Narrative

Needs Assessment process

Western New South Wales Primary Health Network (WNSW PHN) undertook a participatory needs assessment approach to identifying the key and service needs and set priorities, to be used as the basis for developing service activity planning. Under the guidance of the WNSW PHN Needs Assessment Project Advisory Committee, a comprehensive analysis of quantitative data from a variety of sources including national, state and commissioned services databases was complemented by an extensive consultation with a broad cross section of stakeholders including: community members, consumers, carers, general practitioners, service providers, and key government and non-government organisations.

The key stages of the needs assessment included:

(1) Project planning

The PHN established a project Advisory Committee whose membership included PHN executive and management staff, representatives from the Far West Local Health District (FW LHD) and Western NSW Local Health Districts (WNSW LHD), a General Practitioner, an allied health professional and university lecturer and project consultants.

(2) Health data analysis

Identification of key regional and sub-regional health and service unmet needs through the analyses of key population, health and service data, and determining variance from national, state and peer PHN averages.

(3) Consultation and stakeholder engagement

Workshops and region-wide stakeholder surveys conducted to validate, add context and augment health data analyses.

Twelve consultation workshops were held in four representative communities, Broken Hill, Bourke, Dubbo and Orange. The workshops were supported by concurrent telephone and online surveys of almost 3,200 residents across the region; results of which are included in the final consultation report summary. Planning and delivery of the workshops involved a collaboration with key health partners including the Far West Local Health District (FW LHD), Western NSW Local Health District (WNSW LHD), Three Rivers Regional Assembly, Murdi Paaki Regional Assembly, Bula Muuji Aboriginal Controlled Health Services and the NSW Rural Doctors Network (RDN). To engage with as many stakeholders from each community as possible, three workshops were held in each location:

(1) Aboriginal yarning session
(2) Whole of community workshop
(3) General practice and service provider workshop

To ensure members of the Aboriginal community were provided a culturally safe place to discuss health issues, yarning sessions were held first and were facilitated by a prominent Aboriginal leader and Wiradjuri man who grew up in the region. Key messages from the yarning sessions were then fed into the whole of community workshop by the facilitator. In all, over 200 people attended the consultation workshops. Key stakeholder groups represented at the workshops included members of local and neighbouring communities and over 70 individual services and organisation representatives from general and specialist practices, allied health private practices, FWLHD and WNSW LHD services; Aboriginal community-controlled organisations including land councils and Aboriginal medical

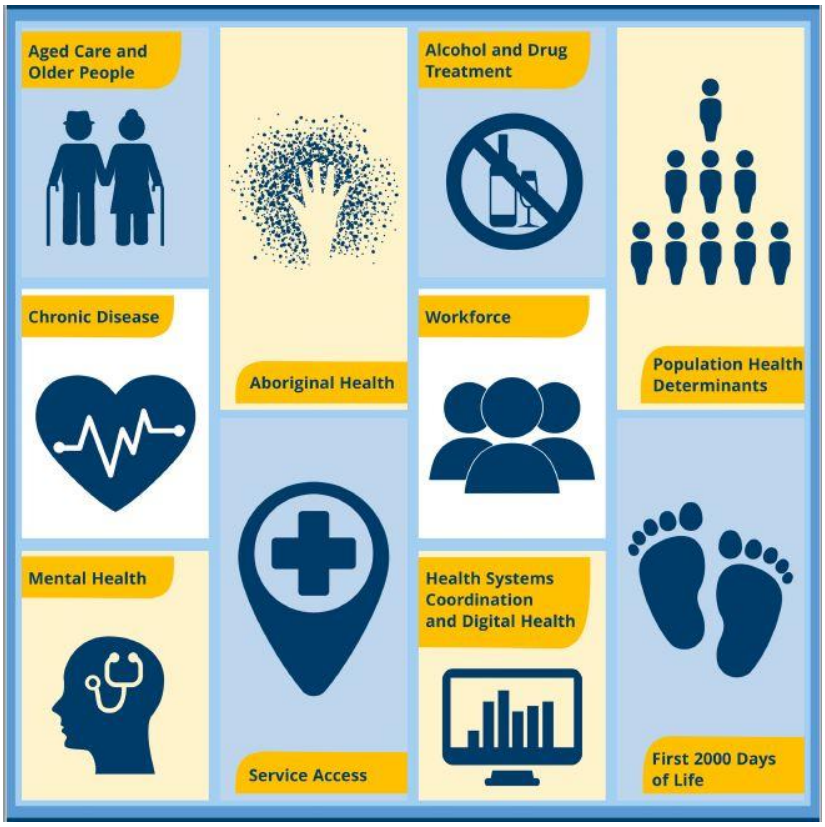
services; local community groups, local government and shire councils; department of Education and Technical and Further Education (TAFE), universities with rural campuses and non-government organisations.

(4) Synthesis and prioritisation: data was analysed using appropriate statistical methods and priorities were determined by applying a modified Hanlon method. The modified Hanlon method involved the use of multiple criteria to rank issues identified in the consultations stakeholder workshops and community phone and online surveys together with issues identified from the quantitative data analysis of key health and service data. Priorities were then validated by the PHN Board, PHN Clinical, Community and Aboriginal Health Councils and PHN staff using an anonymous survey.

The finalised list of ten key health and service priorities, ranked in order of importance include:

1. Mental health and services
2. Access to services
3. Health workforce
4. Health systems and coordination improvement
5. First 2000 days of life
6. Health of Aboriginal people
7. Chronic disease management and prevention
8. Digital health
9. Alcohol and drug abuse

10. Aged care and older people



(5) Development of a strategies, opportunities and options to address priority health and service needs:

This stage involved consultation with the PHN Board, PHN Clinical, Community and Aboriginal Health Council, PHN staff, and key health partners. Options to address priorities were also drawn from the findings of the consultation workshops and information submitted from stakeholders via an online survey.

(6) Needs Assessment Review and approval by the Chief Executive Officer.

Additional Data Needs and Gaps

WNSW PHN encountered challenges accessing sufficient data in the following areas:

(1) Health and service utilisation data for Aboriginal people

(2) Mapping of complex service provisions

(3) General practice and allied health data to indicate prevalence of conditions (beyond Medicare service data)

(4) Commissioned service data in a format to support Needs Assessments and service planning

Recommendations for future Needs Assessments:

In future needs assessments it is recommended additional data be collected and analysed to further define the needs of lesbian, gay, bisexual, transgender, intersex (LGBTI) people and understand the size of this vulnerable group in our region. Due to difficulties obtaining data for this community it is recommended separate consultation be conducted with peak bodies and service providers relevant to LGBTI people.

Section 2 – Outcomes of the health needs analysis

(i) General Population Health

Outcomes of the health needs analysis -general population			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Population health determinants	Population profile	Low population density with majority of people living in regional centres	**Whole of PHN and sub-regional variation (LGA)** In 2016, the estimated resident population (ERP) for WNSW PHN was 309,250, representing 4% of the NSW population. The PHN's population is geographically dispersed over an area of around 55% of the total area of NSW; the largest area of any NSW PHN. Half of the population live in one of the four regional centres of Bathurst, Broken Hill, Western Plains (Dubbo) and Orange. Western Plains had the largest ERP in 2016 in Western NSW, and Broken Hill for the Far West of NSW. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 6.11.2018
	Gender structure	Males outnumber females	**Whole of PHN** In 2016, for every 100.0 females there were 101.1 males in WNSW PHN. Source: *Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health District, December 2017.
	Age Structure	Bimodal: majority of the population aged 0-14 or 50-69 years	**Whole of PHN** In 2016, more of the population occupied two main age groups (bimodal), 0-14 and 50-69 years, compared to NSW, where the largest proportion of the population occupied the 25-44 years age group. Source: *Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health District, December 2017.

Outcomes of the health needs analysis -general population			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Population health determinants	Population average age	Older average age compared to NSW	**Whole of PHN** In 2016, the average age of a WNSW PHN resident was approximately 40 years compared to 32 years for that for NSW. Source: *Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health District, December 2017
	Population projections: 2016-2036	Small population increase compared to that expected for NSW, with sub-regional variation.	**Whole of PHN and sub-regional variation (Local Government Area)** From 2016 to 2036, the WNSW PHN population is projected to increase by 6% compared to more than 20% for NSW. At the Local Government Area (LGA) level, over the same 20-year period, a decline is predicted in the Far West LGAs of Wentworth, Balranald and Broken hill, with Broken Hill expecting the largest decline of 10%. By comparison, the populations of the Western regional and surrounding LGAs of Bathurst, Cabonne and Orange are expected to increase by at least 18%, with Bathurst showing the largest predicted increase of 30%. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 6.11.2018
	Ageing population	70 years + age group expected to increase by more than 60% by 2036	**Whole of PHN** Between 2016 and 2036, the number of WNSW PHN residents aged 70 years and over are expected to increase by more than 60%, while all other age groups are predicted to remain relatively stable over the 20-year period. Source: *Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health District, December 2017
	Life Expectancy	Lowest life expectancy at birth of all NSW PHNs.	**Whole of PHN:** In 2016, life expectancy at birth for WNSW PHN residents was 80.3 years, lower than the NSW average of 83.1 years and lowest of all NSW PHNs. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 13.10.2018

Outcomes of the health needs analysis -general population			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Population health determinants	Life Expectancy	Life expectancies lower than NSW average in all LGAs	**Sub-regional variation (LGA):** In 2016, life expectancy at birth for residents in all 27 LGAs were lower than the NSW average of 83.1 years. The LGAs of Broken Hill, Mid-Western Regional and Walgett had the lowest life expectancy at birth (80.0, 80.8 and 81.0 years, respectively). The LGAs of Balranald, Wentworth and Oberon had the highest life expectancy at birth (82.3, 82.2 and 82.2 years, respectively). Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 13.10.2018
	Cultural and linguistic diversity	Lower rates of people born overseas who do not speak English well, or at all	**Whole of PHN and sub-regional variation (LGA)** According to the ABS Census 2016**,** 0.3% of WNSW PHN residents were born overseas and did not speak English well, or at all, compared to 2.9% for Australian residents and 3.8% for NSW residents for the same. At the sub-regional level, the LGAs with the highest proportion of residents born overseas who did not speak English well, or at all, were Balranald (0.6%), Orange (0.6%) and Walgett (0.4%). Source: Population Health Information Development Unit (PHIDU), 2018 '*Social Health Atlas of Australia, Data by Primary Health Network'* Available at: http://www.phidu.torrens.edu.au/social-health-atlases/data (Accessed: 15.10.2018)
	Socio-economic disadvantage	High levels of socio-economic disadvantage	**Whole of PHN:** The Social Economic Index for Areas (SEIFA) Index of Relative Socio-economic Disadvantage (IRSD) for WNSW PHN is 954, lower than the Australian score of 1000. The lower the score the higher the degree of disadvantage. Source: Population Health Information Development Unit (PHIDU), 2018 '*Social Health Atlas of Australia, Data by Primary Health Network*' Available at: http://www.phidu.torrens.edu.au/social-health-atlases/data (Accessed: 15.10.2018)

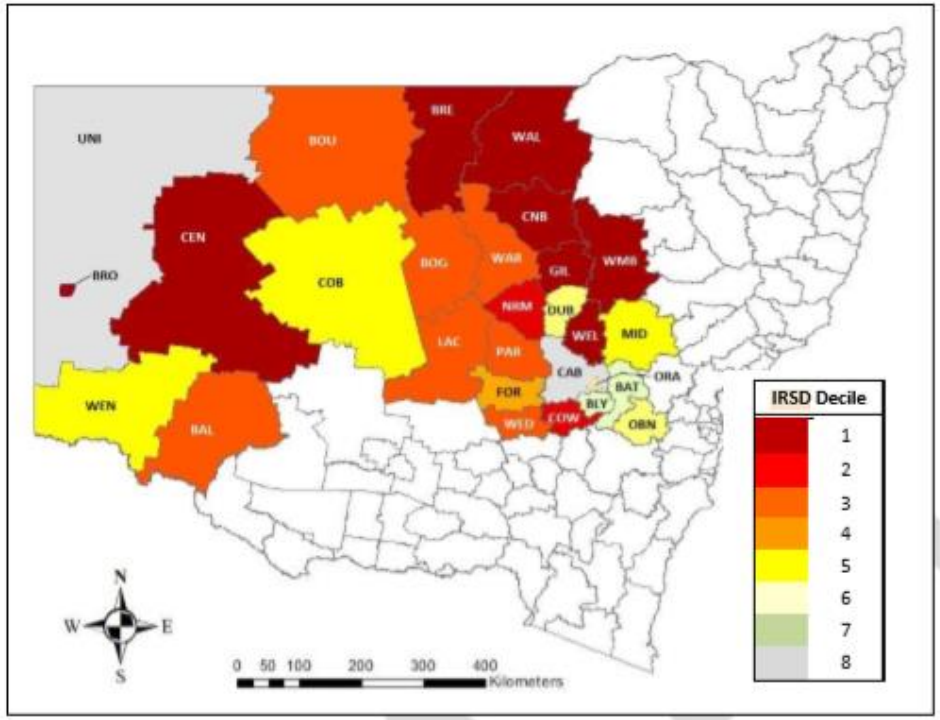
Outcomes of the health needs analysis -general population			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Population Health Determinants	Socio-economic disadvantage	Higher levels of socio-economic disadvantage in Far West and North West NSW	**Sub-regional variation (LGA):** In 2016, 85% of WNSW PHN LGAs were ranked in the five lowest IRSD deciles (i.e. 1-5), nationally; with more than a third (37%) occupying the two lowest deciles (Figure 1).  Source: *Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health District, December 2017.

Figure 1: Index of Relative Socioeconomic Disadvantage (IRSD) by LGA, 2016 where 1=most disadvantaged and 8=least disadvantaged

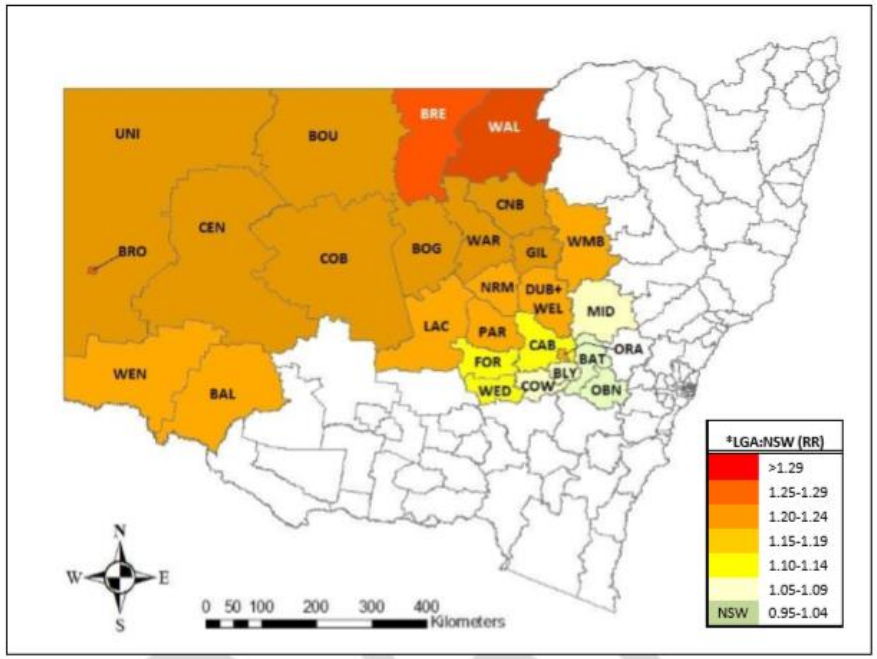
Outcomes of the health needs analysis -general population			
Priority	Identified Need	Key Issue	Description of Evidence
Population Health Determinants	Health Literacy	Lower levels of health literacy in vulnerable groups	Only about 40% of adults have the level of individual health literacy needed to be able to make informed decisions and take action about their own health.[1]From stakeholder consultation, health literacy was raised as an important factor impacting on self-care and health outcomes. There was concern that people do not realise they are unhealthy and are often not presenting until very unwell. Improving health literacy across the lifespan would empower individuals to improve, and engage with health professionals to better manage, their own health. Vulnerable groups identified through consultations with community included parents of babies and young children, Aboriginal people, Elders and older people, rural and remote communities, men, people living with chronic disease and/or disabilities and their Carers, people living with mental illness and drug and alcohol addiction and their Carers. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Disability	Levels of disability on par with state and national averages, with higher levels in rural and remote regions	**Whole of PHN and sub-regional variation (LGA)** In 2016, 5% of WNSW PHN residents were living with a profound or severe disability and living in the community, similar to that for NSW (5%) and Australia (5%). The majority of LGAs had levels equal to or lower than the average for NSW, while those LGAs in more remote and rural areas tended to have higher levels with Weddin (8%), Broken Hill (7%) and Coonamble (7%) having the highest levels. Source: Population Health Information Development Unit (PHIDU), 2018 '*Social Health Atlas of Australia, Data by Primary Health Network*' Available at: http://www.phidu.torrens.edu.au/social-health-atlases/data (Accessed: 15.10.2018)

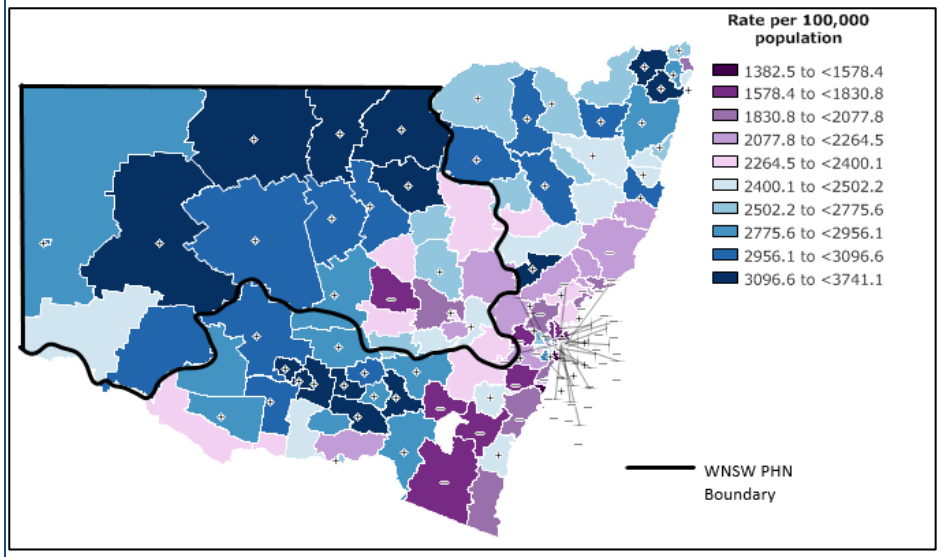
[1] Source: Australian Commission on Safety and Quality in Health Care,2015. *Health Literacy: A Summary for Clinicians*

Available at: https://www.safetyandquality.gov.au Accessed: 16.10.2018

Outcomes of the health needs analysis -general population			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Population Health Determinants	Aboriginal Population		**Refer to Aboriginal Health Needs Assessment tables**
	LGBTI (lesbian, gay, bisexual, transgender, or intersex) population	Identified as a vulnerable population that for which little data was available. Requires further exploration.	**Australia** Due to a lack of specific data, even at a national level, reporting on the health of LGBTI people in WNSW PHN is challenging. From the AIHW's *Australia's health 2018 Report,* it is estimated that this group may comprise as high as 11% of the total population. This population is considered at high risk of mental health, drug and alcohol and sexual health issues. Source: Australian Institute of Health and Welfare 2018. Australia's health 2018. Australia's health series no. 16. AUS 221. Canberra: AIHW. Available at: https://www.aihw.gov.au Accessed: 3/11/2018

Outcomes of the health needs analysis -general population			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Population health status	Health and wellbeing perceptions	Lower rate of self-reported good health compared to national average	**Whole of PHN:** In 2016-17, 81% of surveyed WNSW PHN residents reported their health as excellent, very good or good compared to a national average of 85%. Source: Australian Institute of Health and Welfare analysis of Australian Bureau of Statistics, Patient Experience Survey, 2016-17. Available at: https://www.myhealthycommunities.gov.au/primary-health-network/phn107# Accessed: 13.10.2018
		Low rates of self-reported good health and wellbeing, with lowest rates reported in some rural areas	**Whole of PHN and Sub-regional variation (LGA):** In 2018, 73% of participants surveyed in the WNSW PHN Telephone Community Health Survey rated their health and wellbeing as good or better, and that of their family as slightly higher than their own, 75%. Groups that rated their own health lower than the survey average were people aged 65 years and over (66% rated their health as good or better), and Aboriginal people (62% rated their health as good or better). There was considerable sub-regional variation with the lowest levels of good or better health and wellbeing reported by participants living in the LGAs of Blayney (53%), Brewarrina (54%), Narromine (68%), Broken Hill (69%), Cowra (69%) and Parkes (69%). While the highest levels were reported by participants living in Central Darling (89%), Gilgandra (84%), Balranald (81%) and Warren (80%). Source: *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018.*

Outcomes of the health needs analysis -general population			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Population health status	Potentially avoidable deaths (PAD)	Higher rates of potentially avoidable deaths, highest in North-West NSW	**Whole of PHN:** The annual average rate of potentially avoidable deaths for WNSW PHN residents for the five years from July 2011 to June 2016 was 43% higher than that for NSW, 151.9 compared to 106.4 per 100,000 population, respectively. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 16.10.2018) **Sub-regional variation (LGA):** Between July 2010 and June 2015, the average annual rates of potentially avoidable deaths were higher for all WNSW PHN LGAs than NSW, with the exception of Oberon (Figure 2). Rates were highest in Walgett, Broken Hill and Brewarinna. Only Oberon and Bathurst had similar rates to the of NSW.  **Figure 2: Potentially avoidable deaths (annual average standardised rate) for persons less than 75 years of age by LGA, 2010-11 to 2014-15.** (*The ratio of LGA rate to NSW rate (RR=rate ratio) Source: *Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health District, December 2017.

Outcomes of the health needs analysis -general population			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Population Health Status	Potentially preventable hospitalisations (PPH)	High rate compared to NSW with steady trend over 5 years	**Whole of PHN:** Between July 2012 and June 2017, the annual average rate of PPH in WNSW PHN was 16% higher than that for NSW, 2460.6 compared to 2118.2 per 100,000 population, respectively. However, for the five-year reporting period, rates have increased by only 0.5% in the PHN compared to an 11% increase of the same in NSW. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 16.10.2018
		Higher rates in North-West NSW	**Sub-regional variation (LGA):** Between July 2015 and June 2017, the rates of PPH in just under half of WNSW PHN LGAs had PPHs rates significantly higher than the NSW rate. Highest rates occurred in Walgett, Bourke, Brewarrina and Coonamble (Figure 3). Lower rates occurred in Blayney, Mid-Western Regional, Cabonne and Parkes.  **Figure 3: PPH by LGA, NSW 2015-16 to 2016-17** Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au

Outcomes of the health needs analysis -general population			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Population health status	Risk Factors	Higher prevalence of chronic disease risk factors	**Whole of PHN:** **Alcohol consumption:** In 2017, 37% of WNSW PHN adults surveyed in the NSW Adult Population Health Survey reported levels of alcohol consumption posing a long-term risk to health. This rate was 20% more than the NSW average for the same (31%). **Inadequate fruit and vegetable consumption:** In 2017, less than half (45%) of WNSW PHN adults self-reported adequate fruit consumption. This rate was 4% lower than the State average (46%). While only 7% of surveyed adults reported adequate vegetable consumption, this was 11% more than the NSW average for the same (7%). **Overweight and obesity** In 2017, 33% of WNSW PHN adults surveyed in the Adult Population Health Survey self-reported being overweight, equal to that for NSW (33%). However, 25% self-reported being obese which was 17% more than that for NSW (21%). In 2018, obesity was rated as a serious health concern by 28% of participants of the WNSW PHN Telephone Community Health Survey. **Physical Inactivity** In 2017, 53% of WNSW PHN adults surveyed in the Adult Population Health Survey self-reported insufficient physical activity. This rate was the highest of any NSW PHNs and 27% higher than that for NSW (42%). **Smoking:** In 2017, 23% of WNSW PHN adults surveyed reported they were current smokers. This rate was the highest of any NSW PHNs and was 49% more than the average for NSW (15%). Sources: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 16.10.2018 *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018.*

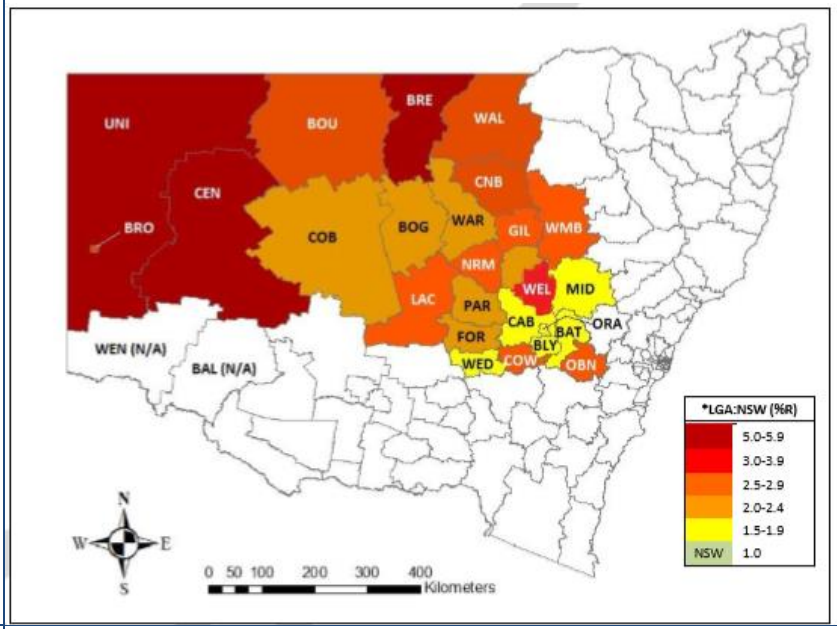
Outcomes of the health needs analysis -general population			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Population health status	Risk factors	Higher prevalence of risk factors increasing with rurality and remoteness	**Sub-regional variation (LGA):** For the period 2014-15, rates of biomedical risk factors, when ranked by socioeconomic disadvantage, tended to be higher in those LGAs located North West and Far West NSW (Table 1). NB: lack of data for remote communities due to small numbers **Table 1: Self-reported biomedical risk factors, socioeconomic disadvantage and service accessibility, 2014-16** Source: Population Health Information Development Unit (PHIDU), 2018 '*Social Health Atlas of Australia, Data by Primary Health Network*' Available at: http://www.phidu.torrens.edu.au/social-health-atlases/data

