



Australian Government
Department of Health



An Australian Government Initiative

Primary Health Network Program

Needs Assessment Reporting

Template

This template may be used to submit the Primary Health Network's (PHN's) Needs Assessment to the Department of Health (the Department) by **15 November 2018**.

Name of Primary Health Network

Hunter New England & Central Coast

When submitting this Needs Assessment Report to the Department of Health, the PHN must ensure that all internal clearances have been obtained and the Report has been endorsed by the CEO.

Instructions for using this template

Overview

This template is provided to assist Primary Health Networks (PHNs) to fulfil their reporting requirements for Needs Assessment. The template includes sections to record needs for:

- General population health of the PHN region
- Primary Mental Health Care
- Indigenous Health (including Indigenous chronic disease)
- Alcohol and Other Drug Treatment Needs

Further information for PHNs on the development of needs assessments is provided on the Department's website (www.health.gov.au/PHN), including the *PHN Needs Assessment Guide*, the Mental Health and Drug and Alcohol PHN Circulars, and the Drug and Alcohol Needs Assessment Tool and Checklist (via PHN secure site).

The information provided by PHNs in this report may be used by the Department to inform program and policy development.

Format

The Needs Assessment report template consists of the following:

Section 1 – Narrative

Section 2 – Outcomes of the health needs analysis

Section 3 – Outcomes of the service needs analysis

Section 4 – Opportunities, priorities and options

Section 5 – Checklist

PHN reports must be in a Word document and provide the information as specified in Sections 1-5.

Limited supplementary information may be provided in separate attachments if necessary. Attachments should not be used as a substitute for completing the necessary information as required in Sections 1-5.

While the PHN may include a range of material on their website, for the purposes of public reporting the PHN is required to make the tables in Section 2 and Section 3 publicly available on their website.

Submission Process

The Needs Assessment report must be submitted to the Department, via a mechanism specified by the Department, on or before **15 November 2018**.

Reporting Period

This Needs Assessment report will be for a three year period and cover 1 July 2019 to 30 June 2022. It can be reviewed and updated as needed during this period.

Section 1 – Narrative

This section provides PHNs with the opportunity to provide brief narratives on the process and key issues relating to the Needs Assessment.

Needs Assessment process and issues

This Core Needs Assessment is an update of the Core Needs Assessment submitted in February 2018. This is a three year Needs Assessment which will inform the planning and delivery of all HNECC activities throughout 2019-20, 2020-21 and 2021-22. This update has seen the inclusion of the previously separate Aboriginal Health and Wellbeing Needs Assessment, Drug and Alcohol Needs Assessment, and Mental Health and Suicide Prevention Needs Assessment.

In completing this update of the Core Needs Assessment, the project team have:

- Included new and updated quantitative data against the previously identified needs, including General Practice data obtained through PATCAT and other internal data sources
- Sourced and analysed additional quantitative data on emerging needs
- Captured the information gained from extensive stakeholder engagement activities undertaken across the organisation in 2018
- Included new and updated information gained through ongoing health service mapping

Any new and updated data has been presented in **red text** for ease of review.

These activities have assisted HNECC to develop a more accurate and detailed understanding of local health and service needs and have aided in obtaining information to localise national headline indicators.

Areas of further developmental work planned include:

- In-depth analysis of Potentially Preventable Hospitalisations in the HNECC PHN Region, including variances at a local level and contributing factors;
- Prioritisation of the needs identified through the Core Needs Assessment process;
- Publication of a Core Needs Assessment Snapshot / Summary for staff and key stakeholders to improve visibility of the needs assessment;
- Application of a program logic approach across all activities to more clearly demonstrate the link between activities and the achievement of outcomes that address the identified needs;
- Ongoing investigation and identification of possible opportunities or options for addressing priority needs; and
- Further refinement of the possible performance indicators for activities, informed by the HNECC Health and Wellbeing Framework and in alignment with implementation of the PHN Performance and Quality Framework.

Additional Data Needs and Gaps (approximately 400 words)

PHN Website accessibility

There has been limited use of the data provided in the secure area, however the data provided on the public-facing PHN Website is used. As the site (including the secure data section) continues to grow, accessibility could be greatly improved by:

- Clear labelling of links to data files, including content and publication date
- Publication of data dictionaries and any metadata regarding specific datasets
- Consistent format and layout of spreadsheet (csv, excel) files
- Publication of update schedules for each data set

- Access to a subscription service which alerts subscribers to new and updated data
- A separate subscription service for users with secure area access

Additional data required

Generally, for all data sets, information at discreet geography levels, including SA2, SA3 and LGA (as per the revised boundaries) will allow better data analysis at a local community level. Additional data that would enhance our needs assessment processes includes:

- Current prevalence rates of chronic disease at a PHN and local level;
- Regular release of suicide data from the NCIS;
- Dementia prevalence data by PHN and either SA3 or LGA levels;
- Data to build an accurate picture of need relating to Drug and Alcohol use across the HNECC PHN region is inadequate, specific requirements include:
 - Data at the PHN level as a minimum and preferably at LHD and SA3 levels.
 - Access to up to date data is crucial to the success of this activity, particularly given the anecdotal reports of the increasing misuse of methamphetamine use, especially in rural areas, it is challenging to accurately gauge the scale and impact of this issue without the solid evidence base of current data.
 - Due to the tendency for clients to access a service outside of their local community, any treatment data made available would be enhanced through the provision of residential postcodes or SA3's, this would provide valuable information regarding client flows.
 - Access to comprehensive data from the NADAbase MDS on a regular and ongoing basis, preferably quarterly, is also required.

Additional comments or feedback (approximately 500 words)

HNECC welcomes the move to a three-year needs assessment, and the opportunity to combine previously separate needs assessment documents within one overarching report. The optional template provided has been amended somewhat to suit the purposes of HNECC, this includes a summary of the Priority Needs identified in each of the four focus areas and an indication of the number of options that have been developed this far against each need. Whilst there is considerable overlap between the four focus areas, the amended template has enabled clear presentation of information whilst minimising duplication.

Section 2 – Outcomes of the health needs analysis

This table summarises the findings of the health needs analysis, examining the health status and needs of individuals, populations and communities across the HNECC PHN region.

Outcomes of the Health Needs Analysis		
General Population Health		
Identified need	Key Issue	Description of Evidence
Low levels of health literacy	<p>59% of Australian adults have inadequate health literacy, finding it challenging to understand their health and the healthcare system, and therefore do not implement health messages or instructions for healthy living. Low health literacy is an independent risk factor for poor health, with adequate levels of health literacy linked to lower mortality rates, fewer hospitalisations and lower hospitalisation costs. Lack of health literacy also impacts the efficacy of health promotion efforts.</p> <p>Low levels of health literacy are a barrier to improved health outcomes for people throughout the HNECC PHN region, particularly vulnerable populations, include people aged over 65 years, Aboriginal and Torres strait Islander people, LGBTQI community members, culturally and linguistically diverse (CALD) populations, socioeconomically disadvantaged communities, rural residents and youth (particularly those transitioning to adult services). Specific gaps identified in the HNECC PHN region include a lack of knowledge about services and accessing them, issues navigating health services and limited computer literacy.</p>	<p><i>Australian Commissioning Safety and Quality in Health Care, Health Literacy: A summary for clinicians, 2015, https://www.safetyandquality.gov.au</i></p> <p><i>Australian Bureau of Statistics, Australian Social Trends, 4102, Health Literacy, June 2009.</i></p> <p><i>WHO, 7th Global Conference in Health Promotion, Promoting Health and Development: Closing the Implementation Gap, 2009, www.who.int</i></p> <p><i>Falster, Jorm, Douglas, Blyth, Elliott & Leyland, Sociodemographics and health characteristics, rather than primary care supply, are major drivers of geographic variation in preventable hospitalizations in Australia, Med Care, 2015, 53(5).</i></p> <p><i>Consultation with key stakeholder groups, including HNECC Clinical Councils.</i></p>
Poor self-assessed health status	<p>In 2014-15, 15.5 in every 100 adults in the HNECC PHN region rated their health as ‘fair’ or ‘poor’ (Australia 14.8). LGAs with rates above the Australian average included: Glen Innes Severn (19.2); Tenterfield (19.2); Cessnock (18.9); Liverpool Plains (18.5); Gwydir (17.8); Dungog (17.6); Mid-Coast (17.4); Tamworth Regional (16.7); Uralla (16.5); Maitland (16.3); Inverell (16.2); Upper Hunter Shire (16.0); Muswellbrook (16.0); Armidale Regional (15.8); Newcastle (15.4); Moree Plains (15.3); and Port Stephens (14.9). In 2012-13, in the HNECC PHN region, 25% of Aboriginal and Torres Strait Islander adults rated their health as fair or poor, similar to the Australian average of 24%.</p>	<p><i>Proportion of persons aged 15 years and above assessing their health as ‘fair’ or ‘poor’ 2014-15 (PHIDU).</i></p> <p><i>Australians Aboriginal and Torres Strait Islander Health Survey: First results, Australia, 2012-13 (ABS, 2015).</i></p>

Outcomes of the Health Needs Analysis		
Lower than average life expectancy	In 2016, life expectancy at birth in the HNECC PHN region was 81.7yr, lower than the NSW average 83.1yr. LGAs with lower than the HNECC PHN average life expectancy included: Muswellbrook (81), Moree Plains (81.2), Narrabri (81.2), Cessnock (81.3), Newcastle (81.3), Inverell (81.4), Gwydir (81.5), Mid-Coast (81.5) and Liverpool Plains (81.6). The HNECC PHN region has a high Aboriginal and Torres Strait Islander population. Life expectancy for the Australian Aboriginal and Torres Strait Islander population (females 73.7 years; males 69.1 years) is around 10 years less than the non-Indigenous population (females 83.2 years; males 79.7 years), largely due to increased prevalence of health risk factors and chronic disease.	<i>Life expectancy (Centre for Epidemiology and Evidence, HealthStats NSW, NSW Ministry of Health, 2018). Life Expectancy of Aboriginal and Torres Strait Islander People (AIHW, 2017); Contribution of chronic disease to the gap in adult mortality between Aboriginal and Torres Strait Islander and other Australians (AIHW, 2010).</i>
Widespread socioeconomic disadvantage	Socioeconomic disadvantage is correlated with poor health, higher incidence of risky health behaviours and reduced access to health services. All LGAs in the HNECC PHN region are socioeconomically disadvantaged relative to Australia (1000) and NSW (1000). This ranges from Tenterfield (910), the most relative disadvantaged, to; Liverpool Plains (914); Glen Innes Severn (915); Inverell (916); Moree Plains (917); Cessnock (925); Mid-Coast (928); Muswellbrook (930); Gwydir (941); Narrabri (954); Gunnedah (956); Tamworth Regional (962); Upper Hunter Shire (976); Armidale Regional (980); Port Stephens (980); Walcha (981); Maitland (983); Uralla (983); Central Coast (989); Dungog (989); Singleton (994); Lake Macquarie (996); and Newcastle (997), the least relative disadvantaged. Aboriginal and Torres Strait Islander people consistently experience greater socioeconomic disadvantage relative to the SEIFA score for the area in which they reside, the Indigenous Relative Socioeconomic Outcomes index is the preferred method of examining socioeconomic disadvantage amongst this population. Indigenous Areas with the most relative disadvantage on this index in the region, and more disadvantaged than the NSW average (36), are Moree Plains (81), Tenterfield-Jubullum Village (77), Moree (76), Guyra-Tingha (75), Inverell-Gwydir (70), Taree (69), Armidale (66), Narrabri (61), Great Lakes (59), Glen Innes (58), Muswellbrook (55), Liverpool Plains (48), Uralla-Walcha (47), Gunnedah (43), Tamworth (43), Gloucester-Dungog (42) and Cessnock (39).	<i>Blakely T., Hales, S., & Woodward, A. (2004). Poverty: assessing the distribution of health risks by socioeconomic position at national and local levels. Geneva: World Health Organisation. Turrell, G., & Mathers C.D. (2000). Socioeconomic status and health in Australia. The Medical Journal of Australia, 172(9), 434-438. Socio-Economic Index for Areas (ABS, 2017). Indigenous Relative Socioeconomic Outcomes Index, 2016, Aboriginal and Torres Strait Islander Social Health Atlas of Australia, Data by Indigenous Area (PHIDU, 2018).</i>
Health needs of an ageing population	An ageing population is challenging the health system, with many health conditions increasing in prevalence with age, and older people being high health service users. There is a higher proportion of people aged 65 years and over in the HNECC PHN region (19.1%) than NSW (15.7%) and Australia (15.2%), this is projected to increase to 26% by 2036. LGAs with high proportions of older residents include: Mid-Coast (29.0%); Tenterfield (26.3%); Gwydir (25.8%); Glen Innes Severn (25.0%); Walcha (24.7%); Port Stephens (22.0%); Liverpool Plains (21.4%); Central Coast (20.1%); Inverell (20.1%); Uralla (19.8%); Lake	<i>Proportion (%) of people aged 65 years and over (2016) (PHIDU). New South Wales State and Local Government Area population projections, 2016 (NSW Department of Planning and Environment, 2016).</i>

Outcomes of the Health Needs Analysis

	<p>Macquarie (19.8%); Dungog (19.0%); Tamworth Regional (18.0%); Upper Hunter Shire (17.7%); Gunnedah (17.5%); Narrabri (17.1%); Armidale Regional (16.3%); and Cessnock (15.8%).</p> <p>In 2015-16, people aged 65 years and over in the HNECC PHN region were hospitalised for influenza and pneumonia at a rate (1,353.6 per 100,000) that was almost 4 times the average for all ages (355). In 2016-17, people aged 65 years and over in the HNECC PHN region were hospitalised as a result of falls at over 4 times the rate of all ages (3,629.7 and 878.5 per 100,000); from COPD at almost 6 times the rate of all ages (1,654.6 and 287 per 100,000).</p> <p>In 2016-17, people aged 75 years and over in the HNECC PHN region were hospitalised due to stroke at 16 times the rate of those aged 0-74 years (1,171.3 and 72.7 per 100,000), and for coronary heart disease at over 5 times the rate of people aged 24-74 years (3,265.6 and 623.9 per 100,000).</p> <p>In 2017, there were 78.6 residential care places per 1,000 people aged 70 years+ in NSW. The availability of residential care varied throughout the HNECC PHN region as follows (by aged care planning region), Central Coast (67.6), New England (70.1), Mid-North Coast (75.7) and Hunter (80.4).</p>	<p><i>Influenza and pneumonia hospitalisations, persons aged 65+ and all ages, Hunter New England and Central Coast PHN, NSW 2001-01 to 2015-16; Falls-related hospitalisations, persons of all ages and 65 years and over, Hunter New England and Central Coast PHN, NSW 2001-02 to 2016-17; Chronic obstructive pulmonary disease hospitalisations, Hunter New England and Central Coast PHN, NSW 2001-02 to 2016-17 (Centre for Epidemiology and Evidence, HealthStats NSW, NSW Ministry of Health, 2018).</i></p> <p><i>Stroke hospitalisations, Hunter New England and Central Coast PHN, NSW 2001-02 to 2016-17; Coronary heart disease hospitalisations, Hunter New England and Central Coast PHN, NSW 2001-02 to 2016-17 (Centre for Epidemiology and Evidence, HealthStats NSW, NSW Ministry of Health, 2018).</i></p> <p><i>My aged care region tool (AIHW, 2018).</i></p>
<p>Poorer health outcomes for culturally and linguistically diverse populations</p>	<p>People from culturally and linguistically diverse backgrounds, particularly those from non-English speaking backgrounds, are less likely to access health services due to difficulty understanding and accessing mainstream systems of care and a lack of culturally safe services. The majority of the HNECC PHN population was born in Australia (82.3%), well above the NSW average (65.5%). A much smaller proportion of the HNECC PHN population are from non-English speaking backgrounds (5.2%) than NSW (21%), with the highest proportions in Newcastle (9.2%) and Armidale Regional (7.8%) LGAs. Only 0.5% of HNECC PHN residents born overseas report poor proficiency in English (NSW, 3.8%). Stakeholders report social and cultural isolation is being experienced by CALD students of boarding schools or university in Armidale.</p>	<p><i>Australian born population 2016; People born in predominantly NES countries 2016; People born overseas reporting poor proficiency in English 2016 (PHIDU 2018).</i></p> <p><i>Consultation with key stakeholder groups.</i></p> <p><i>People from culturally and linguistically diverse backgrounds, The Department of Health, 2006 (Australian Government; Department of Health, 2018).</i></p>
<p>Areas for improvement in childhood immunisation rates</p>	<p>In 2016-17, the average rates of immunisation for the HNECC PHN region were above the national rates, however with a national aspirational target of 95% there are areas for improvement. This includes 1 year olds in Inverell-Tenterfield (93.5%), Lake Macquarie-West (93.6%), Armidale (94%), Great Lakes (94.4%), Port Stephens (94.5%), Gosford (94.5%) and Taree-Gloucester (94.6%) SA3s. Along with 2 year olds in all SA3s with the exception of Lake Macquarie-East. And in 5 years olds in Armidale (94.1%), Gosford (94.2%), Lake Macquarie-West (94.3%), Inverell-Tenterfield (94.9%), and Taree-Gloucester (94.9%) SA3s. Amongst Aboriginal and Torres Strait Islander children, improvement would be required amongst 1 year olds in the Hunter Valley excluding Newcastle (94.4%) and New England and North West (94.5%) SA4s; and amongst 2 year olds throughout the region including, the New England and North West (89.0%); Mid North Coast</p>	<p><i>Percentage of fully immunised 1, 2 and 5-year-old children, by Primary Health Network area, for Hunter New England and Central Coast (NSW), 2016-17 (Australian Institute of Health and Welfare, 2018).</i></p>