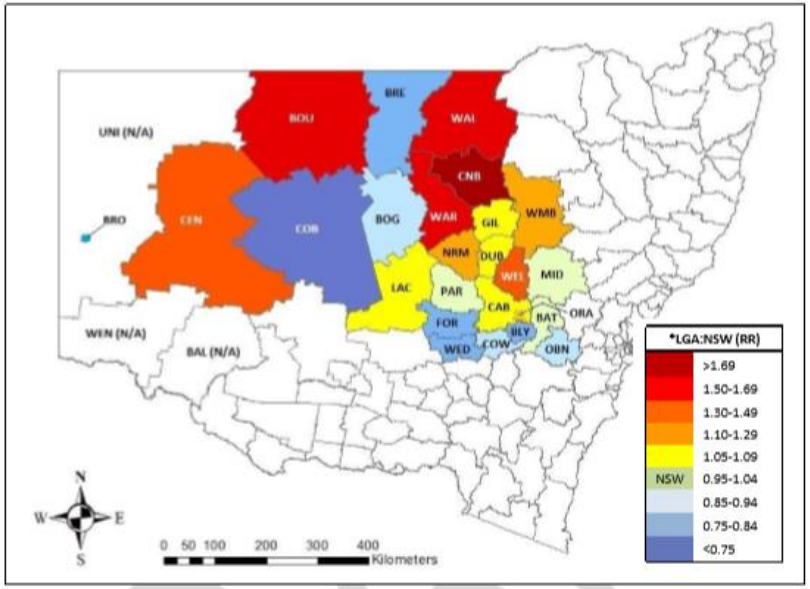
LGA	2016 IRSD Decile	2011 ARIA	2014-15 Waist measurement indicating increased risk of chronic disease (ASR/100)	2014-15 High blood pressure (ASR/100)	2014-15 High or very high psychological distress (ASR/100)	2014-15 Obese (ASR/100)
Brewarrina	1	V. remote	N/A	N/A	N/A	N/A
Central Darling	1	V. remote	68.3	23.7	13.6	37.2
Walgett	1	Remote	N/A	N/A	N/A	N/A
Coonamble	1	Remote	73.9	21.4	12.7	42.2
Broken Hill	2	M. accessible	68.3	23.7	13.6	37.2
Gilgandra	2	M. accessible	70.6	17.1	10.0	40.9
Warrumbungle Shire	2	M. accessible	70.2	18.2	10.1	40.3
Bourke	2	V. remote	N/A	N/A	N/A	N/A
Cowra	2	M. accessible	67.4	20.6	13.0	36.2
Lachlan	2	Remote	72.1	19.2	10.5	42.5
Narromine	3	M. accessible	70.6	17.1	10.0	40.9
Parkes	3	M. accessible	68.9	24.0	10.9	38.7
Balranald	3	Remote	71.6	18.0	11.0	39.2
Unincorp. FW NSW	3	N/A	N/A	N/A	N/A	N/A
Warren	3	Remote	73.7	21.1	12.6	42.1
Bogan	4	Remote	73.9	21.5	12.8	42.2
Forbes	4	M. accessible	72.1	19.2	10.5	42.5
Weddin	4	M. accessible	70.4	19.0	8.9	40.0
Wentworth	4	Remote	71.6	18.0	11.0	39.2
Mid-Western Regional	5	M. accessible	67.6	23.5	10.8	36.6
Dubbo (Western Plains) Regional	5	M. accessible	69.3	20.3	12.6	40.4
Cobar	5	V. remote	73.9	21.5	12.8	42.2
Oberon	5	M. accessible	69.2	22.3	11.6	40.5
Orange	6	Accessible	68.4	20.6	12.6	37.8
Blayney	6	Accessible	67.1	20.3	12.3	42.6
Bathurst Regional	6	Accessible	68.6	23.9	12.3	36.7
Cabonne	8	M. accessible	70.1	16.2	10.5	38.6
Western NSW			**69.3**	**21.1**	**11.9**	**38.9**
New South Wales			**61.9**	**22.3**	**11.0**	**28.1**

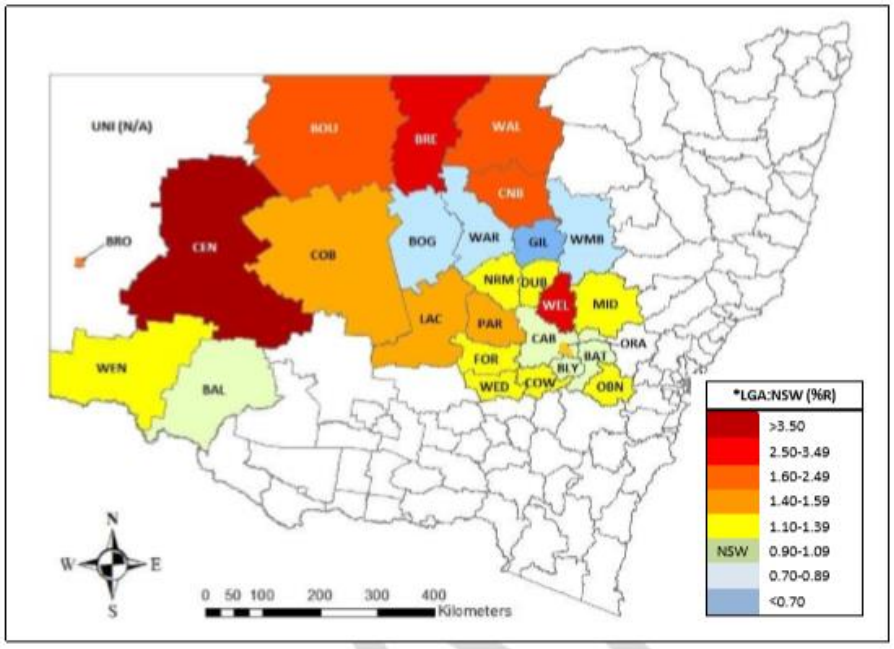
N/A= not available due to small numbers; **ARIA** = Accessibility Remoteness Index of Australia; **LGA**=local government area; **IRSD**=SEIFA Index of Relative Socioeconomic Disadvantage; **ASR**=age standardised rate; **V**=very; **M**=moderately.

Outcomes of the health needs analysis -general population			
Priority	**Identified Need**	**Key Issue**	**Description of the evidence**
First 2000 days of life	Children aged younger than 5 years	Higher proportion of the total population compared to NSW	**Whole of PHN and sub-regional variation** In 2016, the total WNSW PHN ERP aged 0-4 years made up 7.0% of the total WNSW PHN ERP, 8% higher than that for NSW (6.5%). The majority (70%) of WNSW PHN LGAs had a greater proportion of their population aged under 5 years of age compared to the same for NSW. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 17.10.2018
	Fertility rates	Highest fertility rate of all NSW PHNs	**Whole of PHN** In 2016, the total fertility rate of 2.22 in WNSW PHN was the highest of any NSW PHN and 25% higher than that for NSW (1.78). Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 17.10.2018
	Births	A decline in the total number of births per year; lowest rate in Far West	**Whole of PHN and sub-regional variation (LHD)** In 2001, there were 4,136 births to WNSW PHN resident mothers, representing 5% of the total state births for that year. In 2017, there were 3,839 births to PHN resident mothers, representing 4% of total state births for that year; a 7% decline since 2001. In Far West Local Health District (FW LHD) the total number of births fell by 34% between 2001 (312) and 2017 (207). This decline is much larger than that for Western NSW LHD where the total number of births fell by only 5% between 2001 (3,824) and 2017 (3,632). Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 17.10.2018
	Teen pregnancy	Highest rate of pregnancy in young mothers of all NSW PHNs	**Whole of PHN and sub-regional variation (LHD)** In 2017, 5% of WNSW PHN mothers giving birth were aged under 20 years. This was the highest proportion of all NSW PHNs and 2.5 times that for NSW (2%). In 2017, 6% of FWLHD resident mothers giving birth were aged under 20 years more than that for WNSW LHD (5%). Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 17.10.2018

Outcomes of the health needs analysis -general population			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
First 2000 days of life	Mortality	Higher rate of mortality compared to NSW average	**Whole of PHN** Between 2009 and 2013 the annual average mortality rate for the 0-4-year old age group, was more than 30% higher than that for NSW, 119.4 compared to 89.5 per 100,000 population. Over the five-year period, child mortality rates in NSW declined, while that for WNSW PHN increased. The leading causes of death were those originating in the perinatal period, followed by congenital and chromosomal abnormalities, injury and poisoning, respiratory diseases and cardiovascular diseases. Source*: Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health District, December 2017.
	Smoking in pregnancy	Highest rate of smoking in pregnancy of any NSW PHN, but evidence of a downward trend	**Whole of PHN** In 2016, 20% of mothers giving birth smoked in pregnancy, the highest of any NSW PHN. Between 2012 and 2016, the annual average rate of WNSW PHN mothers who smoked at all during pregnancy was 23%, 2.4 times that for NSW (9%). Importantly however, rates have fallen by 21% from 2012 to 2016, a similar trend to that in NSW (20%). Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 17.10.2018

Outcomes of the health needs analysis -general population			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
First 2000 days of life	Smoking in pregnancy	Rates increasing with rurality and remoteness	**Sub-regional variation (LGA)** Between 2011 and 2014, the proportion of mothers who smoked during pregnancy was higher in all WNSW PHN LGAs than that for NSW (Figure 4). In general, rates increased with rurality and remoteness. Brewarrina, Central Darling and Unincorporated Far West LGAs had the highest proportion of all the LGAs and were each more than 5 times that of NSW.  **Figure 4: Proportion of mothers that smoked during pregnancy in WNSW PHN LGAs compared to NSW, 2011 to 2014** (*The ratio of LGA % to NSW% %R=percentage ratio) Source: *Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health District, December 2017
	Low Birth Weight	Highest rate of low birth weights of any NSW PHN	**Whole of PHN** Low birth weights (LBW) are those less than 2,500 grams and in 2016, 7% of babies born in WNSW PHN had a LBW; the highest of any NSW PHN. Between the years 2012 and 2016, the annual average rate of LBW in WNSW PHN was 7% of all births, almost 10% more than that in NSW (6%). Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 17.10.2018

Outcomes of the health needs analysis -general population			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
First 2000 days of life	Low Birth Weight	Higher proportion of low birth weights	**Sub-regional variation (LGA)** Between 2011 and 2014, the annual average percentage of LBW was highest in residents of the LGAs of Coonamble, Walgett, Bourke and Warren, higher than that for NSW by 50-70% (Figure 5). However, a substantial number of LGAs reported lower proportions including Cowra, Bogan, Oberon and Forbes.  **Figure 5: Annual average rate of low birth weight babies in WNSW PHN LGAs compared to NSW, 2011 to 2014** (*The ratio of LGA rate to NSW rate (RR=rate ratio) Source: *Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health District, December 2017
	Developmental vulnerability	Higher levels compared to NSW	**Whole of region** For the years 2009, 2012 and 2015, on average 15% of WNSW PHN resident children in their first full year of full-time school were developmentally vulnerable on two or more domains, 54% higher than that for NSW (10%). Source: *Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health District, December 2017

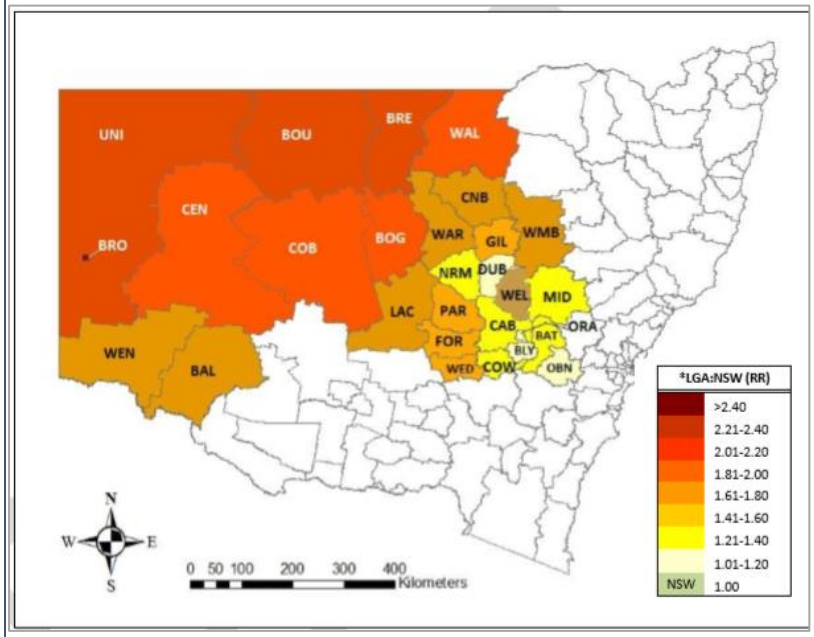
Outcomes of the health needs analysis -general population			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
First 2000 days of life	Developmental vulnerability	Mostly higher in Far West and North-West NSW	**Sub-regional variation (LGA)** For the years 2009, 2012 and 2015, the LGAs with the highest average proportion of children with developmentally vulnerability on two or more domains included Central Darling, Brewarrina, Wellington (now part of Western Plains (Dubbo) Regional), Bourke, Coonamble and Walgett where the average percentage was more than twice that of NSW (Figure 6).  **Figure 6: Average percentage (2009,2012,2015) of children commencing full-time school in LGAs that were developmentally vulnerable on two or more domains compared to NSW.** (*The ratio of LGA % to NSW% %R=percentage ratio) Source: *Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health District, December 2017

Outcomes of the health needs analysis -general population			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
First 2000 days of life	Foetal Alcohol Spectrum Disorder (FASD)	Higher incidence in remote communities	From community consultations, FASD was raised as a serious health concern particularly in remote communities. The prevalence of FASD in Australia is unknown and there are few diagnostic services for FASD.[2] Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Hospitalisations in children aged 0-4 years	Higher rates of respiratory disease compared to NSW	**WNSW PHN** Between 2009 and 2013, the annual average hospitalisation rate for children aged 0-4 years was higher in WNSW PHN residents by 4% compared to NSW, 41.4 compared to 40.0 per 1,000 population. The leading causes of hospitalisations were: (1) factors associated with health status and health service contact (e.g. chemotherapy) (49%) (2) respiratory conditions (20%) (3) conditions originating in the perinatal period (17%) (4) ill-defined or unknown causes (7%) (5) and injury and poisoning (6%) Of note, respiratory diseases were responsible for 17% more hospitalisations than that for NSW. Detailed data for WNSW PHN children aged under 5 years for respiratory disease was unavailable. However, between July 2011 and June 2016, the annual average percentage of WNSW PHN resident children aged 2-15 years of age reported in the NSW Population Health Survey to have current asthma was 20% higher than that for NSW, 17% compared to 14%. Sources: *Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health District, December 2017 Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 29.10.2018

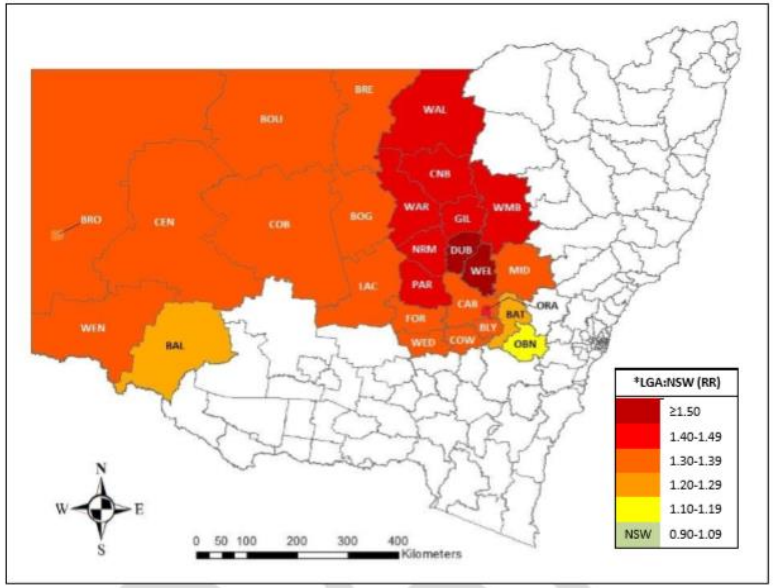
[2] (Fitzpatrick JP et al (2012). The Liliwan Project: study protocol for a population-based active case ascertainment study of the prevalence of fetal alcohol spectrum disorders (FASD) in remote Australian Aboriginal communities. BMJ Open 2012;2:e000968. doi: 10.1136/bmjopen-2012-000968))

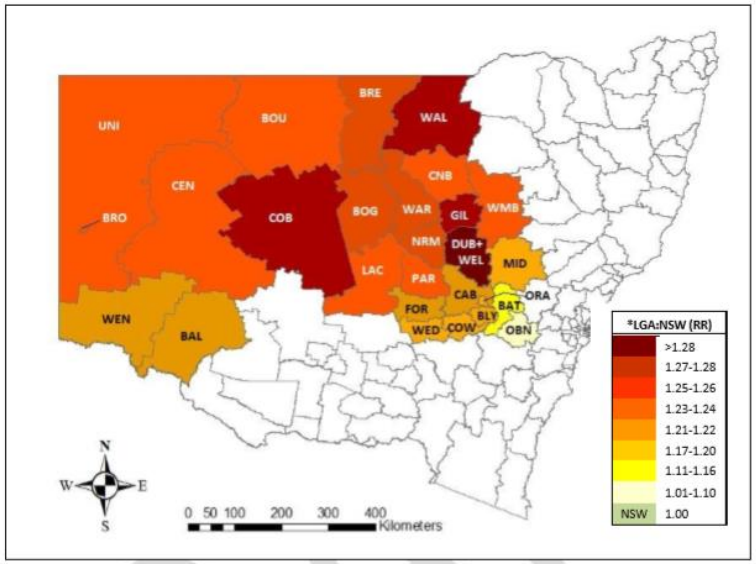
Outcomes of the health needs analysis -general population			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
First 2000 days of life	Community concern for health of mothers, babies and young children	More of a concern for women and people aged under 50 years	In 2018, participants in the WNSW PHN Telephone Community Health Survey who were female, and adults aged under 50 years rated the health of mothers, babies and young children as an important health concern for the community more highly than males and people aged 50 years and over. Source: *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018.*
	Early intervention	A lack of a systematic approach to early intervention	From stakeholder consultation, the lack of a region-wide approach to early intervention strategy for children aged younger than 5 years was noted as an issue that may potentially impact on the developmental vulnerability of children who reach school age. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Prevention – immunisation	Lower fully immunised rates in one and two-year-old's in some rural and remote centres	**Whole of PHN and sub-regional variation (Statistical Area 3)** • In 2016-17, a higher proportion of 1-year old WNSW PHN resident children were fully immunised compared to the national average, 95.3 and 93.8%, respectively. The Statistical Areas 3 (SA3) of Bourke-Cobar-Coonamble was the only region with rates lower than the national average, 91.8%. • In 2016-17, a higher proportion of 2-year old WNSW PHN resident children were fully immunised compared to the national average, 93.0% and 90.9%, respectively. The SA3 area of Lithgow-Mudgee was the only region with rates lower than the national average, 90.2%. • In 2016-17, WNSW PHN had the highest rate of fully immunised children aged 5 years, of any PHN nationally. Rates in all SA3 regions were above the national average. Source: Australian Institute of Health and Welfare analysis of Department of Human Services, Australian Immunisation Register statistics 2016–17, data supplied 05 September 2017 Available at: https://www.myhealthycommunities.gov.au Accessed: 19.10.2018

Priority	Identified Need	Key Issue	Description of the evidence
Chronic disease management and prevention	Potentially preventable hospitalisations (PPH) for chronic conditions	Highest average length of stay (ALOS) nationally with PPH rates highest in Far West and North West NSW	**Whole of PHN and sub-regional analysis (SA3)** In 2015-16, the rate of PPH for chronic conditions for WNSW PHN residents was only slightly higher than the national average for the same, 1,257 compared to 1,205 per 100,000, respectively. However, the **ALOS** for PPH chronic conditions in WNSW PHN was 5.5 days, **the highest nationally of any PHN**. In 2015-16, PPH for chronic conditions were highest in Bourke-Cobar-Coonamble and Broken Hill & Far West. Source: Australian Institute of Health and Welfare analysis of the National Hospital Morbidity Database 2015–16 and Australian Bureau of Statistics, Estimated Resident Population 30 June 2015. Available at: https://www.myhealthycommunities.gov.au Accessed: 19.10.2018
	Chronic disease prevalence	Higher levels of long-term health than Australia	**Whole of PHN** In 2016-17, 20% more WNSW PHN residents surveyed in the ABS Patient Experience Survey self-reported a long-term health condition than that for Australia, 60% compared to 50%, respectively. Source: Australian Institute of Health and Welfare analysis of Australian Bureau of Statistics, Patient Experience Survey, 2016-17. Available at: https://www.myhealthycommunities.gov.au Accessed: 22.10.2018
	Diabetes prevalence	Higher prevalence compared to national levels, particularly in Far West and North-West NSW	**Whole of PHN and sub-regional variation (LGA)** As of September 2018, more than 20,000 WNSW PHN residents were registered with the National Diabetes Services Scheme (NDSS) representing around 6% of the total population, which is higher than the national average of 5%. The LGAs of Broken Hill (9%), Brewarrina (9%), Central Darling (7%), Walgett (7%), Cowra (7%), Coonamble (7%) and Warren (7%) had the highest proportions of the total LGA population registered with the NDSS. Source: The National Diabetes Service Scheme (NDSS) March 2018: Australian Diabetes Map Available http://www.diabetesmap.com.au/#/ Accessed: 10.11.2018
		Higher prevalence in males	**Whole of PHN** In 2017, for WNSW PHN participants in the NSW Adult Population Health Survey, a higher proportion of males reported a diagnosis of diabetes or high blood glucose than females, 9.9% compared to 8.6%, respectively. Reflecting similar trends for NSW. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 19.10.2018

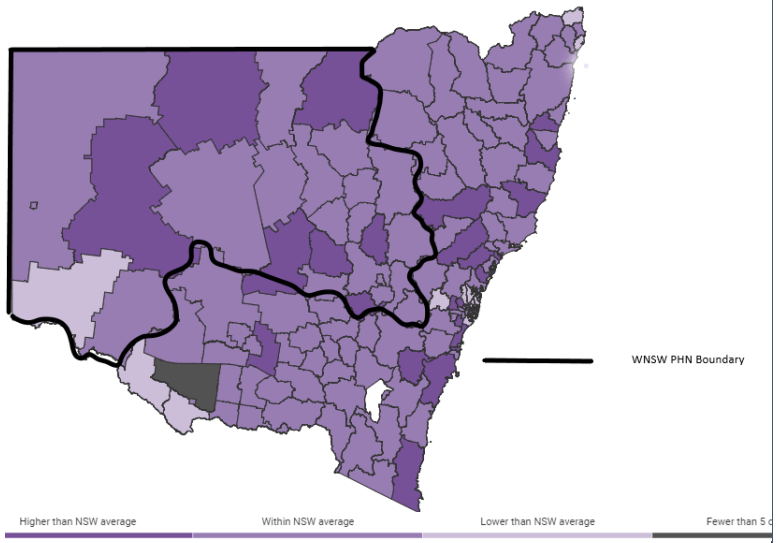
Priority	Identified Need	Key Issue	Description of the evidence
Chronic disease management and prevention	Diabetes hospitalisation	Higher rate compared to NSW	**Whole of PHN** From July 2012 to June 2017, the annual average WNSW PHN rate of hospitalisations for diabetes as the principal diagnosis was 41% higher than that for NSW, 209.2 compared to 148.7 per 100,000 population, respectively. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 19.10.2018
		Increasing rates with rurality and remoteness	**Sub-regional variation (LGA):** Between July 2010 and June 2015, the average diabetes hospitalisation rates for all WNSW PHN LGAs were higher than that for NSW (Figure 7). Broken Hill, Bourke, Brewarrina and Unincorporated Far West NSW reported the highest rates, more than twice that of NSW, while Orange and Oberon reported the lowest rates.  **Figure 7: Biennial average diabetes-related hospitalisation rates (aged-standardised) by LGA compared to NSW, 2010-12 to 2013-15** (*The ratio of LGA rate to NSW rate (RR=rate ratio) Source: *Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health District, December 2017

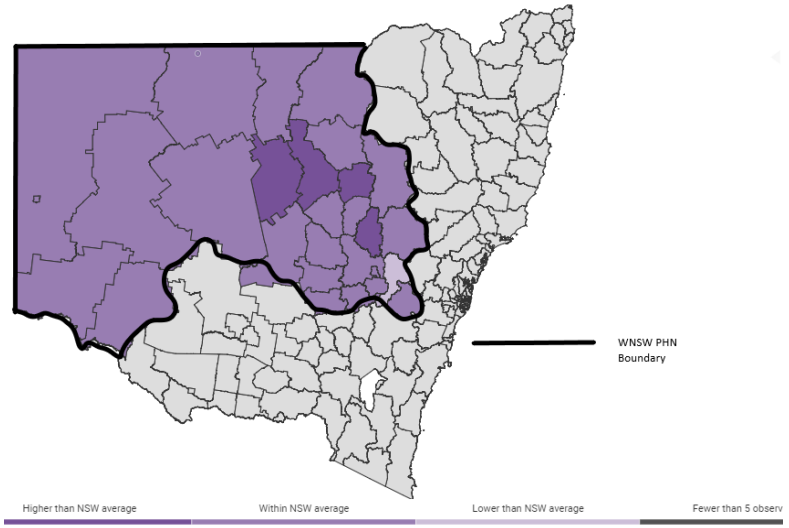
Priority	Identified Need	Key Issue	Description of the evidence
Chronic disease management and prevention	Diabetes perceptions	An important priority health concern in the community	**Whole of PHN** In 2018, diabetes was found to be one of the most serious health concerns with 23% of people surveyed in the WNSW PHN Telephone Community Health Survey mentioning diabetes as a serious health concern facing communities. Source: *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018.*
	Kidney disease hospitalisation	Dialysis was the leading cause of hospitalisation; higher in males than females	**Whole of PHN** In 2016-17, dialysis was the leading cause of hospitalisations, responsible for 12% of all WNSW PHN resident hospitalisations. For the reporting period, the rate of hospitalisation for WNSW PHN residents was slightly less than that for NSW, 4142.4 compared to 4264.8 per 100,000 population, respectively. For WNSW PHN, dialysis was the cause of 16% of all hospitalisations in males compared to 9% in females. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 19.10.2018
		Higher rates of dialysis in the Far West NSW.	**Sub-regional variation (LHD)** In 2016-17, dialysis was the cause of almost 1 in 5 hospitalisations (19%) in FW LHD residents compared to 12% for the same in WNSW LHD residents. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 19.10.2018
	Respiratory disease deaths	A leading cause of deaths and higher rate compared to NSW	**Whole of PHN** In 2016, respiratory diseases were the cause of 11% of deaths in WNSW PHN residents. The mortality rate for respiratory disease in WNSW PHN residents was 50% higher than that for NSW, 73.6 compared to 49.1 per 100,000 population, respectively. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 19.10.2018
	Respiratory disease hospitalisations	Higher rate compared to NSW	**Whole of PHN** In 2016-17, respiratory diseases were the cause of 7% of all WNSW PHN resident hospitalisations. The respiratory disease hospitalisation rate for WNSW PHN residents was 34% higher than that for NSW, 2344.0 compared to 1750.0 per 100,000 population, respectively. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 19.10.2018

Priority	Identified Need	Key Issue	Description of the evidence
Chronic disease management and prevention	Respiratory Disease - Chronic Obstructive Pulmonary Disease (COPD)- deaths	Highest rate of COPD deaths of all NSW PHNs	**Whole of PHN** Between 2011-12 and 2015-16, the average mortality rate for COPD in WNSW PHN residents was 55% higher than that for NSW, 36.9 compared to 23.9 per 100,000 population, respectively. In 2015-16, the WNSW PHN COPD mortality rate was the highest of all NSW PHNs. Source: *Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health District, December 2017
	Respiratory disease – COPD deaths	COPD rates higher in North-West NSW	**Sub-regional variation (LGA)** Between July 2010 and June 2015, the annual average COPD mortality rates for all WNSW PHN LGAs were higher than that for NSW (Figure 8). For the reporting period, Western Plains Regional LGA (Dubbo-Wellington) had the highest mortality rate, which was 57% higher than that for NSW.  **Figure 8: Annual average death rate (age-standardised) for COPD by LGA compared to NSW, 2010-11 to 2015-15** (*The ratio of LGA rate to NSW rate (RR=rate ratio) Source: *Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health District, December 2017

Priority	Identified Need	Key Issue	Description of the evidence
Chronic disease management and prevention	Cardiovascular disease (CVD) deaths	Leading cause of deaths and higher rate compared to NSW; higher in males	**Whole of PHN** In 2016, CVD was the leading cause of deaths in WNSW PHN residents, responsible for more than a quarter (28%) of all deaths. Between July 2011 and June 2016, the annual average rate of CVD mortality was 21% higher than that for NSW, 191.7 compared to 158.2 per 100,000 population, respectively. For the five-year reporting period, CVD mortality rates were 40% higher in WNSW PHN males than that for WNSW PHN females, 224.9 compared to 160.8 per 100,000 population, respectively. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 19.10.2018
	CVD deaths	Higher rates of CVD mortality in North-West NSW	**Sub-regional variation (LGA)** Between July 2010 and June 2015, all WNSW PHN LGAs had higher CVD mortality rates than that for NSW (Figure 9). Western Plains (Dubbo) Regional LGA had the highest death rate, which was 31% higher than that for NSW. Walgett, Coonamble, Gilgandra and Cobar also had high rates.  **Figure 9: The average annual CVD mortality rate in WNSW PHN LGAs compared to NSW, 2010-11 to 2014-15** (*The ratio of LGA rate to NSW rate (RR=rate ratio) Source: *Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health District, December 2017

Priority	Identified Need	Key Issue	Description of the evidence
Chronic disease management and prevention	CVD hospitalisations	Higher rates compared to NSW; higher in males than average for NSW	**Whole of PHN** Between July 2012 and June 2017, the annual average rate of CVD hospitalisations in WNSW PHN residents was 17% higher than that for NSW, 2037.7 compared to 1746.9 per 100,000 population, respectively. For the reporting period, in WNSW PHN, the annual average rate of CVD hospitalisations in males was a higher than that in females, and 41% higher than the rate for the same in NSW males. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 19.10.2018
	Cancer perceptions	A leading health concern for the community	**Whole of PHN** From community consultations, cancer was the third most serious health concern of participants in the WNSW PHN Telephone Community Health Survey with 35% of people ranking this issue in the top 5 health concerns facing their community. Source: *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018.*
	Cancer deaths (all causes combined)	Second leading cause of deaths and highest rate of cancer deaths of all NSW PHNs	**Whole of PHN** In 2016, cancer was the second leading cause of deaths in WNSW PHN residents, causing 26% of deaths, slightly fewer than CVD. Between 2009 and 2013, the annual average cancer mortality rate in WNSW PHN was the highest of all NSW PHNs, and significantly higher than the NSW average rate, 181.0 compared to 164.5 per 100,000, respectively. Sources: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 19.10.2018 NSW Cancer Institute Available at: https://www.cancer.nsw.gov.au Accessed: February 2018

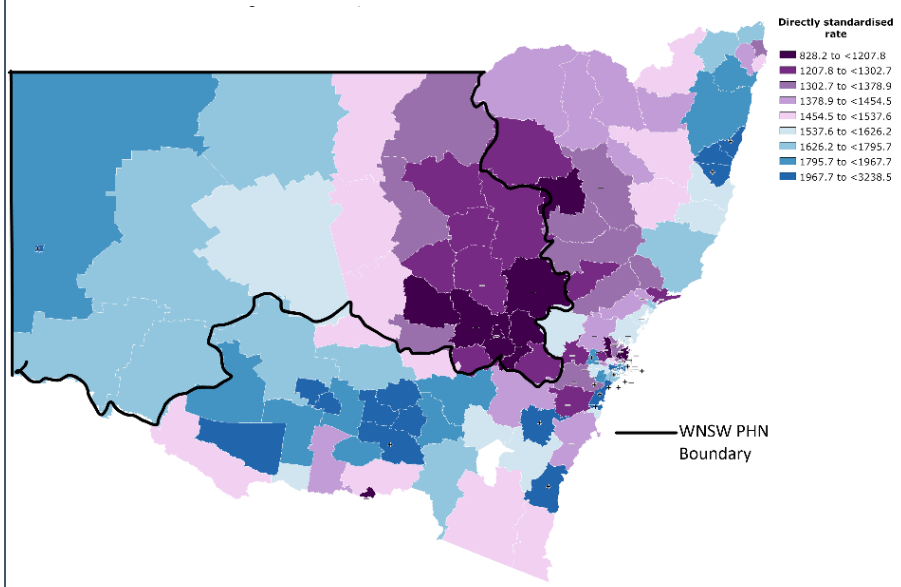
Priority	Identified Need	Key Issue	Description of the evidence
Chronic disease management and prevention	Cancer deaths (all causes combined)	Variation in sub-regional cancer mortality rates	**Sub-regional variation (LGA)** Between 2009 and 2013, the majority of WNSW PHN LGAs had cancer mortality rates not significantly different to that for NSW (Figure 10). However, the LGAs of Bourke, Central Darling, Walgett, Parkes and Lachlan had significantly higher mortality rates of cancer than that for NSW. **Figure 10: Standardised mortality ratio of all cancers WNSW PHN LGAs, NSW, 2009-2013** Source: NSW Cancer Institute Available at: https://www.cancer.nsw.gov.au Accessed: February 2018 
	Cancer incidence (all causes combined)	Incidence of cancer not significantly different to national average	**Whole of PHN** Between 2009 and 2013 the annual average incidence rate of cancer in WNSW PHN residents was slightly higher than the national average for the same, 509 compared to 497 per 100,000, though not significantly. Source: Australian Institute of Health and Welfare, 2014 Australian Cancer Database (ACD) Available at: https://www.myhealthycommunities.gov.au Accessed: 22.10.2018

Priority	Identified Need	Key Issue	Description of the evidence
Chronic disease management and prevention	Cancer incidence (all causes combined)	Variation in sub-regional cancer incidence rates	**Sub-regional variation (LGA)** Between 2009 and 2013, the incidence of cancer in the majority of WNSW PHN LGAs was not significantly different to that of NSW (Figure 11). However, the LGAs of Bogan, Warren, Gilgandra and Wellington (now included in Western Plains (Dubbo) regional) had significantly higher incidence rates of cancer than that for NSW.  **Figure 11: Standardised incidence ratio of all cancers, WNSW PHN LGAs, NSW, 2009-2013** Source: NSW Cancer Institute Available at: https://www.cancer.nsw.gov.au Accessed: February 2018
	Cancer types	Third highest cervical cancer incidence rate of all PHNs nationally	**Whole of PHN** Between 2009 and 2013, WNSW PHN had the third highest incidence of cervical cancer nationally of all PHNs with a rate of 9.2 per compared to the national average of 7.0 per 100,000 females. For the same reporting period, the incidence of colorectal, lung and prostate cancers were slightly higher than the national average while that for breast and melanoma were lower for the same Source: Australian Institute of Health and Welfare, 2014 Australian Cancer Database (ACD) Available at: https://www.myhealthycommunities.gov.au Accessed: 22.10.2018

Priority	Identified Need	Key Issue	Description of the evidence
Chronic disease management and prevention	Prevention – cancer screening	Low screening rates for cervical and bowel cancer	**Whole of PHN** In 2015-16, WNSW PHN had one of the lowest participation rates of any PHN nationally, with 53% of eligible women participating in the cervical screening program compared to 55% nationally. Similarly, for the same reporting period, rates of bowel cancer screening participation for eligible persons were lower than the national average, 38% compared to 41%, respectively. Breast screening rates for eligible WNSW PHN females were equal to the national average (55%). Source: Australian Institute of Health and Welfare, 2014 Australian Cancer Database (ACD) Available at: https://www.myhealthycommunities.gov.au Accessed: 22.10.2018
	Chronic disease prevention and health promotion	Unhealthy lifestyles a leading concern for the community	**Whole of PHN** From stakeholder consultations, unhealthy lifestyle was ranked as the second highest serious health concern by participants in the WNSW PHN Online Community Health Survey, with 49% of people ranking this issue in their top 5 health concerns. This issue was not ranked as highly by participants in the WNSW PHN Telephone Community Health Survey, with 13% of people mentioning this as a serious health concern. Sources: *Online Community Health Survey for Western NSW PHN Report, 17 August* *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018.*
	Oral health	Highest rate for dental caries hospitalisation of any NSW PHN	**Whole of PHN** In 2016-17, the rate for removal and restoration of teeth for dental caries for all ages in WNSW PHN residents was the highest of all NSW PHNs, and 29% higher than that for NSW, 157.8 compared to 122.6 per 100,000 population, respectively. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 19.10.2018
	Prevention	Strategies for healthy lifestyles supported by health literacy	From stakeholder consultations, a need for preventative strategies aimed at promoting healthy lifestyles across all life stages was highlighted as a priority need. Further, increasing health literacy levels in vulnerable populations, empowering individuals to improve their own health and enable them to engage more effectively with health professionals, particularly in rural and remote areas, would improve health outcomes. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

Priority	Identified Need	Key Issue	Description of the evidence
Aged care and older people	65 years plus population profile	Older people represent a higher proportion of the total population compared to NSW	**Whole of PHN and sub-regional variation (LGA)** In 2016, people aged 65 years and over made up 18% of the total WNSW PHN ERP. This is 15% more than that for NSW (16%). The majority (74%) of WNSW PHN LGAs have a greater proportion of their population aged 65 years and over compared to that for NSW. Source: Population Health Information Development Unit (PHIDU), 2018 '*Social Health Atlas of Australia, Data by Primary Health Network'* Available at: http://www.phidu.torrens.edu.au/social-health-atlases/data Accessed: 15.10.2018
	Ageing population	More than a quarter of the population will be aged 65 years or older by 2036	**Whole of PHN** Population projections predict that by 2036, a quarter (25%) of the WNSW PHN resident population will be aged 65 years and over. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 17.10.2018
	Life expectancy	Lowest life expectancy at 65 years of all NSW PHNs	**Whole of PHN:** In 2016, life expectancy at 65 years for WNSW PHN residents was 84.9 years, lower than the NSW average of 86.4 years and lowest of all NSW PHNs. The WNSW PHN male life expectancy at 65 years in 2016 was lower than females, 83.6 years compared to 86.3 years, respectively. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 17.10.2018
	Community health priority perceptions	Cancer and alcohol & drug use	**Whole of PHN:** In 2018, for participants aged 65 years and over in the WNSW PHN Telephone Community Health Survey, the most important health concern was cancer (40%) followed by alcohol and drug abuse (39%). Source: *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018.*

Priority	Identified Need	Key Issue	Description of the evidence
Aged care and older people	Health Status perceptions	Lower rates of good or better health	**Whole of PHN:** In 2018, 66% of participants aged 65 years and over in the WNSW PHN Telephone Community Health Survey reported their health and wellbeing as good or better, lower than the total survey average (73%). Source: *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018.*
	Prevalence of falls in older people	Highest rate of all NSW PHNs	**Whole of PHN:** In 2015, more than a quarter (29%) of WNSW PHN residents aged 65 years and over surveyed in the NSW Adult Population Health Survey reported falling in the previous year, the highest of all NSW PHNs and greater than that reported for NSW (23%). Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 17.10.2018
	Hospitalisations due to falls in older people	Lower rate than the NSW rate; higher rate in females than males	**Whole of PHN:** In 2016-17, the rate of overnight hospitalisations due to a fall-related injury for WNSW PHN residents aged 65 years and over was 12% lower than that for NSW, 2183.5 compared to 2493.5 per 100,000 population. For the same reporting period, the rate of overnight hospitalisations due to a fall-related injury for WNSW PHN females was almost 50% more than that for WNSW PHN males, 2522.8 compared to 1764.0 per 100,000 population. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 17.10.2018
	Falls prevention	Lack of health promotion to prevent falls in elderly	Concern for falls in elderly in the community were raised in stakeholder consultations and a need for greater investment in falls prevention programs was emphasised. Locally developed resources that are culturally appropriate for older Aboriginal people, and accommodate low literacy, was highlighted in the yarning sessions with the community: '*My 89-year old Mum can't read, but can understand pictures*' Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

Priority	Identified Need	Key Issue	Description of the evidence
Aged care and older people	Dementia hospitalisations	Low rate compared to NSW, but increasing with rurality and remoteness	**Whole of PHN and sub-regional variation (LGA)** From July 2012 to June 2017 the annual average rate of dementia hospitalisations in WNSW PHN residents aged 65 years and over was 40% lower than that for NSW, 1215.5 compared to 2009.0 per 100,000 population, respectively. For the 2 years from July 2015 to June 2017 only the Broken Hill LGA had rates of dementia hospitalisations in people aged 65 years and over that were significantly higher than that for NSW. Rates were significantly less than NSW in the 3 regional LGAs of Bathurst, Orange and Western Plain (Dubbo) Regional. As demonstrated in Figure 12, rates tended to increase with rurality and remoteness. **Figure 12: Dementia as a principal diagnosis or comorbidity hospitalisations, NSW, 2015-16 to 2016-17**  Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 19.10.2018

Priority	Identified Need	Key Issue	Description of the evidence
Aged care and older people	Dementia screening	Education of clinicians in dementia screening	From stakeholder consultations, community members and clinicians highlighted the need for improved dementia screening, follow-up services and education resources for health professionals and carers. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Social isolation Impacts on mental and physical health of older people	Older people feel forgotten	Elders, older people and carers participating in community consultations expressed a sense of being overlooked and their willingness to share life experiences for younger people to learn, from was being ignored: '*Young people won't listen to older people*' Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
		Poor health literacy	Elders, older people and Carers participating in community consultations reported a lack of awareness and understanding about how '*to improve awareness of their own health'.* Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
		Poor computer literacy	From stakeholder consultations, low computer literacy amongst those aged 65 years and over was highlighted as a barrier for telehealth service uptake and health literacy, a particular concern, as so much information is now available online and in 'apps'. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

(ii) Primary Mental Health Care (including Suicide Prevention)

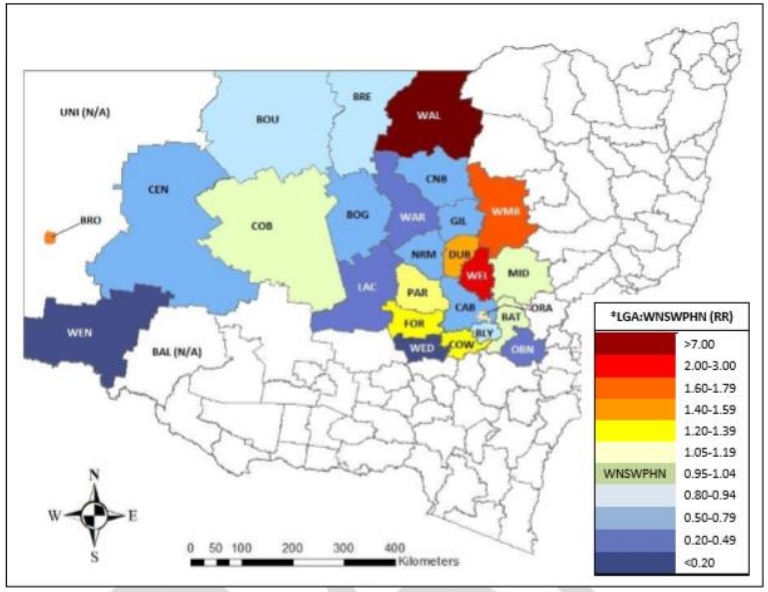
Outcomes of the health needs analysis-primary mental health care (including suicide prevention)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Mental health and services	Socio-economic factors	High levels of socio-economic disadvantage	**Refer to population health determinants** **Refer to WNSW PHN Mental Health and Suicide Prevention Needs Assessment 2017**
	Health and wellbeing perception	Low levels of good health status	**Refer to population health determinants**
	Biomedical risk factors	Increasing trend for high or very high psychological distress	**Whole of PHN** In 2017, 15% of WNSW PHN adults surveyed in the NSW Adult Population Health Survey reported high or very high psychological distress in the past month, equal to that for NSW (15%), but more than a third higher than for 2013 (11%). Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 23.10.2018
	Mental health perceptions	An important health concern for the community	**Whole of PHN** In 2018, more than 40% of people surveyed in both the WNSW PHN Telephone (41%) and Online (43%) Community Health Surveys rated mental health as an important health concern. Mental health illness was ranked as the top health concern in the online survey and second in the telephone survey. Indeed, for online participants, when prompted with a list of 14 different health concerns, 65% of participants included mental health in their top 5 concerns. In stakeholder consultation workshops, mental health was identified as a priority issue particularly for Aboriginal people, men and children of parents suffering mental health issues. Sources: *Online Community Health Survey for Western NSW PHN Report, 17 August* *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018.* *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

Outcomes of the health needs analysis-primary mental health care (including suicide prevention)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Mental health and services	Vulnerable groups	Men, particularly those in rural and remote areas	From stakeholder consultations, men were identified as at-risk of mental health issues, particularly in relation to: • depression, for farmers, associated with drought; • drug and alcohol addiction; • trauma. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
		Aboriginal people	**Refer to Health of Aboriginal people**
		LGBTI	**Australia** Evidence suggests that the LGBTI population, reported to make up as much as 11% of the population nationally, are at a higher risk of mental health issues and substance abuse. The incidence of anxiety disorders in homosexual/bisexual people aged 16 years and over in Australia in the previous 12 months was estimated to be as high as 1 in 3. **WNSWPHN** From stakeholder consultation, a lack of specific LGBTI physical and mental health profiles and needs is due to a lack of systematic identification in current health databases. However, a need to reduce stigma and discrimination experienced by people with mental illness in vulnerable groups already at high risk, such as Aboriginal people who identify as LGBTI, was emphasised. Source: Australian Institute of Health and Welfare 2018. Australia's health 2018. Australia's health series no. 16. AUS 221. Canberra: AIHW. Available at: https://www.aihw.gov.au Accessed: 3/11/2018
		Children and adolescents	**NSW and rural and regional LHDs' variation** (data at PHN level is unavailable) Just over one third (34%) of students residing in rural and regional LHDS reported being unhappy, sad or depressed, levels similar to other LHDs. These rates were similar to all of NSW amongst students aged 12-17 years with 33% feeling of unhappy, sad or depressed in the last six months which were worse than usual, quite bad or almost more than "I could take". Source: WNSW PHN Mental Health, Suicide Prevention and Drug and Alcohol Needs Assessment, November 2017

Outcomes of the health needs analysis-primary mental health care (including suicide prevention)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Mental health and services	Suicide	Higher rates with an increasing trend	**Whole of PHN** Between 2012 and 2016, the annual average rate of suicides in WNSW PHN residents was 20% higher than that for NSW, 12.2 compared to 10.2 per 100,000 population, respectively. Suicide rates in WNSW PHN have increased, with rates in 2016, 14% higher than that in 2012, 11.6 compared to 10.2 per 100,000, respectively. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 23.10.201
		Higher rates in outer regional and remote areas and in males aged 35-44 years	**NSW and outer regional and remote variation** (data at PHN level unavailable) Age, gender and sub-regional data for WNSW PHN is unavailable due to low numbers in some areas. At the state level, between 2012 and 2016, the annual average suicide rate for outer regional and remote NSW was 56% higher than that for the rest of NSW, 15.6 compared to 10.0 per 100,000 population, respectively. In 2016, suicide rates in males were more than three times that in females. The highest rate of suicide occurred in males aged 35-44 years of age. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 05.11.2018
	Suicide risk factors	Alcohol and drug use, unemployment, family and relationship breakdowns	Stakeholder consultations in WNSW PHN identified alcohol and drug use, unemployment and family and relationship breakdowns as factors contributing to suicide attempts. Source: WNSW PHN Mental Health, Suicide Prevention and Drug and Alcohol Needs Assessment, November 2017
	Suicide - vulnerable groups	Young people aged 12-25 years	From stakeholder consultations, the age group 12-25 years and males aged 25-45 years were identified as vulnerable groups. Factors associated with suicide attempts included bullying, social media, family and relationship breakdowns, study pressures, developmental stages and risk -taking. Source: WNSW PHN Mental Health, Suicide Prevention and Drug and Alcohol Needs Assessment, November 2017

Outcomes of the health needs analysis-primary mental health care (including suicide prevention)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Mental health and services	Suicide - vulnerable groups	Socially and geographically isolated	From consultations with stakeholder groups, people who were socially or geographically isolated were perceived to be at increased risk of suicide. Factors associated with suicide attempts include alcohol and drug use, family breakdown and people living in isolated areas such as farms, particularly those affected by drought, were also considered at a higher risk. Source: WNSW PHN Mental Health, Suicide Prevention and Drug and Alcohol Needs Assessment, November 2017
	Intentional self-harm hospitalisations	Lower rates compared to NSW; higher rates in females than males aged 15-24 years	**Whole of PHN** Between July 2012 and June 2017, the average annual rate of intentional self-harm hospitalisations was lower for WNSW PHN residents than that for NSW, 125.9 compared to 137.9 per 100,000 population, respectively. For the reporting period, rates were higher in WNSW PHN females than males, 145.7 compared to 107.6 per 100,000 population, respectively. For WNSW PHN residents the highest rates of intentional self-harm hospitalisations occurred in females aged 15-24 years and was almost double that for males, 422.8 compared to 222.3 per 100,000 population, respectively. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 23.10.2018
		Higher rates in males aged 15-24 years compared to NSW rates	**Whole of PHN** Between July 2012 and June 2017, the average annual rate of intentional self-harm hospitalisations for WNSW PHN males aged 15-24 years was 24% higher than that for NSW, 222.3 compared to 178.9 per 100,000 population, respectively. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 23.10.2018
	Mental health overnight hospitalisations	Decreasing trends with higher rates compared to national levels	**Whole of PHN** Rates of mental health overnight hospitalisations for WNSW PHN residents fell by 7%, from 2012-13 to 2015-16, 121 compared to 113 per 10,000 population, respectively. However, in 2015-16 the rate for WNSW PHN residents was 11% higher than the national average, 113 compared to 102 per 10,000 people, respectively. Source: Australian Institute of Health and Welfare analysis of the National Hospital Morbidity Database 2015-16 Available at: https://www.myhealthycommunities.gov.au Accessed: 23/10/2018

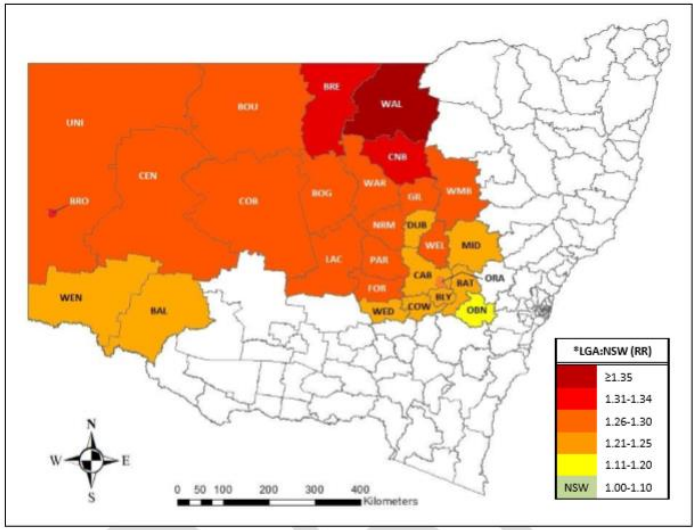
Outcomes of the health needs analysis-primary mental health care (including suicide prevention)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Mental health and services	Leading causes of mental health hospitalisations	Mood and stress disorders, psychoactive substance abuse and delusional disorders	**Whole of PHN** Between 2010-11 and 2014-15, the leading causes of hospitalisation due to mental/behavioural disorders among WNSWPHN residents were disorders related to mood, stress and psychoactive substance use. Mood and stress disorders accounted for more than half of all mental disorder hospitalisations, while psychoactive substance use accounted for nearly 20%. Delusional disorders, such as schizophrenia accounted for nearly 15%. Source: *Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health District, December 2017
	Anxiety and stress disorders and depressive episodes overnight hospitalisations	Higher rates compared to Australian average	**Whole of PHN** In 2015-16 the rates of overnight hospitalisations for anxiety and stress disorders was almost 80% higher than the national average, 25 compared to 14 per 10,000 population, respectively. Similarly, the rate of overnight hospitalisations for depressive episodes was 42% higher than the national average, 17 compared to 12 per 10,000 population, respectively. Source: Australian Institute of Health and Welfare analysis of the National Hospital Morbidity Database 2015-16 Available at: https://www.myhealthycommunities.gov.au Accessed: 23/10/2018

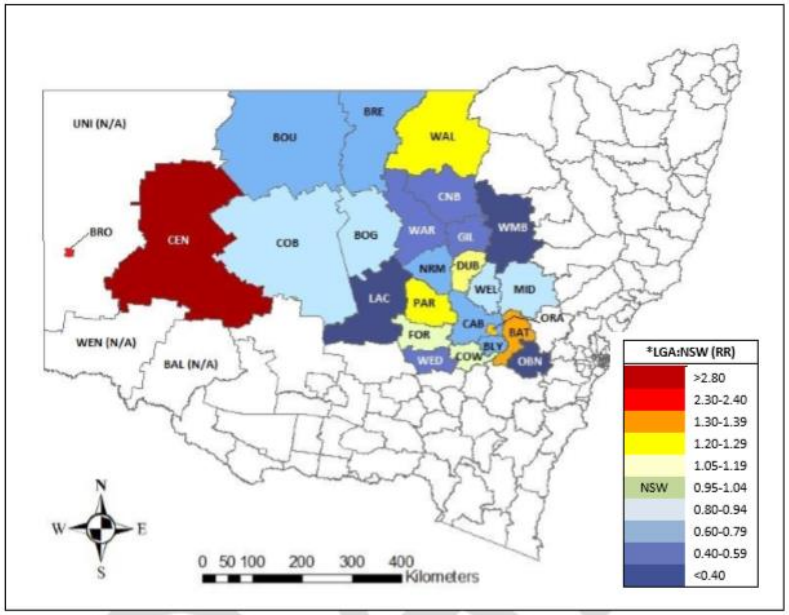
Outcomes of the health needs analysis-primary mental health care (including suicide prevention)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Mental health and services	Emergency department presentations for mental health problems	Increasing rates with sub-regional rates highest in North-West NSW	**Whole of PHN and sub-regional variation (LGA)** From July 2011 to June 2016, rates of emergency presentations for mental health problems in WNSW PHN residents increased by 70%. Sub-regionally, LGA rates are compared to the PHN average, as a State comparator was not available. For the five years between 2011 and 2015, the highest annual average rate of ED presentations for mental/behavioural disorders occurred in Walgett (more than seven times the PHN average). The next highest rates occurred in the LGAs of Western Plains (Dubbo) Regional and Warrumbungle Shire (Figure 13). Compared to 2011, ED presentation rates in 2015 were higher in all LGAs except for Central Darling where rates were 35% less. Cobar reported the greatest change with rates increasing more than 10-fold. Cowra and Warren reported the next highest increases with rates in 2015 being four and five times that of 2011, respectively.  **Figure 13: Annual average emergency presentation crude rate for mental and behavioural disorders for WNSW PHN LGAs compare to the WNSW PHN average, 2011 to 2015** (*The ratio of LGA rate to PHN rate (RR=rate ratio) Source: *Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health District, December 2017

Outcomes of the health needs analysis-primary mental health care (including suicide prevention)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Mental health and services	Psychosocial support	Relatively small cohort estimates with impacts of geography, social and economic disadvantage to be explored further	Psychosocial disability is the term used to describe some of the disabilities and participation restrictions that may arise for people because of having a mental health illness. The restrictions may include a loss of ability to think clearly, manage completion of day-to-day tasks such as cooking and cleaning and interact socially with others. The National Psychosocial Support measure (NSPM) has been funded by the federal government to provide support services to assist people with severe (but not complex) illness causing psychosocial disability, who are not eligible for assistance through the National Disability Insurance Scheme (NDIS). The NPSM is being implemented through purpose specific funding to PHNs to commission these new services and complementary to State funded psychosocial support. **Whole of PHN** From analysis of the National Mental Health Service Planning Framework (NMHSPF) undertaken by the University of Queensland, the total estimated cohort eligible for the NPSM is 2,834 or: • 2,216 individuals with severe (but not complex) mental illness aged 18-64 years • 618 individuals with severe (but not complex) mental illness aged 65 years and over **Sub-regional analysis** Sub-regional estimates have been prepared. However, as noted above, WNSW PHN service provision is impacted by low population density, significant socio-economic disadvantage, rurality and remoteness and a higher proportion of Aboriginal population compared to NSW and national levels. These factors have as yet not been considered in the current estimates. An update to the modelling to incorporate health determinants is currently being undertaken, but updated estimates were unavailable in time for this needs assessment. Source: Mental Health Policy and Epidemiology Group, The University of Queensland *Mental health psychosocial support service needs from the National Mental Health Service Planning Framework (NMHSPF), 2018*