Outcomes of the Health Needs Analysis		
	(91.5%); Hunter Valley excluding Newcastle (93.5%); Newcastle & Lake Macquarie (93.6%); and Central Coast (93.8%) SA4s.	
High rates of smoking during pregnancy	Smoking during pregnancy is associated with greater risk of maternal and infant complications. In 2016, 11.3% of non-Indigenous mothers and 39.7% of Aboriginal and Torres Strait Islander mothers in the HNECC PHN region smoked during pregnancy (NSW 6.9% and 41.3%). Smoking during pregnancy accounts for 51% of low birthweight babies born to Aboriginal and Torres Strait Islander mothers and 19% of those born to non-Indigenous mothers. In the HNECC PHN region, in 2016 10.8% of babies born to Aboriginal mothers were of low birth weight, compared to 6.7% of those born to non-Indigenous mothers (NSW 10.8% and 6.3%).	<p><i>Reporting for Better Cancer Outcomes Performance Report 2018, Hunter New England and Central Coast Primary Health Network, Cancer Institute NSW, 2018.</i></p> <p><i>Smoking at all during pregnancy by PHN, among Aboriginal and non-Aboriginal mothers, 2016; Low birth weight babies by mother's Aboriginality and Primary Health Network, 2016 (Centre for Epidemiology and Evidence, HealthStats NSW, NSW Ministry of Health, 2018). Australian Government Department of the Prime Minister and Cabinet, Closing the Gap – Prime Minister's Report 2016, Canberra.</i></p>
Poor health and developmental outcomes for infants and young children	<p>In 2014-16 within the HNECC PHN region the infant and young child (less than 5 years) mortality rate was 5 deaths per 1,000 live births, substantially higher than the Australian average (3.9). 13 out of 15 SA3's recorded higher rates than the national averages, including: Taree-Gloucester (8.8); Great Lakes (7.0); Inverell-Tenterfield (6.6); Newcastle (6.4); Tamworth-Gunnedah (5.7); Upper Hunter (5.6); Lower Hunter (5.4); Maitland (5.4); Armidale (5.0); Port Stephens (4.9); Wyong (4.8); Lake Macquarie- West (4.3); and Moree-Narrabri (4.0).</p> <p>The Australian Early Development Census collects data on children in their first year of school focusing on: language and cognitive skills; communication skills and general knowledge; emotional maturity; physical health and wellbeing; and social competence. Results of this instrument predict health and wellbeing later in life. In 2015, in the HNECC PHN region 19.7% of children in their first year of school were considered developmentally vulnerable (NSW 20.2%; Australia 22.0%). LGAs with higher than the Australian average proportions included: Walcha (42.5%); Moree Plains (33.9%); Inverell (28.4%); Gwydir (27.9%); Tamworth Regional (25.4%); Tenterfield (25.3%); Glen Innes Severn (24.3%); Muswellbrook (23.8%); Mid-Coast (23.8%); Cessnock (23.1%); and Liverpool Plains (22.1%).</p>	<p><i>Number of deaths among infants and young children aged less than 5 years per 1,000 live births, by Statistical Area Level 3 (SA3), Child and maternal health in 2014-2016, Myhealthycommunities, AIHW, 2018.</i></p> <p><i>Early childhood development: AEDC Developmentally vulnerable on one or more domains, 2015 (PHIDU 2018).</i></p>
Youth health needs	In 2016, 12.4% of the population of the HNECC PHN region were aged 15-24 years (NSW 12.9%), 82.3% of 15-24 year olds were earning or learning (NSW 85%) and 5.3% of 16 to 24 year olds were receiving an unemployment benefit (NSW 3%). Suicide and risky drug and alcohol use amongst youth are a concern for communities across the HNECC PHN region. The Port Stephens community has raised concerns regarding	<p><i>Consultation with key stakeholder groups.</i></p> <p><i>Proportion of population aged 15-24 years, 2016 ERP; Learning or earning at ages 15 to 24, 2016; Youth unemployment beneficiaries 16 to 24 years, 2016 (PHIDU, 2016).</i></p>

Outcomes of the Health Needs Analysis

	<p>rates of suicide and mental ill-health amongst the youth in their community. Feedback from stakeholders in Moree, Narrabri and Inverell and surrounding communities indicate that youth health is being impacted by: child sexual assault; child protection issues; online bullying; homelessness; domestic violence; drug and alcohol use; and truancy.</p> <p>In 2016-17, in the HNECC PHN region the rates of intentional self-harm hospitalisations for young people aged 15-24 years (males, 246.4 per 100,000; females, 553.4) were higher than the NSW averages (males, 194.8; females, 541.7) and the averages for all ages in the region (males, 140.3; females, 221.5). The rate of intentional self-harm hospitalisations is also much higher amongst Aboriginal and Torres Strait Islander people. In 2000-2013 in HNECC PHN, there were 78 intentional self-harm fatalities amongst people aged 24 years and younger.</p> <p>84.7% of 15 year old females in the HNECC PHN region were fully immunised against HPV in 2015-16 (NSW 83.1%), along with 78.1% of males (NSW 75.1%).</p>	<p><i>Intentional self-harm hospitalisations, persons of all ages and 15-24 years, Hunter New England and Central Coast PHN, NSW 2016-17 (Centre for Epidemiology and Evidence, HealthStats NSW, NSW Ministry of Health, 2018).</i></p> <p><i>National Coronial Information System. Intentional self-harm fatalities in the Hunter, New England and Central Coast Region 2000-2013. 2016.</i></p> <p><i>Reporting for Better Cancer Outcomes Performance Report 2018, Hunter New England and Central Coast Primary Health Network, Cancer Institute NSW, 2018.</i></p>
<p>Rural health disparities</p>	<p>In the HNECC PHN region in 2016, 65.4% of the population reside in major cities; 25% in inner regional areas; 9.4% in outer regional areas; and 0.2% in remote areas. On average, people living in rural and remote locations experience poorer health outcomes and shorter life expectancy than those living in metropolitan areas. People in regional and remote areas are more likely to: smoke daily; be overweight or obese; be insufficiently active; drink alcohol at harmful levels; and have high blood cholesterol. Socioeconomic disadvantage is often higher within these areas, reduced access to fresh food, levels of health literacy lower and often limited opportunities for education, training and work for young people. The environment impacts industry, livelihood and mental health. This is often seen in times of drought and economic instability. Rates of injury and accidents are higher due to types of industry (farming) and risky social behaviours. Travelling long distances, often in poor road conditions can lead to higher rates of accidents.</p> <p>Stakeholders have identified the Hunter New England rural region as having high rates of neonatal mortality.</p>	<p><i>Australian Standard Geographical Classification—Remoteness Areas (ASGC-RA); National data on lifestyle risk factors regional/remote compared to urban populations (AIHW 2014).</i></p> <p><i>Consultation with key stakeholder groups.</i></p>
<p>High proportions of people with severe disability and carers</p>	<p>In 2016, 6.6% of the population had a severe or profound disability (NSW 5.6%). LGAs with higher than average proportions of people with a severe or profound disability included: Mid-Coast (8.7%); Cessnock (7.6%); Gwydir (7.5%); Glen Innes Severn (7.3%); Lake Macquarie (6.8%); Inverell (6.8%); Port Stephens (6.8%); Liverpool Plains (6.8%); Central Coast (6.7%); and Tenterfield (6.7%). 12.6% of people aged 15 years</p>	<p><i>Number of people with a profound or severe disability (includes people in long-term accommodation), all ages, 2016; assistance to people with a disability, unpaid, 2016 (PHIDU 2017).</i></p>

Outcomes of the Health Needs Analysis		
	and over provided unpaid assistance to persons with a disability (NSW 11.6%). LGAs with above average proportions of unpaid carers included Uralla (13.9%); Mid-Coast (13.8); Lake Macquarie (13.6%); Dungog (13.5%); Inverell (13.0%); Maitland (12.9%); Tenterfield (12.8%); Port Stephens (12.8%); and Glen Innes Severn (12.7%). In the Armidale, Glen Innes and Tenterfield communities there is reportedly a lack of support for young carers of family members experiencing mental illness.	<i>Consultation with key stakeholder groups.</i>
Increasing prevalence of dementia	<p>An ageing population presents increased health needs particularly related to dementia, with the rates of dementia predicted to rise. Dementia is the second leading cause of death in Australia, contributing to 5.4% of male deaths and 10.6% of female deaths. Primary health care plays a key role in early detection and diagnosis of dementia, and in the management, support and referral for people with dementia and their families. In 2018, areas (Commonwealth Electoral Divisions) with the highest estimated dementia prevalence in the region were Lyne (prevalence of 4,616), Dobell (3,842) and Robertson (3,672). In 2015-16, the rate of mental health overnight hospitalisations for dementia in the HNECC PHN region was 5 per 10,000 (Australia, 6). The highest rate (6) was in Maitland, Lake Macquarie-West, Tamworth-Gunnedah and Newcastle SA3s. Dementia is under-diagnosed and under-reported amongst Aboriginal and Torres Strait Islander people, where dementia rates are three to five times higher than in the general population, with one in eight Aboriginal and Torres Strait Islander people over the age of 45 years living with dementia.</p> <p>Over 50% of people using permanent residential aged care in the HNECC PHN region have a diagnosis of dementia.</p>	<p><i>Australian Bureau of Statistics (2017) Causes of Death, Australia, 2016 (cat. no. 3303.0).</i></p> <p><i>Dementia prevalence data 2018-2058 (Dementia Australia, 2018).</i></p> <p><i>Aboriginal and Torres Strait Islander people and dementia: A review of the research (Alzheimer's Australia, 2014).</i></p> <p><i>Rate of mental health overnight hospitalisations for dementia per 10,000, age-standardised, 2015-16 (Australian Institute of Health and Welfare, 2018).</i></p> <p><i>My aged care region tool (AIHW, 2018).</i></p>
High rates of overweight and obesity	<p>Being overweight or obese is a risk factor for many health conditions, including chronic disease, and associated preventable hospitalisation. Rates of overweight and obesity are concerningly high in the HNECC PHN region. In 2014-15, 34.2 in 100 adults were overweight and 33.7 obese (NSW 35.1 and 28.2). Compared to the NSW averages, all LGAs reported higher rates of obese adults and the Central Coast LGA recorded higher rates of overweight adults. Overweight and obesity is more common amongst coal mine employees, which is particularly relevant to Singleton, Muswellbrook and Upper Hunter Shire LGAs.</p> <p>In 2014-15, amongst children aged 2-17 years, 15.7 in 100 were overweight and 8 obese, (NSW 16.4 and 7.8). LGAs with higher than NSW average rates of overweight children include: Gwydir (17.6); Narrabri (17.2); Liverpool Plains (17); Glen Innes Severn (16.8); Tenterfield (16.8); and Moree Plains (16.5). Higher than NSW average rates of childhood obesity were recorded in: Moree Plains (10.3); Cessnock (9.7); Narrabri (9.4); Inverell (9.1); Gunnedah (9.1); Muswellbrook (8.8); Glen Innes Severn (8.6); Tenterfield (8.6); Gwydir (8.5); Liverpool Plains (8.4); Tamworth Regional (8.4); Mid-Coast (8.2); Maitland (8.0); Central Coast (7.9); and Port Stephens (7.9).</p>	<p><i>Consultation with key stakeholder groups.</i></p> <p><i>People aged 18 years and over who were overweight (not obese) ASR per 100, 2014-15 (PHIDU 2017); People aged 18 years and over who were obese ASR per 100, 2014-15 (PHIDU 2017).</i></p> <p><i>Blueprint for the Management of Overweight and Obesity in the Mining Industry 2016.</i></p> <p><i>Overweight persons, aged 2-17 years, 2014-15; Obese persons, aged 2-17 years, 2014-15 (PHIDU 2018).</i></p>

Outcomes of the Health Needs Analysis		
High rates of physical inactivity and poor nutrition	There are high rates of physical inactivity and poor nutrition in the HNECC PHN region, contributing to chronic disease, potentially preventable hospitalisations and premature mortality. Of people aged 16 years and over, 44.8% consume the recommended daily consumption of fruit and 9.3% of vegetables (NSW 46.4% and 6.6%); and 46.3% are insufficiently physically active (NSW 41.6%). Identified barriers to a healthy lifestyle in the HNECC PHN region include: cost of healthy food; easy access to fast foods; fast food advertisement; limited healthy takeaway options; awareness of where to shop; cooking knowledge; limited areas designated for exercise; knowledge of gyms; feeling unsafe exercising; and hours of work. Poor nutrition, and physical inactivity have been identified by stakeholders as contributing to the poorer health status of the Aboriginal and Torres Strait Islander population in the HNECC PHN region.	<p><i>Fruit and vegetables: recommended daily consumption by Primary Health Network, percentage of persons aged 16 years and over, NSW 2017; Insufficient physical activity by Primary Health Network, persons aged 16 years and over, NSW 2017 (Centre for Epidemiology and Evidence, HealthStats NSW, NSW Ministry of Health, 2018).</i></p> <p><i>Consultation with key stakeholder groups.</i></p>
High rates of smoking	There are high rates of smoking in the HNECC PHN region, contributing to chronic diseases such as COPD and cancer, and associated potentially preventable hospitalisations and premature mortality. The World Health Organisation highlights tobacco use as the single greatest avoidable risk factor for cancer mortality worldwide. In 2017, 15.2% of adults in the HNECC PHN region were current smokers (NSW 15.2%). At a NSW level, rates of smoking increase with remoteness and socioeconomic disadvantage. Aboriginal and Torres Strait Islander people are twice as likely to smoke as non-Aboriginal people. People experiencing mental illness are also twice as likely to smoke as those without, and despite a similar readiness to quit are less likely to have access to smoking cessation resources or treatment. Smoking has been identified by stakeholders as contributing to the poorer health status of the Aboriginal and Torres Strait Islander population in the HNECC PHN region.	<p><i>Current smoking in adults, by Primary Health Network, NSW, 2017; Current smoking in adults by Aboriginality, NSW 2017; Current smoking in adults by remoteness from service centres and sex, NSW 2017 (Centre for Epidemiology and Evidence, HealthStats NSW, NSW Ministry of Health, 2018). Reporting for Better Cancer Outcomes Performance Report 2017, Hunter New England and Central Coast Primary Health Network, Cancer Institute NSW, 2017; Tobacco in Australia, Prevalence of smoking in other high-risk sub groups of the population (The Cancer Council, 2018); Smoking and mental illness: A guide for health professionals (Australian Government Department of Health and Ageing, 2017).</i></p> <p><i>Consultation with key stakeholder groups.</i></p>
High rates of chronic disease	<p>Chronic diseases are leading to increased premature mortality and hospitalisations in the HNECC PHN region, with 58% of adults having a long-term health condition, much higher than the national average of 49.9%.</p> <p>Diabetes. In 2016, there were 168 new cases of Type I diabetes diagnosed in the HNECC PHN region at a rate of 14.4 per 100,000, (NSW 10.8) and 1,085 new cases of Insulin treated Type II diabetes at a rate of 70.2 per 100,000 (NSW 59.1). In 2017, 13% of adult males and 10.7% of females reported diabetes or high blood glucose, slightly higher than the NSW averages (males 10.7%, females 9.4%). There were 583 diabetes-related deaths in the HNECC PHN region in 2016 at a rate of 30.7 per 100,000 (NSW 30.3). In 2015-16, Cessnock and Newcastle LGAs recorded diabetes-related death rates <u>significantly higher</u> than the</p>	<p><i>Consultation with key stakeholder groups.</i></p> <p><i>Percentage of adults who reported having a long-term health condition, 2016-17 (Australian Institute of Health and Welfare, 2018).</i></p> <p><i>AIHW analysis of 2016 National (insulin-treated) Diabetes Register (AIHW 2018). Diabetes or high blood glucose by age and sex, persons aged 16 years and over, 2017; Diabetes deaths by Local Government Area: Diabetes-related deaths (total underlying + selected associated), NSW 2015 to 2016; Diabetes as a principal diagnosis: Hospitalisations by Primary Health Network, NSW 2016-17; Diabetes hospitalisations by Local</i></p>

Outcomes of the Health Needs Analysis

NSW average. The rate of hospitalisations for diabetes in the HNECC PHN region has remained steady over time and at 184.4 per 100,000 in 2016-17 is higher than the NSW average (151.8). The hospitalisation rate for Type I diabetes in the HNECC PHN region (76.6 per 100,000) was much higher than the NSW average (53.1). 15 of the 23 LGAs recorded significantly higher rates of Type I diabetes hospitalisation than the NSW average. LGAs with significantly higher rates of Type II diabetes hospitalisation included: Inverell; Narrabri; Newcastle; and Tamworth Regional.

Respiratory Disease. Rates of childhood asthma in the HNECC PHN region in 2015-16 were higher than the NSW average, with 21.4% of children having ever had asthma (NSW 17%) and 17% having current asthma (NSW 12.2%). The rate of deaths from COPD in 2015-16, (30.2 per 100,000) was higher than the NSW average (24.9). Whilst the 2015-16 to 2016-17 COPD related hospitalisation rate for the region was similar to that of NSW, there were significantly higher rates in Central Coast, Cessnock, Glen Innes Severn, Gunnedah, Inverell, Liverpool Plains, Maitland, Moree Plains, Muswellbrook, Narrabri, Tamworth Regional, Tenterfield and Upper Hunter Shire LGAs.

Circulatory Disease. The rate of deaths from circulatory disease in 2015-16 (165.5 per 100,000), was also higher than the NSW average (147.9). Stakeholders in the New England region have expressed concern about the higher than average circulatory disease mortality rates in the Tamworth Regional LGA. Data from general practices across the HNECC PHN region collected through the PAT CAT tool indicates that as of October 2018, 7.8% of non-Indigenous and 5.8% of Aboriginal and Torres Strait Islander patients aged 16 years+ have a recorded diagnosis of cardiovascular disease.

Other.

Data from general practices across the HNECC PHN region collected through the PAT CAT tool indicates that as of October 2018, 4.5% of non-Indigenous and 5.8% of Aboriginal and Torres Strait Islander patients aged 16 years+ have COPD (diagnosed or indicated). Whilst 5.4% of non-Indigenous and 5.2% of Aboriginal and Torres Strait Islander patients aged 16 years+ have a diagnosis of chronic kidney disease on record.

Compared to the NSW averages, HNECC PHN has significantly higher incidence and mortality rates across a range of cancer types, this is investigated in greater detail below.

Government Area and type of diabetes: Type 1, NSW 2016-17; ; Diabetes hospitalisations by Local Government Area and type of diabetes: Type 2, NSW 2016-17 (Centre for Epidemiology and Evidence, HealthStats NSW, NSW Ministry of Health, 2018).

Asthma status by Primary Health Network, children aged 2-15 years, NSW 2015-16; COPD deaths by Primary Health Network, All ages, NSW, 2015-16; COPD hospitalisations by Local Government Area, persons of all ages, NSW 2015-16 to 2016-17 (Centre for Epidemiology and Evidence, HealthStats NSW, NSW Ministry of Health, 2018).

Circulatory disease by Primary Health Network, All circulatory disease's NSW 2015-16 (Centre for Epidemiology and Evidence, HealthStats NSW, NSW Ministry of Health, 2018).

Reporting for Better Cancer Outcomes Performance Report 2018, Hunter New England and Central Coast Primary Health Network, Cancer Institute NSW, 2018.

HNECC PAT CAT data, 2018.

Outcomes of the Health Needs Analysis

<p>High cancer incidence and mortality</p>	<p>In 2010-14, compared to the NSW average, the HNECC PHN region experienced <u>significantly higher incidence</u> of the following cancers: bowel; cancer with unknown primary; cervical; head and neck; myelodysplasia; respiratory; and skin. <u>Significantly higher mortality</u> was reported for the following cancers: bowel; cancer with unknown primary; lymphohaematopoietic; skin; non-melanoma; respiratory; upper gastrointestinal; and urogenital. As many as one third of cancers are attributable to modifiable behavior, such as smoking, overweight or obesity, unhealthy diet, physical inactivity and risky alcohol consumption. There is an identified need for prevention in the community and the facilitation of early screening and detection within primary health care.</p> <p>In 2015-17, the HNECC PHN cervical screening participation rate was 58.1%, with twelve LGAs reporting participation rates below the NSW average (55.9%): Tenterfield (44.0%); Narrabri (46.3%); Liverpool Plains (48.4%); Muswellbrook (49%); Moree Plains (51.2%); Cessnock (52.5%); Upper Hunter Shire (54.7%); Great Lakes (54.8%); Wyong (55.0%); Singleton (55.3%); Greater Taree (55.3%); and Armidale Dumaresq (55.4%). Reliable data on participation in cervical screening by Aboriginal and Torres Strait Islander women is unavailable, however available evidence suggests that Aboriginal women are under-screened, with estimates of screening rates as much as 18% below the average for that particular region. Data collected by HNECC through the PAT CAT tool, indicated that as of September 2018, 28.4% of eligible Aboriginal women seen in general practices in the HNECC PHN region were recorded as screened in accordance with the guidelines, as compared to 36.9% of non-Indigenous women.</p> <p>In 2016-17, the HNECC PHN breast screening participation rate was 59.3%, with Gosford (52.9%), Wyong (52.6%), and Moree Plains (48.7%) LGAs continuing to record rates below the NSW average of 53.1%. Breast screening amongst CALD women in the HNECC PHN region is lower than the general population (45.4%), with lower than NSW average (46.3%) rates in: Greater Taree (45.8%); Wyong (45.2%); Newcastle (44.6%); Lake Macquarie (44.2%); Great Lakes (42.4%); Gosford (42.1%); Port Stephens (41.3%); Cessnock (37.6%); Tenterfield (35.7%); and Gunnedah (32.3%) LGAs. Screening amongst Aboriginal and Torres Strait Islander women in the HNECC PHN region is also lower than the general population (52.4%), with lower than the NSW average (41.7%) rates in Guyra (41.4%), Moree Plains (39.2%) and Gosford (31.9%). Low breast screening rates within Aboriginal and Torres Strait Islander communities has been attributed to low levels of health literacy and cultural barriers.</p> <p>In 2016-17, the National Bowel Cancer Screening Program (NBCSP) participation rate for the HNECC PHN region was 38.8%, with screening rates below the NSW average (36.8%) recorded in: Moree Plains (29.1%); Narrabri (31.6%); Muswellbrook (32.9%); Gunnedah (35.3%); Wyong (35.8%); Glen Innes Severn (35.9%); Tenterfield (36%); Cessnock (36.1%); and Singleton (36.5%) LGAs. The NSW Bowel Cancer Screening Program aims to increase participation to 60% by 2020. There are multiple avenues for participation in</p>	<p><i>Reporting for Better Cancer Outcomes Performance Report 2018, Hunter New England and Central Coast Primary Health Network, Cancer Institute NSW, 2018.</i></p> <p><i>Consultation with key stakeholder groups.</i></p> <p><i>Reporting for Better Cancer Outcomes Performance Report 2017, Hunter New England and Central Coast Primary Health Network, Cancer Institute NSW, 2017.</i></p> <p><i>HNECC PAT CAT data, 2018.</i></p>
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Outcomes of the Health Needs Analysis		
	<p>bowel cancer screening, including through GPs, NBCSP, pharmacies and NGOs. These do not all provide participation details to the national register and it is therefore impossible to determine the true screening participation rate.</p> <p>In 2017 the HNECC PHN region was identified as having only 16% of patients who were diagnosed with lung cancer being diagnosed at an early stage. This region was the worst performing when compared to the remainder of NSW. Early diagnosis and provision of appropriate, evidence-based treatment are critical to improving outcomes for people with lung cancer.</p>	
Poorer health outcomes for people experiencing homelessness	<p>Homeless people experience a high prevalence of substance use disorders and mental illness. Ill-health can contribute to homelessness; however, homelessness also causes illness and can exacerbate pre-existing conditions. Homeless people are at increased risk of chronic and infectious diseases, with reduced access to primary care. Homelessness has particularly been identified as a need in the Hunter region. Over one week in 2016, 53 people were found sleeping rough in Newcastle and surveyed. Needs identified included: access to care in terms of housing, brief support and ongoing support to a lesser extent. Many reported having received a mental health and substance abuse dual diagnosis or experienced a brain injury/head trauma. Over half of the people surveyed had become homeless due to trauma and many had experienced violence whilst homeless.</p>	<p><i>Registry week for rough sleepers, 17-21 October 2016 (Matthew Talbot Homeless Service Newcastle).</i></p> <p><i>Consultation with key stakeholder groups.</i></p>
Primary Mental Health Care and Suicide Prevention Needs		
Identified need	Key Issue	Description of Evidence
High rates of mental illness, intentional self-harm and suicide	<p>People experience psychological distress and chronic mental illness at higher than average rates across the HNECC PHN region, with the most common conditions being depression, anxiety and drug and alcohol misuse. In 2014-15, in the HNECC PHN region, the rate at which adults experienced high or very high psychological distress was higher at 12.2 per 100 than the NSW (11.0) and Australian (11.7) averages. Rates of high or very high psychological stress were greatest in Cessnock (15.2), Muswellbrook (13.7), Maitland (12.6), Mid-Coast (12.6), Central Coast (12.4) and Tamworth Regional (12.3) LGAs.</p> <p>The premature mortality rate from suicide and self-inflicted injuries in the HNECC PHN region is higher than the NSW average, with the greatest numbers of suicides occurring between the ages of 25 and 55 years, and males accounting for four out of five deaths. The rate of hospitalisation due to intentional self-</p>	<p><i>Social health atlas of Australia Data by Primary Health Network (incl. local government areas); Estimated number of people aged 18 years and over with high or very high psychological distress, based on the Kessler 10 Scale (K10) (modelled estimates) 2014-15, (PHIDU 2017).</i></p> <p><i>Intentional self-harm fatalities in the Hunter, New England and Central Coast Region, 2000 (National Coronial Information System, 2016).</i></p> <p><i>Intentional self-harm hospitalisations, persons of all ages and 15-24 years, Hunter New England and Central Coast PHN, NSW 2001-02 to 2014-15 (Centre for Epidemiology and Evidence, HealthStats NSW, 2018).</i></p>

Outcomes of the Health Needs Analysis

	<p>harm is consistently higher for the HNECC PHN region than NSW, with higher rates among females, and amongst the 15-24 year olds.</p>	
<p>Mental health and suicide prevention needs of youth</p>	<p>Young people aged 12-25 years are a priority cohort for mental health and for suicide prevention in the HNECC PHN region. In 2016-17, the rate of hospitalisations due to intentional self-harm in the HNECC PHN region was substantially higher for people aged 15-24 years (395.9 per 100,000) than for all ages (180), and was higher than the NSW average (363.6). Rates were much higher for young females (553.4) than males (246.4), whilst a similar trend was observed at a NSW level, rates for young males in the HNECC PHN region were well above the state average (females 541.7; males 194.8). The high suicide related needs of youth in the region were associated with social and geographic isolation, relationship breakdown and bullying at school and through social media.</p> <p>There is a common perception that the mental health needs of young people in the HNECC PHN region are increasing with eating disorders and increasing levels of self-harm of particular concern. Factors identified by stakeholders as being associated with mental illness in young people included: family dysfunction; lack of hope for future employment; lower high school retention rates; bullying at home, in schools, in sporting teams and cultural groups, particularly through social media; and social isolation.</p> <p>Services for people up to 18 years of age was a gap identified throughout the region, with access to child and adolescent mental health services limited to those with severe mental illness. Inpatient services for children are only available in Newcastle area, and there is a general lack of accredited psychologists available to work with children across the region. Barriers identified as impeding access to mental health care for young people included: a lack of follow-up care after a suicide attempt; stigma associated with mental illness; poor mental health literacy; long waiting lists; expensive treatment; reluctance to engage in treatment; parental stress; lack of mental health professionals to treat children; the shift to prescribing medication to address children's needs rather than considering non-pharmacologic approaches; parents / caregivers distrust of mental health providers; caregiver fear; transport issues; embarrassment; confidentiality concerns; and mistrust.</p>	<p><i>Intentional self-harm hospitalisations by Primary Health Network, persons of all ages and 15-24 years, NSW 2016-17; HealthStats (Centre for Epidemiology and Evidence, 2018).</i></p> <p><i>Consultation with key stakeholder groups.</i></p> <p><i>Mendelson J, Kelehear B, Wallace K, Morris K, White S, Rigby K, Considine R, Davies K, Handley T, Rich J. Hunter New England Central Coast Primary Health Network, Mental health and Suicide Prevention Needs Assessment Report 2017; pg 19, 21, 23, 96.</i></p>
<p>Mental health and suicide prevention needs of males aged 25-65 years</p>	<p>Stakeholders across the HNECC PHN region consistently identified males aged 25 - 65 years as being at-risk for experiencing mental illness and as a priority population group for suicide prevention. For this cohort, stigma in accessing services and reluctance to discuss mental illness were perceived as contributing to reduced service access. Across all communities, stakeholders reported that this cohort was most likely to</p>	<p><i>Mendelson J, Kelehear B, Wallace K, Morris K, White S, Rigby K, Considine R, Davies K, Handley T, Rich J. Hunter New England Central Coast Primary Health Network, Mental health and Suicide Prevention Needs Assessment Report 2017; pg 21-23.</i></p>

Outcomes of the Health Needs Analysis

	<p>experience suicidal ideation or complete suicide. The highest numbers of suicides in the HNECC PHN region was amongst people aged between 25 and 55 years, with males accounting for four in five deaths. The suicide related needs of males aged 25-45 years were identified as particularly high and were associated with social and geographic isolation, and relationship breakdown. It was identified that young men are less likely to seek help than women, possibly be due to stigma and shame around help-seeking.</p>	
<p>Mental health and suicide prevention needs of males aged over 80 years</p>	<p>Males aged over 80 years were identified as a priority population group for mental health and suicide prevention in the HNECC PHN region, as this cohort reportedly commonly experience suicidal ideation or complete suicide. Contributing factors include: grief and loss; adjustment to life in aged care facilities; geographic isolation; and social isolation, particularly following the death of a partner.</p> <p>Significant service gaps were recognised as this cohort cannot seek support through the NDIS due to the 65 year upper age limit and need to seek services through My Aged Care. Access to allied health services is available through a GP chronic care plan but is limited to five services per year, and it was perceived that older patients prioritised services such as podiatry and physiotherapy over mental health services. Residents of aged care facilities are also ineligible for services under the Better Access mental health program. Further to this, older people are less likely to seek help for mental illness due to perceived stigma, self-reliance, poor mental health literacy, lack of available transport, service gaps and a lack of professional specialisation in mental health later in life.</p>	<p><i>Mendelson J, Kelehear B, Wallace K, Morris K, White S, Rigby K, Considine R, Davies K, Handley T, Rich J. Hunter New England Central Coast Primary Health Network, Mental health and Suicide Prevention Needs Assessment Report 2017; pg 21, 22, 91, 96.</i></p>
<p>Mental health and suicide prevention needs of Aboriginal and Torres Strait Islander people</p>	<p>In 2016, the Aboriginal and Torres Strait Islander URP for the HNECC PHN region was 65,183 or 5.4%, compared to 2.8% nationally. Stakeholders consider the mental health needs of Aboriginal people to be a priority across the region. The impact of inter-generational trauma on Aboriginal communities and the associated impact on mental health was perceived to contribute to a range of other associated health and social problems including drug and alcohol use, family dysfunction and domestic violence. It was perceived that there was a need for more than 12 sessions maximum available under different allied health access programs for clients who had experienced trauma and abuse, particularly Aboriginal and Torres Strait Islander clients.</p> <p>In 2016-17, in NSW, the hospitalisation rate for mental health conditions for Aboriginal people was considerably higher than for non-Indigenous people (32.7 and 18.0 per 1,000 respectively). The rate of hospitalisations for intentional self-harm for Aboriginal people was 481.4 per 100,000, substantially higher</p>	<p><i>Social health atlas of Australia Data by Primary Health Network (incl. local government areas) (PHIDU, 2017). Stakeholder consultations (2017).</i></p> <p><i>Hospitalisations by cause and Aboriginality, NSW; 2016-17; Intentional self-harm hospitalisations by Aboriginality, persons of all ages and 15-24 years, NSW 2016-2017 (Centre for Epidemiology and Evidence, HealthStats NSW, 2018).</i></p> <p><i>Mendelson J, Kelehear B, Wallace K, Morris K, White S, Rigby K, Considine R, Davies K, Handley T, Rich J. Hunter New England Central Coast Primary Health Network, Mental health and Suicide Prevention Needs Assessment Report 2017; pg 9, 10, 21, 22, 24, 64.</i></p>

Outcomes of the Health Needs Analysis

	<p>than the rate for non-Indigenous people (138.3). The rate for Aboriginal youth was particularly high (904.0), with the rate for young females (1,181.4) markedly higher than males (641.8).</p> <p>Aboriginal males are less likely than females to seek help from mental health services and are more likely to contact services when they are acutely unwell. Although Aboriginal people access mental health services at a higher rate than the non-Indigenous population, there is likely to be many Aboriginal people who need services but do not access them, with underutilisation largely attributed to cultural inappropriateness of services.</p>	
Mental health and suicide prevention needs of older people residing in aged care facilities	<p>The mental health needs of older people in the HNECC PHN region, and particularly older males, were frequently mentioned by stakeholders as increasing with the ageing population. The mental health needs of older people in aged care facilities were identified as significant, due to a higher risk of completed suicide than any other group worldwide. National data indicates that over half of all permanent aged care residents experience symptoms of depression. Factors associated with these needs included: grief and loss after the death of partner; adjustment to life in aged care facilities; loss of local community connection when the facility was located distantly to their previous home; and social and sometimes geographic isolation from family.</p>	<p><i>Mendelson J, Kelehear B, Wallace K, Morris K, White S, Rigby K, Considine R, Davies K, Handley T, Rich J. Hunter New England Central Coast Primary Health Network, Mental health and Suicide Prevention Needs Assessment Report 2017; pg 9, 10, 17, 21, 22, 41, 55, 89,91.</i></p>
Mental health and suicide prevention needs of LGBTIQ community members	<p>A higher proportion of members of the LGBTIQ community meet criteria for experiencing a major depressive disorder and report high or very high levels of psychological distress, suicidal ideation and suicide attempts compared to heterosexual people, these are magnified in young people. The needs of the LGBTIQ community were identified as significant by stakeholders across the HNECC PHN region. Factors including stigma, discrimination, community and service awareness and respect were associated with higher levels of mental ill-health for this community. For people who are transgender and intersex, discrimination and stigma by service providers were identified as significant factors affecting their mental health. The mental health and suicide needs of younger LGBTIQ people were also highlighted by stakeholders with factors such as difficulties in coming out, stigma, discrimination, acceptance and isolation, contributing to mental ill-health and suicide. Stakeholders reported that some services refused access or refused to acknowledge transgender people by offering gender appropriate services based on sexual and gender diversity.</p>	<p><i>Rosenstreich G. LGBTI People Mental Health and Suicide. Revised 2nd Edition. Sydney: National LGBTI Health Alliance, 2013. Table 21: Profile of Headspace clients by population group, Q1-Q3 2016/17.</i></p> <p><i>Consultation with key stakeholder groups.</i></p>
Needs of people experiencing	<p>In 2011-12, the rate at which people experienced chronic mental and behavioural disorders within the HNECC PHN region was 14.4 per 100, higher than the national (13.6) and state rates (13.1), and was higher for females (15.6) than males (13.2). LGAs with the highest rate of people experiencing mental and</p>	<p><i>Social health atlas of Australia Data by Primary Health Network (incl. local government areas) (PHIDU, 2017).</i></p>

Outcomes of the Health Needs Analysis

<p>moderate to severe mental illness</p>	<p>behavioural problems were Mid-Coast (16.2), Glen Innes Severn (15.4), Tenterfield (15.4), Inverell (15.2), Liverpool Plains (15.1), Central Coast (14.9) and Cessnock (14.8).</p> <p>The needs of people experiencing moderate to severe mental illness, including episodic and chronic mental illness, were identified as the highest priority need by stakeholders across the HNECC PHN region. This included those people experiencing other complex health and social problems such as physical illness, drug and alcohol misuse, access to sustained housing, unemployment and difficulties in daily living. Providers, consumers and carers indicate that social connectedness is one of the greatest areas of need for people who are ineligible for NDIS assistance, yet are experiencing severe mental illness with reduced psychosocial functional capacity.</p> <p>Factors contributing to the unmet needs of this priority group include: access, waiting times and cost barriers for psychiatrists across communities; patient and service provider experience of the mental health line; reduced access to experienced psychologists across communities; gaps in case management and follow-up; and a lack of focus across all services on prevention and early intervention to reduce the need for more intensive services.</p>	<p><i>Mendelson J, Kelehear B, Wallace K, Morris K, White S, Rigby K, Considine R, Davies K, Handley T, Rich J. Hunter New England Central Coast Primary Health Network, Mental health and Suicide Prevention Needs Assessment Report 2017; pg 95.</i></p> <p><i>Consultation with key stakeholder groups (National Psychosocial Support measure needs assessment).</i></p>
<p>Stigma associated with mental illness including help seeking</p>	<p>Stigma related to mental illness was identified by stakeholders across the HNECC PHN region as impacting on help seeking and engagement with services, including stigma in the general community and on behalf of service providers. Males, particularly in rural areas, were reportedly reluctant to seek care due to the stigma associated with needing help. Stigma was also reported to be a barrier to treatment for adolescents and young people, members of the LGBTIQ community and older people. Stigma has been identified as a barrier in implementing school-based interventions and to help-seeking due to fear of being shamed or socially excluded.</p> <p>Stakeholders have identified a need to address stigma in asking for help and concern around mandatory reporting, which are substantial barriers to help seeking for medical professionals experiencing mental illness.</p>	<p><i>Mendelson J, Kelehear B, Wallace K, Morris K, White S, Rigby K, Considine R, Davies K, Handley T, Rich J. Hunter New England Central Coast Primary Health Network, Mental health and Suicide Prevention Needs Assessment Report 2017; pg 12, 18, 19, 21, 22, 23, 90.</i></p> <p><i>Consultation with key stakeholder groups, including HNECC Clinical Councils.</i></p>