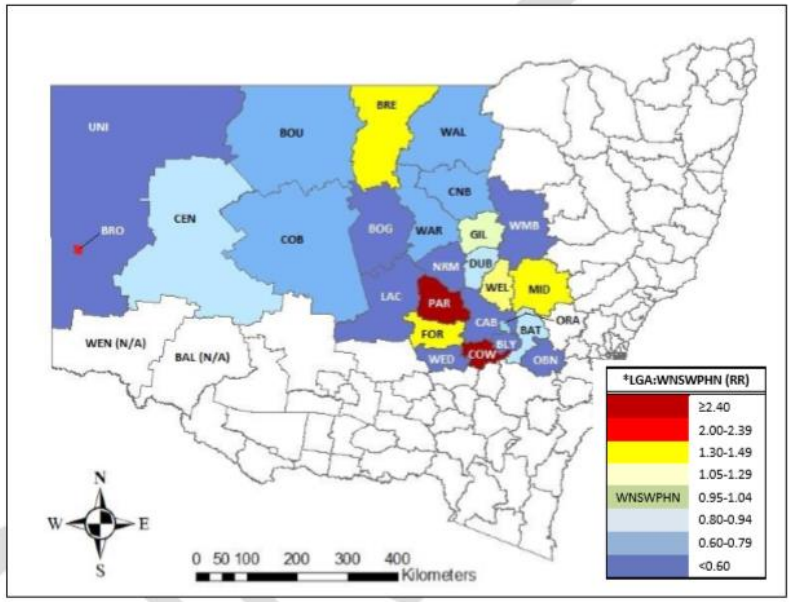
(iii) Alcohol and Other Drug Treatment Needs

Outcomes of the health needs analysis-alcohol and other drug treatments			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Alcohol and drug abuse	Alcohol and drug abuse	The most serious health concern for the community	**Whole of PHN** Drug and alcohol use was rated as the most serious health concern facing communities in the WNSW PHN Telephone Community Health Survey, with 47% of participants mentioning this as a serious health concern. Close to one in five (17%) of participants in the WNSW PHN Online Community Health Survey mentioned drug and alcohol use, making it the fourth most serious health concern. Sources: *Online Community Health Survey for Western NSW PHN Report, 17 August* *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018.*
	Determinants	High levels of socio-economic disadvantage including higher unemployment	**For further detail, please refer to WNSW PHN Drug and Alcohol Needs Assessment 2017**
	Risk factors	Smoking rates & alcohol consumption posing a long-term health risk	**For further detail, please refer to risk factors in general population health**
	Alcohol attributed deaths	Highest rate for all persons, and males, of any NSW PHN	**Whole of PHN** Between July 2008 and June 2013, the annual average mortality rate due to alcohol in WNSW PHN residents was 41% higher than that for NSW, 23.9 compared to 17.0 per 100,000 population, respectively. For 2012-13, the rates of alcohol attributed deaths in WNSW PHN residents and WNSW PHN males, were the highest of any PHN in NSW. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 22.10.2018

Outcomes of the health needs analysis-alcohol and other drug treatments			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Alcohol and drug abuse	Alcohol attributed deaths	Higher rates in North-West NSW	**Sub-regional variation (LGA)** Between July 2008 and June 2013, alcohol-attributed death rates were higher in all WNSW PHN LGAs than that for NSW and highest in the northern LGAs of the PHN (Figure 14). Bogan, Bourke, Brewarrina, Coonamble, Walgett and Warren all had death rates around 30% higher than NSW.  **Figure 14: Annual average alcohol-attributed death rate in WNSW PHN LGAs compared to NSW, 2008-09 to 2012-13** (*The ratio of LGA rate to NSW rate (RR=rate ratio) Source: *Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health District, December 2017
	Emergency department presentations for alcohol-related problems	Higher rates of ED presentation compared to NSW; increasing trends for PHN	**Whole of PHN** From 2011 to 2015, the annual average rate of alcohol-related ED presentations for WNSW PHN residents was 8.0% higher than that for NSW, 221.8 compared to 206.2 per 100,000 population, respectively. Compared to 2011, ED presentations in 2015 had increased by 20%, 207.6 and 248.6 per 100,000 population, respectively. Source: *Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health District, December 2017

Outcomes of the health needs analysis-alcohol and other drug treatments			
Alcohol and drug abuse	Emergency department presentations for alcohol-related problems	Higher rate of ED presentation for males except for the 15-19-year age group	**Whole of PHN** Alcohol presentations to EDs varied by both age and gender. Between 2011 and 2015, the annual average rate of alcohol presentations to EDs amongst males in WNSW PHN was 63% higher than that for females. However, for the 15-19-year age group, presentations were higher among females by 25%. Male presentations were highest for the 15-24 and 45-49-year age groups while female presentations were highest for the 15-24 and 35-39 age groups. Source: *Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health District, December 2017
		Lower rates of ED presentation in majority of LGAs compared to NSW	**Sub-regional variation (LGAs)** Between 2011 and 2015, the majority of WNSW PHN LGAs had ED alcohol-related presentation rates lower than that for NSW (Figure 15). Central Darling and Broken Hill had the highest rates at 2.8 and 2.4 times greater than that for NSW, respectively. **Figure 15: Annual average rate of alcohol presentations to ED, WNSW PHN LGAs compared to NSW, 2011-2015** (*The ratio of LGA rate to NSW rate (RR=rate ratio) Source: *Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health District, December 2017 

Outcomes of the health needs analysis-alcohol and other drug treatments			
Alcohol and drug abuse	Emergency presentations for Illicit substances	Increase in the rate of illicit substance related ED presentations and higher in males	**Whole of PHN** The rate of illicit substance related ED presentations in WNSW PHN for 2015 were approximately twice that of 2011, 182.2 compared to 84.8 per 100,000, respectively. For the same reporting period, the annual average rate of ED presentations for WNSW PHN males was nearly 50% higher than for WNSW PHN females. Male presentations peaked for age groups 20-24 and 35-44 years; while female presentations peaked for the 30-39-year age group. NB: no state comparative data available Source: *Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health District, December 2017
		Highest rates of illicit substance related ED presentations in Cowra, Parkes and Broken Hill	**Sub-regional variation (LGAs)** Between 2011 and 2015, the annual average rates of illicit substance presentations to WNSW PHN EDs were highest in Cowra, Parkes and Broken Hill and more than double that for WNSW PHN on average (Figure 16). **Figure 16: Age-standardised rates of emergency department presentations due to illicit substances, WNSW PHN LGAs compared to WNSW PHN, 2011-2015** (*The ratio of LGA rate to PHN rate (RR=rate ratio) Source: *Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health District, December 2017



Outcomes of the health needs analysis-alcohol and other drug treatments			
Alcohol and drug abuse	Emergency presentations for Illicit substances	Opioids the most common cause	**Whole of PHN** Between 2011 and 2015, the most common illicit substances responsible for ED presentations in WNSW PHN that could be identified were opioids (61%), amphetamines (27%), cannabis (10%) and cocaine (3%). Source: *Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health District, December 2017
	Opioid prescription	Higher rates of opioid prescriptions compared to NSW rates	**Whole of PHN** In 2013-14, the average rate of opioid prescriptions for WNSW PHN residents was 44% higher than that for NSW, 71,888.6 compare to 49,967.0 per 100,000 population, respectively. Source: The First Australian Atlas of Healthcare Variation, 2015 Available at: https://www.safetyandquality.gov.au/atlas
		Sub-regional variation with rates highest in rural and remote regions	**Sub-regional variation (Statistical Area 3 (SA3))** In 2013-14, the rates of opioid prescriptions were highest in the North-West and Far West NSW, with the age-standardised rate in Bourke-Cobar-Coonamble SA3s 68% higher than that for NSW. Source: The First Australian Atlas of Healthcare Variation, 2015 Available at: https://www.safetyandquality.gov.au/atlas
	Meth-Amphetamines-related hospitalisations	Lower rate compared to NSW, but a 6-fold increase over 5-year period	**Whole of PHN** Between July 2012 and June 2017, the annual average rate of methamphetamine-related hospitalisations in persons aged 16 years and over in WNSW PHN was 20% lower than that in NSW, 68.4 compared to 85.4 per 100,000 population, respectively. However, the rate in 2016-17 for WNSW PHN is 6.6 times that in 2012-13, 94.5 compared to 14.3 per 100,000 population, respectively. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 22.10.2018

Outcomes of the health needs analysis-alcohol and other drug treatments			
Alcohol and drug abuse	Other indicators of alcohol and drug abuse – Hepatitis C infection	Highest rate of Hepatitis C notifications of any NSW PHN and higher rates in males	**Whole of PHN** In 2015, WNSW PHN had the highest rate of Hepatitis C notifications of any PHN in NSW, and 82% higher than that for NSW, 86.4 compared to 47.6 per 100,000 population, respectively. For the reporting period, rates in males were 63% higher than that for females, 107.2 compared to 65.6 per 100,000 population, respectively. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au (Accessed: 4.11.2018)
	Other indicators of alcohol and drug abuse – interpersonal violence-related hospitalisations	Higher rates compared to NSW rate with highest rate for females of any NSW PHN	**Whole of PHN** In 2016-17, the rate of interpersonal violence-related hospitalisations in WNSW PHN residents was 40% higher than that in NSW, 109.5 compared to 78.1 per 100,000 population, respectively. For the reporting period, rates in WNSW PHN males were 21% higher than rates for the same in NSW. However, the rate of interpersonal violence-related hospitalisations in WNSW PHN females was the highest of any NSW PHN, and almost double that for NSW, 84.1 compared to 44.7 per 100,000, respectively. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au (Accessed: 4.11.2018)

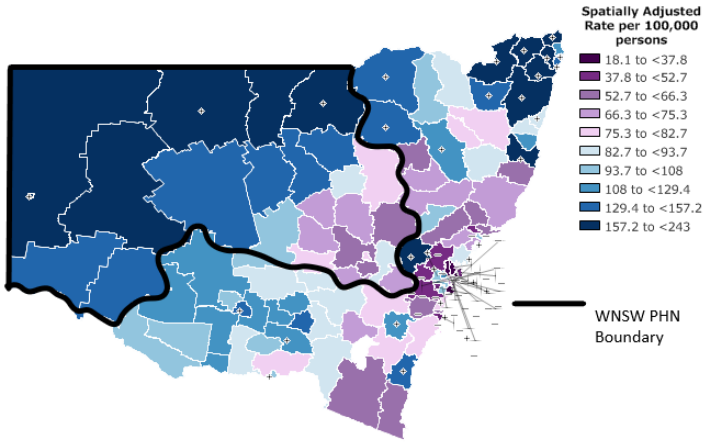
<table>
<tr><th colspan="4">Outcomes of the health needs analysis-alcohol and other drug treatments</th></tr>
<tr><td rowspan="2">Alcohol and drug abuse</td><td>Other indicators of alcohol and drug abuse – interpersonal violence-related hospitalisations</td><td>Highest rates in Far West and North West NSW</td><td>Sub-regional variation (LGA)
Between July 2015 and June 2017, rates of interpersonal violence-related hospitalisations increased with remoteness, with the highest rates in those LGAs located in the Far West and North West of the State (Figure 17).
 

Figure 17: Interpersonal violence-related hospitalisations by LGA, NSW, 2015-16 to 2016-17
Source: Centre for Epidemiology and Evidence, NSW Ministry of Health
Available at: http://www.healthstats.nsw.gov.au (Accessed: 4.11.2018)</td></tr>
<tr><td>Other indicators of alcohol and drug abuse - trauma</td><td>Trauma a link to drug & alcohol abuse issues</td><td>From stakeholder consultation, the issue of trauma, including intergeneration trauma, trauma due to domestic violence, and disconnection from family and community were seen as significant contributors to ill health. In particular, these issues were highlighted for people with drug and alcohol issues and mental illness.

Source: Western NSW Needs Assessment Consultation Workshops 2018 Final Report</td></tr>
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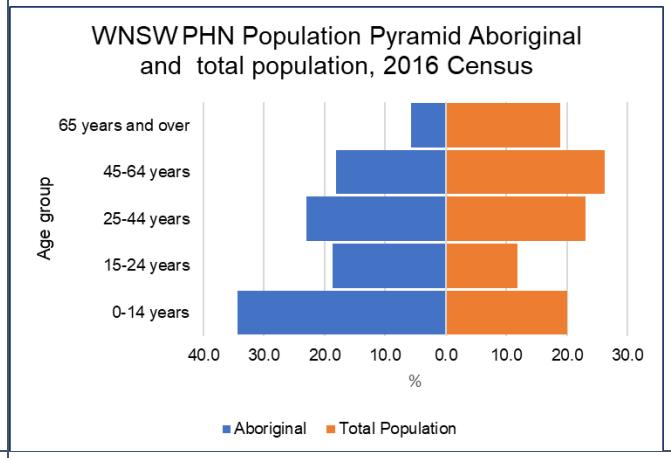
Outcomes of the health needs analysis-alcohol and other drug treatments			
Alcohol and drug abuse	Alcohol and drug abuse high-risk groups perceptions	Males, young people and Aboriginal people	From stakeholder consultations, vulnerable populations in the region identified were: • Young people aged 12 to 25 years • Males aged 25 to 45 years • Aboriginal people Source: WNSW PHN Mental Health, Suicide Prevention and Drug and Alcohol Needs Assessment, November 2017
	Prevention	Lack of preventative strategies and health promotion	From stakeholder consultations, a need for education and health promotion programs focusing on drug and alcohol use, in coordination with those supporting better mental health and healthy lifestyles for school-aged children and men, was raised consistently. Suggestions include the use of art and sport to engage children and their families in culturally safe approaches. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

(iv) Aboriginal Health (including chronic disease)

Outcomes of the health needs analysis- Aboriginal health (including chronic disease)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Population health determinants	Aboriginal population	High Aboriginal population	**Whole of PHN** In 2016, 31,455 people (usual resident population) living in the footprint of the WNSW PHN region, identified as Aboriginal in the ABS Census. This was the fifth highest of all PHNs, nationally. Source: Population Health Information Development Unit (PHIDU), 2018 '*Social Health Atlas of Australia, Data by Primary Health Network'* Available at: http://www.phidu.torrens.edu.au/social-health-atlases/data Accessed: 15.10.2018
	Population distribution	Majority of Aboriginal people live in the regional centres	**Sub-regional variation (LGA)** In 2016, just under half (45%) of the WNSW PHN Aboriginal population lived in the four regional centres of Western Plains (Dubbo) Regional, Orange, Bathurst and Broken Hill. However, the remote LGA of Walgett, located in north-west NSW has the fourth highest Aboriginal population for the PHN. Source: Population Health Information Development Unit (PHIDU), 2018 '*Social Health Atlas of Australia, Data by Primary Health Network'* Available at: http://www.phidu.torrens.edu.au/social-health-atlases/data Accessed: 15.10.2018
		Represent the highest proportion of the total population all NSW PHNs	**Whole of PHN** In 2016, 11% of the WNSW PHN usual resident population (URP) identified as Aboriginal in the ABS Census, the highest of all NSW PHNs and the third highest nationally. Source: Population Health Information Development Unit (PHIDU), 2018 '*Social Health Atlas of Australia, Data by Primary Health Network'* Available at: http://www.phidu.torrens.edu.au/social-health-atlases/data Accessed: 15.10.2018
		Remote LGAs have higher proportions of Aboriginal people	**Sub-regional variation (LGA)** In 2016, the LGAs where Aboriginal population made up the highest proportion of the total population were those located in the remote LGAs of Brewarrina (61%), Central Darling (40%), Bourke (32%), Coonamble (30%) and Walgett (29%). Source: Population Health Information Development Unit (PHIDU), 2018 '*Social Health Atlas of Australia, Data by Primary Health Network'* Available at: http://www.phidu.torrens.edu.au/social-health-atlases/data Accessed: 15.10.2018

Outcomes of the health needs analysis- Aboriginal health (including chronic disease)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Population health determinants	Age profile	Younger age profile compared to non-Aboriginal population	**Whole of PHN** In 2016, the WNSW PHN Aboriginal had a younger age profile compared to the total PHN population, with 53% of the Aboriginal population aged under 25 years compared to 33% of all people in the region (Figure 18).  **Figure 18** Source: Population Health Information Development Unit (PHIDU), 2018 '*Social Health Atlas of Australia, Data by Primary Health Network*' Available at: http://www.phidu.torrens.edu.au/social-health-atlases/data Accessed: 15.10.2018
	Life Expectancy	Lower life expectancy than non-Aboriginal population and lowest in Aboriginal males	**NSW** (data at PHN level unavailable) NSW Aboriginal males born between 2010 and 2012 have a life expectancy 12% lower than that for non-Aboriginal males, 70.5 compared to 79.8 years. Similarly, NSW Aboriginal females born between 2010 and 2012 have life expectancy 10% less than that for non-Aboriginal females, 74.6 compared to 83.1 years. Life expectancy of NSW Aboriginal males born between 2010 and 2012 is 6% less than that for NSW Aboriginal females. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 24.10.2018

Outcomes of the health needs analysis- Aboriginal health (including chronic disease)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Population health determinants	Cultural and language diversity	Many language groups and nations	**Whole of PHN** The Aboriginal nations within our region include Barindji, Barkandji/Paakantji, Barranbinya, Barundji, Gunu, Kamilaroi, Muruwari, Muthi Muthi, Ngemba, Nyamba, Wailwan, Wilyakali, Wiradjuri and Wongaibon Sources: WNSW LHD Aboriginal nations. Available at: https://wnswlhd.health.nsw.gov.au/our-organisation/our-initiatives/improving-aboriginal-health Accessed: 24.10.2018 Far West Local Health District Planning Unit
	Socio-economic disadvantage	High levels of Aboriginal socio-economic disadvantage	**Whole of PHN and Sub-regional variation (Indigenous Area)** The Indigenous Relative Socioeconomic Outcomes (IRSEO) index is a specific indicator calculated for the Aboriginal population in each Indigenous Region and Indigenous Area. In 2016, compared to NSW (Index Score 36) and Australia (Index Score 43), the majority (83%) of Indigenous areas within the WNSW PHN footprint have scores indicating significant disadvantage. Walgett and Brewarrina have the greatest levels of socio-economic disadvantage and only four of the Indigenous areas have scores equal to or lower than that for NSW. Source: Population Health Information Development Unit (PHIDU), 2018 '*Social Health Atlas of Australia, Data by Primary Health Network'* Available at: http://www.phidu.torrens.edu.au/social-health-atlases/data Accessed: 15.10.2018
	Health literacy	Low levels of health literacy impact on self-care and disease prevention across all life stages	From community yarning sessions, concerns of low literacy levels were raised, particularly in older Aboriginal people. Participants discussed problems understanding what is being talked about in hospital, and in accessing enough information to self-care at home. Low health literacy levels impact on Aboriginal people's awareness of the risk factors and preventable diseases. A need for more health professionals to be able to yarn with their Aboriginal patients in a culturally safe way because there is 'shame in not knowing'. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

Outcomes of the health needs analysis- Aboriginal health (including chronic disease)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Population Health Determinants	Risk factors	Higher levels of chronic disease risk factors	**NSW** (data at PHN level unavailable) **Alcohol consumption** Aboriginal people in NSW are equally likely to abstain from drinking alcohol as non-Aboriginal people. However, among those who do drink, there is a higher rate of alcohol at levels that increase their long-term risk of harm. In 2017, **41%** of Aboriginal people surveyed in the NSW Adult Population Health Survey self-reported alcohol consumption at levels posing long-term health risk compared to **31%** of that for non-Aboriginal people. **Smoking** In 2017, a higher proportion of Aboriginal people surveyed self-reported smoking daily or occasionally than that for non-Aboriginal people, **29%** compared to **15%**. **Fruit and vegetable consumption** In 2017, a greater proportion of Aboriginal people surveyed self-reported consuming the recommended daily vegetable than that for non-Aboriginal people, **8%** compared to **7%.** However, this still represents a very low rate of vegetable daily consumption. In 2017, a lower proportion of Aboriginal people surveyed self-reported recommended daily fruit consumption than that for non-Aboriginal people, **41.0**% compared to **47%.** **Physical inactivity** In 2017, similar rates of insufficient physical activity were reported in Aboriginal and non-Aboriginal people surveyed in the NSW Adult Population Health Survey, **42.0%** compared to **41.7%.** **Obesity** In 2017, a greater proportion of Aboriginal people surveyed in the NSW Adult Population Health Survey self-reported being overweight or obese than that for non-Aboriginal people, **61%** compared to **52%.** Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 25.10.2018

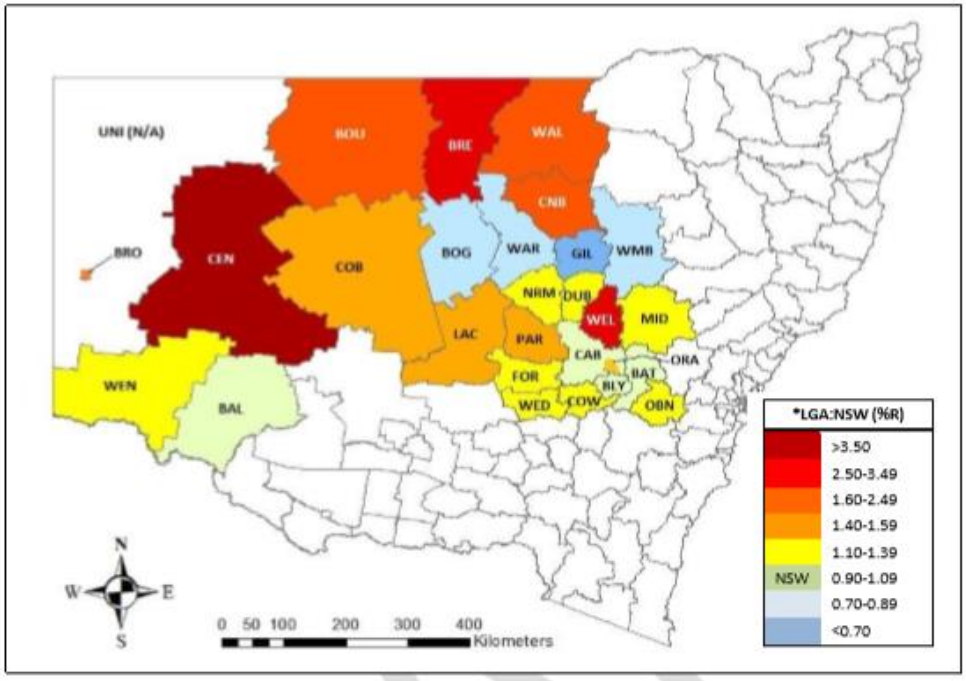
Outcomes of the health needs analysis- Aboriginal health (including chronic disease)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Population health status	Health and wellbeing perceptions	Low rates of self-reported good health and wellbeing	**Whole of PHN** In 2018, 62% of Aboriginal participants* in the WNSW PHN Telephone Community Health Survey rated their own health and wellbeing as good or better, 15% lower than that the total survey average for the same (73%). Only 56% of Aboriginal participants rated their family's health and wellbeing as good or better, 25% lower than that the total survey for the same (75%). Sources: *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018.* *Aboriginal people were under-represented in the survey with only 5% of participants who identified as Aboriginal
	Health of Aboriginal people	An important health concern in the community	**Whole of PHN** In 2018, the health of Aboriginal people was ranked as an important health concern facing communities in the WNSW PHN Telephone Community Health Survey by 16% of all participants, and 41% of Aboriginal participants. Sources: *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018.*
	Potentially avoidable deaths	Higher rate compared to non-Aboriginal rate and highest in Aboriginal males	**NSW** (data at PHN level unavailable) In NSW, between 2012 and 2016, the rate of potentially avoidable deaths in Aboriginal people was more than 2 times that in non-Aboriginal people, 243.1 compared to 101.5 per 100,000 population, respectively. The highest rate of potentially avoidable deaths during the reporting period was in Aboriginal males, 286.3 compared to 202.7 per 100,000 population in Aboriginal females. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health. Available at: http://www.healthstats.nsw.gov.au
	Potentially avoidable hospitalisations (PPH)	Higher PPH rate compared to non-Aboriginal rate	**Whole of PHN** In WNSW PHN, between July 2011 and June 2016, the annual average rate of PPH in Aboriginal residents was almost 3 times that for non-Aboriginal residents, 5928.2 compared to 2187.5 per 100,000 population, respectively. Rates of PPH for Aboriginal residents have remained largely unchanged over the 5-year reporting period, with the rate in 2016-17 only slightly less than that for 2012-13, 5974.6 compared to 6002.9 per 100,000 population, respectively. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health

Outcomes of the health needs analysis- Aboriginal health (including chronic disease)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Population health status	Potentially avoidable hospitalisations (PPH)	Higher PPH rate compared to non-Aboriginal rate	**Whole of PHN** In WNSW PHN, between July 2011 and June 2016, the annual average rate of PPH in Aboriginal residents was almost 3 times that for non-Aboriginal residents, 5928.2 compared to 2187.5 per 100,000 population, respectively. Rates of PPH for Aboriginal residents have remained largely unchanged over the 5-year reporting period, with the rate in 2016-17 only slightly less than that for 2012-13, 5974.6 compared to 6002.9 per 100,000 population, respectively. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health
First 2000 days of life	0-4-year population profile	Represents the highest proportion of this age cohort of any NSW PHN	**Whole of PHN** In 2016, of all WNSW PHN residents aged 0-4 years of age, almost one in five children (19%) were identified as Aboriginal, the highest proportion of all NSW PHNs for the 0-4-year cohort and more than 3.5 times that for NSW (5%). Source: Population Health Information Development Unit (PHIDU), 2018 '*Social Health Atlas of Australia, Data by Primary Health Network'* Available at: http://www.phidu.torrens.edu.au/social-health-atlases/data (Accessed: 15.10.2018)
		Higher proportions in rural and remote LGAs	**Sub-regional variation (LGA)** In 2016, Aboriginal children aged 0-4 years living in remote and very remote communities make up a high proportion of the total cohort in each community. The LGAs with the highest proportions include Brewarrina (69%), Coonamble (52%), Central Darling (49%), Walgett (44%) and Narromine (39%). Source: Population Health Information Development Unit (PHIDU), 2018 '*Social Health Atlas of Australia, Data by Primary Health Network'* Available at: http://www.phidu.torrens.edu.au/social-health-atlases/data (Accessed: 15.10.2018)

Outcomes of the health needs analysis- Aboriginal health (including chronic disease)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
First 2000 days of life	Total fertility rate	Higher rate of fertility in Aboriginal mothers	**NSW** (Data at a PHN level is unavailable) In 2016, the fertility rate for Aboriginal women was a third higher than that for non-Aboriginal women, **2.35** compared to **1.75**. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 25.10.2018
	Births	Higher proportion of babies born to Aboriginal mothers than that for NSW	**Whole of PHN** In 2017, 19% of babies were born to mothers identifying as Aboriginal, more than 4 times that for NSW (4%). Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 25.10.2018
	0-4-year mortality	Higher rate compared to non-Aboriginal rate	**Whole of PHN** In WNSW PHN, between 2009 and 2013, the 4-year average perinatal mortality rate for Aboriginal children was 45% higher than that for non-Aboriginal children. Source: *Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health District, December 2017
	Low birth weight (LBW)	Twice the percentage of LBW babies compared to non-Aboriginal percentages	**Whole of PHN** In WNSW PHN, between 2012 and 2016, the annual average percentage of LBW babies born to Aboriginal mothers was double that for non-Aboriginal mothers, 12% compared to 6%. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 25.10.2018