Outcomes of the Health Needs Analysis

Aboriginal and Torres Strait Islander Health

Identified need	Key Issue	Description of Evidence
<p>Poorer health outcomes for Aboriginal and Torres Strait Islander people</p>	<p>Socioeconomic disadvantage, including homelessness and insecure housing, health risk factors and chronic disease are contributing to poor health outcomes for Aboriginal and Torres Strait Islander people across the region. In 2016-17 the hospitalisation rate for Aboriginal and Torres Strait Islander people (62,650 per 100,000) in the HNECC PHN region was almost double that of non-Indigenous people (34,671.3). Whilst the number of 715 health assessments being claimed is increasing across the region over time, the usage rate in 2015-16 was 25.5%, similar to the NSW average of 24.7%.</p> <p>Mental ill-health has been identified as a health need for Aboriginal and Torres Strait Islander people in the HNECC PHN region, particularly complex and enduring mental illness, grief and loss, and youth mental health. There is also concern that the physical health needs of Aboriginal people experiencing mental illness, particularly severe and complex mental illness, are being overlooked.</p> <p>The spread of disadvantage suggests the need for careful health service planning in these areas, particularly taking account of issues related to accessibility, transport, awareness and affordability of primary health care services, specialist and allied health services. The poor health outcomes of the most disadvantaged members of our communities consistently emerge as a theme, and the need for action on the social determinants of health is evident.</p>	<p><i>Consultation with key stakeholder groups.</i></p> <p><i>Hospitalisations for all causes by Aboriginality, Hunter New England and Central Coast PHN, NSW 2006-07 to 2016-17 (Centre for Epidemiology and Evidence, HealthStats NSW, NSW Ministry of Health, 2018).</i></p> <p><i>Indigenous health check (MBS 715) data tool (AIHW, 2017).</i></p>
<p>Higher rates of chronic disease amongst Aboriginal and Torres Strait Islander people</p>	<p>73% of Aboriginal and Torres Strait Islander people in the HNECC PHN region report at least one long-term health condition. General practice data extracted through the HNECC PAT CAT tool indicated that as at October 2018 in the HNECC PHN region, chronic diseases that were more common amongst Aboriginal and Torres Strait Islander patients aged 16 years+ included: COPD (5.8%; non-Indigenous 4.5%); all Diabetes (13.3%; non-Indigenous 11%); and Type II Diabetes (7.8%; non-Indigenous 6.5%). Asthma was also more common amongst Aboriginal and Torres Strait Islander people of all ages (14.6%; non-Indigenous 9.9%).</p> <p>In 2016-17, the rate of hospitalisation for dialysis among Aboriginal and Torres Strait Islander people in the HNECC PHN region was over five times that of non-Indigenous people (17,427.9 per 100,000 compared to 3,399.7) these rates and this substantial disparity have remained steady over time. The rate of hospitalisations for endocrine diseases amongst Aboriginal and Torres Strait Islander people in the HNECC PHN region is over twice that of non-Indigenous people, a similar trend can be observed for circulatory disease hospitalisations and for hospitalisations due to respiratory diseases where the gap between the</p>	<p><i>Australian Bureau of Statistics (ABS). (2015). Australian Aboriginal and Torres Strait Islander Health Survey: Updated Results 2012-13. Canberra, ACT: ABS; HNECC PAT CAT data, 2018.</i></p> <p><i>Potentially preventable hospitalisations by category and Aboriginality, Hunter New England and Central Coast PHN, NSW 2006-07 to 2016-17; Hospitalisations by cause and Aboriginality, Hunter New England and Central Coast PHN, NSW 2006-07 to 2016-17 (Centre for Epidemiology and Evidence, HealthStats NSW, NSW Ministry of Health, 2018).</i></p>

Outcomes of the Health Needs Analysis

two populations continues to widen. In accordance with this data, stakeholders have particularly highlighted diabetes, cancer and kidney disease as health needs for local Aboriginal communities, and have called for better care coordination and improved follow up care for Aboriginal and Torres Strait Islander people with chronic disease.

Alcohol and Other Drug Treatment Needs

Identified need	Key Issue	Description of Evidence
Higher rates of alcohol misuse	<p>Alcohol misuse is a concern across the HNECC PHN region, and has been flagged by stakeholders as contributing to mental illness and suicide. In 2017, 37.3% of people aged 16 years+ consumed alcohol at levels posing a long-term risk to health (NSW 31.1%); whilst 31.1% consumed alcohol at levels posing an immediate risk to health (NSW 26.1%). Compared to NSW, the HNECC PHN region has slightly higher proportions of adults drinking daily (males 13.2%, females 5.7%; NSW males 10.4%, females 4.8%), and weekly (males 44.5%, females 32.4%; NSW males 42.2%, females 32.1%). Alcohol consumption has been identified by stakeholders as contributing to the poorer health status of the Aboriginal and Torres Strait Islander population in the HNECC PHN region.</p> <p>From 2013-14 to 2014-15, Glen Innes Severn and Gosford LGAs recorded significantly higher rates of alcohol attributable hospitalisations than NSW. The rate of mental health hospitalisations for drug and alcohol use in the HNECC PHN region in 2015-16 was 27 per 10,000 people, this is higher than the Australian average of 20 and remains stable over time. Communities with higher than average hospitalisation rates included Wyong (41), Gosford (36), Moree-Narrabri (30), Newcastle (28) and Great Lakes (28) SA3s, with the exception of Great Lakes hospitalisation rates in these areas have remained consistently high over time. In 2012-13, the rate of alcohol attributed deaths was higher in the HNECC PHN region (20.4 per 100,000) than the NSW average (16.1) and was higher amongst males (31.5; NSW 24.6) than females (10.0; NSW 8.1).</p> <p>Factors contributing to drug and alcohol misuse in communities across the HNECC PHN region flagged by service providers include: family breakdown; poor understanding of mental illness; poor understanding of drug and alcohol issues; reduced access to services; and distance to services.</p>	<p>Consultation with key stakeholder groups, including HNECC Clinical Councils and Community Advisory Committees.</p> <p>Alcohol consumption at levels posing long-term risk to health by PHN, persons aged 16 years and over, NSW 2017; Alcohol consumption at levels posing immediate risk to health by PHN, persons aged 16 years and over, NSW, 2017; Alcohol drinking frequency in adults by sex, by PHN, NSW 2016-17; Alcohol attributable deaths by PHN, NSW, 2012-13; Alcohol attributable hospitalisations by LGA, NSW 2013-14 to 2014-15 (Centre for Epidemiology and Evidence, HealthStats NSW, NSW Ministry of Health, 2018). Rate of mental health overnight hospitalisations for drug and alcohol use, 2015-16 (AIHW, 2018).</p> <p>HNECC Regional Drug & Alcohol Networks Service Mapping Survey Report (HNECC PHN, HNE LHD, CC LHD, & NADA, 2017).</p>

Outcomes of the Health Needs Analysis

<p>Concerning levels of Illicit drug use</p>	<p>Illicit drug use is an increasing concern for stakeholders across the HNECC PHN region, and has been flagged by stakeholders as contributing to mental illness and suicide. Stakeholders have particularly identified substance misuse as an issue for the Central Coast, including increasing methamphetamine use and associated issues, and the impact of drug use on mental health and domestic violence. Drug misuse has been identified by stakeholders as a key contributing factor to the poorer health status of the Aboriginal and Torres Strait Islander population in the HNECC PHN region. In 2016-17, there were 1,281 methamphetamine-related hospitalisations in the HNECC PHN region, at a rate of 157.6 per 100,000 population, higher than the NSW average (136.3). This included the hospitalisation of 1,014 individuals at a rate of 124.3 per 100,000 population, also higher than the NSW average (92.8). There is an increasing trend in methamphetamine-related hospitalisations in the HNECC PHN region over time. As mentioned above, the HNECC PHN region has consistently recorded a higher than average rate of mental health hospitalisations for drug and alcohol use, with particularly high rates in Wyong (41), Gosford (36), Moree-Narrabri (30), Newcastle (28) and Great Lakes (28) SA3s.</p> <p>Data from general practices across the HNECC PHN region indicated that 450.5 per 100,000 patients had a record of drug misuse. This rate was much higher for people with a record of a mental health diagnosis (1645.9 per 100,000) who were 3.6 times as likely to have a record of drug misuse as those without. The likelihood of comorbid mental illness and drug misuse varied by diagnosis. A record of drug misuse was 13.2 times as likely with a schizophrenia diagnosis recorded; 10.6 times as likely amongst patients with a bipolar disorder recorded; 3.8 times as likely amongst patients with a depression diagnosis recorded; 3.8 times as likely amongst patients with an anxiety disorder recorded; and 1.5 times as likely amongst patients with a postnatal depression diagnosis recorded.</p> <p>Factors contributing to drug and alcohol misuse in communities across the HNECC PHN region flagged by service providers include: family breakdown; poor understanding of mental illness; poor understanding of drug and alcohol issues; reduced access to services; and distance to services.</p>	<p><i>Consultation with key stakeholder groups.</i></p> <p><i>Methamphetamine-related hospitalisations and persons hospitalised, persons aged 16 years and over, by PHN, NSW 2009-10 to 2016-17 (Centre for Epidemiology and Evidence, HealthStats NSW, NSW Ministry of Health, 2018). Rate of mental health overnight hospitalisations for drug and alcohol use, 2015-16 (AIHW, 2018).</i></p> <p><i>HNECC PAT CAT data, 2018.</i></p> <p><i>HNECC Regional Drug & Alcohol Networks Service Mapping Survey Report (HNECC PHN, HNE LHD, CC LHD, & NADA, 2017).</i></p>
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Section 3 – Outcomes of the service needs analysis

This table summarises the findings of the service needs analysis, examining the HNECC PHN region’s services and health infrastructure.

Outcomes of the Service Needs Analysis		
General Population Health		
Identified need	Key Issue	Description of Evidence
A lack of health service integration, coordination and information sharing	<p>Patients, health professionals and other stakeholders indicate that a lack of integration and coordination of services, including hospitals, primary care services, older person’s health services in the community and in RACFs, and mental health services, and limited exchange of information across the health system is a barrier to health service access, making the system difficult for patients to navigate and affecting continuity of care. A review into the service gaps encountered by palliative and end of life care patients and their families in the Central Coast region has indicated a need for greater coordination and integration between services. Other particularly vulnerable groups include: people experiencing mental illness; people with low health literacy; older people; Aboriginal and Torres Strait Islander people; CALD populations; youth transitioning to adult services; and people living in regional and rural areas, where the ability to share information is hampered by poor infrastructure, including slow internet speeds or no internet at all.</p> <p>General practice stakeholders have highlighted a need for support with the uptake of MyHealth Record and Secure Messaging.</p> <p>There is a need to reduce the fragmented nature of care for Aboriginal and Torres Strait Islander people, with specific needs including: improved prenatal service coordination; enhanced care coordination and improved follow-up care, particularly for people with complex health care needs; and provision of holistic care taking into consideration mental health, physical health, disability, and social issues.</p>	<p><i>Mapping system and patient flow.</i></p> <p><i>Consultation with key stakeholder groups, including HNECC Clinical Councils and Community Advisory Committees.</i></p> <p><i>Central Coast Local Health District, Palliative Care and End of Life Care Review (CCLHD, 2017).</i></p>
Areas of primary care workforce vulnerability	<p>The primary care workforce is inequitably distributed across the HNECC PHN region, with some areas (generally rural) having fewer health professionals than others, and when compared to the rest of NSW. Workforce shortage and geographical distribution are key determinants of access to health care for the community. Primary care workforce issues also impact small rural hospitals serviced by GPs.</p> <p>The HNECC PHN region is serviced by 411 General Practices and 17 Aboriginal Medical Service sites. The average GP FTE / 100,000 population rate for the region is 99.4 (1 FTE = 37.5hr/wk). This suggests a region</p>	<p><i>Consultation with general practices and other key stakeholder groups, including HNECC Clinical Councils and Community Advisory Committees.</i></p> <p><i>HNECC Internal Data.</i></p>

Outcomes of the Service Needs Analysis

	<p>fairly well serviced, however there is maldistribution, with the least serviced LGAs being: Uralla (49.6/100,000); Dungog (55.7); Walcha (64.7); and Liverpool Plains (65).</p> <p>There is an identified need to minimise workforce vulnerability in communities across the HNECC PHN region. Key contributors include:</p> <ul style="list-style-type: none"> • An ageing GP workforce leading to workforce shortages across the region, highlighting the need for succession planning to ensure continuity of care; • Younger GPs preferring reduced hours of work; • Reliance on international medical graduates in areas of shortage; • An expansion of corporate general practices often requiring additional support for non-vocationally recognised doctors; • A lack of reliable, regular locum support; • Challenges in relation to after hours and on-call hospital rostering; • Reduced networking opportunities in rural areas; • Changes to District of Workforce Shortage areas affect the capacity to employ overseas trained doctors; and • Lack of suitable mentoring programs for GPs and nurses in rural areas. 	
<p>Locally relevant professional development and education for primary care clinicians</p>	<p>Stakeholders have identified a need for professional development and education opportunities for primary care clinicians that are locally relevant and targeted to address the changing needs of the sector. Specific needs that have been identified in the HNECC PHN region include:</p> <ul style="list-style-type: none"> • Ongoing Regional Continuing Professional Development advisory groups; • Greater education for GPs, Practice Managers and Nurses, and administrative staff; • Education relative to the changing needs of General Practice for example, changes in models of care, changes to Practice Incentive Payments, quality improvement and accreditation, and Digital Health; and • Investigation into alternative methods of education via webinars, live streaming, focused groups and small group learning. 	<p><i>Consultation with general practices and other key stakeholder groups, including HNECC Clinical Councils and Community Advisory Committees.</i></p>
<p>Targeted support for general practice</p>	<p>General practice stakeholders have identified a need for support to maximise their practice viability and sustainability, and to provide high quality, evidence-informed patient care. Particular areas that have been identified for support include:</p>	<p><i>Consultation with general practices and other key stakeholder groups, including HNECC Clinical Councils and Community Advisory Committees.</i></p>

Outcomes of the Service Needs Analysis		
	<ul style="list-style-type: none"> Continuing Quality Improvement Practice data extraction and analysis Practice management Practice Nurse optimisation Education and professional development Digital Health Accreditation Chronic disease management Preventative health and models of care 	<ul style="list-style-type: none"> Workforce capacity and capability Immunisation Pathways General Practice Quality Planning MBS item number and Practice Incentive Payment changes awareness Model of care development and support Workforce planning
Limited access to dental services	<p>Dental conditions are one of the leading causes of potentially preventable hospitalisation in our region, there were 3,553 hospitalisations in the HNECC PHN region in 2016-17 at a rate of 278.8 per 100,000, higher than the rest of NSW (222.1), and showing an increasing trend over the last 10 years.</p> <p>In 2016-17, 48.6% of adults saw a dentist / hygienist / dental specialist in the previous 12 months (Australia 48.1%), whilst 20% of adults did not see, or delayed seeing, a dentist / hygienist / dental specialist due to cost over this time (Australia 18.4%).</p> <p>Reduced access to affordable dental services is consistently identified by stakeholders across the HNECC PHN region as a considerable area of need, particularly in rural areas. Access to private dental services is cost-prohibitive for many members of the HNECC PHN community, public dental services are available to people with a Health Care Card, however there is a 3 – 6 month waiting list for non-emergency appointments. Whilst most Aboriginal Medical Services provide dental care, this is restricted to clients of the service who have engaged in a 715 health assessment and there are also lengthy waiting lists.</p>	<p><i>Potentially preventable hospitalisations by condition, Hunter New England and Central Coast PHN, NSW 2016-17 (Centre for Epidemiology and Evidence, HealthStats NSW, NSW Ministry of Health, 2018).</i></p> <p><i>Percentage of adults who saw a dentist, hygienist or dental specialist in the preceding 12 months, 2016-17; Percentage of adults who did not see or delayed seeing a dentist, hygienist or dental specialist due to cost in the preceding 12 months (Australian Institute of Health and Welfare, 2018).</i></p> <p><i>Consultation with key stakeholder groups.</i></p>
Limited capacity of services to address dementia	<p>Throughout the HNECC PHN region people are presenting to hospital in the advanced stages of dementia, due to under-diagnosis and misdiagnosis, leading to poorer outcomes for people living with dementia and their carers, increased avoidable hospitalisations and premature admission to aged care facilities. Identified service needs include: improved awareness and understanding of dementia; increased understanding of the importance of timely diagnosis and early intervention; improved knowledge of dementia assessment and management; increased understanding of and access to dementia services; improved flexibility of MBS item numbers to support complex dementia assessment and carer support by GPs; and improved understanding of My Aged Care. The number of deaths attributed to dementia has</p>	<p><i>Consultation with key stakeholder groups.</i></p>

Outcomes of the Service Needs Analysis		
	risen by 68% in the past decade, yet health services remain ill-equipped to address the increasing prevalence and provide timely access to care, including access to dementia assessment services, geriatricians and psycho-geriatricians.	
Lack of prevention and early intervention services	Ongoing, targeted health promotion and prevention is required to maintain and improve health outcomes. The availability and awareness of services that prevent illness and chronic disease or assist in the early detection of ill-health within the HNECC PHN region are limited for some population groups. Stakeholders highlight a need for an increased focus on healthy lifestyle interventions and report that there is restricted capacity for service providers to provide prevention or early intervention services.	<i>Consultation with key stakeholder groups, including HNECC Clinical Councils.</i>
High rates of chronic disease hospitalisations	High rates of chronic disease are concerning for stakeholders, this is placing a burden on the health of our community and on the health system, including through Potentially Preventable Hospitalisations (PPH) which can be avoided through preventive care and early disease management. Rates of PPH from chronic disease are a good measure of the effectiveness of chronic disease management in a population. In 2016-17, there were 17,049 PPHs for Chronic Conditions in the HNECC PHN region at a rate of 1,016.2 per 100,000, higher than the NSW rate (963.4). Leading causes of these hospitalisations in our region included: chronic obstructive pulmonary disease (COPD) (4,818 hospitalisations); iron deficiency anaemia (2,662); diabetes complications (2,301); congestive cardiac failure (3,087); asthma (1,538); and angina (1,753). The PPH rate for Chronic Conditions in the HNECC PHN region was over three times higher for Aboriginal and Torres Strait Islander people than non-Aboriginal people (3,176.3 per 100,000 and 964.9). Specific issues raised by stakeholders include reduced access to chronic disease management programs in rural areas, with limited health workforce available to fill this gap; along with considerable variation in the models of care and clinical management delivered in primary care across the region.	<i>Potentially preventable hospitalisations by category, Primary Health Network and Year, 2016-17; Potentially preventable hospitalisations by condition, Primary Health Network and Year, 2016-17; Potentially preventable hospitalisations by category, Aboriginality Primary Health Network and Year, 2016-17 (Centre for Epidemiology and Evidence, NSW Health, 2018).</i> <i>Consultation with key stakeholder groups including HNECC Clinical Councils and Community Advisory Committees.</i>
Barriers to cancer screening in primary care	Cancer screening participation rates for the HNECCPHN region are low within some communities and priority population groups. Primary healthcare can have a significant impact on improving screening rates. In the General Practice setting, there are varying levels of connection and sense of responsibility towards the national cancer screening programs. Clinicians report reduced confidence in explaining the recent cervical screening clinical guideline changes, and indicate a disconnection with, and low sense of responsibility for, the national breast and bowel screening programs. Clinician engagement with each screening program is reflected in their use of practice systems, with 82% actively reminding patients to attend for cervical screening but only 26% sending reminders for breast screening and 18% for bowel screening. There is a high use of private radiology providers for breast screening, particularly in the Central	<i>Consultation with key stakeholder groups, including GPs and Practice Nurses.</i> <i>GP coverage; female GP coverage; and number and location of practice nurses who have completed the Well Women's Screening course.</i> <i>RBCO Report</i> <i>HNECC PATCAT data.</i>