Outcomes of the health needs analysis- Aboriginal health (including chronic disease)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
First 2000 days of life	Smoking in pregnancy	More than half of Aboriginal mothers smoked during pregnancy	**Whole of PHN** In WNSW PHN, between 2012 and 2016, the annual average percentage of Aboriginal mothers who smoked during pregnancy was 3 times that for WNSW PHN non-Aboriginal mothers, 53% compared to 17%. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 25.10.2018
	Foetal Alcohol Spectrum Disorder (FASD)	Increase awareness of FASD	From community yarning sessions, FASD was raised as a serious health concern particularly in remote communities within the WNSW PHN region. The prevalence of FASD in Australia is unknown and there are few diagnostic services for FASD.[3] Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Family	Encourage fathers' involvement in family life	From community yarning sessions, the important role that fathers can play in the family was acknowledged. Men should be better supported and encouraged to be more involved in their children's lives. Community members highlighted a need for education for new fathers to feel more confident to support their families and that the phrase 'mums and bubs', leaves out dads. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
		Support parents in providing a healthy lifestyle for children	From community yarning sessions, a need to support parents to help their children grow up healthy in their family and community, was emphasised. Further, a need for education services for parents of children with chronic conditions such as diabetes, or special needs, was raised by the community. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

[3] (Fitzpatrick JP et al (2012). The Liliwan 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:e000968. doi: 10.1136/bmjopen-2012-000968

Outcomes of the health needs analysis- Aboriginal health (including chronic disease)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
First 2000 days of life	Developmental vulnerability	Highest levels of developmental vulnerability in remote communities, where the majority of the under 5-year age cohort are Aboriginal	**Sub-regional variation (LGA)** While data for Aboriginal children at a subregional level is unavailable, for the years 2009, 2012 and 2015, the LGAs with the highest average proportion of children with developmentally vulnerability on two or more domains included Central Darling, Brewarrina, Wellington (now part of Dubbo (Western) Regional), Bourke, Coonamble and Walgett where the average percentage was more than twice that of NSW (Figure 19). As noted under the population profile, the majority of the under 5-year age cohort are Aboriginal.  **Figure 19: Average percentage (2009,2012,2015) of children commencing full-time school that are developmentally vulnerable on two or more domains by LGA compared to NSW.** (*The ratio of LGA % to NSW% %R=percentage ratio) Source: *Health of the Population. Western NSW Health Needs Assessment*. Health Intelligence Unit, Western NSW Local Health

Outcomes of the health needs analysis- Aboriginal health (including chronic disease)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Aged care and older people	Social isolation Impacts on mental and physical health of older people	Young people not respecting their elders	From the community yarning sessions, elders and older people expressed a sense of being overlooked and their willingness to share life experiences for younger people to learn from was being ignored: '*Young people won't listen to older people'*. A lack of respect from young people was highlighted: '*Whenever an elder comes into the room we are known as 'Aunty'; but that has been forgotten'.* Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
		Poor health literacy	From the community yarning sessions and consultation workshops, family and carers of elders and older people reported a lack of understanding about how '*to improve awareness of their own health and support services'.* A need to ensure resources developed to assist with health literacy included pictures and photos of local the community to engage older people and assist those with low literacy levels: '*My 89-year old Mum can't read but can understand pictures'* Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
		Lack of computer literacy impacts access to telehealth and aged care services	From community yarning sessions and consultation workshops, low computer literacy amongst older Aboriginal people was highlighted as an issue for accessing MyAgedCare and telehealth services. '*Need to get access to computers or internet before (you) can apply'* Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Health promotion and preventative programs	Lack of health promotion programs targeting older Aboriginal people	From community yarning sessions a need for health promotion and health education programs to reduce the rate of preventable conditions in older people such as falls and assist with self-care and medication management. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

Outcomes of the health needs analysis- Aboriginal health (including chronic disease)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Chronic disease prevention and management	Potentially Preventable Hospitalisations – chronic conditions	Three times the PPH rate in non-Aboriginal people	**Whole of PHN** In WNSW PHN, between July 2012 and June 2017, the annual average rate of PPH-chronic conditions in Aboriginal people was 3 times that in non-Aboriginal people, 3247.7 compared to 971.4 per 100,000 population, respectively. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 25.10.2018
	Dialysis hospitalisations	Leading cause of hospitalisation in Aboriginal people with rates 7 times the non-Aboriginal rate	**Whole of PHN** In WNSW PHN, for 2016-17, dialysis was the leading cause of hospitalisations in Aboriginal people, the rate of which was more than 7 times higher than that in non-Aboriginal people, 21,638.6 compared to 2,981.2 per 100,000 population, respectively. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 25.10.2018
	Respiratory diseases hospitalisations	Higher rate compared to non-Aboriginal rate	**Whole of PHN** In WNSW PHN, for 2016, the rate of respiratory diseases in Aboriginal people was more than double that in non-Aboriginal people, 4932.6 compared to 2198.1 per 100,000 population, respectively. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 25.10.2018
	Cancer	An important health concern for Aboriginal people in the community	**Whole of PHN** In 2018, 32% of Aboriginal people surveyed in the WNSW PHN Telephone Community Health Survey rated cancer as an important health concern facing communities in the region. Source: *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018.*

Outcomes of the health needs analysis- Aboriginal health (including chronic disease)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Chronic disease prevention and management	Cancer	Higher rate compared to non-Aboriginal people	**Whole of PHN** In WNSW PHN, for 2016-17, the rate of malignant neoplasm hospitalisations in Aboriginal people was 14% higher than that in non-Aboriginal people, 1318.8 compared to 1155.3 per 100,000 population, respectively. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 25.10.2018
	Diabetes	An important concern for Aboriginal people in the community	**Whole of PHN** In 2018, 24% of Aboriginal people surveyed in the WNSW PHN Telephone Community Health Surveyed rated diabetes as an important health concern, the fifth highest for Aboriginal participants. Source: *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018.*
		Low NDSS registration compared to national levels for Aboriginal people	**Whole of PHN** Prevalence data for diabetes in WNSW PHN Aboriginal people is unavailable. However, as of September 2018, 3.5% of WNSW PHN population were registered with the National Diabetes Services Scheme; lower than both the national average of 3.9% for Aboriginal people and the WNSW PHN total population average of 6.0%. Source: The National Diabetes Service Scheme (NDSS) March 2018: Australian Diabetes Map Available http://www.diabetesmap.com.au/#/ Accessed: 26.10.2018

Outcomes of the health needs analysis- Aboriginal health (including chronic disease)			
Priority	**Identified Needs**	**Key Issue**	**Description of Evidence**
Mental health and services	Mental health	Top concern for Aboriginal community	In 2018, more than half (51%) of Aboriginal people surveyed in the WNSW PHN Telephone Community Health Surveyed reported mental health as an important health concern, second only to alcohol and drug use. Mental health was also highlighted as a serious concern in community yarning sessions. Source: *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018.*
	Risk factors	Higher prevalence of high or very high psychological distress	**NSW** (data unavailable at PHN level) In NSW, for 2017, rates of high or very high psychological distress in Aboriginal people were 78% higher than that for non-Aboriginal people, 19% compared to 11%. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au (Accessed: 26.10.2018)
	Trauma	Trauma contributor to mental illness	From community yarning sessions, trauma, as a result of domestic violence, disconnection from family, community and country, and intergenerational trauma were seen as significant contributors for people suffering mental illness. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Hospitalisations	Higher rate compared to non-Aboriginal rate	**Whole of PHN** In WNSW PHN, for 2016-17, the rate of hospitalisations due to mental disorders in Aboriginal people was 86% higher than non-Aboriginal people, 2434.1 compared to 1,306.7 per 100,000 population, respectively. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au (Accessed: 26.10.2018)

Outcomes of the health needs analysis- Aboriginal health (including chronic disease)			
Priority	**Identified Need**	**Key Issues**	**Description of Evidence**
Mental health and services	Justice health	Higher rates of mental illness in Aboriginal inmates compared to non-Aboriginal inmates	**NSW** (data unavailable at PHN level) In 2015, 80% of Aboriginal women and 66% of Aboriginal men who participated in the 2015 Network Patient Health Survey reported a diagnosis of mental illness by a clinician. In comparison, 61% of non-Aboriginal men and 76% of non-Aboriginal women survey participants reported a diagnosis of mental illness by a clinician. Source: Justice Health & Forensic Mental Health Network Patient Health Survey – Aboriginal People's Health Report, 2015 Available at: http://www.justicehealth.nsw.gov.au/publications/2015NPHSReportAboriginalPeoplesHealthReport.pdf Accessed: 31/10/2018
	Prevention programs	Mental health promotion especially for men	From community yarning sessions and whole of community consultations a need for mental health promotion and education programs, particularly targeting men and school-age children to increase mental health literacy were highlighted. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
Alcohol and drug abuse	Alcohol and drug use	The leading health concern for the Aboriginal community	**Whole of PHN** In 2018, 56% of Aboriginal people surveyed in the WNSW PHN Telephone Community Health Surveyed reported alcohol and drug use as an important health concern, the top priority for Aboriginal participants. Similarly, this issue was highlighted in community yarning sessions as a major concern facing the Aboriginal community. Source: *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018.* *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Alcohol attributable hospitalisations	Higher rate compared to non-Aboriginal rate	**NSW** (data unavailable at PHN level) In 2014-15, the rate of alcohol attributable hospitalisations in Aboriginal people was more than double higher that for non-Aboriginal people, 1390.1 compared to 639.4 per 100,000 population. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 26.10.2018

Outcomes of the health needs analysis- Aboriginal health (including chronic disease)			
Priority	**Identified Need**	**Key Issues**	**Description of Evidence**
Alcohol and drug abuse	Interpersonal violence hospitalisations	Higher rates compared to non-Aboriginal rates	**NSW** (data unavailable at PHN level) In 2016-17, the rate of interpersonal violence-related hospitalisations in Aboriginal people was 6 times that in non-Aboriginal people, 413.9 compared to 67.7 per 100,000 population, respectively. The rate in Aboriginal males was higher than that in Aboriginal females, 513.0 compared to 318.1 per 100,000 population. However, the rate in Aboriginal females was almost nine times that in non-Aboriginal females. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 26.10.2018
	Trauma	Raised by community as contributing to drug and alcohol abuse	From community consultations, trauma including intergenerational trauma, as a result of domestic violence, and disconnection from family, community and country were seen as significant contributors to those with drug and alcohol issues, especially for people who have been in prison. *Source: Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Justice Health	High rate of Aboriginal people with drug and alcohol	In 2015, Aboriginal participants in the 2015 Network Patient Health Survey were more likely to report using alcohol at hazardous levels compared to non-Aboriginal participants. Source: Justice Health & Forensic Mental Health Network '*Network Patient Health Survey-Aboriginal People's Health Report*' Available at: http://www.justicehealth.nsw.gov.au Accessed: 26/10/2018

Section 3 – Outcomes of the service needs analysis

(i) General Population Health

Outcomes of the service needs analysis-general population health			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service access	Providing services to geographically dispersed population	Challenges providing, or facilitating access to, a wide range of primary and community health services to over 60 towns and communities	According to the ABS Remoteness Area 2016 (RA_2016) postcode classification of over 80 PHN postcodes, a quarter of which have at least 2 different RA_2016 classifications, includes: • 14% Inner Regional; • 53% Outer Regional; • 23% Remote • 10% Very Remote Thus, a third of the PHN area is classified as remote or very remote Source: Australian Bureau of Statistics, *Postcode 2017 to Remoteness Area* Available at: http://www.abs.gov.au/ Accessed 26.10.2018
	Population serviced by many Federal, State and Local Government Services	Challenging and complex to engage with, collaborate and coordinate the vast number of stakeholders involved in planning and delivering health services to people living within the many communities of the PHN.	The population of WNSW PHN is serviced by: • 2 local health districts • 27 local government areas • 2 Regional Assemblies • 15 Aboriginal Community Controlled Health Organisation Services • Many private health organisations and non-government organisations.

Outcomes of the service needs analysis-general population health			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service access	Cross-border flows and access to services in adjacent regions	Complex array of cross-border flow arrangements with three states, multiple PHNs and local health district partners.	The WNSW PHN borders three states: Queensland, South Australia and Victoria. The PHN shares boundaries with eight other PHNs in all and five NSW Local Health Districts.
		Cross border issues	Challenging to support an integrated provision of services with border communities such as the Dareton/Balranald/Wentworth areas. Dareton and Wentworth, and Balranald due to their proximity to state and PHN borders, tends to be overlooked and hence underserviced. In these communities some agreements are in place for access to services through Mildura and Robinvale, but these vary depending on service. The opportunity for co-commissioning has the potential to improve access in these areas. Source: *Western NSW Needs Assessment Priorities, Options and Opportunities PHN Councils and Staff Survey, 2018*
			Wentworth and Balranald LGAs have close connections across the Victorian border, with many community members recognising Mildura as the closest regional centre. From stakeholder consultations, it was raised that people living in Wentworth access health services in Mildura. Broken Hill's main centre for subspecialist and tertiary care is Adelaide. From the Telephone Community Health Survey, one participant explained that Sources: *Western NSW Needs Assessment Priorities, Options and Opportunities PHN Councils and Staff Survey, 2018* *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018.*

Outcomes of the service needs analysis-general population health			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service access	Cross-border flows and access to services in adjacent regions	Need for improved communication and collaboration across PHN boundaries to ensure patient access to services close to home	In 2018, participants in the WNSW PHN Telephone Community Health Survey identified the issue of having to travel to Mildura or Adelaide or even Bendigo and Melbourne for services that are either not available locally as '*they only do the basic stuff here*' or to avoid long waiting times, '*I had to go to Adelaide to have cataracts done – other than that it would have been a two-year wait*'. Source: *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018.*
		Complex network of transfers and referrals for patients across the region to access higher levels of care and specialist services in larger centres.	The WNSW LHD is organised into southern and northern network systems. Referral networks, both informal and formal, that exist for intra-district and tertiary services for WNSW LHD consequently follow the southern and northern network system. These are based on usual flows from smaller towns to larger towns and cities for generalist and specialist services. Flow patterns for certain speciality services i.e. acute coronary syndrome, stroke and severe trauma are influenced at a state level according to state-wide pathways. Funding arrangements and lack of collaborative planning can be a barrier to effective and efficient service distribution and cross-border working. Source: WNSW LHD The Clinical Services Framework 2015
	Access to specialist services	Leading gap in services for WNSW PHN community, with long specialist waiting times, affordability and travel distance significant barriers to specialist service access.	In 2018, access to specialist services was the most commonly mentioned service gap in the WNSW PHN Telephone Community Health Survey, with 32% of participants identifying this as a shortcoming of existing health services. Better access to specialists was identified by 21% of participants in the WNSW PHN Online Community Health Survey. Service access barriers included: long waiting times, high fees a barrier for young families and pensioners; need for more publicly funded specialist services, transport and long travel distances. Sources: *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018.* *Telephone Online Health Survey for Western NSW PHN Report, 15 August 2018.* *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

Outcomes of the service needs analysis-general population health			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service access	Access to specialist services	Lower specialist attendances rate compared to national average, with lowest rates in Lachlan Valley and Bourke-Cobar-Coonamble sub-regional areas.	**Whole of PHN and sub-regional variation (SA3)** In 2016-17, the age-standardised rate of specialist attendances for WNSW PHN residents was lower than the national average rate, 0.82 compared to 0.89 per person, respectively. Per person, the specialist attendance rates were higher or equal to the national rate in the SA3s of Lower Murray (0.90) and Dubbo, but lower for Orange (0.87), Bathurst (0.83), Broken Hill& Far West (0.82) Lithgow-Mudgee (0.77), Lachlan Valley (0.74); Bourke-Cobar-Coonamble (0.73) was 18.0% lower than the national rate. Source: Australian Institute of Health and Welfare analysis of Department of Health Medicare Benefits claims data 2016–17 and Australian Bureau of Statistics, Estimated Resident Population 30 June 2016. Available at: https://www.myhealthycommunities.gov.au Accessed: 28.10.2018
		Most commonly identified types of specialist service gaps were: oncology, cardiology, orthopaedic, paediatrics and ophthalmology	In 2018, WNSW PHN Telephone Community Health Survey respondents who mentioned medical specialists as a priority health service gap highlighted a need for a range of specialist services with the leading specialities being: 1. Cancer specialists, oncology and cancer services 2. Cardiology 3. Orthopaedic, bone specialists and surgeons 4. Paediatrics 5. Ophthalmology and eye specialists 6. Surgeons 7. Dermatologists 8. Neurologists 9. Ear, nose and throat specialists 10.Maternity services Source: *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018.*

Outcomes of the service needs analysis-general population health			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service access	Access to allied health services	Lack of locally available allied health services, particularly in rural and remote centres; and long waiting times and access to affordable services in all areas.	From the consultation workshops, a lack of locally available allied health services, or an awareness of existing services, in rural and remote centres was raised as an important gap. This was supported by the Western NSW HIU analysis of allied health service provision (including public, private and outreach) which found that any type of occupation therapy services was unavailable across 11 LGAs and any type of physiotherapy unavailable in 4 LGAs. Consultations also highlighted a lack speech therapy services. For rural and remote patients requiring allied health services, distance and travel costs to access regional services were raised as an issue. Long waiting times and affordable services were issues in remote, rural and regional areas. Sources: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report* *Western NSW Health Intelligence Unit Market & Service Analysis Western NSW Health Assessment, June 2017*
	Outreach and visiting services	Heavy reliance on outreach and visiting creates confusion for health professionals referring patients and public awareness of availability	NSW RDN data shows 13 different organisations administer 367 approved outreach services within the WNSW PHN boundaries. These include LHDs, ACCHS' and Marathon Health with 335 operational services, 18 with an identified provider in readiness to commence clinics; and 14 are not operational. Source: NSW RDN
	National Disability Insurance Scheme (NDIS)	Emerging issues relating to wait times for assessments, availability of allied health services and health service integration.	From stakeholder consultations, the complexity of the NDIS assessment process for potential clients, their families and carers, impacts on access to NDIS-related services. Issues with the impersonal nature of phone-based service were raised by community members, and GPs felt the systems and interactions were frustrating and not intuitive. Integration with other health services, including GPs, was an issue raised by families of NDIS participants. Sources: National Disability Insurance Agency *Update from the National Disability Insurance Agency, 2018* Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

Outcomes of the service needs analysis-general population health			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service access	Hospital services-Emergency Department (ED) presentations	Highest in-hours AND hour-of-hours ED attendances of any PHN nationally.	In 2015-16, WNSW PHN had the highest rates of in-hours and out-of-hours ED attendances of any PHN nationally, 227 and 206 per 1,000 people, respectively. Source: Bureau of Statistics Estimated Resident Population 30 June 2015. Available at: https://www.myhealthycommunities.gov.au Accessed: 28.10.2018
	Hospital services – low acuity ED time of day	Around a third of all low acuity ED presentations occur between the hours of 9 am and 1 pm	**Whole of PHN** For the three years between July 2015 and June 2018, on average, almost one third (30%) of ED presentations categorised as low acuity triage 4 or 5 occurred between 9am -1 pm. Source: Health Intelligence Unit, *ED data request, 2018*
	Hospital services-After-hours ED presentations	A third of low acuity ED presentations occur on weekends and around a quarter of low acuity presentations occur between the hours of 5 and 10pm	For the three years between July 2015 and June 2018, on average, 32% of low acuity presentations to FWLHD or WNSW LHD EDs, occurred on the weekend. For the same reporting period, 23% of low acuity presentations in WNSW PHN occurred between the hours of 5pm and 10pm. Source: Health Intelligence Unit, *ED data request, 2018*
	Primary Health Care-General Practitioner (GP) access	A need for more GPs and local access to doctors	In 2018,' GP access/local access to doctors/more GPs' was a top health priority for 27% of the WNSW PHN Telephone Survey participants and 22% of Online Survey participants. Sources: *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018. Telephone Online Health Survey for Western NSW PHN Report, 15 August 2018.*

Outcomes of the service needs analysis-general population health			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service Access	Primary Health Care- GP access	Lower GP attendances rate compared to national rate	**Whole of PHN and sub-regional variation (SA3)** In 2016-17, the number of GP attendances per person, age-standardised, was 10% lower than the national rate for the same, 5.3 compared to 5.9, respectively. Except for Broken Hill and Far West, the remaining 7 SA3 areas within the PHN region had lower GP attendances per person than national averages with the SA3s of Lower Murray and Lithgow-Mudgee having the lowest (5.2 per person). Source: Australian Institute of Health and Welfare analysis of Department of Health Medicare Benefits claims data 2016–17 and Australian Bureau of Statistics, Estimated Resident Population 30 June 2016. Available at: https://www.myhealthycommunities.gov.au Accessed: 28.10.2018
		After-hours GP clinic coverage in regional centres not reflective of actual need	A disparity exists between after-hours clinic coverage in the main town centres and the volume and timing of low acuity presentations to EDs. Source: After Hours Serviced Audit Western NSW Primary Health Network Carramar, 2017
		Lowest afterhours GP attendance rate of any PHN nationally.	**Whole of PHN and sub-regional variation (SA3)** In 2016-17, the number of after-hours GP attendances per person, age-standardised was almost 3 times lower that for Australia, 0.18 compared to 0.49, respectively. This was the lowest of any PHN nationally. Sub-regionally, attendance rates were lowest in Orange (0.08), Bathurst (0.10) and Lachlan Valley (0.10 per person). Source: Australian Institute of Health and Welfare analysis of Department of Health Medicare Benefits claims data 2016–17 and Australian Bureau of Statistics, Estimated Resident Population 30 June 2016. Available at: https://www.myhealthycommunities.gov.au Accessed: 28.10.2018

Outcomes of the service needs analysis-general population health			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service Access	Primary Health Care- GP access	Lack of afterhours GP coverage in rural and remote areas and communities with high proportions of shift workers	After-hours GP clinics and phone services need to be considered for rural and remote areas, and areas with specific employment issues e.g. mine shift work. Outside of the larger towns, there is a financial disincentive to offer separate after-hours clinics for practitioners, as they will earn more by providing the service through the hospital. Sources: *Western NSW Needs Assessment Consultation Workshops 2018 Final* After Hours Serviced Audit Western NSW Primary Health Network Carramar, 2017
	Transport	Transport or the travel distance to, medical services was a leading health priority in the community	In 2018, 14% of people surveyed in the WNSW PHN Telephone Community Health Survey, identified transport as a top health priority. This was ranked higher for people aged 50 years and over and Aboriginal people. Similarly, 15% of the online survey participants included transport, or travel distances to medical services in their top three most important gaps in health services. *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018.*
		Major gaps in transport for out-of-town hospital discharge, particularly after-hours and transport costs home.	From stakeholder consultations, transport issues were raised at all stakeholder workshops, particularly for people needing to be sent out of town for medical services. Indeed, after-hours discharge requires better support to return patients home. Cost of transport is also a barrier, suggestions solutions included discounting taxi and local bus services. One solution suggested developing a discharge integration service that incorporated transport home and follow-up outreach services, including options for people living out of town. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

Priority	Identified Need	Key Issue	Description of Evidence
Service Access	Primary Health Care- GP access	Lack of afterhours GP coverage in rural and remote areas and communities with high proportions of shift workers	After-hours GP clinics and phone services need to be considered for rural and remote areas, and areas with specific employment issues e.g. mine shift work. Outside of the larger towns, there is a financial disincentive to offer separate after-hours clinics for practitioners, as they will earn more by providing the service through the hospital. Sources: *Western NSW Needs Assessment Consultation Workshops 2018 Final* After Hours Serviced Audit Western NSW Primary Health Network Carramar, 2017

Outcomes of the service needs analysis-general population health			
Priority Area	**Identified Need**	**Key Issue**	**Description of Evidence**
First 2000 days of life	Emergency Department Presentations	Two thirds of all 0-4-year age cohort attendances were of low acuity with Aboriginal children over-represented	**Whole of PHN** For the three years between July 2015 and June 2018, low acuity (triage 4 or 5) presentations to EDs located within the WNSW PHN, for children aged 0-4 years contributed around two-thirds of all ED presentations for this cohort. Aboriginal children represented more than a quarter (28%) of all low acuity presentations of children aged 0-4 years in WNSW PHN. Source: Health Intelligence Unit, *ED Data Request Report*,2018
	Immunisation	One and two-year old immunisation lower uptake in some rural and remote centres	**Refer to description in needs analysis table (page 23)**
	Access to allied health and specialist services	Lack of early intervention screening and follow-up services in rural and remote areas, and limited access to regional centres due to high costs	From stakeholder consultations, a lack of early intervention screening and follow-up services, with waiting times reported as long as 3 years for pre-school aged children, was highlighted as a priority issue in rural and remote areas. For regional centres, long-waiting lists and prohibitive costs of private early intervention services for screening and follow-up services was identified as an issue. Source*: Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Chronic diseases	Health literacy and education to support parents of children living with chronic disease and special needs.	Given the higher rates of asthma hospitalisations in WNSW PHN children aged 2-15 years, better health literacy and support programs for parents of children with asthma to improve disease management could reduce unplanned hospital admissions. From stakeholder consultations, a need for diabetes management education programs for parents of children suffering this chronic disease was identified. Source*: Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

Outcomes of the service needs analysis-general population health			
Priority Area	**Identified Need**	**Key Issue**	**Description of Evidence**
Aged care and older people	Dementia	Lack of dementia screening, follow-up and support services in the acute and primary care setting.	From stakeholder consultations, community members and clinicians identified a need for improved dementia screening and follow-up services. Education for families and carers, and health professionals was recommended as a solution. Indeed, lower than average dementia hospitalisations in WNSW PHN may be indicative of a need to improve diagnosis and management of dementia at hospital admission.[4] Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Aged care admissions	Higher than national average rate of admissions into permanent residential aged care and lower rates for home care package access. Rates were higher in females than males.	**Whole of PHN** In 2016-17, of the total target WNSW PHN population (all people aged 65 years and over and Aboriginal people aged 50 to 64 years), the rate of admissions to **permanent residential care** was higher than that for Australia, 20.2 compared to 18.8 per 1,000 target population. Rates were higher in females than males, 11.9 compared to 8.3 per 1,000 population. For the reporting period, access to **home care packages** was lower in the PHN target population than for Australia, 10.7 compared to 10.9 per 1,000. Source:https://www.gen-agedcaredata.gov.au/Topics/Admissions-into-aged-care/Explore-admissions-into-aged-care Accessed: 2/11/2018
		Sub-regional variation in residential aged care with access decreasing for more rural and remote centres	**Sub-regional variation (LGA)** As at June 2016, the national target for people aged 70 years and over was 113 per 1,000 target population. Rates in WNSW PHN LGAs were higher for the most part, in the larger regional centres of Bathurst, Broken Hill, Orange and Western Plains (Dubbo) Regional and surrounding LGAs with significantly lower rates in Central Darling, Cobar, Narromine, Walgett and Weddin. Source: *HIU Market & Service Analysis Western NSW Health Needs Assessment, 2017*

[4] Alzheimers Australia, 2014 'Dementia Care in the Acute Hospital Setting: Issues and Strategies. Available at: https://www.dementia.org.au/files/Alzheimers_Australia_Numbered_Publication_40.PDF Accessed 29.10.2018

Outcomes of the service needs analysis-general population health			
Priority Area	**Identified Need**	**Key Issue**	**Description of Evidence**
Aged care and older people	Residential aged care facility (RACF) primary health care access	MBS funded GP attendance services to RACF residents has increased in the region, however a more detailed analysis is required.	**Whole of PHN** Between July 2014 and June 2017, the number of MBS funded GP attendances to RACF increased by 15% from 38,158 in 2014-15 to 44,042 in 2016-17. However, from stakeholder consultations, it was reported that the incentives were inadequate for GPs and pharmacists to provide primary health care in RACFs. Sources: Department of Health Data *Medical Benefits Schedule data* Available at: http://www.health.gov.au/internet/main/publishing.nsf/Content/PHN-MBS_Data Accessed: 31/10/2018 *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Residential Aged Care Telehealth	Need telehealth services available region wide for residential aged care facilities.	From stakeholder consultations, the success of Aged Care Residential Facility telehealth services in Far West should encourage expanding this service region wide. WNSW PHN currently provides a Telehealth in Residential Aged Care Facilities Program in Broken Hill and Dubbo in partnership with NSW Rural Doctors Network, to increase residents' access to GPs and specialists. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Allied health and medication management RACF	Lack of allied health and medication management in residential care	From stakeholder consultations, a lack of allied health services. In particular, physiotherapy, often not available outside of hospitals, was identified as an issue for RACFs as well. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Ageing population living well into the future	A need for health promotion and health literacy programs encouraging a healthy lifestyle and disease prevention	From stakeholder consultation, health promotion and disease prevention enabling older people living at home, and those in residential care, to live well was raised as an important gap. Sources: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report* *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018.*

Outcomes of the service needs analysis-general population health			
Priority Area	**Identified Need**	**Key Issue**	**Description of Evidence**
Aged care and older people	Ageing population living well into the future	Need to enable healthy ageing to prevent over demand on health services as the population ages	By 2036, around a quarter of the population will be aged 65 years and over. Demand for aged care services will increase steadily over the next 10-20 years. Disease prevention and health promotion programs across the life spans can help reduce potential pressure on health services. Better management of chronic conditions to prevent overdemand for health services in the future. Sources: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au (Accessed: 22.10.2018) Australian Institute of Health and Welfare, 2018 'Older Australia at a glance' Available at: https://www.aihw.gov.au Accessed: 29.10.2018 *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018.*
	Transport	Lack of transport for aged people in rural and remote areas	From stakeholder consultation, better transport for older people living in rural and remote communities to access health services is required. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Palliative care services	Lack of palliative care services in rural and remote areas	From stakeholder consultations, a lack of palliative care home care services was noted as issues in rural and remote areas. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

the service needs analysis-general population health			
Priority Area	**Identified Need**	**Key Issue**	**Description of Evidence**
Chronic disease management and prevention	Potentially preventable hospitalisations (PPH) for chronic conditions	Highest average length of stay (ALOS) nationally of any PHN	**Whole of PHN** In 2015-16, the rate of PPH for chronic conditions for WNSW PHN residents was only slightly higher than the national average for the same, 1,257 compared to 1,205 per 100,000, respectively. However, the **ALOS** for PPH chronic conditions was 5.5 days, **the highest nationally of any PHN**. Source: Australian Institute of Health and Welfare analysis of the National Hospital Morbidity Database 2015–16 and Australian Bureau of Statistics, Estimated Resident Population 30 June 2015.Available at: https://www.myhealthycommunities.gov.au Accessed: 19.10.2018
	Primary care setting – chronic disease care plans and team care service utilisation	There has been an increase in the number of MBS funded services for chronic disease care management plan preparation & reviews, and chronic disease team care arrangement coordination and reviews.	**Whole of PHN** In the three years between 2014-15 and 2016-17: • MBS funded chronic disease care management plan services by GPs have increased by 12% from 34,345 in 2014-15 to 38,565 in 2016-17. • MBS funded coordination of chronic disease team care arrangements services by GPs have increased by 15% from 27,642 in 2014-15 to 31,847 in 2016-17. • MBS funded services for reviews by GPs of chronic disease care management plans or team care arrangements have increased by 5% from 52,058 in 2014-15 to 54,745 in 2016-17. • MBS funded multidisciplinary chronic disease care plan preparation or review services have increased by 19% from 64 in 2014-15 to 76 in 2015-16 for non-residential aged care residents. However, the number of these services provided to residents of RACFs was much greater, 894 in 2014-15 rising by 12% to 1,001 in 2016-17. Source: Department of Health Data *Medical Benefits Schedule data* Available at: http://www.health.gov.au/internet/main/publishing.nsf/Content/PHN-MBS_Data Accessed: 31/10/2018

the service needs analysis-general population health			
Chronic disease management and prevention	Integrated Care and Chronic Disease Management	Considerable resources focused on a small number of high need patients	From clinical stakeholder consultations, concern was raised that only a small number of patients are eligible for the Integrated Care Program, with ineligible patients reporting service access issues, such as long waiting times for non-program services. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
		Lack of medication management review services impacting on treatment and health outcomes.	From clinical stakeholder consultations, medication management, particularly for patients with co-morbidities and suffering from chronic pain, requiring multiple service interactions, lacks coordination. This has the potential to risk serious harm if not death. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Chronic disease early intervention	While there has been a decline in the number of MBS funded chronic disease health assessments of eligible people for non-Aboriginal targeted services, that for Aboriginal targeted people have increased.	**Whole of PHN** In the three years between 2014-15 and 2016-17: • MBS funded health assessments for eligible people at risk of chronic disease services have declined by 11% from 11,530 in 2014-15 to 10,245 in 2016-17. • MBS funded health assessments for eligible Aboriginal people at risk of chronic disease services have increased by 15% from 12,885 in 2014-15 to 14,838 in 2016-17. Source: Department of Health Data *Medical Benefits Schedule data* Available at: http://www.health.gov.au/internet/main/publishing.nsf/Content/PHN-MBS_Data Accessed: 31/10/2018

the service needs analysis-general population health			
Chronic disease management and prevention	Chronic disease health literacy and patient self-care	Lack of health literacy which impacts on chronic disease self-management and healthy lifestyle	From stakeholder consultations, improving health literacy across the lifespan was raised as a priority need. Areas of focus included: • Parents of young children with chronic diseases or disabilities • School-aged children • Men • Older people living at home and their carers Source*: Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

Outcomes of the service needs analysis-general population health			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Health systems and coordination	Care integration and coordination	Lack of health system integration and integrated referral pathways is a key barrier to an efficient and effective health care system impacting on patient experience and outcomes.	From stakeholder consultations, a need for better coordination of the many services, *'there are so many',* were raised as an area impacting on referral pathways and patient care. Issues included: • lack of awareness of locally available specialist, allied health and support services providers; • long waiting times, or difficulties determining extent thereof; • difficulty coordinating multiple care and treatment needs impacting on continuity of care There is a need to develop a coordinated, effective approach to sharing service information and referrals within communities and in existing clinical networks. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Communication of changes to existing health services and programs	A lack of change management when health services and programs cease or are delivered under a new model of care.	From stakeholder consultations, health organisations need to better manage changes to health services and programs, particularly when services cease. Examples were cited of program changes where clinical and community stakeholders were not consulted, resulting in disruption to patient care and loss of trust in health services. Program evaluations need to be conducted and communicated to stakeholders to demonstrate evidence-informed decisions. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

Outcomes of the service needs analysis-general population health			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Digital health	Health systems communication	A need to improve health information systems to better facilitate sharing of patient care planning and coordination.	From stakeholder engagement, improved patient health record information was raised as an important need. Participants suggested that sharing may be facilitated through the development of a regional platform that is compatible with multiple practice software and health information systems for specific purposes e.g. chronic disease and/or management plans. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
		Secure Messaging is still not widely interoperable.	Reliable, secure provider-to-provider communication is a key component of integration and coordinate care. Secure messaging is a core capability required to enable interoperability and safe sharing of confidential records between health care providers and consumers. Currently there is a lack of a consistent approach to secure messaging and information. The Australian Digital Health Agency is currently working with Secure Messaging providers to fast track interoperability and meaningful use of the Secure Messaging products. Source: Australian Digital Health Agency https://www.digitalhealth.gov.au/get-started-with-digital-health/what-is-digital-health/secure-messaging Accessed: 7/11/2018

Outcomes of the service needs analysis-general population health			
Digital health	**My Health Record**	Only part of the solution to sharing patient health information- key health information summary level only.	**My Health Record** contributes to improving patient care continuity by providing a summary of the key health information of individuals. In its current format, it does not include more detailed interaction with health services such as treatment or care plans. Therefore, it is not a single point for patient health information sharing systems. From stakeholder consultation, improvements were recommended to encourage uptake for both patients and providers. Source: *Western NSW Needs Assessment Priorities, Options and Opportunities PHN Councils and Staff Survey, 2018*
	Telehealth service utilisation	Variable telehealth service uptake with increases in specialist consultant physician and patient-end nurse practitioner telehealth services but declines in specialist geriatric telehealth services.	**Whole of PHN** In the three years between 2014-15 and 2016-17: • MBS funded specialist geriatric telehealth services decreased by 25% from 163 in 2014-15 to 123 in 2016-17. • MBS specialist consultant physician telehealth services more than doubled between 2014-15 and 2016-17, 434 compared to 957. • MBS patient-end medical practitioner telehealth services (patient-end practitioners provide clinical support during video consultations) have remained relatively steady with 2,193 in 2014-15 and 2,188 in 2016-17 • MBS patient-end nurse practitioners telehealth services increased the most with services in 2016-17 29% higher than those in 2014-15, 1,009 compared to 785. Source: Department of Health Data *MBS Mental Health Data* Available at:http://www.health.gov.au/internet/main/publishing.nsf/Content/PHN-Mental_Health_Data Accessed: 31/10/2018

Outcomes of the service needs analysis-general population health			
Digital health	Commissioned telehealth services	Need for increased telehealth GP and specialist services in Residential Aged Care Facilities - currently only in Broken Hill and Dubbo	From stakeholder consultation, telehealth has been found to improve health service access in aged care settings where patients have low-mobility and co-morbidities requiring specialist services. Geographic isolation and qualified workforce can be challenging in rural and remote communities. WNSW PHN has successfully implemented a **Telehealth in Residential Aged Care** program with NSW RDN in Broken Hill and Dubbo. Lack of GP and specialist service incentives has limited health care access to RACF, and recommendations from consultations are to expand this service across the region. Sources: *Western NSW Needs Assessment Priorities, Options and Opportunities PHN Councils and Staff Survey, 2018* *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Telehealth service access	Lowest internet connectivity of any PHN nationally with sub-regional rates lowest in the Far West and North West of the State.	**Whole of PHN and sub-regional variation (LGA)** Telehealth is a solution to providing health consultation services in rural and remote areas and other hard to reach populations. However, in 2016, home internet connectivity in WNSW PHN on average was the lowest of any PHN nationally, and 12% lower than the national average, 73% compared to 83%, respectively. Home internet connectivity showed wide sub-regional variation with the lowest rates occurring in the LGAs of Central Darling (54%), Brewarrina (55%), Walgett (58%), Coonamble (61%) and Bourke (63%), while the highest rates tended to be in the central west regional centres of Western Plains (76%), Orange (77%) and Bathurst (79%). The unincorporated Far West was an outlier, reporting internet connectivity of 81%. Source: Population Health Information Development Unit (PHIDU), 2018 '*Social Health Atlas of Australia, Data by Primary Health Network'* Available at: http://www.phidu.torrens.edu.au/social-health-atlases/data Accessed: 15.10.2018

Outcomes of the service needs analysis-general population health			
Digital health	Telehealth service uptake	More care navigators and cultural safety needed to increase uptake for Aboriginal people and older people	From stakeholder consultations, poor telehealth uptake by Aboriginal people and older people was reported by clinicians. For Aboriginal people, time to develop a rapport and trust with a health service/professional as well as cultural safety is important. Similarly, low computer and health literacy were reported as limiting access to telehealth services, which can be assisted through care navigators. Computer technology, internet and smart phone costs were raised as prohibitive factors for low socio-economic populations and older people. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Telehealth service uptake	Improve patient-end interactions to encourage better uptake	From stakeholder consultations, it was suggested that improving patient portals and telehealth software may increase availability and uptake of the telehealth services. Encourage use of Skype and GoToMeeting to increase telehealth accessibility which are relatively simple and accessible. Source: *Western NSW Needs Assessment Priorities, Options and Opportunities PHN Councils and Staff Survey, 2018*
	Telehealth education and promotion	Improve education of staff at remote sites in telehealth	From stakeholder consultation, staff at remote sites need to be better supported to build confidence in telehealth use and better support patients. Source: *Western NSW Needs Assessment Priorities, Options and Opportunities PHN Councils and Staff Survey, 2018*

Outcomes of the service needs analysis-general population health			
Digital health	Telehealth education and promotion	Telehealth not appropriate for all health service consultations or vulnerable groups	From stakeholder consultations, telehealth was acknowledged as appropriate for specialist consults and follow-up appointments but not recommended as an appropriate service delivery mode for mental health services. While clinicians from smaller rural communities discussed the value of mental telehealth services, such as Strong Minds, as solutions for lack of locally available mental health services, they reported low uptake by patients. Mainly due to lack of rapport with the treating professionals and a lack of confidence with the technology and internet connectivity issues. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Telehealth service funding models limitations	Lack of Medicare Benefits Scheme (MBS) rebates for many consultations amenable to telehealth	From stakeholder consultation, it was identified that not all funding models support service delivery via telehealth. The lack of MBS rebates for many consultations amenable to telehealth was noted as a significant limitation. It was recommended that block funding is required for telehealth to be a fully utilised service with alternative suggestions recommending mixed funding models. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

Outcomes of the service needs analysis-general population health			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Health Workforce	Distribution of GP workforce	Lower GP full-time equivalent (FTE) with maldistribution of GPs through the region.	In 2017, the GP FTE for WNSW PHN was lower than that for NSW and Australia, 7.4 compared to 8.1 and 7.8 per 10,000 population, respectively Source: *State of General Practice in Western NSW PHN, 2017*
		GP District Workforce Shortage (DWS)	All SA2 areas of WNSW PHN are defined as DWS except for the townships of Broken Hill, Parkes, Orange and Dubbo. Source: Australian Government Department of Health DoctorConnect. Available at: http://www.doctorconnect.gov.au/internet/otd/publishing.nsf/Content/locator Accessed: 28/10/2018
	GP Workforce Sustainability	Ageing GP workforce	In 2017, almost a quarter (22%) of the GP workforce in WNSW PHN are aged older than 55 years, indicating a need for collaborative succession planning with clinical networks and supportive organisations such as the NSW Rural Doctors Network. Source: NSW Rural Doctors Network *Western NSW Regional Workforce Needs Assessment, 2017*
		Higher proportion of GPs are International Medical Graduates (IMG)	In 2017, 53% of the GP workforce in WNSW PHN are IMGs, which is 45% higher than the NSW average for the same. Source: NSW Rural Doctors Network *Western NSW Regional Workforce Needs Assessment, 2017*
		Lower proportion of the GP workforce are engaged in visiting medical officer work (VMO) in local hospitals	The proportion of WNSW PHN GP workforce engaged in VMO work is 28%, lower than that for neighbouring PHNs Hunter New England & Central Coast (39%) and Murrumbidgee (44%). Source: NSW Rural Doctors Network *Western NSW Regional Workforce Needs Assessment, 2017*

Outcomes of the service needs analysis-general population health			
Health Workforce	GP Workforce Sustainability	High GP turnover in rural and remote communities	From community consultations, the issue of a high turnover of Doctors in rural and remote areas was highlighted, and that constantly having to retell one's medical history was often the point at which patients became disengaged. Source: *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018. Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Recruitment and sustainability	Sustainability of GPs in rural and remote areas & recruitment and sustainability of all health professionals esp. mental health and allied health professionals.	From community consultations, recruitment and sustainability of health workforce was identified as a priority in workshops held in rural and remote areas. Mental health and allied health professionals were areas of concern. Professional development pathways for Aboriginal health professionals was highlighted in the yarning sessions. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
		Need for local workforce training and development of career pathways	From community consultations, a need to develop a local workforce with connections to the community and pathways for career development were suggested solutions to solve the health workforce shortages in rural and remote communities. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
		Development of an innovative, centralised and incentivised recruitment and retention strategy	Consultation workshops with clinical stakeholders, identified the issue of recruitment and retaining health professionals in rural and remote communities. Suggested solutions included development of a centralised recruitment strategy to improve efficiency and effectiveness and provides incentives to encourage retention. Comparisons with education and emergency services in rural communities suggested that providing housing, longer annual leave entitlements and options for career development were successful strategies. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

Outcomes of the service needs analysis-general population health			
Health workforce	Professional development	Continuing education and quality improvement	From the NSW RDN Western NSW Workforce Needs Assessment and clinical stakeholder's consultation workshops, requests for upskilling from health professionals include: • chronic disease management, especially diabetes, • mental health management, including preparing mental health plans • aged care and associated conditions, especially dementia screening and follow up • culturally safe practices and practitioners • coordinated team care • patient health literacy and self-management Source: NSW Rural Doctors Network *Western NSW Regional Workforce Needs Assessment, 2017 Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

(ii) Primary Mental Health Care (including Suicide Prevention)

Outcomes of the service needs analysis-primary mental health care (including suicide prevention)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service access	Access to mental health professionals and services	Important priority for the community	In 2018, 10% of participants in the WNSW PHN Telephone Community Health Survey identified mental health services as the fifth most important priority health service gap. Source: *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018.*
		Growing area of need with services largely focused on crisis care	From stakeholder consultation, mental health was identified as a growing area of need. This supports findings from data analysis of ED presentations in WNSW PHN, showing a five-year increasing trend. Participants noted that mental health services were largely focused on crisis care. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
		Concentration of mental health professionals in regional centres	The majority of mental health services are located in Orange, Bathurst, Dubbo and Broken Hill. In the Far West of the region, 85% of services, including residential services, are located within Broken Hill. Outreach services to rural and remote areas are mostly provided by the Royal Flying Doctor Service (RFDS) and non-government organisations. Access to psychiatrists and clinical psychologists is limited and some communities have no access to acute or specialised services when needed. In the Far West, people may travel from three to five and a half hours to reach residential services in Broken Hill. Similarly, in the north-west, like Bourke, people have to travel from four hours to reach Dubbo, or Orange for inpatient and residential mental health services. Source: WNSW PHN Mental Health, Suicide Prevention and Drug and Alcohol Needs Assessment, November 2017

Outcomes of the service needs analysis-primary mental health care (including suicide prevention)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service access	Acute services	Decline in mental health hospital overnight hospitalisations compared to national increases with the highest rates in Far West and North West NSW; and, lowest in Dubbo and the Lower Murray.	**Whole of PHN and sub-regional variation (SA3)** The rate of mental health overnight hospitalisations in WNSW PHN residents has declined by 7% from 2013-14 to 2015-16, 121 compared to 113 per 10,000 people, respectively. Yet, there has been a 13% increase in that for Australia from 91 compared to 102 per 10,000 people. At the sub-regional level, the highest rate in 2015-16 was in the Broken Hill and Far West and Bourke-Cobar-Coonamble SA3 regions with rates around 40% or more higher than the national average. Source: Australian Institute of Health and Welfare analysis of the National Hospital Morbidity Database 2015–16 and Australian Bureau of Statistics, Estimated Resident Population 30 June 2015. Available at: https://www.myhealthycommunities.gov.au Accessed: 31.10.2018
		Higher mental health hospital bed days compared to national average and highest in the Far West and Orange sub-regions.	**Whole of PHN and sub-regional variation (SA3)** In 2015-16 the bed day rate across the WNSW PHN was 26% higher than the national average rate for the same, 1,761 compared to 1,401 per 10,000 population. Sub-regional analysis revealed the highest rate of bed days occurred in the SA3s of Broken Hill & Far West and Orange, 2,444 and 2,354 per 10,000 population, respectively. The lowest occurred in Dubbo and Lower Murray, 1,519 and 1,200 per 10,000 population, respectively. Source: Australian Institute of Health and Welfare analysis of the National Hospital Morbidity Database 2015–16 and Australian Bureau of Statistics, Estimated Resident Population 30 June 2015. Available at: https://www.myhealthycommunities.gov.au Accessed: 31.10.2018

Outcomes of the service needs analysis-primary mental health care (including suicide prevention)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service access	Acute services	Emergency presentations for mental health related problems have increased with highest rates in Walgett, Western Plains (Dubbo) Regional and Warrumbungle Shire	**Please see Mental health needs analysis outcomes (page 42)**
	Primary mental health care	Increase in MBS funded mental health related services for face to face psychiatrists, clinical psychologists, general practitioners but a decline in allied health and telehealth psychiatry services.	**Whole of PHN and sub-regional variation (LGA)** For WNSW PHN, excepting MBS funded Mental Health Allied Health and telehealth psychiatry services, the number of other MBS funded mental health services increased over the three years from July 2014 to June 2017: • Psychiatrists – 10% increase in MBS funded services from 2014-15 to 2016-17, with 14,502 compared to 15,951, respectively. • Clinical psychologists – 34% increase in MBS funded services from 2014-15 to 2016-147, 11,175 compared to 15,028, respectively. • General practitioners – 15% increase in MBS funded services from 2014-15 to 2016-17, 36,806 compared to 42,182, respectively. • Allied mental health – 10% decrease in MBS funded services from 2014-15 to 2016-17, 37,969 compared to 37,535, respectively. • Telehealth psychiatry – there were no MBS funded services for 2014-15. There was a 31% decline in services between 2015-16 and 2016-17, 170 to 117, respectively. NB: this data only captures MBS funded services and not LHD and PHN funded services, data for which was unavailable.

Outcomes of the service needs analysis-primary mental health care (including suicide prevention)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service Access	Primary mental health care	(see above)	From 1 November 2017 telehealth psychology became a MBS item for registered practitioners. From 1 November 2018 the Medicare Better Access initiative commenced to provide further Medicare coverage for mental health support in drought-affected areas. Under this program, eligible GPs in rural and remote (MMM 4-7) regions will be able to deliver Focused Psychological Strategy consultations via telehealth (videoconferencing). Six new MBS items will be available to enable practitioners in these areas to provide general mental health and wellbeing support via telehealth. Eligible patients are not required to have a diagnosed mental illness or Mental Health Treatment Plan to access these services. Sources: Department of Health Data *MBS Mental Health Data* Available at:http://www.health.gov.au/internet/main/publishing.nsf/Content/PHN-Mental_Health_Data Accessed: 31/10/2018 Department of Health Website, Better Access Telehealth Services for People in rural and remote areas at: http://www.health.gov.au/internet/main/publishing.nsf/Content/mental-ba-telehealth Accessed: 12/11/2018
		Increase in access to MBS funded services occurred in the larger regional centres, while declines were seen in Far West and North-West NSW.	At the SA3 level, the largest increases in the number of MBS funded mental health services for the three years from July 2014 to June 2017 occurred in Bathurst (18%) and Dubbo (13%) with decreases over the same three-year period in Broken Hill (14%) and Bourke-Cobar-Coonamble (7%). Source: Department of Health Data *MBS Mental Health Data* Available at:http://www.health.gov.au/internet/main/publishing.nsf/Content/PHN-Mental_Health_Data Accessed: 31/10/2018

Outcomes of the service needs analysis-primary mental health care (including suicide prevention)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service Access	Primary mental health care	**Access to Allied Psychological Service** (ATAPS) and **Strong Minds Program**– increasing trends	**Whole of PHN** **ATAPS was** provided under the Better Access to Services Strategy. For the three years between July 2013 and June 2016, the number of services increased by 48%, from 6,954 in 2013-14 to 10,274 in 2015-16. NB: This data is the latest available, but it should be noted that ATAPS is now funded through PHNs separately to the MBS funded Better Access initiative, for which data is unavailable for this needs assessment. Since October 2017, WNSW PHN commissioned the 'Strong Minds Western NSW' program to provide psychological therapy services for under-serviced groups. This program delivers free referral-based psychological services face-to-face or via telehealth across the whole region. Although there was an initial drop in service provision at the commencement of the new program (and transition from ATAPS) Strong Minds has demonstrated a steady quarter by quarter increase in service numbers. Source: Department of Health Data *Access to Allied Psychological Services (ATAPS)* Available at: http://www.health.gov.au/internet/main/publishing.nsf/Content/PHN-Mental_Health_Data Accessed: 31/10/2018

Outcomes of the service needs analysis-primary mental health care (including suicide prevention)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service Access	Primary mental health care	**Mental Health Nurse Incentive Program** (MNHIP)-falling trends in MBS services which may have been offset by the PHN funded services.	**Whole of PHN** The **MNHIP** funds community based general practice, private psychiatric practices and other appropriate organisations to employ mental health nurses to help provide coordinated clinical care for people with severe mental illness. In the 3 years between July 2012 and June 2015 (latest available), the number of services has decreased by 26% from 3,956 in 2012-13 compared to 2,932 2014-15. WNSW PHN commissioned additional MHNIP services (an increase of 5FTE) in 2017, however service data was unavailable for this needs assessment. Source: Mental Health Nurse Incentive Program (MHNIP) Data Available at: http://www.health.gov.au/internet/main/publishing.nsf/Content/PHN-Mental_Health_Data Accessed: 31/10/2018
		Consumers and service providers are seeking or referring access to a 24 hours mental health emergency care line for primary mental health care support services, indicative of either a lack of primary mental health care services in the region, or a lack of understanding in the community about the difference between primary, secondary and tertiary services, or both.	The western NSW **Mental Health Emergency Care Rural Access Program** (MHEC RAP) is a WNSW LHD program whose main functions is to support access to secondary and tertiary mental health services and is not a primary mental health care service. During stakeholder consultation, dissatisfaction with the MHEC RAP service was expressed with views that this service did not meet patient's or referring service provider needs. Discussion with MHEC RAP revealed that most dissatisfaction is based on the misconception that many calls received are requesting primary mental health care. Sources: Hopkins, J., Salvador-Carulla, L., Stretton, A., Bell, T., McLoughlin, L., Mendoza, J. & Salinas-Perez, J. A. (2017). The Integrated Mental Health Atlas of Western NSW – Version for public comments. The Menzies Centre for Health Policy, University of Sydney and ConNetica. WNSW PHN Mental Health, Suicide Prevention and Drug and Alcohol Needs Assessment Report, November 2017 Western NSW PHN Opportunities, priorities and options Board, Councils and Staff Survey

Outcomes of the service needs analysis-primary mental health care (including suicide prevention)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service Access	Child and adolescent mental health services	Complex array of specialist children services	In the WNSW PHN region 13 teams provides services targeting children and adolescents, provided by the health sector and NGOs. The Bathurst and Dubbo Special Programs Teams provide specialised staff for both older adults and children in the blended team approach. This is also the case for the blended community mental health and drug and alcohol service teams at Mudgee, Bourke, Lightening Ridge, Cowra, Parkes, Forbes and Condobolin. There are also many generalist mental health teams that provide services to children and adults, including the Royal Flying Doctors Clinics, Mental Health Emergency Care (MHEC-REC) and some MHNIP nurses. Source: WNSW PHN Mental Health, Suicide Prevention and Drug and Alcohol Needs Assessment, November 2017
		Lack of inpatient mental health services for children and adolescents (younger than 18 years of age)	Stakeholder consultation identified the lack of mental health inpatient services for children and young adults (<18 years) as the only beds available region wide are at the Orange-Bloomfield Health Facility. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
		headspace concentrated in larger regional centres with a need for this service in rural and remote areas	The **headspace** program provides early intervention mental health services to 12-25-year old adolescents young peoples' mainly in the large regional centres including Broken Hill. There have been increases in numbers of serviced persons most months in 2017 compared with July to December in 2016. Source: WNSW PHN Mental Health, Suicide Prevention and Drug and Alcohol Needs Assessment, November 2017

Outcomes of the service needs analysis-primary mental health care (including suicide prevention)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service access	Child and adolescent mental health services	Dissatisfaction at medical model of **headspace** – only providing mild to moderate services and referrals for high moderate to severe illness	From stakeholder consultations, although providing referrals to psychiatry specialist services, headspace provides services for those with mild to moderate mental health problems, not for people with high moderate to severe mental illness. This conflicts with expectations of community members with misconceptions commonly expressed that specialist services were part of the model. Source: WNSW PHN Mental Health, Suicide Prevention and Drug and Alcohol Needs Assessment, November 2017
	Suicide	Lack of evidence informed suicide prevention models in communities	Some communities had established suicide prevention committees. For those working in the area of community-based suicide prevention there were concerns that these approaches lacked an evidentiary base. Source: WNSW PHN Mental Health, Suicide Prevention and Drug and Alcohol Needs Assessment, November 2017
		Lack of management of patients at risk of suicide including follow up care from previous attempt/s	From stakeholder consultations, capacity of acute and primary care services to manage patients at risk of suicide or follow-up after a suicide attempt were identified as a concern. Opinions were expressed that some GPs lacked appropriate skills or time to identify a young patient, especially, at risk of suicide, ignoring risk factors. Source: WNSW PHN Mental Health, Suicide Prevention and Drug and Alcohol Needs Assessment, November 2017
	Chronic mental health	Lack of services for chronic mental health	Clinicians participating in the consultations reported that in many cases, they were only able to address symptoms rather than the underlying cause of mental illness. Unfortunately, this unsustainable and not supportive of good outcomes for patients. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