Outcomes of the Service Needs Analysis

	<p>Coast region (which could link to low participation rates reported by the National Program), and private pathology or commercial FOBT test kits for bowel screening. These results are currently not communicated to the national screening programs or included in national screening datasets.</p> <p>GPs and Practice Nurses are the main providers of cervical screening in the Primary Care setting. Male clinicians present a barrier to participation, which can be addressed by upskilling the female Practice Nurse workforce in areas with low participation rates. However, stakeholders indicate that Practice Nurses in rural areas are disadvantaged when it comes to upskilling due to distance to travel to training and costs associated with travel and accommodation. Additionally, the Practice Nurse workforce is mobile and building capacity therefore presents an ongoing challenge</p> <p>Within the HNECC PHN region only 32% of people diagnosed with colorectal cancer are diagnosed when cancer is in localised phase. The National Screening Register for bowel screening will not be activated until December 2020, General Practice is therefore key in identifying screening participation, as not all patients are utilising the National Screening Program and access screening kits from a variety of sources. General Practice data from across the HNECC PHN region indicates that only 32.1% of eligible patients have bowel cancer screening (FOBT) on record. This indicates that 68% patients attending General Practice in the HNECCPHN region have no bowel screening status recorded, with some Practices identified as much higher. There is a need for data and system improvement to improve recording, with potential opportunities to then increase bowel screening participation.</p>	
<p>Barriers to accessing disability services</p>	<p>The disability sector is challenged by a lack of carer recognition, limited residential facilities, a lack of respite services, an ageing workforce (including carers) and declining volunteer numbers. Concerns about service accessibility with the NDIS implementation include: need that is currently not visible; lack of capacity and skilled workforce in the NGO sector; change of business practices for service providers; and loss of skilled workforce during the transition. Stakeholders have identified a need for greater support for clinicians in navigating the NDIS. There is a need for programs for active individuals with mild cognitive impairment.</p> <p>The NSW Government has been progressively phasing out Large Residential Centres, with the Hunter sites being some of the last to close. Many former residents have limited social and family networks and require significant personal care and social support. This cohort often require a combination of disability and health services, and some have challenging behaviours necessitating specialised support and housing. The</p>	<p><i>Consultation with key stakeholder groups, including HNECC Clinical Councils.</i></p>

Outcomes of the Service Needs Analysis		
	challenges this presents to the health community and the limited capacity, particularly of general practitioners, to address this demand is a concern for stakeholder groups.	
Reduced access to services for children and youth	There is a significant gap in the region for affordable and timely services for children and youth. Particular service gaps include: general mental health; mental health in-patient services psychology; psychiatry; dental; eating disorders; mental health promotion and prevention; drop-in centres suicide prevention; services for children/youth experiencing behavioural issues and autism; and family-based therapies. Barriers to accessing services include: cost; waiting periods; transport; limited awareness of services; a lack of locally based services; low confidence and mistrust of services; service availability and suitability; affordability of internet access/technology; lack of service integration and coordination; lack of support during the transition from adolescent to adult support services; safety concerns for young people in mental health in-patient settings with adults; lack of nursing education in youth mental health and early psychosis. More specifically, there is a need for specific mental health, health promotion and education activities, including leadership and mentoring, for Aboriginal and Torres Strait Islander youth throughout the region and cross-border issues for the Boggabilla/Toomelah community are complicating service provision.	<i>Consultation with key stakeholder groups.</i>
Limited access to after-hours GPs	Limited access to a GP outside standard operating hours is a barrier to health service access across the HNECC PHN region, particularly in rural areas where a lack of workforce coordination and collaboration in sharing after hours availability compounds the issue. In locations with after-hours services there is a lack of service awareness, with residents continuing to present to emergency departments for non-emergency treatment. In 2016-17 there were 0.32 after-hours GP attendances per person in the HNECC PHN region, this was lower than the national average (0.49), and there was considerable variability across the region, from 0.11 in Tamworth-Gunnedah and Moree-Narrabri SA3s to 0.54 in Gosford SA3. 8% of adults reported having seen a GP after hours in the previous 12 months, similar to the national average (8.4%). After hours GP support to Residential Aged Care Facilities (RACFs) is of variable quality across the region. Without reliable and effective support RACF residents are at a disadvantage and often rely on presentation to ED rather than care in place.	<i>Consultation with key stakeholder groups, including Karuah and Tilligerry Peninsula community members and service providers.</i> <i>Number of after-hours GP attendances per person, 2016-17; Percentage of adults who saw a GP after hours in the preceding 12 months, 2016-17 (AIHW, 2018).</i>
High proportions of semi-urgent and non-urgent emergency	Emergency departments (EDs) can be a preferred option for care for some people if a timely GP appointment is unavailable; in the after-hours period; and for those community members who are financially disadvantaged, as medications and diagnostic services are provided at no cost in a single visit. A heavy reliance on EDs can indicate a lack of accessible health services in the community and leads to higher	<i>Consultation with key stakeholder groups.</i> <i>Emergency department care 2016-17, Australian hospital statistics (AIHW, 2017).</i>

Outcomes of the Service Needs Analysis		
department presentations	health care costs. Semi-Urgent and Non-Urgent ED attendances are often considered best managed in general practice. Large hospitals in the HNECC PHN region with high proportions of semi-urgent and non-urgent presentations in 2016-17, were Glen Innes Hospital (76%), Manilla Hospital (75%), Gunnedah Hospital (72%), Gloucester Hospital (72%), Scone Hospital (72%), Muswellbrook Hospital (71%) and Belmont Hospital (70%), compared to 50% across Australia.	
Reduced access to services for older people	<p>Older people experience difficulties accessing health and community care services, with barriers including cost, transport, appointment waiting times, and lack of knowledge and understanding of the aged care system, including navigating My Aged Care. There is a need for improved care planning and management of older people within the community and in residential aged care facilities, especially those with complex and deteriorating conditions, and those at the end of their life. Greater support and education is required for consumers, carers and families in navigating the system and negotiating with providers in the consumer directed care model.</p> <p>In 2017, there were 78.6 residential care places per 1,000 people aged 70 years+ in NSW. The availability of residential care varied throughout the HNECC PHN region as follows (by aged care planning region), Central Coast (67.6), New England (70.1), Mid-North Coast (75.7) and Hunter (80.4). Workforce capacity and the ability to attract and retain skilled and suitably qualified staff in aged care (due to wages, ageing workforce, and lack of understanding or expertise in the existing workforce) are challenges in achieving better outcomes in aged care.</p> <p>RACF residents have reduced access to GP services, allied health, dental and mental health services, leading to poorer health outcomes and avoidable ED presentations. Needs specific to HNECC PHN RACFs include:</p> <ul style="list-style-type: none"> • Greater capability to manage unexpected deterioration, end of life care, deprescribing, and behavioral and psychological symptoms; • Increased number of regular GPs available to provide services to Aged Care facilities, both within and after-hours; • Improved access to GPs and allied health professionals through funded telehealth consultations; and • A review into RACF clinical information storage systems. 	<p><i>Consultation with key stakeholder groups, including HNECC Clinical Councils.</i></p> <p><i>My aged care region tool (AIHW, 2018).</i></p>

Outcomes of the Service Needs Analysis

<p>Reduced access to services in rural and remote areas</p>	<p>25% of the HNECC PHN population reside in inner regional areas, 9.4% in outer regional areas and 0.2% in remote areas. On average, people living in rural and remote communities experience poorer health outcomes, have reduced access to health services and report higher rates of some diseases, this is enhanced for people who are disadvantaged or vulnerable. Barriers to accessing care include: the upfront cost of accessing primary care, with few providers bulk billing; distance to services; difficulties getting an appointment; limited public transport options and increased cost of private travel; issues recruiting and retaining the health workforce; reduced availability of health services; fewer health professionals per capita; and lack of anonymity in small communities. Additional specific needs identified in rural areas include:</p> <ul style="list-style-type: none"> • enhanced outreach capability, workforce capacity and access to medical specialists for Aboriginal Medical Services; • greater access to Allied Health Services, particularly dentists, physiotherapy, podiatry, psychology, child mental health clinicians, exercise physiology, endocrinology, psychiatry, urology, gerontology, speech pathology, radiology, audiology, and drug and alcohol support services; • increased availability of bulk-billing imaging services (particularly in Inverell where there are high rates of high-risk pregnancies); • greater access to specialist services, particularly Ear, Nose and Throat specialists; and • increased after hours services. 	<p><i>Australian Standard Geographical Classification—Remoteness Areas (ASGC-RA); National data on access to health services regional/remote compared to urban populations (AIHW 2014).</i></p> <p><i>Consultation with key stakeholder groups, including HNECC Clinical Councils and Community Advisory Committees.</i></p>
<p>Transport limitations</p>	<p>Limited transport is a barrier to accessing health services in our region, particularly for Aboriginal and Torres Strait Islander peoples, for older persons and for those residing in rural areas. In 2014, in the HNECC PHN region, the rate of people who often had difficulty or could not get to places as needed with transport was 4.1 per 100, compared to 4.0 per 100 Australia-wide, and 4.3 per 100 for NSW. LGAs with the highest rate of people encountering transportation barriers were Moree Plains (4.7 per 100), Liverpool Plains (4.5 per 100), Inverell (4.4 per 100), Central Coast (4.3 per 100), Cessnock (4.3 per 100), Gunnedah (4.3 per 100), Newcastle (4.3 per 100), Tamworth Regional (4.3 per 100) and Tenterfield (4.2 per 100).</p> <p>Stakeholders believe that an area wide review of transport is required, with significant involvement across a broad range of sectors. Specific needs in the HNECC PHN region include:</p> <ul style="list-style-type: none"> • the coordination of transport services with timing of medical appointments; • limited transport services to / from Singleton hospital, including for dialysis patients; 	<p><i>Social health atlas of Australia Data by Primary Health Network (incl. local government areas) (PHIDU, 2018).</i></p> <p><i>Consultation with key stakeholder groups, including HNECC Clinical Councils and Community Advisory Committees.</i></p>

Outcomes of the Service Needs Analysis		
	<ul style="list-style-type: none"> limited transport services to facilitate access to health and social support services for the community of Tilligerry Peninsula; no patient transport from Barraba to Tamworth hospital except NSW Ambulance; and limited or no public transport in regional areas. 	
Cost barriers to healthcare	<p>Cost of accessing health care for consumers, particularly for vulnerable groups such as Aboriginal and Torres Strait Islander people, is a major barrier across the HNECC PHN region, particularly in rural areas where bulk billing is anecdotally less common. Cost prohibitive primary care services encourage financially disadvantaged people to attend Emergency Departments where medications and diagnostic services are provided at no cost, in a single visit. There are also variations in the per capita cost of care between comparable services in the HNECC PHN region.</p> <p>In 2016-17, 8.1% of adults in the HNECC PHN region did not see or delayed seeing a medical specialist or GP, or completing an imaging or pathology test, due to cost (Australia 6.5%), and 8% delayed or avoided filling a prescription due to cost (Australia 7.3%). 56.1% of patients incurred out-of-pocket costs for non-hospital Medicare services (i.e. GP visits, specialist attendances, obstetrics, diagnostic imaging, allied health attendances) in the HNECC PHN region (Australia 49.8%), with marked variability evident across the region, ranging from 50% in Wyong SA3 to 61.6% in Newcastle and Tamworth-Gunnedah SA3s. The total out-of-pocket cost per patient was \$130 (Australia \$142), varying from \$108 in Moree-Narabri SA3 to \$147 in Gosford SA3.</p>	<p><i>Consultation with key stakeholder groups, including HNECC Clinical Councils and Community Advisory Committees.</i></p> <p><i>Percentage of people who delayed or did not see a medical specialist, GP, get an imaging test and/or get a pathology test due to cost in the last 12 months, 2016-17; percentage of adults who delayed or avoided filling a prescription due to cost in the preceding 12 months, 2016-17; percentage of patients with out-of-pocket costs for non-hospital Medicare services, 2016-17; total out-of-pocket cost per patient for all non-hospital Medicare services (median, patients with costs), 2016-17 (AIHW, 2018).</i></p>
Reduced access to services for people experiencing homelessness	<p>People experiencing homelessness find it difficult to access support services, including mental health services, as services will often not accept, or follow-up on, referrals which do not include a contact address. Crisis accommodation services, refuges and other accommodation services will often not accept people with substance use issues or those experiencing mental illness, with some services asking for a letter from a doctor stating that they do not pose a risk. Mental health needs of people who are homeless are high and the delays in accessing a mental health assessment through the Mental Health Line are particularly counterproductive for this vulnerable cohort. There is a lack of coordination and integration between homelessness services and primary care services, including mental health services. Support for people who are experiencing homelessness has been identified as an issue within the Newcastle region, consultation with this cohort has identified the following needs: housing; brief support; and ongoing support. People who are homeless, find it difficult to attend appointment-based services, leading to reduced access to primary health care, and increased use of hospital and ambulance services.</p>	<p><i>Consultation with key stakeholders groups, including HNECC Clinical Councils and Community Advisory Committees and St Vincent de Paul.</i></p>

Outcomes of the Service Needs Analysis

Improved access to safe, appropriate and non-judgmental primary health care, including in the after-hours period is required.

Primary Mental Health Care and Suicide Prevention Needs

Identified need	Key Issue	Description of Evidence
<p>Lack of integration and collaboration between mental health services</p>	<p>In 2015-16 the rate of overnight hospitalisations for mental illness in the HNECC PHN region were higher (115 per 10,000) than the Australian average (102). 11 out of the 15 SA3s recorded rates higher than the Australian average, including Wyong (132), Gosford (129), Taree-Gloucester (126), Newcastle (124), Tamworth-Gunnedah (121), Moree-Narrabri (120), Great Lakes (115), Inverell-Tenterfield (113), Armidale (109), Port Stephens (107) and Lake Macquarie-West (106).</p> <p>Distribution of primary mental health care service providers, psychiatry services and patient to provider ratios vary considerably across the HNECC PHN region. Access to and retention of psychiatrists and experienced psychologists is the most common mental health workforce need highlighted across all communities, but particularly in rural areas, with significant turnover in mental health staff affecting continuity of care.</p> <p>Integrated planning is a substantial area of need in this region, with the lack of integration and collaboration between mental health services is making it difficult for people to navigate the fragmented mental health system. Further to this, the effectiveness of primary mental health care is dependent on integration with specialist services.</p> <p>Stakeholders have identified a need to increase the capacity of community based social support services for people with severe mental health and other complexities. This includes strengthening the approaches to quality and governance across all health and social services; ensuring staff have the knowledge and skills to provide support to people experiencing mental illness and understand their scope of practice; and building clear protocols and pathways within services for escalating those with deteriorating mental illness to clinical care.</p> <p>Additional priority service needs identified by stakeholders include: mental health training for GPs; greater capacity of general practice to provide multidisciplinary care; services for people experiencing moderate to severe chronic mental illness; early intervention approaches and services, particularly for young people;</p>	<p>Consultation with key stakeholder groups, including HNECC Clinical Councils and Community Advisory Committees.</p> <p><i>Mental Health Overnight Hospitalisations, Australian Institute of Health and Welfare. My Healthy Communities; 2018.</i></p> <p><i>Mendelson J, Kelehear B, Wallace K, Morris K, White S, Rigby K, Considine R, Davies K, Handley T, Rich J. Hunter New England Central Coast Primary Health Network, Mental health and Suicide Prevention Needs Assessment Report 2017; pg 22, 71, 73, 74, 79, 80- 82, 86- 88, 97.</i></p>

Outcomes of the Service Needs Analysis

	<p>transport to and from services; evidence-based and systematic approaches to mental health promotion and prevention; and support, recognition and involvement for families and carers of people living with mental illness.</p> <p>Service needs specific to suicide prevention relate to ensuring people at risk are identified across the service system, with support services accessible as needed. Supporting community and service based approaches to suicide prevention, including post-vention strategies, is a high priority.</p>	
<p>Cost barriers to accessing mental health and suicide prevention services</p>	<p>Consultation across the HNECC PHN region showed that many consumers, clients and carers indicated that cost was a significant barrier to accessing services for mental illness and suicide prevention, with 81% of service providers and 71% of consumers, clients and community members reporting cost as a barrier to accessing services. Many GPs, psychiatrists and private allied health staff charged a gap payment on top of the Medicare rebate with few bulk-billing. The cumulative effect of these costs is considerable especially for those with moderate to severe mental illness, who are reliant on welfare payments as due to work is limited work opportunities as a result of their illness. Service providers indicated that their decisions about referral were often made on knowledge about service costs rather than on care needs. Consumers also reported making decisions about accessing care based on cost, often waiting until symptoms deteriorated before seeking care, leading to the need for more intensive help through specialist services such as acute wards, at an increased cost to the health system. Additionally, there is a cost disincentive for services to take on patients with complex needs as billing is the same whether the patient requires treatment for less complicated or more complex needs.</p>	<p><i>Mendelson J, Kelehear B, Wallace K, Morris K, White S, Rigby K, Considine R, Davies K, Handley T, Rich J. Hunter New England Central Coast Primary Health Network, Mental health and Suicide Prevention Needs Assessment Report 2017; pg 23.</i></p>
<p>Transport barriers to mental health services</p>	<p>Transport has been identified as a barrier to accessing services for mental illness and suicide prevention throughout the HNECC PHN region, with public transport limited or unavailable in many communities. This is a particular barrier to engagement in mental health services for low-income individuals, adolescents and frail older people, and is not unique to rural parts of the region. Clients are often relying on public transport to access specialist clinical services distant to their home, leading to whole day or overnight stays. Community transport, while available, is often cost prohibitive and consumers reported experiencing stigmatising attitudes when requesting access.</p>	<p><i>Mendelson J, Kelehear B, Wallace K, Morris K, White S, Rigby K, Considine R, Davies K, Handley T, Rich J. Hunter New England Central Coast Primary Health Network, Mental health and Suicide Prevention Needs Assessment Report 2017; pg 21- 23.</i></p>
<p>Limited services for people experiencing moderate to severe mental illness</p>	<p>The most common service gap reported by stakeholders in the HNECC PHN region was for people experiencing moderate to severe mental illness, both episodic and chronic, including those experiencing other complex health and social problems. As clinical care for people experiencing severe mental illness is largely unavailable, providing care for this population group is stretching the capacity of primary care, with</p>	<p><i>Clinical and committee members, June 2017; Mendelson J, Kelehear B, Wallace K, Morris K, White S, Rigby K, Considine R, Davies K, Handley T, Rich J. Hunter New England Central Coast Primary Health Network, Mental health and Suicide Prevention Needs Assessment Report 2017; pg 17, 21.</i></p>

Outcomes of the Service Needs Analysis

LHD specialist services only available for acutely unwell people. The gaps in the current system tend to channel people into the acute setting. Stakeholders suggest there is a priority need to strengthen the capacity of services including approaches to quality and governance across services to provide care for this cohort.

The capacity to provide the breadth of services for this cohort is limited, with few services providing seamless access to clinical, therapeutic and support services. Referral between services is described as difficult, with challenges around information sharing, case management and role delineation. The mental health line, the initial point of access for someone experiencing acute mental health symptoms, was criticised due to long delays on the phone and most people eventually being deemed ineligible for state based mental health services. If triaged as eligible upon presentation to an acute facility, clients were often either not admitted or discharged early, including late at night and far from home without transport.

Many community-based service providers indicated they felt ill-equipped to provide the type and intensity of services needed by these consumers. There is a clear need to strengthen quality and governance across these services. Support service staff working with this cohort are often welfare trained without mental health specific expertise and working beyond their level of qualification and scope of practice. There is also a lack of formal mechanisms for escalating clients with deteriorating mental health.

Under the various allied health access programs, clients are eligible for between 6 and 12 sessions per year, which is considered insufficient for this population group and specifically for clients with a history of trauma and abuse including intergenerational trauma.

Due to the introduction of the NDIS, services providing support to people experiencing severe mental illness are in a state of flux as funding and business models are adapted. Those services using an NDIS business model are largely unable to provide support to non-NDIS participants. Anecdotal reports suggest that NDIS recipients are encouraged to access mainstream services to maximise their funds available to purchase other services, further limiting the availability of services to people with severe mental illness who are ineligible for NDIS assistance. Stakeholders indicate that whilst the type of psychosocial support services required by people who are not eligible for NDIS assistance are similar to those of people who are eligible, services of shorter duration and/or lower intensity are required.

Consultation with key stakeholder groups (National Psychosocial Support measure needs assessment).

Outcomes of the Service Needs Analysis

	<p>Service providers has also highlighted that due to the considerable documentation and effort required to apply for access to the NDIS, in some instances people who would likely be eligible for the program are electing not to apply or to reapply if rejected initially.</p> <p>There is considerable concern amongst stakeholders as to the impact of the changes to funding and programs available to people with severe mental illness, this includes a lack of clarity around how the Continuity of Support arrangements will apply for current participants in Partners in Recovery, Personal Helpers and Mentors service and Day to Day Living, how this will differ from the National Psychosocial Support measure, and how the integration of services within a stepped care framework will be facilitated.</p>	
<p>Support for GPs to play a central role in mental health care</p>	<p>In 2016-17, in the HNECC PHN region, there were 207,782 GP mental health services provided through the MBS to 117,530 patients. At a local level, the rate at which services were delivered ranged considerably from 7,090 per 100,000 in Moree-Narrabri SA3 to 20,084 per 100,000 in Wyong SA3. With lower rates also recorded in Inverell-Tenterfield (8,782), Tamworth-Gunnedah (9,745) and Armidale (10,436) SA3s.</p> <p>The capacity of GPs to provide mental health care was a concern expressed by many consumers, carers and service providers, partially due to the attitudes of GPs towards mental illness and to those experiencing mental illness. It was perceived that the attitude of the GP determined care, rather than the patient's symptoms or principles of best practice, with GPs often relying on medication for the initial treatment of depression and anxiety, and appearing reluctant to prepare a mental health care plan. Clients and carers signified GPs were critical in ensuring a comprehensive and supportive approach to care, however their attitudes could compromise care. Additional capacity challenges for GPs included: time; knowledge; skill; and interest. While it was recognised that GPs play a key role in managing mental ill-health, there is a need for greater involvement in care by other general practice staff such as practice nurses and other allied health providers.</p> <p>Given the lack of services for people with severe and complex mental illness stakeholders reported a reliance on primary care to service this population group. This was perceived by clients, carers and service providers, including GPs, to be beyond the capacity of primary care particularly for those experiencing escalated symptoms, leading to poorer outcomes. Many GPs focus on physical health viewing the treatment of mental health, particularly severe mental illness, as the role of mental health professionals.</p>	<p><i>MBS Mental Health Data by Primary Health Network; MBS Mental Health Data by ABS SA3 (Australian Government Department of Health, 2017).</i></p> <p><i>Mendelson J, Kelehear B, Wallace K, Morris K, White S, Rigby K, Considine R, Davies K, Handley T, Rich J. Hunter New England Central Coast Primary Health Network, Mental health and Suicide Prevention Needs Assessment Report 2017; pg 17, 73, 88.</i></p>

Outcomes of the Service Needs Analysis

	<p>The capacity of GPs to provide care for people with suicidal ideation and attitude towards suicide, were concerning for stakeholders, particularly young people. It was perceived some GPs lacked skills in identifying a patient at risk of suicide including ignoring risk factors or being reluctant to begin a conversation about suicide.</p> <p>The central role of the GP in the provision of mental health care needs to be a key tenet of service models, however this needs to occur in the context of support and capacity building across the service system. Specific requirements include training GPs in mental health with a focus on skills, knowledge and attitudes towards mental illness across population groups; and improving the capacity of general practice to provide multidisciplinary care.</p>	
<p>Reduced access to psychiatrists</p>	<p>In 2016-17, in the HNECC PHN region, a total of 17,623 patients received 85,136 psychiatry services through the MBS. At a local level, the rate at which psychiatry services were delivered ranged from 2,168 per 100,000 in Moree-Narrabri SA3 to 9,548 per 100,000 in Newcastle SA3. Lower rates were also recorded in Upper Hunter (3,171), Tamworth-Gunnedah (3,404), Armidale (3,445) and Inverell-Tenterfield (3,741) SA3s.</p> <p>According to stakeholders access to psychiatrists across the HNECC PHN region especially in rural areas was a significant barrier to care, with insufficient numbers to meet needs alongside cost due to a gap payment. The ability of consumers to access psychiatrists in a timely manner was a consistent concern with lengthy waiting lists particularly for those who bulk billed. This was applicable across all ages but especially for children and young people with few child psychiatrists available and these being mainly located in Newcastle and only for those with severe mental illness.</p> <p>Telehealth was thought to enhance access to psychiatry services, particularly in rural areas but was mostly unavailable. There was reliance in many rural communities on fly-in fly-out psychiatrists to provide specialist medical input, with access to care only available when the specialist was in town. Retention of psychiatrists is seen as disruptive to continuity of care.</p>	<p><i>MBS Mental Health Data by Primary Health Network; MBS Mental Health Data by ABS SA3 (Australian Government Department of Health, 2017).</i></p> <p><i>Mendelson J, Kelehear B, Wallace K, Morris K, White S, Rigby K, Considine R, Davies K, Handley T, Rich J. Hunter New England Central Coast Primary Health Network, Mental health and Suicide Prevention Needs Assessment Report 2017; pg 70, 73, 81, 86.</i></p>
<p>Reduced capacity of services to recruit and retain allied health staff</p>	<p>There is a need to strengthen the capacity of mental health services to recruit and retain allied health staff, particularly psychiatrists and psychologists and in rural areas. Strategies such as incentives are in place to attract psychiatrists, and other professionals such as teachers and police to rural areas, but are not available for psychologists. There is significant turnover in mental health staff, which affects continuity of</p>	<p><i>Mendelson J, Kelehear B, Wallace K, Morris K, White S, Rigby K, Considine R, Davies K, Handley T, Rich J. Hunter New England Central Coast Primary Health Network, Mental health and Suicide Prevention Needs Assessment Report 2017; pg 72, 73, 82.</i></p>

Outcomes of the Service Needs Analysis		
	care, and an overreliance on provisional psychologists impacts retention. Service providers indicated that the challenges faced by provisional psychologists in terms of case complexity, and lack of support, results in many leaving services.	
Limited availability of early intervention services	A lack of early intervention and prevention approaches and services was identified as a high service need throughout the HNECC PHN region, especially for young people and for people experiencing early psychosis. This includes: early intervention to prevent onset or deterioration of mental illness; support recovery; and specifically, for those experiencing first onset of psychosis. Not only are these specific services unavailable, but there is a need for a significant shift in the delivery of services to ensure early intervention is applied across the service system. There is a need to increase capacity to identify associated factors and intervene before symptoms manifest or conditions deteriorate. A stronger early intervention and prevention focus across all services will help prevent people requiring more intensive services rather than the current system which, due to service gaps, channels people into the acute setting.	<i>Mendelson J, Kelehear B, Wallace K, Morris K, White S, Rigby K, Considine R, Davies K, Handley T, Rich J. Hunter New England Central Coast Primary Health Network, Mental health and Suicide Prevention Needs Assessment Report 2017; pg 73, 95.</i> <i>Consultations with key stakeholder groups, including Tilligerry Peninsula community members and services.</i>
Lack of cross-sectoral mental health promotion and prevention, and suicide prevention strategies	Reduced availability of mental health promotion and prevention services was identified by stakeholders as a key service gap in the HNECC PHN region. There is a need to ensure evidence-based and systematic approaches to mental health promotion and prevention alongside suicide prevention, with an emphasis on strategies which are broader than the current focus on education and training. Initiatives needed for implementation across sectors including: youth specific services; education and training; community and sporting groups; workplaces; aged care facilities; and the general health system.	<i>Mendelson J, Kelehear B, Wallace K, Morris K, White S, Rigby K, Considine R, Davies K, Handley T, Rich J. Hunter New England Central Coast Primary Health Network, Mental health and Suicide Prevention Needs Assessment Report 2017; pg 20, 21, 93.</i>
Limited capacity of services to develop and implement an approach to quality	Inconsistencies exist in the approaches to quality and quality improvement across all services throughout the HNECC PHN region. There is a need for frameworks aligned to sound clinical governance approaches across the mental health service system, including support services, and with support for case review and clinical supervision to manage risk. Stakeholders were particularly concerned about the quality of mental health treatment services provided across the region, including by the Local Health District and in the acute setting. Further concerns related to the lack of experienced clinical staff in some organisations, including a reliance on provisional psychologists. This was suggested as occurring in the absence of supervision by an experienced psychologist and as a way to reduce session costs, whilst jeopardising quality of care.	<i>Mendelson J, Kelehear B, Wallace K, Morris K, White S, Rigby K, Considine R, Davies K, Handley T, Rich J. Hunter New England Central Coast Primary Health Network, Mental health and Suicide Prevention Needs Assessment Report 2017; pg 78, 87, 99, 100.</i>

Outcomes of the Service Needs Analysis

	<p>Few support services appeared to have a systematic approach to quality. A quality framework including an approach to manage clinical risk was considered imperative for all services but was not a focus of many services. Mechanisms for escalating clients' needs to more specialist services for example were not available in some services. In addition, there were few examples of services reporting client outcomes, and clinical and client experience, with a reliance on activity reporting.</p>	
<p>Limited support for families and carers of people living with mental illness</p>	<p>Support services for families and carers of people living with mental illness was identified by stakeholders as a high need throughout the HNECC PHN region. This includes providing direct support whilst recognising and respecting the key role that families and carers play in supporting and caring for people experiencing mental illness and involving them in decision making. It is generally accepted that involvement of family and carers in care leads to better outcomes, however carers feel that there is a lack of recognition of their role in care, with their lack of involvement often attributed to confidentiality. Service providers especially those in the LHD mental health services recognise a need to strengthen the involvement of carers in care planning particularly for patients with severe and complex mental illness. The impact on family and carers of someone with severe mental illness is significant. Support and recognition for carers and family members should be a key element of services.</p>	<p><i>Mendelson J, Kelehear B, Wallace K, Morris K, White S, Rigby K, Considine R, Davies K, Handley T, Rich J. Hunter New England Central Coast Primary Health Network, Mental health and Suicide Prevention Needs Assessment Report 2017; pg 80.</i></p>
<p>Lack of a systematic evidence-based post-vention strategy across communities</p>	<p>Stakeholders identified a lack of services, or lack of awareness of services, for family and friends after a suicide attempt as a need in the HNECC PHN region. The provision of support for families following a suicide attempt or completed suicide was also perceived as a significant system challenge and a barrier to addressing suicide. It was perceived that families were often the best placed to provide support for a loved one following a suicide attempt, however the claimed need for privacy and confidentiality was used as a barrier to family involvement. This was considered a significant barrier to recovery for both the person who had attempted suicide and the family.</p> <p>The capacity of communities to respond following a suicide was identified as an area of need across the HNECC PHN region. Strategies to support families, friends and colleagues of people after suicide have been implemented in some communities such as: partnerships with organisations like Lifeline Hunter and United Synergies; suicide prevention networks established without organisational support; and school based post-vention strategies supported by headspace. Many communities however do not have such strategies in place.</p>	<p><i>Mendelson J, Kelehear B, Wallace K, Morris K, White S, Rigby K, Considine R, Davies K, Handley T, Rich J. Hunter New England Central Coast Primary Health Network, Mental health and Suicide Prevention Needs Assessment Report 2017; pg 80.</i></p>

Outcomes of the Service Needs Analysis		
Barriers for mental health nurses to gain credentials to work in general practice	Substantial barriers in gaining the required credentials to provide mental health nursing care in general practice have resulted in few completing required training. Further to this, the pay differential between mental health nurses in general practice and those working in LHD mental health services limits supply. Stakeholders indicate the role of general practice in mental health care needs to be strengthened by supporting multidisciplinary teams located in general practice.	<i>Mendelson J, Kelehear B, Wallace K, Morris K, White S, Rigby K, Considine R, Davies K, Handley T, Rich J. Hunter New England Central Coast Primary Health Network, Mental health and Suicide Prevention Needs Assessment Report 2017; pg 73, 82.</i>
Aboriginal and Torres Strait Islander Health		
Identified need	Key Issue	Description of Evidence
Reduced access to health services for Aboriginal and Torres Strait Islander people	<p>Reduced access to health services is a key contributing factor to the disproportionate burden of disease experienced by Aboriginal and Torres Strait Islander people. Rates of potentially preventable hospitalisations (PPHs) in the HNECC PHN region remain consistently higher for Aboriginal and Torres Strait Islander populations across all categories, including vaccine-preventable conditions; chronic conditions; and acute conditions. This can indicate a lack of appropriate individualised preventive health interventions and early disease management in primary care and community-based care settings.</p> <p>Barriers to accessing health care for the Aboriginal and Torres Strait Islander population of the HNECC PHN region, include: the cost of appointments and medications; lack of public and affordable private transport; low health literacy; lack of culturally friendly services; mistrust of mainstream service providers; misunderstandings between clients and health professionals; confidentiality concerns when accessing Aboriginal Medical Services; low motivation, competing work and family commitments; a lack of knowledge of available services; not bringing or having a Medicare card; patient discomfort in waiting rooms and consulting rooms; difficulty contacting transient community members; system complexity, particularly for people with complex needs; a shortage of Aboriginal health staff, especially Aboriginal Outreach Workers, Aboriginal maternal health workers, Aboriginal sexual health workers, Aboriginal Health Workers and Aboriginal Health Practitioners; high rate of 'burn out' and Aboriginal health staff turnover; closed books and long waiting times at Aboriginal Medical Services and general practices in rural areas; limited access to after hours GP services particularly where upfront fees are required and in rural areas; reduced availability of GPs, specialists and outreach services in rural areas; limited health professional service knowledge.</p> <p>Specific service needs include:</p> <ul style="list-style-type: none"> GP education on available services for Aboriginal and Torres Strait Islander patients; 	<p><i>Consultation with key stakeholder groups, including Karuah and Tilligerry Peninsula community members and service providers.</i></p> <p><i>Potentially preventable hospitalisations by category and Aboriginality, Hunter New England and Central Coast PHN, NSW 2006-07 to 2016-17 (Centre for Epidemiology and Evidence, NSW Health, 2018).</i></p>

Outcomes of the Service Needs Analysis

	<ul style="list-style-type: none"> increased education on disease prevention, health promotion and accessing services for Aboriginal and Torres Strait Islander people, including youth specific content; greater integration and coordination of services to reduce fragmented care; social and emotional wellbeing services with a focus on drug and alcohol misuse, youth health, and grief and loss; an area wide review of transport issues, with involvement across sectors; increased outreach capability, workforce capacity and access to specialists for rural Aboriginal Medical Services; culturally appropriate health initiatives and services; improved cultural competence of the non-Indigenous workforce; and localised cultural awareness training for health service staff. 	
Lack of integration, flexibility and cultural appropriateness of mental health and drug and alcohol services	There is a need for greater integration between mental health and drug and alcohol services, for more flexibility in treatment approaches, and for an increased emphasis on culturally appropriate mental health treatment. There is also concern amongst health professionals that the physical health needs of Aboriginal people experiencing mental illness, particularly severe and complex mental illness, are being overlooked.	<i>Consultation with key stakeholder groups.</i>
A low proportion of Aboriginal and Torres Strait Islander people having a 715 health assessment	The annual Indigenous-specific 715 health assessment promotes earlier detection of disease, and diagnosis and treatment of common, treatable conditions. The proportion of HNECC PHN's Aboriginal and Torres Strait Islander population having a 715 health assessment in 2015-16 was only 25.5% (Australia 26.7%), although this has increased from 11.7% in 2012-13. Stakeholders have flagged issues with the use of the 715 health assessment, including: numerous instances where non-regular primary health care providers have visited a community, performed health assessments and claimed the payments, but not offered continuity of care; providers not performing all components of the assessment; and difficulties providing continuity of care for transient populations.	<i>Australian Institute of Health and Welfare (AIHW). (2017). Indigenous health check (MBS 715) data tool. Retrieved from: http://analytics.aihw.gov.au/</i> <i>Consultation with key stakeholder groups.</i>
Lack of culturally safe workplaces for the Aboriginal and Torres Strait Islander workforce	Increasing the Aboriginal workforce in the health system will enhance health service access for Aboriginal and Torres Strait Islander people, however this workforce must be well supported. Members of the Aboriginal workforce working in non-Aboriginal workplaces across the HNECC PHN region consistently report a lack of workplace cultural safety due to ignorance on behalf of non-Aboriginal staff and managers; little awareness of culture and customs; and a limited understanding of the work practices of Aboriginal	<i>Consultation with key stakeholder groups.</i>

Outcomes of the Service Needs Analysis

staff. There are widespread reports of Aboriginal staff experiencing racism, not being listened to, and feeling tokenistic, under-valued and isolated. The Aboriginal workforce has identified a substantial need for improvement in the cultural competence of the non-Indigenous workforce, through for example mandatory cultural awareness or competence training, or compulsory input into an organisational Reconciliation Action Plan.