Outcomes of the service needs analysis-primary mental health care (including suicide prevention)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service Access	Primary care mental health management	Increase in MBS funded GP mental health management services	**Whole of PHN** In the three years from July 2014 to June 2017, the number of MBS funded GP services to undertake early intervention, assessment and management of patients with mental disorders have increased by 12%, from 29,030 in 2014-15 to 32,607 in 2016-17. Source: Department of Health Data *Medical Benefits Schedule data* Available at: http://www.health.gov.au/internet/main/publishing.nsf/Content/PHN-MBS_Data Accessed: 31/10/2018
	Primary care mental health management	Decline in MBS funded allied health mental health management, which may be offset by an increase in PHN funded ATAPS access.	**Whole of PHN** In the three years from July 2014 to June 2017, the number of MBS funded allied health services to undertake early intervention, assessment and management of patients with mental disorders have fallen slightly from 37,969 in 2014-15 to 37,535 in 2016-17. However, it should be noted that this decrease in MBS funded services is most likely to be offset by the increase in PHN funded ATAPs services, for which data was unavailable. Source: Department of Health Data *Medical Benefits Schedule data* Available at: http://www.health.gov.au/internet/main/publishing.nsf/Content/PHN-MBS_Data Accessed: 31/10/2018
	Stepped Care Model	Need for further investment in a more coordinated Stepped Care Model with clear referral pathways that includes more publicly funded services.	From stakeholder consultation, there was in-principle support for a stepped care model. However, most service providers, clients, carers and community members perceived that such a model was not in place. Rather there was a disparate array of services with little alignment to a stepped care model and most importantly no clear linkages between steps. Issues with the current Stepped Mental Health Care Model resulted in access issues including long wait times, complex referral pathways and lack of awareness of existing services, and lack of low to moderate services. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report* WNSW PHN Mental Health, Suicide Prevention and Drug and Alcohol Needs Assessment, November 2017

Outcomes of the service needs analysis-primary mental health care (including suicide prevention)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service Access	Publicly funded mental health services	Lack of public health services in some areas or long waiting times and prohibitive costs limit access	From stakeholder consultations, where publicly funded services are not accessible or there are long waiting times, cost of private psychiatry and mental health allied specialists were prohibitive for many people. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Psychosocial support service access	Not all people with a severe and complex mental illness will apply for NDIS and people with 'moderate' mental illness may be ineligible for NDIS	**Whole of PHN** From analysis of the National Mental Health Service Planning Framework (NMHSPF) undertaken by the University of Queensland, a number of people with a 'moderate' mental illness also requires psychosocial support. Source: Mental Health Policy and Epidemiology Group, The University of Queensland *Mental health psychosocial support service needs from the National Mental Health Service Planning Framework (NMHSPF), 2018*
		Currently most services concentrated in Bathurst, Orange and Dubbo with lack of services in majority of other rural and remote areas, including Broken Hill	**Whole of PHN and sub-regional analysis (LGA)** From stakeholder consultation, it was identified that many local government areas were either receiving no services or there was only one provider covering very large rural and/or remote regions. The highest concentrations of providers were in the main regional centres of Bathurst, Orange and Dubbo. Source: *Psychosocial support needs in the Western NSW Primary Network region survey, 2018*

Outcomes of the service needs analysis-primary mental health care (including suicide prevention)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service Access	Psychosocial support service access	Poor level of services to meet the most needed psychosocial supports of family, education and social skills	Participants in the WNSWPHN survey were asked to rate the current availability and accessibility of services to meet the three most important type of psychosocial support needs, family, education and social skills training; 69% of respondents ranked them in the range of "fair" to "very poor." Source: *Psychosocial support needs in the Western NSW Primary Network region survey, 2018*
	NDIS ineligibility	Uncertainty and difficulty in accessing the NDIS	Case studies from two separate providers of psychosocial supports services indicate that only a small percentage of current clients are being assessed as eligible for NDIS support. A provider of Personal Helpers and Mentors (PhaMs) in one rural local government area has advised that of 30 clients who have submitted applications, 7 (23%) were eligible, 18 (60%) were ineligible and 5 (17%) were still awaiting a decision. Of the 7 who were eligible, many had experienced significant problems in finding local providers of supports and this had resulted in unspent funds and no services being obtained. A Partners In Recovery (PIR) provider in Western NSW reports that only 29% (12 participants) in their program were deemed eligible for the NDIS. A common theme in provider feedback is that current clients and their carers require considerable support to go through the application process and there is a need for much more training for GP's to understand all requirements when completing forms. Collectively, these findings suggest there could be a higher than expected number of people with severe (not complex) mental illness who choose not to pursue an NDIS application and/or who are deemed ineligible. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

Outcomes of the service needs analysis-primary mental health care (including suicide prevention)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service Access	Prevention	Lack of systematic, evidence-based approach to mental health promotion and mental health literacy vulnerable groups.	Stakeholder consultations highlighted the need for mental health promotion across all life-stages but particularly for school-aged children, men and older people. There are some approaches to mental health promotion in the WNSW PHN region as demonstrated through school link coordinators and staff in the Rural Adversity Mental Health Program (RAMHP). However, a need for a systematic approach to mental health promotion which is aligned to evidence-based frameworks, was highlighted, rather than relying on delivery of training programs across different settings such as schools, workplaces and sporting groups. Source: WNSW PHN Mental Health, Suicide Prevention and Drug and Alcohol Needs Assessment, November 2017 *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
Health Workforce	Mental health workforce	Barriers to mental health access experienced across the region due to lack of locally available services in rural and remote areas and lack of coordinated and affordable services in regional areas.	From stakeholder consultations, lack of mental health nurses and other mental health professionals was identified as an issue, particularly in rural and remote areas. Difficulties recruiting and retaining mental health workforce was highlighted Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
		Recruitment and retainment	Difficulties recruiting and retaining mental health workforce was highlighted with a need to develop attractive schemes to fill vacancies. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

Outcomes of the service needs analysis-primary mental health care (including suicide prevention)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Health Workforce	Psychosocial Support Service Workforce	Clarifying psychosocial workforce shortages and challenges.	**Whole of PHN** From University of Queensland estimates, 35FTE staff will be required to meet the psychosocial support needs of people with a severe (not complex) mental illness in our region. Further workforce data is required to better understand what the current EFT is and/or will be during and after the transition period/establishment phase. Anecdotal information from current federal psychosocial support service providers such as PHaMs and PIR indicates that over the past few years during the NDIS transitioning period, there has been reductions in their program funding and this has led to the loss of local staff (6 workers in one program covering a large local government area). Both the University of Queensland report and local providers identify a range of additional challenges related to rural and remote mental health service delivery including. These include: travel time and higher costs required to support individuals spread over large distances; and difficulties recruiting staff and private organisations to service clients in remote locations/small population areas. Several providers expressed concerns about whether it is financially viable for them to continue delivering any psychosocial support programs under either the NDIS or NPSM because of the high operational costs and comparatively low funding. Sources: Mental Health Policy and Epidemiology Group, The University of Queensland *Mental health psychosocial support service needs from the National Mental Health Service Planning Framework (NMHSPF), 2018* *Psychosocial support needs in the Western NSW Primary Network region survey, 2018*

(iii) Alcohol and Other Drug Treatment Needs

Outcomes of the service needs analysis-alcohol and other drug treatment needs			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service Access	Improvement of services	Improvement of drug and alcohol services was ranked the fifth most needed service improvement in the region	In 2018, participants in the WNSW PHN Telephone Community Health Survey ranked drug and alcohol services as the fifth most needed improvement in the region. Sub-groups of participants rating this more highly than the survey average included: those aged 18 to 34 years, Aboriginal people, and FW LHD residents. *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018.*
	General substance dependence	Access to local rehabilitation services and stigma related to seeking help for substance issues	In rural areas, the major issue is access and community stigma to seeking help for substance issues, however lack of data relating to local demand for services makes estimating the need difficult. Source: Ritter, A, Chalmers, J. & Sunderland, M (2013) *Planning for drug treatment services: estimating population need and demand for treatment.* Drug Policy Modelling Program, National Drug and Alcohol Research Centre, UNSW.
	Data deficiencies	Difficulty in planning without a good picture of what Government, NGOs and private services already exist.	There is limited understanding of what D&A services are being provided across Western NSW. For instance, the WLHD MHDA service review found that there was no data on D&A services provided by health, and the best they could discover was that there were 9 FTE D&A workers for every 100,000 people in the region. Source: Hopkins, J., Salvador-Carulla, L., Stretton, A., Bell, T., McLoughlin, L., Mendoza, J. & Salinas-Perez, J. A. (2017). The Integrated Mental Health Atlas of Western NSW – Version for public comments. The Menzies Centre for Health Policy, University of Sydney and ConNetica. WNSW PHN Mental Health, Suicide Prevention and Drug and Alcohol Needs Assessment Report, November 2017

Outcomes of the service needs analysis-alcohol and other drug treatment needs			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service Access	Accessing health care	Access to specialist drug and alcohol services	There was a perception that few communities had access to specialist drug and alcohol services for those people experiencing problems. Where these did exist they often operated on a FIFO or DIDO basis with access limited. Source: WNSW PHN Mental Health, Suicide Prevention and Drug and Alcohol Needs Assessment, November 2017
		Access to addiction medical specialists	Few addiction medical specialists, operating in a limited number of communities, were able to be identified. Where these did exist, they operated usually on a FIFO or DIDO basis with access limited. Source: Hopkins, J., Salvador-Carulla, L., Stretton, A., Bell, T., McLoughlin, L., Mendoza, J. & Salinas-Perez, J. A. (2017). The Integrated Mental Health Atlas of Western NSW – Version for public comments. The Menzies Centre for Health Policy, University of Sydney and ConNetica. WNSW PHN Mental Health, Suicide Prevention and Drug and Alcohol Needs Assessment Report, November 2017
	Coordination between, and integration of, services	Need for improved integration and coordination for drug and alcohol services reflected in regional plans	From stakeholder consultation, a need for integration between primary care and specialist services to ensure effective drug and alcohol services, was highlighted. Improved referral pathways, coordination of treatment and care information is needed to improve patient outcomes. Source: WNSW PHN Mental Health, Suicide Prevention and Drug and Alcohol Needs Assessment, November 2017

Outcomes of the service needs analysis-alcohol and other drug treatment needs			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service Access	Specific service challenges and gaps for high need populations	Gaps in substance abuse services for rehabilitation, increasing with remoteness.	The need for specialist drug and alcohol rehabilitation services, with locally accessible options, was raised in most communities as a high priority need. Currently there are 3-4 rehabilitation facilities located in Western NSW - most in regional towns, for instance, Lyndon Community. That service gets an estimated 60-70 calls a week where assessments cannot be completed as there is no capacity. The Lyndon Community provide Commonwealth-funded detoxification, residential rehabilitation and community outreach services. Lyndon detox's 800 people a year, with people coming from all over NSW. Source: WNSW PHN Mental Health, Suicide Prevention and Drug and Alcohol Needs Assessment, November 2017
		Need for multi-purpose rehabilitation services that are inclusive of consumers with a history of mental illness	From stakeholder consultation, an important gap in drug and alcohol rehabilitation services that is inclusive of clients with a history of mental illness. Access to rehab for this vulnerable population was reported to often occur through justice health, as committing crimes were a common outcome. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
		Lack of detoxification services across the region, with demand outstripping supply	Options for drug and alcohol detoxification were very limited across the region and identified as a high need through stakeholder consultation. Few drug and alcohol detoxification beds; with demand outstripping supply. While there was general support for home-based detoxification this was rarely available. The skills, capacity and attitudes of GPs to provide home-based detoxification was perceived as limiting more home-based detoxification. Where home-based detoxification was provided it was dependent on skilled and committed nurses with drug and alcohol training to support the GP and the patient. Source: WNSW PHN Mental Health, Suicide Prevention and Drug and Alcohol Needs Assessment, November 2017

Outcomes of the service needs analysis-alcohol and other drug treatment needs			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service Access	Specific service challenges and gaps for moderate & low need populations	Capacity of GPs to address drug and alcohol problems of patients	From stakeholder consultations, support for early intervention approaches was widespread with GPs seen as playing a key role. However, their capacity to provide early intervention was perceived to be limited by time, skills and attitudes. Source: WNSW PHN Mental Health, Suicide Prevention and Drug and Alcohol Needs Assessment, November 2017
			Referral options for GPs to provide additional support for those people experiencing drug and alcohol problems were limited because of so few drug and alcohol services. Source: WNSW PHN Mental Health, Suicide Prevention and Drug and Alcohol Needs Assessment, November 2017
		Capacity of AMS to address drug and alcohol problems of patients	From stakeholder consultations, support for early intervention approaches was widespread with AMS's seen as playing a key role. However, their capacity to provide early intervention was perceived to be limited. Source: WNSW PHN Mental Health, Suicide Prevention and Drug and Alcohol Needs Assessment, November 2017
	Family and Carer Support	Support for families and carers of people living with drug and alcohol problems	The impact of a family members drug and alcohol use was significant, affecting relationships, employment and often contributing to family breakdown. Support for family members of someone with a drug and alcohol problem was raised as a priority need. Source: WNSW PHN Mental Health, Suicide Prevention and Drug and Alcohol Needs Assessment, November 2017

Outcomes of the service needs analysis-alcohol and other drug treatment needs			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Population health	Health promotion and prevention	Largely focused on Aboriginal women who are pregnant	Services currently delivered from a variety of sources and uncoordinated. Some of the noted preventive health efforts: • support smoking cessation in Aboriginal women through the Giving Up Smoking (GUS) program • support the use of the IRIS D&A Screening tool for pregnant Aboriginal women • support midwives to use brief interventions for women with substance use issues, in particular alcohol and tobacco Source: WNSW PHN Mental Health, Suicide Prevention and Drug and Alcohol Needs Assessment, November 2017
	Health promotion and prevention	Lack of coordinated, strategic approach to drug and alcohol abuse prevention	There are a range of evidence-based approaches to reduce at risk alcohol consumption in the community. However, there was a perception that there was no coordinated strategic approach to addressing alcohol use through comprehensive prevention and promotion strategies. Source: WNSW PHN Mental Health, Suicide Prevention and Drug and Alcohol Needs Assessment, November 2017

(iv) Aboriginal Health (including chronic disease)

Outcomes of the service needs analysis-Aboriginal health (including chronic disease)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service access	Hospitalisations	For Aboriginal people is around double that of non-Aboriginal people	**Whole of PHN** In WNSW PHN, between July 2012 and June 2017, the annual average rate of all hospitalisations in Aboriginal residents was almost twice that for non-Aboriginal people, 62,303.7 compared to 33,339.6 per 100,000 population, respectively. Source: Centre for Epidemiology and Evidence, NSW Ministry of Health Available at: http://www.healthstats.nsw.gov.au Accessed: 5.11.2018
	Emergency presentations	Over-representation of Aboriginal people presenting to Emergency needs further analysis	At stakeholder yarning workshops, the over-representation of Aboriginal people presenting to EDs and being hospitalised was highlighted in the Western NSW HIU data presentations in all communities where workshops were held. *Source: Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
		A need for local hospital services to work more closely with Aboriginal Medical and Health Services to reduce low acuity ED presentations	Local Aboriginal Medical Services expressed a willingness to work more closely with hospitals to support Aboriginal patients presenting to EDs and to consider adjustments to opening times to reduce the burden on hospital ED services caused by low acuity presentations. *Source: Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Identification of Aboriginal patients	Undercount of Aboriginal people due to inconsistent identification procedures	From stakeholder yarning workshops, an apparent under count of the Aboriginal population in some areas, such as Orange, emphasised the importance of health services providing an opportunity for all patients to identify and not those who '*look Aboriginal*'. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

Outcomes of the service needs analysis-Aboriginal health (including chronic disease)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service access	Primary health care	More GPs or quality of GP service was the most important first service improvement needed for Aboriginal people in the community	**Whole of PHN** In 2018, 23% of Aboriginal participants of the WNSW Telephone Community Health Survey rated more GPs or better-quality GP services as the first improvement need in their community. Source: *Telephone Community Health Survey for Western NSW PHN Report, 28 August 2018.*
	Primary health care service utilisations	Increase in MBS funded GP Health Assessments services for Aboriginal patients	**Whole of PHN** Between July 2014 to June 2017, the number of MBS funded GP Health Assessments for WNSW PHN Aboriginal residents has increased by 15%, from 12,885 in 2014-15 to 14,838 in 2016-17. Source: Department of Health Data *Medical Benefits Schedule data* Available at: http://www.health.gov.au/internet/main/publishing.nsf/Content/PHN-MBS_Data Accessed: 31/10/2018
		Increase in the MBS funded follow-up services for Aboriginal patients following a Health Assessment by a Practice Nurse/Aboriginal Health Worker	**Whole of PHN** In WNSW PHN, between July 2014 and June 2017, the number of MBS funded Health Assessment follow-up services provided to Aboriginal patients by a Practice Nurse or Aboriginal Health Worker has increased by almost a quarter, from 37,845 in 2014-15 to 46,407 in 2016-17. Source: Department of Health Data *Medical Benefits Schedule data* Available at: http://www.health.gov.au/internet/main/publishing.nsf/Content/PHN-MBS_Data Accessed: 31/10/2018
	Aboriginal Community Controlled Health Services	Aboriginal Community Controlled Health Organisations (ACCHOs) and Aboriginal Medical Services (AMSs)	**Whole of PHN** Within the PHN, the Bila Muuji Consortium, 15 ACCHOs and 3 AMS provide primary health care for Aboriginal people and their families who may or may not identify as Aboriginal.

Outcomes of the service needs analysis-Aboriginal health (including chronic disease)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service Access	Outreach primary care services	Provided to regional, rural and remote communities	As of September 2018, Aboriginal Health Professional outreach services were provided to 16 communities in the WNSW PHN footprint by 4 Health services, 3 of which are Aboriginal Community Controlled Health Organisations (ACCHOs). These include: • Aboriginal Education Officers services provided in Broken Hill, Ivanhoe, Menindee and Wilcannia • Aboriginal Health Practitioner services provided in Bourke, Broken Hill, Forbes and Wilcannia • Aboriginal Health Worker, audiometry services provided in Coonamble, Dubbo, Dunedoo, Gilgandra, Narromine, Nyngan, Peak Hill, Trangie, Warren and Wellington. Source: NSW Rural Doctors Network Outreach Services, 2018 Available at: https://www.nswrdn.com.au Accessed: 5/11/2018
	Integration of cultural safety into all health services	Improve health professional yarning practices to better engage Aboriginal patients that are inclusive of family	From stakeholder yarning workshops, a need to teach more health professionals about culture and yarning practices was highlighted as a better way to engage with their Aboriginal patients and their families, to improve health outcomes. Group yarns between community and health services were encouraged. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
		A need for co-designed health services which are community led and centred, with active involvement from the local Aboriginal community.	From stakeholder yarning workshops, it was identified that service uptake by Aboriginal people may be improved through authentically co-designed services. Community members explained that early consultation would ensure service planning would improve cultural safety and increase uptake of services when delivered locally. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

Outcomes of the service needs analysis-Aboriginal health (including chronic disease)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Service Access	Integration of cultural safety into all health services	A need to acknowledge Elders and cultural advisors to provide traditional insight when developing programs	From stakeholder yarning workshops, the importance of acknowledging Elders as cultural advisors who provide traditional insight and authentically involving Elders early on when developing programs could improve uptake of services in communities. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Transport and affordability	A need for 'one-stop' health care services to avoid missed appointments and improve continuity of care	From stakeholder yarning workshops, anecdotal reports of community members being denied services because they had missed previous appointments. Health leaders present noted that there are many missed appointments because people are being referred onto other services, while community members suggested that lack of transport and high costs were sometimes the reason for 'not turning up'. It was noted that denying people services because they have missed some appointments does not address fundamental issue about why consumers are not able to access services. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

Outcomes of the service needs analysis-Aboriginal health (including chronic disease)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Health systems and coordination	Integration of Aboriginal health information systems	Data access issues due to lack of integration of health information systems for Aboriginal people's health information	
Chronic disease management	Chronic disease Management – commissioned services	An increase in Integrated Team Care (ITC) services	**Whole of PHN** The WNSW PHN ITC is a brokerage service for complex care for Aboriginal people with a diagnosed chronic condition. In 2017-18 there were almost 3 times the services provided for ITC than in 2016-17, 14,170 compared to 5,451, respectively.
		Chronic Disease Management and Prevention Program	**Whole of PHN** General practice-based services including chronic disease practice nurses, Aboriginal Health Workers and visiting allied health workers. It targets Aboriginal people aged 15 years and over living with, or at high risk of developing, two or more chronic diseases.
		Transport Coordination Service	**Whole of PHN** This is a whole of region phone and online transport information service enabling access to health appointments.
		A need for coordinated medication management reviews to improve patient outcomes	From stakeholder consultation workshops, clinicians identified a need to improve medication management for those Aboriginal patients with a multi-health service interaction experience. *Source: Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

Outcomes of the service needs analysis-Aboriginal health (including chronic disease)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Chronic disease management and prevention	Chronic Disease Prevention and health promotion	Lack of culturally safe healthy lifestyle programs, particularly in remote communities	From stakeholder yarning workshops, community members highlighted a priority need for chronic disease prevention programs across all life stages, that are: • culturally safe • co-designed • evidence-based • community led • delivered in community. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
		Health literacy impacts on patients' self-care and management of their health	From stakeholder yarning workshops, health professionals need to consider the health literacy levels of their Aboriginal patients who may feel 'shame at not knowing', and therefore not ask questions or seek advice. To assist patients and their carers to better manage their own health, strategies to address low health literacy are critical to improving health outcomes, including group yarning. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

Outcomes of the service needs analysis-Aboriginal health (including chronic disease)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
First 2000 days of life	Maternity services	Improved support services for Aboriginal mothers and partners or family who are birthing off country.	From stakeholder yarning workshops, it was noted that birthing facilities are only available in the 4 regional hospitals and 5 procedural hospitals; mothers living in smaller rural and remote communities must travel to one of the 9 birthing facilities. While acknowledging that the LHDs' Aboriginal Maternal and Infant Health Services (AMIHS) support expectant mothers with transport to the birthing facility, the community expressed a lack of support for the partners and families, meaning many mothers were alone and off country when giving birth. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Parenting support	Need for parenting education programs to support new parents to help their children to grow up healthy which are inclusive of fathers	From stakeholder yarning workshops, programs to help encourage strong families, particularly supporting parents to help their children grow up healthy in their family and community, were identified gaps. A need for education services for parents with children with diabetes was noted and suggestions for education initiatives based on intervention in early childhood services were put forward. Communities expressed the need for education for new fathers to feel more confident to support their families and that the phrase 'Mums and Bubs' leaves Dads out. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

Outcomes of the service needs analysis-Aboriginal health (including chronic disease)			
Priority	**Early intervention**	**Key Issue**	**Description of Evidence**
First 2000 days of life	Prevention-immunisation	Rates of immunisation in Aboriginal children were higher than national levels, however, rates for 2-year old Aboriginal children were less than 90%	**Whole of PHN** • In 2016-17, the proportion of 1-year old WNSW PHN resident Aboriginal children fully immunised was more than that for Australia, 92.9% compared to 92.2%, respectively. • In 2016-17, the proportion of 2-year old WNSW PHN resident Aboriginal children fully immunised was higher than that for Australia, 88.8% and 88.6%. • In 2016-17, the proportion of 5-year old WNSW PHN resident Aboriginal children fully immunised was higher than that for Australia, 97.0% compared to 95.7%; and higher than the rate for all WNSW PHN resident 5-year old children fully immunised. Source: Australian Institute of Health and Welfare analysis of Department of Human Services, Australian Immunisation Register statistics 2016–17, data supplied 05 September 2017 Available at: https://www.myhealthycommunities.gov.au Accessed: 19.10.2018
	Prevention-healthy start to life	Smoking cessation programs for pregnant mothers	From stakeholder yarning workshops, a need for increased access to smoking cessation programs delivered by local AHS was needed to reduce the high proportion of pregnant mothers who smoke. *Source: Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Early intervention	Lack of FASD screening and support services	From stakeholder yarning workshops, anecdotal reports of Aboriginal mothers consuming alcohol during pregnancy had the potential to increase the prevalence of FASD, particularly in rural and remote communities. A systematic approach to FASD screening and support service provision was highlighted as a need to reduce developmental vulnerability in young Aboriginal children. *Source: Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

Outcomes of the service needs analysis-Aboriginal health (including chronic disease)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Aged care and older people	Access to aged home care packages	Higher than national average rate of admissions into permanent residential aged care and lower rates for home care package access. Rates were higher in females than males.	**Whole of PHN** In 2016-17, of the target WNSW PHN population (all people aged 65 years and over and Aboriginal people aged 50 to 64 years), the rate of admissions to **permanent residential care** who identified as Aboriginal was 0.5 per 1,000 target population. Rates were higher for Aboriginal males, than Aboriginal females, 0.3 compared to 0.2 per 1,000 population, respectively. For the reporting period, rates of access to home care was higher than that for permanent residential care for the WNSW PHN target population who identified as Aboriginal, 0.7 per 1,000 target population and higher for Aboriginal females than Aboriginal males, 0.5 compared to 0.2 per 1,000 target population, respectively. Source: https://www.gen-agedcaredata.gov.au/Topics/Admissions-into-aged-care/Explore-admissions-into-aged-care Accessed: 2/11/2018
		Improved education and support in accessing and assessment for MyAgedCare for older Aboriginal people	From stakeholder yarning workshops, better awareness of, and access to, the MyAgedCare home care packages was highlighted to support older Aboriginal people who want to be cared for in the home. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
		Improved support services that are culturally safe for older Aboriginal people to stay at home	From stakeholder yarning workshops, the significance of the connection to country for all Aboriginal people, but especially older Aboriginal people was emphasised. Further that older Aboriginal people wish to be cared for at home in their own community in a culturally safe environment, and people they know. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

Outcomes of the service needs analysis-Aboriginal health (including chronic disease)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Mental health and services	Mental health services	Lack of affordable and accessible mental health services impacting on continuity of care and mental health outcomes	From stakeholder yarning workshops, a lack of access to acute and primary care mental health services in rural and remote communities was noted as a priority issue. The perception that a lack of culturally safe, locally available and publicly funded mental health services was impacting negatively on mental health outcomes in the local Aboriginal community. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
	Sorry business: loss and grieving	A need for culturally appropriated loss and grief spaces in hospitals	From stakeholder yarning workshops, a lack of health service acknowledgement of the significance that sorry business, loss and grieving, is to the Aboriginal community and the need for local hospital services to provide culturally safe spaces and support services. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
		Low uptake of mental telehealth services due to a lack of cultural safety.	From stakeholder yarning workshops, clinicians explained that when clients are speaking with treating mental health professionals, they are often sharing very personally traumatic experiences. They did not feel the sterile atmosphere of a telehealth service was private and personal enough. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*

Outcomes of the service needs analysis-Aboriginal health (including chronic disease)			
Priority	**Identified Need**	**Key Issue**	**Description of Evidence**
Alcohol and drug abuse	Drug and alcohol services	Lack of local detox and rehab services and a need for multipurpose models that are inclusive of a mental illness history	From stakeholder yarning workshops, a need for locally accessible detoxification and rehabilitation services, on country, and inclusive of people with a history of mental illness was a very high priority for the Aboriginal community. These need to be co-designed with the community, led and mentored by local Aboriginal people with a lived experience of these issues. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
		Liaise with justice health to support newly released inmates in the community to address drug and alcohol addictions	From stakeholder yarning workshops, Aboriginal people who are exiting prison expressed a strong need for support on country for drug and alcohol addictions. There is a strong desire to avoid reverting to drug and alcohol addictions, and willingness from local Aboriginal services to support a co-design of strategies and services. Source: *Western NSW Needs Assessment Consultation Workshops 2018 Final Report*
Health workforce	Aboriginal health professional workforce	Support and encourage local aboriginal health workforce with career development options in the community	From stakeholder yarning workshops, the locally developed Aboriginal health workforce increases engagement with, and uptake of, health services by Aboriginal people. A need to support AHW to develop their career through education and advancement options was emphasised