Alcohol and Other Drug Treatment Needs

Identified need	Key Issue	Description of Evidence
<p>Reduced access to drug and alcohol treatment services</p>	<p>Stakeholder engagement has confirmed that alcohol-related harm and subsequent treatment service provision remains the single largest contributing factor across the AOD sector, however methamphetamine-related presentations continue to increase as reported by HNECC PHN-funded providers. The availability of drug and alcohol residential services across the HNECC PHN region is inadequate, with waiting lists of up to 3 months in some services being reported. There is a particular lack of detoxification and residential treatment services in the Upper Hunter, Singleton, Muswellbrook and Greater Taree and Great Lakes LGAs.</p> <p>Service providers indicate that people do not understand the signs and symptoms of drug and alcohol misuse and are delaying help-seeking, due in part to stigma. People are also finding it difficult to travel to access the services they require, particularly in rural and remote regions of the HNECC PHN region.</p> <p>Service providers and other stakeholders indicate that the following factors need to be in place to improve outcomes across the region: increased coordination between services; improved patient access, engagement and sector navigation; improved access to primary mental health care services; more investment in drug and alcohol and mental health promotion and prevention; increased access to early intervention services; improved quality of treatment services in the hospital system; improved follow up of patients after hospital discharge; greater access to community mental health services; improved referral to counselling services; and improved access to residential and aftercare services; greater support for clients during transition between services; improved access to services for vulnerable population groups; greater support for primary care services in identifying and treating substance misuse, particularly General Practice; availability of services in languages other than English; increased availability of services after hours; more holistic treatment; increased access to psychiatrists; support for carers; and improved access to housing, accommodation, employment and skills-based training.</p>	<p><i>Consultation with key stakeholder groups, including HNECC Clinical Councils.</i></p> <p><i>HNECC Regional Drug & Alcohol Networks Service Mapping Survey Report (HNECC PHN, HNE LHD, CC LHD, & NADA, 2017).</i></p>

Outcomes of the Service Needs Analysis		
Reduced access to drug and alcohol treatment services for Aboriginal and Torres Strait Islander people	Greater access to drug and alcohol treatment services for Aboriginal and Torres Strait Islander community members throughout the HNECC PHN region has been identified as a need. Specific needs identified by stakeholders in relation to this vulnerable cohort include: more culturally appropriate services; greater integration between mental health, and drug and alcohol services; more flexibility in treatment approaches; ongoing support and referral pathways; and targeted support for services to provide treatment for this population group.	<i>Consultation with key stakeholder groups.</i>
Reduced access to drug and alcohol treatment services for pregnant women and/or those with young children	Pregnant women and women with young children have been identified as a vulnerable population group with reduced access to drug and alcohol services in the HNECC PHN region. Stakeholders have indicated that there is a need for more services for families, mothers and children, including day programs and peer support groups.	<i>Consultation with key stakeholder groups.</i>
Reduced access to drug and alcohol treatment services for youth	Youth are a vulnerable population group with reduced access to drug and alcohol treatment services in the HNECC PHN region. Service providers indicate that early intervention services are inaccessible for young people, and stakeholders in general have highlighted a need for improved access and more age appropriate drug and alcohol services for youth, and greater support for families. Due to a lack of youth residential services in the HNECC PHN region, young people are travelling to other PHN regions to engage in treatment.	<i>Consultation with key stakeholder groups.</i>
Reduced access to drug and alcohol treatment services for people exiting the criminal justice system	Stakeholders have indicated that there is reduced access to drug and alcohol treatment services for people upon exit from the criminal justice system, calling for increased availability of services via probation and parole for court mandated counselling clients and for those who have a requirement of treatment as a component of their parole conditions.	<i>Consultation with key stakeholder groups.</i>
Reduced access to drug and alcohol treatment services for people with co-occurring substance misuse and mental illness	Reduced access to treatment for people experiencing co-existing substance misuse and mental illness has been consistently flagged as a need by services providers and community members throughout the HNECC PHN region.	<i>Consultation with key stakeholder groups.</i>

Section 4 – Opportunities, priorities and options

This section summarises the priority needs and possible options / activities to address these. Each need has a unique code which also indicates the focus area, these are used in the Opportunities and Options tables to highlight the needs addressed by each activity. The number of options against each need are listed in the blue tables.*

**PH - General Population Health. MH - Primary Mental Health Care & Suicide Prevention. IH - Aboriginal and Torres Strait Islander Health. AOD - Alcohol and Other Drug Treatment.*

General Population Health Priority Needs								
Code	Need	No. of Options	Code	Need	No. of Options	Code	Need	No. of Options
NxPH1	Low levels of health literacy	2	NxPH14	High rates of overweight and obesity	3	NxPH27	High rates of chronic disease hospitalisations	5
NxPH2	Poor self-assessed health status	4	NxPH15	High rates of physical inactivity and poor nutrition	3	NxPH28	Barriers to screening in primary care	5
NxPH3	Lower than average life expectancy	11	NxPH16	High rates of smoking	2	NxPH29	Barriers to accessing disability services	1
NxPH4	Widespread socioeconomic disadvantage	0	NxPH17	High rates of chronic disease	7	NxPH30	Reduced access to services for children and youth	7
NxPH5	Health needs of an ageing population	8	NxPH18	High cancer incidence and mortality	7	NxPH31	Limited access to after-hours GPs	3
NxPH6	Poorer health outcomes for culturally and linguistically diverse populations	3	NxPH19	Poorer health outcomes for people experiencing homelessness	1	NxPH32	High proportions of semi-urgent and non-urgent emergency department presentations	5
NxPH7	Areas for improvement in childhood immunisation rates	1	NxPH20	A lack of health service integration, coordination and information sharing	8	NxPH33	Reduced access to services for older people	7
NxPH8	High rates of smoking during pregnancy	1	NxPH21	Areas of primary care workforce vulnerability	6	NxPH34	Reduced access to services in rural and remote areas	10
NxPH9	Poor health and developmental outcomes for infants and young children	4	NxPH22	Locally relevant professional development and education for primary care clinicians	4	NxPH35	Transport limitations	4
NxPH10	Youth health needs	7	NxPH23	Targeted support for general practice	5	NxPH36	Cost barriers to healthcare	4
NxPH11	Rural health disparities	11	NxPH24	Limited access to dental services	2	NxPH37	Reduced access to services for people experiencing homelessness	1
NxPH12	High proportions of people with severe disability and carers	1	NxPH25	Limited capacity of services to address dementia	4			
NxPH13	Increasing prevalence of dementia	2	NxPH26	Lack of prevention and early intervention services	3			

Opportunities and Options

General Population Health					
Possible Activities	Expected Outcome	Possible Performance Indicators	Data Source	Potential Lead	Need/s
Commission a Mobile X-Ray Service to provide non-urgent on-site radiography to RACF residents	Reduction in transportation of RACF residents to hospital	<i>Output indicator</i> – Number of participants Proportion of RACFs in the area with access to the service <i>Outcome indicator</i> – Number of instances where transport to hospital has been avoided	HNECC	HNECC CCLHD	NxPH5 NxPH32 NxPH33 NxPH35
Conduct further investigation into the needs of people from culturally and linguistically diverse backgrounds with a view to commissioning solutions or working with key partners to improve the health outcomes of this population	Increased understanding of the needs of people from culturally and linguistically diverse backgrounds, improved health outcomes and access to services for this cohort	<i>Process indicator</i> – Investigation is completed <i>Output indicator</i> - Recommendations / solutions are made Services are commissioned in response to local identified need	HNECC	HNECC HNELHD CCLHD NGOs	NxPH6
Commission the administration of a childhood immunisation service in Wyong	Increased childhood immunisation rates in Wyong	<i>Outcome indicator</i> – Rates of 1yr, 2yr and 5yr children fully immunised	AIHW	HNECC CCLHD	NxPH7 NxPH9
Develop and implement a strategy for addressing high rates of low-birth weight babies and smoking during pregnancy in areas of high need in collaboration with key stakeholders	Improved child and maternal health outcomes	<i>Process indicator</i> – Strategy is developed <i>Output indicators</i> – Strategy is implemented and evaluated <i>Outcome indicators</i> – Rates of smoking during pregnancy Rates of low birth weight babies Infant mortality rates	HNECC AIHW NSW HealthStats	HNECC HNELHD CCLHD	NxPH3 NxPH8 NxPH9 NxPH16 NxIH3
Conduct further investigation into potential activities to improve the health outcomes of infants and young children with a view to commissioning solutions or working with key partners	Improved infant and young child health outcomes	<i>Process indicator</i> – Investigation is completed <i>Output indicator</i> - Recommendations / solutions are made Services are commissioned in response to local identified need	HNECC	HNECC HNELHD CCLHD	NxPH9
Commission Primary Health Care Nursing Clinics and Community Participation programs throughout New England North West	Improved health and wellbeing of people living within small rural and remote communities	<i>Output indicator</i> – Proportion of the rural population receiving PHN-commissioned primary health care nursing services	HNECC	HNECC	NxPH1 NxPH3 NxPH5 NxPH11

Opportunities and Options

General Population Health

Possible Activities	Expected Outcome	Possible Performance Indicators	Data Source	Potential Lead	Need/s
		Proportion of the rural Aboriginal and Torres Strait Islander population receiving PHN-commissioned primary health care nursing services			NxPH14 NxPH15 NxPH17 NxPH18 NxPH28 NxPH34 NxPH35 NxPH36
Commission a range of Allied Health services across the New England North West and rural Hunter regions in accordance with local need	Improved health and wellbeing of people living in rural areas	<i>Process indicator</i> – Services are commissioned in accordance with local need <i>Output indicator</i> - Proportion of the rural population receiving PHN-commissioned allied health services <i>Outcome indicator</i> – Clinical outcomes for people receiving PHN-commissioned allied health services	HNECC	HNECC	NxPH2 NxPH3 NxPH11 NxPH14 NxPH15 NxPH17 NxPH18 NxPH28 NxPH34 NxPH35 NxPH36
Commission the Ear, Nose and Throat Telehealth project, using technology to increase rural people’s access to the John Hunter Hospital ENT Outpatient Service and upskilling rural GPs to manage ENT conditions	Increased access to ENT services for rural and remote children	<i>Output indicators</i> – Number of telehealth ENT consultations performed Increase in confidence of GPs in managing ENT conditions <i>Outcome indicator</i> – Patient / Carer experience of care	HNECC HNELHD	HNECC	NxPH9 NxPH11 NxPH30 NxPH34 NxPH35 NxPH36

Opportunities and Options

General Population Health

Possible Activities	Expected Outcome	Possible Performance Indicators	Data Source	Potential Lead	Need/s
Develop a rural communities strategy to identify local health and service needs, and develop solutions	Increased access to health services and improved outcomes for rural communities	<i>Process indicators</i> – Rural communities strategy is developed Local health and service needs are identified Solutions are developed to address identified needs <i>Output indicator</i> - Activities are commissioned to address identified needs	HNECC	HNECC RDN HNELHD	NxPH2 NxPH3 NxPH11
Partner in the NHMRC NSW Centre for Innovation in Regional Health supporting scholarship and research activities in primary care	Increased research capacity in primary care	<i>Process indicator</i> – HNECC actively participates in the Centre for Innovation in Regional Health	HNECC	NHMRC	NxPH11 NxPH20 NxPH21 NxPH22
Conduct further investigation into the needs of people with a disability with a view to commissioning solutions or working with key partners to improve the health outcomes of this population	Increased understanding of the needs of people with a disability, improved health outcomes and access to services for this cohort	<i>Process indicator</i> – Investigation is completed <i>Output indicator</i> - Recommendations / solutions are made Services are commissioned in response to local identified need	HNECC	HNECC HNELHD CCLHD NGOs	NxPH12 NxPH29
Commission a healthy weight initiative, supporting people to engage in healthier behaviours	Reduced waist circumferences, increased productivity and reduced burden of chronic disease and demand on health services	<i>Outcome indicators</i> – Average reduction in waist circumference Rates of overweight and obesity Rates of physical inactivity and poor nutrition Rates of chronic disease	HNECC PHIDU PAT CAT	HNECC	NxPH2 NxPH3 NxPH14 NxPH15 NxPH17 NxPH18 NxPH26 NxPH27
Support smoking cessation programs, including promoting health professional referral of patients / clients to the NSW Quitline	Reduction in rates of smoking	<i>Output indicator</i> – Rate of calls to the NSW Quitline <i>Outcome indicator</i> – Rates of smoking	Cancer Institute NSW	HNECC	NxPH2 NxPH3 NxPH16

Opportunities and Options

General Population Health

Possible Activities	Expected Outcome	Possible Performance Indicators	Data Source	Potential Lead	Need/s
					NxPH17 NxPH18
Co-commission a new COPD model of care which places pulmonary rehabilitation and specialist appointments in the primary care setting	Increased proportion of patients who commence and complete Pulmonary Rehabilitation Reduced hospital admissions for patients	<i>Outcome indicators</i> – Proportion of patients completing Pulmonary Rehabilitation Rate of hospital admissions for the patients involved	HNELHD	HNE Integrated Care Alliance	NxPH17 NxPH27
Co-commission a Diabetes Model of Care through the Hunter New England Integrated Care Alliance	Enhanced diabetes care in primary care, and reduced demand on tertiary services	<i>Outcome indicator</i> – Rate of hospital admissions for diabetes	HNELHD	HNE Integrated Care Alliance	NxPH17 NxPH27
Develop and implement a Community Cancer Screening Participation Strategy under the guidance of key stakeholders and community groups	Increased access to, and participation in, cancer screening programs, with a key focus on vulnerable groups including Aboriginal and Torres Strait Islander people, rural and remote communities and culturally and linguistically diverse populations	<i>Outcome indicators</i> – Cervical screening participation rates Breast screening participation rates, all women Breast screening participation rates, CALD women Breast screening participation rates, Aboriginal and Torres Strait Islander women Bowel cancer screening rates	Cancer Institute NSW	HNECC	NxPH2 NxPH3 NxPH5 NxPH6 NxPH11 NxPH18 NxPH26 NxPH28 NxIH1 NxIH2
Support the Well Women’s Education and Scholarship program delivering targeted training in rural areas	Enhance Practice Nurse workforce capacity to undertake cervical cancer screening. Increased access to and participation in cervical cancer screening within targeted populations and/or communities.	<i>Output indicator</i> – Number of Practice Nurses completing training <i>Outcome indicators</i> – Cervical screening participation rates	HNECC Cancer Institute NSW	HNECC	NxPH11 NxPH18 NxPH21 NxPH28 NxPH34

Opportunities and Options

General Population Health					
Possible Activities	Expected Outcome	Possible Performance Indicators	Data Source	Potential Lead	Need/s
Commission the administration of a bulk-billing cervical and breast cancer screening clinic in Wyong.	Increased access to screening for socially disadvantaged women, and greater early detection of cancer and other abnormalities	<i>Outcome indicators</i> – Cervical screening participation rates Breast screening participation rates, all women Breast screening participation rates, CALD women Breast screening participation rates, Aboriginal and Torres Strait Islander women	Cancer Institute NSW	HNECC CCLHD	NxPH2 NxPH3 NxPH6 NxPH18 NxPH26 NxPH28 NXPH36
Conduct further investigation into the needs of people who are experiencing homelessness with a view to commissioning solutions or working with key partners to improve the health outcomes of this population	Increased understanding of the needs of people experiencing homeless, improved health outcomes and access to services for this cohort	<i>Process indicator</i> – Investigation is completed <i>Output indicator</i> - Recommendations / solutions are made Services are commissioned in response to local identified need	HNECC	HNECC HNELHD CCLHD	NxPH19 NxPH37
Undertake HealthPathways extended reach projects, including supporting the associated PatientInfo website	Improved planning of patient care through primary, community and secondary health care systems. Improved service navigation for patients, families and carers.	<i>Output indicators</i> – Number of pathways localised Proportion of pathways with Closing the Gap information Rates of utilisation	HNECC HNELHD CCLHD	HNECC HNELHD CCLHD	NxPH20
Implement a digital health and information sharing strategy, facilitating the use of: shared health summaries; National Health Service Directory; Central Coast Home Care Package Provider Portal; and eReferral systems.	Improved uptake of digital health systems and improved efficiency, safety, quality and security of referrals to both public and private healthcare providers	<i>Process Indicators</i> – Updates are provided to NHSD NHSD is promoted to stakeholders Contact database of health care providers is maintained <i>Output indicators</i> – Utilisation of shared health summaries Number of eReferrals sent and received Utilisation of secure messaging Uptake of MyHealthRecord	HNECC DoH	HNECC HNELHD CCLHD	NxPH1 NxPH20 NxPH23
Participate in the stage 1 roll-out of the Health Care Homes initiative across the region	Greater coordination of care for people with chronic and complex conditions. Improved	<i>Process indicators</i> – HNECC participates in the Stage 1 roll-out of the initiative	HNECC	DoH HNECC	NxPH2 NxPH3 NxPH20