Section 4 – Opportunities, priorities and options

(i) General Population Health

Opportunities, priorities and options-general population health			
Priority	**Possible Options**	**Expected Outcome**	**Potential Lead**
Service Access	(1) Work with General Practice to build capacity and support development of new business models aiming to provide onsite access to integrated key primary care health services within practices (2) Work with General Practice, AMSs and the LHDs reduce ED presentations of low acuity and support General Practice and AMSs	(1) • Increase access to allied health and pharmacy services • Improve the continuity of care • Improve patient experience (2) Reduce low acuity ED presentations	(1) PHN and GPs (2) PHN, LHD, GPs, ACCHOs
	(3) Work with southern border-town communities to improve access and coordination of services cross-border	• Improved access to services • Improve continuity of care	PHN
	(4) Support programs to address transport needs and access to affordable transport for medical appointments, including improving consumer awareness of existing transport options and programs. (5) Advocate for improved coordination of transport services with specialist and hospital services to meet the needs of people living in regional and remote areas	• Improved access to services • Improved management of chronic conditions and continuity of care	PHN

Opportunities, priorities and options-general population health			
Priority	**Possible Options**	**Expected Outcome**	**Potential Lead**
Service Access	(6) Supporting improved videoconferencing with specialists to reduce travel for patients and consider cross-sectoral collaboration to implement in rural and remote towns	Increased uptake of MBS funded telehealth services in rural and remote communities and hard to reach groups, e.g. Aboriginal communities	LHDs and supported by PHN
	(7) Increase engagement with Local Government to understand and address local barriers to access	Increase access to services	PHN
	(8) Increase after hours GP access in rural and remote communities, including afterhours GP phone assistance	Reduced low acuity ED presentations, particularly in rural and remote communities	PHN and GPs
Health workforce	(1) Lead the development of coordinated strategy in collaboration with NSW RDN, LHDs and General Practice to meet the local recruitment and retention of the health workforce. (2) Support partnerships with relevant health organisations and stakeholders to work towards addressing General Practice, Allied Health and Pharmacy workforce shortages (3) Advocate to the Commonwealth to strengthen initiatives that support rural partnerships to recruit and retain the health workforce. (4) Support a partnership model with LHDs and health care providers, via commissioning of	(1), (2), (3) The development of and implementation of the Western NSW Primary Healthcare Workforce 2030 Planning Framework. (4) Reduce rural and remote workforce shortages	1), (2), (3) NSW RDN in partnership with PHN and LHDs (4) LHDs/PHN collaboration

Opportunities, priorities and options-general population health			
Priority	**Possible Options**	**Expected Outcome**	**Potential Lead**
Health workforce	(5) Supporting improved videoconferencing with specialists to reduce travel for patients and consider cross-sectoral collaboration to implement in rural and remote towns	Increased uptake of MBS funded telehealth services in rural and remote communities and hard to reach groups, e.g. Aboriginal communities	LHDs and supported by PHN
	(6) Increase engagement with Local Government to understand and address local barriers to access	Increase access to services	Local health councils supported by PHN
	(7) Increase after hours GP access in rural and remote communities, including afterhours GP phone assistance	Reduced low acuity ED presentations, particularly in rural and remote communities	PHN
Health systems and coordination	(1) Development of strategies to improve awareness of services and referral pathways including: • Explore options and feasibility to determine how Health Pathways type care mapping and referral systems could be applied across the WNSW PHN region • Support GPs to work more closely with FW LHD and WNSW LHD and other community health and specialist services and advocate for improved referral systems • Development of a communication strategy for commissioned health services and other services providers to raise awareness of services with local health councils, local councils and shires and community groups	• Improved efficiency and effective provision of health services • Improved care continuity • Reduced waiting times • Reduced avoidable hospital admissions • Improved patient experience and outcomes • Increased service utilisation	PHN

Opportunities, priorities and options-general population health			
Priority	**Possible Options**	**Expected Outcome**	**Potential Lead**
Health systems and coordination	(2) Primary care engagement and practice support: **General Practice Liaison (GPL)** Program: • Engage GPs to broker a relationship between general practice and the Local Health District management and services across the region	• Establishment of clinical network (s). • Joint planning and collaboration • Improved health system integration that facilitates secure and efficient patient information and care plan transfer • Improve patient experience and outcomes	PHN and WNSW LHD joint collaboration
First 2000 days of life	(1) Increase access to early intervention screening (particularly occupational and speech therapy) and follow-up services by creating, or collaborating with existing, health and preschool partnerships. This could include: • Commissioning services for early intervention in collaboration with the LHD and aligned with other services. • Coordinate services with clear referral pathways • Consider collaborating with service providers delivering early intervention screening and support services and local preschools	• Increased access to service • Reduced levels of developmental vulnerability in school-aged children	PHN Consider collaborating with services providers conducting early intervention screening and support services and the education sector

Opportunities, priorities and options-general population health			
Priority	**Possible Options**	**Expected Outcome**	**Potential Lead**
First 2000 days of life	(2) lower immunisation rates in hard to reach communities and vulnerable populations (3) Increase childhood immunisation data quality improvement activities	• Increase percentage of Aboriginal children aged 1 and 2 years of age who are fully immunised	PHN
Chronic disease management and prevention	(1) Development of a primary and secondary preventative strategies: • Support the expansion of healthy lifestyle education programs across all life stages especially in Far West and North West of the State. • Encourage general practice to refer clients to preventative health strategies and programs • Support the expansion of smoking cessation and weight management support services • Improve health literacy and support pharmacies and general practice as key delivery points • Innovative cervical cancer and other cancer preventative screening • Support successful non-government health screen programs that are gender specific and target vulnerable populations	• Reduce potentially avoidable deaths • Reduce potentially preventable hospitalisations • Reduce prevalence of chronic disease risk factors	Collaboration with LHDs, NGOs, GPs and Pharmacy (where relevant)

Opportunities, priorities and options-general population health			
Priority	**Possible Options**	**Expected Outcome**	**Potential Lead**
Chronic disease management and prevention	(2) Improve integration of, and access to, existing chronic and complex care programs: • Improve coordination and awareness of referral pathways for chronic disease management services and promote locally available services • Improve access to chronic disease management services in areas of poorest health outcomes – Far West and North West NSW. • In smaller communities, encourage local networking for referral to services and collaborate with local councils and shires • Support General Practice to build capacity in chronic disease management and prevention through implementation of evidence-based business models, generating income through provision of MBS rebated services to employ integrated multi-disciplinary teams	• Reduced waiting times • Reduce unplanned hospital admissions • Improve patient experience and outcomes • Increased revenue for General Practice	PHN in collaboration with GPs and RDN
	(3) Support the integration of pharmacy into General Practice to improve medication management and patient health literacy and education. • Apply evidence-based and successful business models such as Pharmacy in General Practice	• Reduced unplanned hospital admissions • Reduced medication-related deaths	PHN in collaboration with GPs and Pharmacy

Opportunities, priorities and options-general population health			
Priority	**Possible Options**	**Expected Outcome**	**Potential Lead**
Digital Health	(1) In collaboration with stakeholders, plan and invest in the implementation of a **Regional Electronic Health Record** solution to enable timely access to relevant clinical data and to support remote clinical service delivery. This will complement (not duplicate) **My Health Record** and other strategic eHealth initiatives.	• Provide core, real time medical information to clinicians that is interoperable and fit for purpose	PHN
	(2) **My Health Record** • Support general practice and other health care providers to utilise My Health Record • Promote the benefits of My Health Record to consumers • Cross organisational collaboration to ensure secure and effective use	• Increased use of My Health Record by consumers and providers • Reduced opt out numbers • Increased interaction by providers and patients	PHN
	(3) Expand telehealth access Advocate for multisectoral collaboration to support telehealth in rural and remote communities with internet connectivity issues. • Engage with local general practice, pharmacies, other local service agencies and community groups to facilitate local telehealth service provision • Expand patient-end care navigators to support vulnerable groups Advocate for block funding for telehealth to increase service utilisation and consider mixed funding models	• Improved access to services for rural and remote communities • Increase in PHN and MBS funded telehealth services	PHN

Opportunities, priorities and options-general population health			
Priority	**Possible Options**	**Expected Outcome**	**Potential Lead**
Aged care and older people	(1) Advocate to improve access to assessment and aged care services available through MyAgedCare including: • Collaborate with LHDs, and in particular, with WNSW LHD who are currently developing a Healthy Aging Strategy to ensure alignment of activities • Support existing programs run by local government agencies and Live Better which have tailored programs for people living independently in their homes	• Decrease in rate of aged care admissions • Reduce unplanned hospital admissions	PHN
	(2) Increase primary health care access in aged care facilities: • Advocate for funding models to support GP, pharmacy and allied health attendance to RACF	• Increase in MBS funded RACF primary health care services	PHN
	(3) Support the development of primary and secondary preventative strategies: • Expand healthy lifestyle education and falls prevention programs especially in Far West and North West of the State.	• Increase number of preventive programs and services delivered • Reduce the prevalence of chronic disease and comorbidities	LHDs and PHN

Opportunities, priorities and options-general population health			
Priority	**Possible Options**	**Expected Outcome**	**Potential Lead**
Aged care and older people	• Encourage pharmacy and general practice to refer clients to preventative health strategies and programs • Improve health literacy programs and support pharmacies and general practice as key delivery points		

(ii) Primary Mental Health Care (including Suicide Prevention)

Opportunities, priorities and options-primary mental health care (including suicide prevention)			
Priority	**Possible Options**	**Expected Outcome**	**Potential Lead**
Mental health and services	Suicide prevention: 1) Continue to support contracted providers to implement a hybrid systems-based approach to suicide prevention utilising most relevant components of the Lifespan model and recommendations of the Aboriginal and Torres Strait Islander Suicide Prevention Evaluation Project Report (2016) 2) Establish a community-based service for individuals with low intensity suicidal thoughts and for people following a suicide attempt. Service will also provide support to close family members and friends 3) Host a forum bringing together suicide prevention service providers, community suicide prevention networks and people with lived experienced. 4) Continue to provide scholarships and support for residents in rural and remote LGAs to complete a Certificate 4 in Community Services to build capacity for suicide prevention.	• Reductions in suicides and suicide attempts • Develop a comprehensive suicide prevention plan for the region. • Increase the local suicide prevention workforce across rural and remote LGAs	PHN

Opportunities, priorities and options-primary mental health care (including suicide prevention)			
Priority	**Possible Options**	**Expected Outcome**	**Potential Lead**
Mental health and services	(5) Improve targeting of psychological interventions to support those with, or at risk of, mild mental illness by commissioning low intensity mental health services. (6) Commission primary mental health care services for people with **severe mental illness** being managed in primary care, including clinical care coordination for people with severe **and complex mental illness** through the phased implementation of primary mental health care packages and the use of mental health nurses. (7) Encourage and promote a regional approach to **suicide prevention** including community-based activities and liaising with Local Hospital District (LHDs) and other providers to help ensure appropriate follow-up and support arrangements are in place at a regional level for individuals after a suicide attempt and for other people at high risk of suicide.	(5) Improved access to psychological therapy (6) • Reduced mental health hospitalisations • Improved patient experience (7) • Priorities included in health partner organisational mental health plans. • Improved patient and carer support after suicide attempt Increased number of GPs trained in managing suicidal patients	PHN

Opportunities, priorities and options-primary mental health care (including suicide prevention)			
Priority	**Possible Options**	**Expected Outcome**	**Potential Lead**
Mental health and services- psychosocial support	Psychosocial support 1) Continue to gather quantitative data about the size and geographical locations of NPSM cohort in our region 2) Build and strengthen collaborative working relationships with key stakeholders 3) Undertake a co-design workshop with current providers and other relevant stakeholders for a trial service (s) of the NPSM covering the WNSW PHN region	(1) Better evidence for service planning purposes a. NDIA, consumer and carer representatives participate in service design, monitoring and evaluation, including structured consultations with consumers and carers (2) a. All relevant knowledge and skills contribute to the design of a trial program, leading to better 'buy-in' for the new measure. b. A trial of service(s) will enable evaluation information to be gathered about client experiences and any operational challenges etc. Learnings will inform the design of the 'ongoing' service(s) subsequently commissioned.	

Opportunities, priorities and options-primary mental health care (including suicide prevention)			
Priority	**Possible Options**	**Expected Outcome**	**Potential Lead**
Population health	(1) Collaborate with health and education partners to develop a systematic approach to social and emotional wellbeing and mental illness prevention and mental health literacy programs and commission services that: • target vulnerable groups • are co-designed with local communities • utilise and integrate existing services • evidence-based (2) Explore better identification of the LGBTI population needs within WNSW PHN, especially in remote and rural area and safer and more appropriate service delivery contexts for LGBTI population.	(1) • Increase in number of mental health promotion services • Reduced mental health stigma • Reduced prevalence of mental health risk • Reduced unplanned mental disorder hospital admissions • Reduced ED mental health-related problem presentations (2) Increase in access of services to LGBTI population	PHN in collaboration with LHD and mental health service providers

Opportunities, priorities and options-primary mental health care (including suicide prevention)			
Priority	**Possible Options**	**Expected Outcome**	**Potential Lead**
Health Workforce	(1) Address mental health workforce recruitment and retainment issues, by building a better funding model that allows service providers to offer more flexible and attractive roles to mental health workers, with cross over of LHD funded and primary sector funded positions, within a defined stepped-care model. (2) Redesign of the current Mental Health Nurse Incentive Program (MNHIP) model and the role of Credentialed Mental Health Nurses (CMHN). (3) Fund service providers to provide a comprehensive range of stepped-care services and ensure the CMHNs are better utilised as part of the primary mental health team.	(1) • Reduced mental health professional vacancies • Reduced waiting times (2) and (3) • Increased MBS funded MNHIP services • Reduced mental health nurse vacancies	PHN in collaboration with LHDs and RDN

(iii) Alcohol and Other Drug Treatment Needs

Opportunities, priorities and options-alcohol and other drug treatment needs			
Priority	**Possible Options**	**Expected Outcome**	**Potential Lead**
Alcohol and drug services	(1) Develop community-based drug and alcohol detoxification and rehabilitation programs that are: • inclusive of mental health, trauma-informed care, and family focused; • co-designed with community; • culturally safe for Aboriginal people • engaging with justice health and legal services	• Reduced emergency presentations for alcohol and illicit substance related problems • Reduced crime rates • Reduced interpersonal violence-related hospitalisations	PHN in collaboration with LHD, Justice Health
	(2) Support general practice to increase capacity to play a central role in drug and alcohol abuse screening and treatment through: • Education, training and support of GPs, particularly in relation to evidence-based guidelines for early intervention, withdrawal management and other drug and alcohol treatment protocols	• Increase in number of practices with D&A nurses • Increase the number of GPs trained in evidence-based guidelines for early intervention • Increase in referrals to allied health staff for D&A problems	PHN
	(3) Support strategies to increase access to addiction medicine specialists including access to specialist advice for GPs	• Increased number of patients who access specialist drug and alcohol services	PHN in collaboration with LHD

Opportunities, priorities and options-alcohol and other drug treatment needs			
Priority	**Possible Options**	**Expected Outcome**	**Potential Lead**
Alcohol and drug services	(4) System redesign and service improvement through: • Trial of a drug and alcohol Stepped Care Model • Invest in place-based planning to complement an integrated stepped care approach, based on the hub and spoke model	• Improve access to services • Reduced unplanned admissions to hospitals • Reduced emergency presentations for alcohol and illicit substance related problems • Reduced crime rates • Reduced interpersonal violence-related hospitalisations	LHD and PHN
Health Workforce	(5) Address service gaps in **rural and remote areas and other under-serviced and/or hard to reach populations**, making optimal use of the available service infrastructure and workforce, including: • Support prescribers and dispensers to support the increase in drug and alcohol treatment by improving referral pathways. • GP Ambulatory detoxification services • Prescribing practices to support those with drug and alcohol problems including opiate treatment	• Increased in number of GPs who provide supervision for home detoxification • Increased in number of GPs who prescribe for opiate treatment • Improved access to opioid treatment across the district	PHN in partnership with GPs

Opportunities, priorities and options-alcohol and other drug treatment needs			
Priority	**Possible Options**	**Expected Outcome**	**Potential Lead**
Population health	(6) Incorporate health promotion strategies where feasible into currently funded clinical drug and alcohol initiatives	• Reduction in smoking rates and harmful levels of alcohol misuse	LHD and PHN

(iv) Aboriginal Health (including chronic disease)

Opportunities, priorities and options-Aboriginal health (including chronic disease)			
Priority	**Possible Options**	**Expected Outcomes**	**Potential Lead**
Service access	(1) Co-design commissioned services with the local Aboriginal health organisations and community, to lead patient-centred, culturally safe care. This co-design should be inclusive and acknowledge Aboriginal Elders cultural insights.	• Culturally safe service delivery that meet the community's needs • Improved uptake of services • Improved access of services	PHN, with ACCHOs, Aboriginal community and LHD
	(2) Support programs to address transport needs and access to affordable transport for medical appointments, including improving consumer awareness of existing transport options and programs. (3) Advocate for improved coordination of transport services with specialist and hospital services to meet the needs of people living in regional and remote areas.	• Improved access to services • Improved management of chronic conditions and continuity of care	PHN, with State Government Agencies, Local Government and transport providers
	(4) Work with General Practice, AMSs and the LHDs reduce ED presentations of low acuity and support General Practice and AMSs.	Reduce low acuity ED presentations	PHN, LHD, GPs, ACCHOs

Opportunities, priorities and options-Aboriginal health (including chronic disease)			
Priority	**Possible Options**	**Expected Outcomes**	**Potential Lead**
Service access	(5) Support programs to improve Aboriginal health literacy as well as the development of suitable, culturally appropriate resources for people with low literacy levels to communicate important health messages.	• Improved health literacy • Improved cultural safety of services • Improved health outcomes for Aboriginal people	PHN, LHD, GPs, ACCHOs
	(6) Continue to work with general practice and other care providers to improve their ability to yarn with Aboriginal patients and provide accessible information about their health, delivered in a culturally safe way.	• Improved health literacy • Improved cultural safety of services • Improved health outcomes for Aboriginal people • Reduced ED presentations • Improved health data for Aboriginal people • Increase uptake of health services	PHN, LHDs, ACCHOs
	(7) Support assistance to navigate and coordinate care for people with complex and chronic conditions, particularly in accessing specialist services, arranging travel and providing other support as needed.		
	(8) Encourage general practice to consistently use a universal method of identification of Aboriginal patients to improve data quality and support targeting of services		

Opportunities, priorities and options-Aboriginal health (including chronic disease)			
Priority	**Possible Options**	**Expected Outcomes**	**Potential Lead**
First 2000 days of life	(9) Increase access to early intervention screening (particularly occupational and speech therapy) and follow-up services for Aboriginal children by creating, or collaborating with existing, health and preschool partnerships. This could include: • Commissioning services for early intervention in collaboration with the AMSs & LHDs and aligned with other services. • Coordinate services with clear referral pathways • Consider collaborating with service providers delivering early intervention screening and support services and local preschools • Ensure services are accessible to Aboriginal people, particularly in small communities	• Increased access to service • Reduced levels of developmental vulnerability in school-aged children	PHN, in collaboration with ACHHOs and services providers conducting early intervention screening and support services and the education sector

Opportunities, priorities and options-Aboriginal health (including chronic disease)			
Priority	**Possible Options**	**Expected Outcomes**	**Potential Lead**
First 2000 days of life	(10) Introduce culturally safe programs to support stronger Aboriginal families. These to include health literacy and health care education for parents of children with chronic diseases, such as diabetes, disabilities or other needs. Support programs for early parenting programs that: • Are evidence-based and culturally safe • Targe Aboriginal families; • Raise awareness of impact of early traumas on future mental health and drug and alcohol abuse e.g. domestic violence • Coordinated with clear referral pathways • Utilise existing services where possible	• Increase health outcomes for children • Reduce mental health issues in parents caring for children with long-term conditions	PHN in collaboration with Aboriginal community and ACCHOs
	(11) Commission services encouraging engagement with local Aboriginal Community Elders as cultural advisors to provide a traditional insight, particularly those supporting a good start to life for Aboriginal children	Improved uptake of services targeting Aboriginal children and their families	PHN in collaboration with Aboriginal community and ACCHOs
	(12) Support childhood immunisation strategies to address lower immunisation rates in hard to reach communities and vulnerable populations including: • Collaboration with the LHD Aboriginal Health Immunisation workers to include joint visits to ACCHOs and AMS and support overdue follow-strategies (13) Increase childhood immunisation data quality improvement activities	Increase percentage of Aboriginal children aged 1 and 2 years of age who are fully immunised	LHD, in partnership with ACCHOs and PHN

Opportunities, priorities and options-Aboriginal health (including chronic disease)			
Priority	**Possible Options**	**Expected Outcomes**	**Potential Lead**
First 2000 days of life	(14) Support ACCHOs and AMSs to engage with the local hospital services to develop strategies including extending opening hours of Aboriginal Health Services, after-hour GP clinics with Aboriginal Health Professionals and Liaison Officers	Reduction in low acuity presentations to EDs in Aboriginal children aged 0-4 years of age	PHN to provide a coordination role with ACCHOs, AMS and LHD
Aged care and older people	(15) Advocate for improved culturally safety of assessment and access to MyAgedCare	Increased access to aged care packages through MyAgedCare for Aboriginal people	MyAgedCare and service providers with advocacy from PHN
Chronic disease management and prevention	Recommendations to address Aboriginal chronic disease are included in the general population chronic disease management section. **Please refer to pages (125-126)**		

Opportunities, priorities and options-Aboriginal health (including chronic disease)			
Priority	**Possible Options**	**Expected Outcomes**	**Potential Lead**
Mental health and services	(16) Continue funding for the establishment and support of Indigenous community-based Suicide Prevention Networks with a focus on rural and remote locations. (17) Support the role of ACCHOs in the National Suicide Prevention Trial in 3 LGA sites. Service KPI's include undertaking work in alignment with the Lifespan systems-based approach and recommendations of the National Aboriginal and Torres Strait Islander Suicide Prevention Evaluation Project. (18) Continue to include KPI's in contracts with mainstream suicide prevention providers to target Aboriginal people (19) Collaborate with other Federal and State providers of funding to Aboriginal health services and programs to map current contracts across WNSW PHN and monitoring and reporting mechanisms.	(16) • Local community leadership in the design and delivery of suicide prevention activities • Increase knowledge and skills in recognising and supporting suicidal individuals. (17) • Local community led, evidence-based suicide prevention interventions delivered • Increased community and ACCHO workforce knowledge about recognising and supporting suicidal individuals • Reductions in presentations to ED (18) Indigenous people targeted by all suicide prevention service providers. (19) Development of standardised process for grant applications/reports	PHN in collaboration with ACCHOS, Aboriginal community, service providers and NDIA. PHN in collaboration with ACCHOS, Aboriginal community, service providers and NDIA.

Opportunities, priorities and options-Aboriginal health (including chronic disease)			
Priority	**Possible Options**	**Expected Outcomes**	**Potential Lead**
Mental health and services	(20) Continue to require that all commissioned services comply with WNSWPHN's cultural safety framework and report annually on progress. (21) Advocate for and support the improvement of access to NDIS packages	(20) All funded services are culturally safe and responsive. (21) Increased access to NDIS packages for Aboriginal People	PHN in collaboration with ACCHOS, Aboriginal community, service providers and NDIA.
	(22) Support Aboriginal communities and ACCHOs to increase their capacity in Social and Emotional Wellbeing (SEWB). This will include: • Working with ACCHOs to build local capability • Workforce support • Funding for training and program costs associated with SEWB programs There will also be a focus on trauma informed care; cultural strengthening and healing; grief and loss; and promotion of SEWB.	Improved access to a qualified and supported SEWB workforce and a variety of culturally safe SEWB programs across the region, with flexibility to meet local needs.	Collaboration between PHN, ACCHOs, AH&MRC and PM&C.

Opportunities, priorities and options-Aboriginal health (including chronic disease)			
Priority	**Possible Options**	**Expected Outcomes**	**Potential Lead**
Alcohol and drug abuse	(23) Develop a GP ambulatory withdrawal program that integrates connected services such as social & emotional well-being, mental health, family and community approaches. (24) Develop a culturally appropriate co-designed mobile day rehab program delivered in communities.	(23) Improved access to ambulatory detox in the community (24) • Increase in number of GPs who provide supervision for ambulatory detox • Reduced emergency presentations for alcohol and illicit substance related problems	LHD, with PHN and PM&C
	(25) Advocate for increased number of permanent drug and alcohol rehab facilities in remote communities so that consumers can receive services on country (particularly Far West NSW).	Improved access to drug and alcohol rehab programs in the community	PHN with Aboriginal Community
	(26) Support the development of an integrated health care model with justice health.	Improved care coordination for corrections clients with drug and alcohol issues	LHD and Justice Health

Opportunities, priorities and options-Aboriginal health (including chronic disease)			
Priority	**Possible Options**	**Expected Outcomes**	**Potential Lead**
Health workforce	27) Improve access to mainstream health and community services through more Aboriginal care coordinators. 28) Provide training in cultural safety for health professionals to improve cultural competence and ability to tailor services to meet the needs of Aboriginal people. 29) Support career development pathways for Aboriginal health professionals, to increase the stainability of local workforce. This could be done in collaboration with the NSW Aboriginal Health Workforce coordinator.	(27) Improved health outcomes for Aboriginal People (28) Increased numbers of Aboriginal health professionals (29) Increased cultural safety of services	27) PHN & LHD 28) PHN 29) RDN in collaboration with PHN, ACCHOS, LHD, RDN and Universities
Digital health	(30) Expand the care navigator's role to support the delivery of telehealth services in ACCHOs and AMSs and increase accessibility for Aboriginal people use these services within mainstream providers. (31) Education and promotional materials for digital health products to be culturally appropriate. (32) Evaluation of current telehealth and online/app services for Aboriginal communities to understand usage, cultural safety and service improvements.	Increased update of digital health services for Aboriginal people	PHN, with Digital Health Agency and HealthDirect

Opportunities, priorities and options-Aboriginal health (including chronic disease)			
Health systems and coordination	Please refer to the recommendations in the general population (**pages 124-125)**		

Section 5 - Checklist

Requirement	✓
Governance structures have been put in place to oversee and lead the needs assessment process.	√
Opportunities for collaboration and partnership in the development of the needs assessment have been identified.	√
The availability of key information has been verified.	√
Stakeholders have been defined and identified (including other PHNs, service providers and stakeholders that may fall outside the PHN region); Community Advisory Committees and Clinical Councils have been involved; and Consultation processes are effective.	√
The PHN has the human and physical resources and skills required to undertake the needs assessment. Where there are deficits, steps have been taken to address these.	√
Formal processes and timeframes (such as a Project Plan) are in place for undertaking the needs assessment.	√
All parties are clear about the purpose of the needs assessment, its use in informing the development of the PHN Activity Work Plan and for the department to use for program planning and policy development.	√
The PHN is able to provide further evidence to the Department if requested to demonstrate how it has addressed each of the steps in the needs assessment.	√
Geographical regions within the PHN used in the needs assessment are clearly defined and consistent with established and commonly accepted boundaries.	√
Quality assurance of data to be used and statistical methods has been undertaken.	√
Identification of service types is consistent with broader use – for example, definition of allied health professions.	√
Techniques for service mapping, triangulation and prioritisation are fit for purpose.	√
The results of the needs assessment have been communicated to participants and key stakeholders throughout the process, and there is a process for seeking confirmation or registering and acknowledging dissenting views.	√
There are mechanisms for evaluation (for example, methodology, governance, replicability, experience of participants, and approach to prioritisation).	√