Opportunities and Options

General Population Health					
Possible Activities	Expected Outcome	Possible Performance Indicators	Data Source	Potential Lead	Need/s
	management of health conditions and enhanced quality of life.				NxPH27
Form health sector partnerships with other primary care agencies i.e. GP Collaboration Unit; service delivery reform partnerships; Central Coast Aged Care Task Force; Hunter Dementia Alliance; and Central Coast Dementia Alliance	Improved service integration and coordination, increased access to services and improved health outcomes for the HNECC PHN population	<i>Process indicators</i> - Evidence of formalised partnerships with other regional service providers to support integrated regional planning and service delivery HNECC actively participates in all relevant activities associated with each of the partnerships	HNECC HNELHD CCLHD	HNECC HNELHD CCLHD	NxPH5 NxPH11 NxPH13 NxPH20 NxPH25 NxPH32 NxPH33 NxPH34
Co-commission scholarships and education programs to assist in retention of primary care practitioners	Increased retention of primary care practitioners in areas of workforce vulnerability	<i>Outcome indicators</i> – Numbers of primary care practitioners Change in vulnerability index of areas	HNECC RDN HNELHD	HNECC RDN HNELHD	NxPH11 NxPH21 NxPH22 NxPH23 NxPH24 NxPH34 NxMH16
Support General Practice Quality Improvement activities in response to locally identified need	Improved efficiency and sustainability of general practices, patients receive high quality, evidence-informed care	<i>Process indicators</i> – General Practice stakeholders identify areas of quality improvement where support is required Current workforce data is maintained A system for calculating workforce vulnerability of an areas is developed <i>Output indicators</i> – Areas of immediate workforce vulnerability are identified and managed Short and longer-term workforce plans are developed and executed	HNECC	HNECC	NxPH21 NxPH22 NxPH23 NxPH24 NxMH16

Opportunities and Options

General Population Health

Possible Activities	Expected Outcome	Possible Performance Indicators	Data Source	Potential Lead	Need/s
Commission a third-party provider to extract and collect aggregated data from general practices to facilitate benchmarking and identification of continuous quality improvement activities	Identification of practices that would benefit most from quality improvement activities, and improved quality of primary care	<i>Process indicator</i> – Data extraction and aggregation function is commissioned <i>Output indicator</i> – Data is used to identify areas for continuous quality improvement	HNECC	HNECC	NxPH20 NxPH23
Provide support and development opportunities to general practices in accordance with priority areas determined in consultation with practices	Improved efficiency and sustainability of general practices, patients receive high quality, evidence-informed care	<i>Output indicator</i> – Benchmarking of general practices against peers Utilisation of Practice Nurses Number of eReferrals sent and received Utilisation of secure messaging Uptake of MyHealthRecord Utilisation of HealthPathways	HNECC DoH	HNECC	NxPH20 NxPH21 NxPH22 NxPH23
Encourage, provide support and build community capacity for participation in health promotion, wellness and lifestyle activities	Improved health outcomes for the population	<i>Output indicator</i> – Capacity building activities are undertaken according to locally identified need <i>Outcome indicators</i> – Rates of overweight and obesity Rates of physical inactivity and poor nutrition Rates of smoking	HNECC	HNECC	NxPH2 NxPH3 NxPH25
Commission a Memory Assessment Program in the New England region	Improved access to timely comprehensive dementia assessment for people with mild to moderate cognitive impairment.	<i>Output indicators</i> – Number of assessments performed <i>Outcome indicators</i> – Patient and carer experience of care Provider experience of care	HNECC	HNECC	NxPH5 NxPH13 NxPH25 NxPH33
Research Potentially Preventable Hospitalisations in the region and develop recommendations as to how these can be addressed	Recommendations are made with a view towards commissioning services to reduce rates of potentially preventable hospitalisations in the region	<i>Process indicator</i> – Research is undertaken <i>Output indicators</i> - Recommendations are provided Services are commissioned in response to identified need <i>Outcome indicator</i> – Rates of potentially preventable hospitalisations	HNECC AIHW NSW HealthStats	HNECC	NxPH11 NxPH17 NxPH27 NxPH34

Opportunities and Options

General Population Health

Possible Activities	Expected Outcome	Possible Performance Indicators	Data Source	Potential Lead	Need/s
Collaborate with NSW Ambulance on an Ambulance Alternative Pathways project, including protocols for recommending non-transport and for palliative care patients, and community education	Reduction in hospital admissions and in inappropriate triple zero calls	<i>Outcome indicator</i> – Rates of semi-urgent and non-urgent emergency department presentations	AIHW	HNECC NSWA	NxPH20 NxPH32
Collaborate in the delivery of the Aged Care Emergency program, providing support to RACF staff to address the non-life-threatening acute care needs of residents within the facility	Reduced Emergency Department presentations and improved coordination and experience of hospital care for RACF residents	<i>Output indicator</i> – Proportion of RACFs participating Number of telephone consultations provided to RACFs <i>Outcome indicators</i> – Patient experience of care Rates of semi-urgent and non-urgent emergency department presentations	HNECC HNELHD NSWA HPC RACFs	HNECC HNELHD NSWA HPC RACFs	NxPH5 NxPH31 NxPH32 NxPH33
Commission a Small Town After Hours service in the New England region, providing telephone medical support to local hospitals when the usual GP VMO is absent/unavailable	Improved access to After Hours primary medical care for residents of small towns, and improved retention and job satisfaction of GPs working in small towns	<i>Output indicator</i> – Proportion of small communities covered by the program <i>Outcome indicator</i> – Experience of GPs involved	HNECC	HNECC	NxPH21 NxPH31 NxPH34
Commission a GP After Hours service in accordance with local need	Improved access to After Hours primary medical care for residents of the HNECC PHN region	<i>Output indicators</i> – Number of patients seen Number of transfers / referrals from local EDs <i>Outcome indicators</i> – Number of consultations that resulted in hospital avoidance Number of semi-urgent and non-urgent ED presentations in the after-hours period	HNECC	HNECC	NxPH31 NxPH32

Primary Mental Health Care and Suicide Prevention Priority Needs								
Code	Need	No. of Options	Code	Need	No. of Options	Code	Need	No. of Options
NxMH1	High rates of mental illness, intentional self-harm and suicide	30	NxMH9	Stigma associated with mental illness including help seeking	1	NxMH17	Limited availability of early intervention services	9
NxMH2	Mental health and suicide prevention needs of youth	6	NxMH10	Lack of integration and collaboration between mental health services	4	NxMH18	Lack of cross-sectoral mental health promotion and prevention, and suicide prevention strategies	3
NxMH3	Mental health and suicide prevention needs of males aged 25-65 years	1	NxMH11	Cost barriers to accessing mental health and suicide prevention services	16	NxMH19	Limited capacity of services to develop and implement an approach to quality	1
NxMH4	Mental health and suicide prevention needs of males aged over 80 years	2	NxMH12	Transport barriers to mental health services	16	NxMH20	Limited support for families and carers of people living with mental illness	1
NxMH5	Mental health and suicide prevention needs of Aboriginal and Torres Strait Islander people	3	NxMH13	Limited services for people experiencing moderate to severe mental illness	5	NxMH21	Lack of a systematic evidence-based post-vention strategy across communities	1
NxMH6	Mental health and suicide prevention needs of older people residing in aged care facilities	1	NxMH14	Support for GPs to play a central role in mental health care	1	NxMH22	Barriers for mental health nurses to gain credentials to work in general practice	1
NxMH7	Mental health and suicide prevention needs of members of LGBTIQ community members	1	NxMH15	Reduced access to psychiatrists	1			
NxMH8	Needs of people experiencing moderate to severe mental illness	5	NxMH16	Reduced capacity of services to recruit and retain allied health staff	2			

Opportunities and Options

Primary Mental Health Care and Suicide Prevention Needs

Possible Activities	Expected Outcome	Possible Performance Indicators (*Mandatory Performance Indicator)	Data Source	Potential Lead	Need/s
Commission primary mental health care services for underserved and hard-to-reach groups, including rural and remote communities	Increased access to primary mental health care services for underserved groups	<i>Output indicator</i> - Proportion of regional population receiving PHN-commissioned mental health services – Psychological therapies delivered by mental health professionals* <i>Outcome indicator</i> - Clinical outcomes for people receiving PHN-commissioned Psychological therapies delivered by mental health professionals*	PMHC-MDS	HNECC	NxMH1 NxMH11 NxMH12 NxPH10 NxPH34
Commission suicide prevention services in areas of identified need	Increased access to services for people at risk of suicide	<i>Output indicator</i> - Number of people who are followed up by PHN-commissioned services following a recent suicide attempt*	PMHC-MDS	HNECC	NxMH1 NxMH11 NxMH12
Support first responder training and suicide-risk screening programs to facilitate early identification and intervention	Increased early identification and intervention for people at risk of suicide	<i>Output indicator</i> – Average increase in confidence of participants in intervening with people at risk	HNECC	HNECC	NxMH1
Collaborate with LifeSpan consortiums to facilitate QPR training and deliver the Black Dog StepCare program through General Practice	Decreased suicide attempts and decreased suicide deaths	<i>Outcome indicators</i> – Rates of suicide Rates of intentional self-harm hospitalisation	NCIS HealthStats NSW	Black Dog	NxMH1
Commission Headspace centres in Gosford / Lake Haven, Maitland, Newcastle and Tamworth with outreach to Armidale, Moree, Narrabri and Gunnedah	Increased access for youth and their families to help with issues affecting wellbeing.	<i>Output Indicator</i> - Proportion of regional youth population receiving youth-specific PHN-commissioned mental health services*	Headspace MDS PMHC-MDS	HNECC	NxMH1 NxMH2 NxMH11 NxMH12 NxMH17 NxPH10 NxPH30
Commission youth complex services in areas of identified need	Improved outcomes for youth experiencing severe and/or complex mental illness	<i>Output Indicator</i> - Proportion of regional youth population receiving youth-specific PHN-commissioned mental health services*	Headspace MDS PMHC-MDS	HNECC	NxMH1 NxMH2 NxMH11

Opportunities and Options

Primary Mental Health Care and Suicide Prevention Needs

Possible Activities	Expected Outcome	Possible Performance Indicators (*Mandatory Performance Indicator)	Data Source	Potential Lead	Need/s
					NxMH12 NxPH10 NxPH30
Commission low intensity youth services (LITE Model) in areas of identified need	Improved outcomes for youth at risk of, or experiencing, mental illness	<i>Output Indicators</i> - Proportion of regional youth population receiving youth-specific PHN-commissioned mental health services* Proportion of regional population receiving PHN-commissioned mental health services – Low intensity services* <i>Outcome Indicator</i> - Clinical outcomes for people receiving PHN-commissioned low intensity mental health services*	Headspace MDS PMHC-MDS	HNECC	NxMH1 NxMH2 NxMH11 NxMH12 NxMH17 NxPH10 NxPH30
Conduct further investigation into early intervention services targeted at youth at risk of, or experiencing, mental illness with a view to commissioning appropriate services in response to local need	Identification of communities with the greatest unmet need for early intervention services for youth Improved outcomes for youth at risk of, or experiencing, mental illness	<i>Process Indicators</i> – Communities with highest unmet need identified Services commissioned in response to need <i>Output Indicators</i> - Proportion of regional youth population receiving youth-specific PHN-commissioned mental health services* Proportion of regional population receiving PHN-commissioned mental health services – Low intensity services*	HNECC PMHC-MDS	HNECC	NxMH1 NxMH2 NxMH17 NxPH10 NxPH30
Develop the capacity of primary care to provide early intervention and low intensity support to children and youth with, or at risk of developing, mental illness including eating disorders	Improved outcomes for children and youth at risk of, or experiencing, mental illness including eating disorders	<i>Output indicator</i> - Support region-specific, cross sectoral approaches to early intervention for children and young people with, or at risk of mental illness (including those with severe mental illness who are being managed in primary care) and implementation of an equitable and	HNECC	HNECC	NxMH1 NxMH2 NxMH17 NxPH10 NxPH30

Opportunities and Options

Primary Mental Health Care and Suicide Prevention Needs

Possible Activities	Expected Outcome	Possible Performance Indicators (*Mandatory Performance Indicator)	Data Source	Potential Lead	Need/s
		integrated approach to primary mental health services for this population group*			
Commission primary mental health services targeted at males aged 25-65 years	Greater access to services and improved outcomes for males aged 25-65 years	<i>Output indicator</i> – Proportion of this cohort receiving PHN-commissioned mental health services <i>Outcome indicator</i> – Clinical outcomes for this cohort receiving PHN-commissioned mental health services	HNECC PMHC-MDS	HNECC	NxMH1 NxMH3 NxMH11 NxMH12
Commission primary mental health services targeted at males aged over 80 years	Greater access to services and improved outcomes for males aged over 80 years	<i>Output indicator</i> – Proportion of this cohort receiving PHN-commissioned mental health services <i>Outcome indicator</i> – Clinical outcomes for this cohort receiving PHN-commissioned mental health services	HNECC PMHC-MDS	HNECC	NxMH1 NxMH4 NxMH11 NxMH12 NxPH5 NxPH33
Commission primary mental health services targeted at Aboriginal and Torres Strait Islander people	Greater access to services and improved outcomes for Aboriginal and Torres Strait Islander people	<i>Output indicator</i> - Proportion of Indigenous population receiving PHN-commissioned mental health services where the services were culturally appropriate*	PMHC-MDS	HNECC	NxMH1 NxMH5 NxMH11 NxMH12 NxIH1 NxIH3 NxIH4
Investigate culturally appropriate low intensity social and emotional health and suicide prevention initiatives with the view to commissioning appropriate services in areas of need	Identification of culturally appropriate low intensity social and emotional health and suicide prevention initiatives Greater access to services and improved outcomes for Aboriginal and Torres Strait Islander people	<i>Process Indicators</i> – Appropriate initiatives are identified Low intensity social and emotional health and suicide prevention services are commissioned <i>Output indicator</i> - Proportion of Indigenous population receiving PHN-commissioned mental health services where the services were culturally appropriate*	HNECC PMHC-MDS	HNECC	NxMH1 NxMH5 NxIH1 NxIH3 NxIH4

Opportunities and Options

Primary Mental Health Care and Suicide Prevention Needs

Possible Activities	Expected Outcome	Possible Performance Indicators (*Mandatory Performance Indicator)	Data Source	Potential Lead	Need/s
		Proportion of regional population receiving PHN commissioned mental health services – Low intensity interventions <i>Outcome indicator</i> – Clinical outcomes for people receiving PHN-commissioned low intensity mental health interventions			
Build the capacity of primary care to deliver culturally safe mental health and suicide prevention programs	Greater access to mental health and suicide prevention services and improved outcomes for Aboriginal and Torres Strait Islander people	<i>Output indicator</i> – Improved cultural safety of services <i>Outcome indicator</i> – Patient experience of care	HNECC	HNECC	NxMH1 NxMH5 NxIH1 NxIH3 NxIH4
Commission primary mental health services for older people residing in aged care facilities	Greater access to services and improved outcomes for people residing in aged care facilities	<i>Output indicator</i> - Proportion of the regional cohort receiving PHN-commissioned mental health services <i>Outcome indicator</i> – Clinical outcomes for this cohort receiving PHN-commissioned mental health services	HNECC PMHC-MDS	HNECC	NxMH1 NxMH4 NxMH6 NxMH11 NxMH12 NxPH5 NxPH33
Undertake targeted consultation and further investigation to ascertain the mental health and suicide prevention needs of LGBTIQ community members, including the size of the population affected	Increased understanding of the mental health and suicide prevention needs of LGBTIQ community members that can form the basis for commissioning appropriate services	<i>Process indicator</i> – Targeted consultation and further investigation completed Recommendation/s made as to how this need can be addressed	HNECC	HNECC	NxMH1 NxMH7
Commission primary mental health services targeted at people with severe and complex mental illness	Greater access to services and improved outcomes for people with severe and complex mental illness	<i>Output indicator</i> - Proportion of regional population receiving PHN-commissioned mental health services – Clinical care coordination for people with severe and	PMHC-MDS	HNECC	NxMH1 NxMH8 NxMH11

Opportunities and Options

Primary Mental Health Care and Suicide Prevention Needs

Possible Activities	Expected Outcome	Possible Performance Indicators (*Mandatory Performance Indicator)	Data Source	Potential Lead	Need/s
		complex mental illness (including clinical care coordination by mental health nurses)*			NxMH12 NxMH13
Commission psychosocial support services as needed for people with severe mental illness who are ineligible for NDIS support	Greater access to psychosocial support services and improved outcomes for people with severe mental illness	<i>Process indicator</i> – Needs assessment completed Services commissioned in accordance with identified need <i>Output indicator</i> - Proportion of the regional cohort receiving PHN-commissioned psychosocial support services <i>Outcome indicator</i> – Psychosocial outcomes for people receiving PHN-commissioned psychosocial support services	HNECC	HNECC	NxMH1 NxMH8 NxMH11 NxMH12 NxMH13
Commission a transitional care package program in areas of identified need	Improved outcomes for people with severe and complex mental illness	<i>Output indicator</i> - Proportion of regional population receiving PHN-commissioned mental health services – Clinical care coordination for people with severe and complex mental illness (including clinical care coordination by mental health nurses)*	PMHC-MDS	HNECC	NxMH1 NxMH8 NxMH11 NxMH12 NxMH13
Co-commission a GP psychiatry consultation service	Increased access to psychiatric advice for GPs, and improved outcomes for people with severe and complex mental illness	<i>Process indicator</i> – GP psychiatry consultation service is available to HNECC PHN GPs GPs report increased access to psychiatry advice	HNECC	NSW PHN Network	NxMH1 NxMH8 NxMH11 NxMH12 NxMH13 NxMH14 NxMH15
Collaborate with LHDs and the Butterfly Foundation to strengthen the capacity of primary care to deliver early intervention for eating disorders	Improved outcomes for people with eating disorders	<i>Output indicator</i> – Reduction in hospitalisation rates attributed to eating disorders	NSW Ministry of Health	HNECC, LHDs, Butterfly Found'n	NxMH1 NxMH2 NxMH8 NxMH13 NxMH17 NxPH10

Opportunities and Options

Primary Mental Health Care and Suicide Prevention Needs

Possible Activities	Expected Outcome	Possible Performance Indicators (*Mandatory Performance Indicator)	Data Source	Potential Lead	Need/s
					NxPH30
Develop a suicide prevention strategy to address stigma encountered by medical professionals in regards to help seeking	Increased access to suicide prevention services for medical professionals, reduction in suicide rates of this cohort	<i>Process indicator</i> – A strategy is developed The strategy is implemented and evaluated	HNECC	HNECC	NxMH1 NxMH9
Commission a mental health and psychosocial service access, triage and referral service	Improved access to mental health and psychosocial support services across the region within an integrated stepped care model	<i>Process indicator</i> – An access, triage and referral service model is developed The service is commissioned	HNECC	HNECC	NxMH10
Commission low intensity mental health services	Increased access to low intensity services across the region within an integrated stepped care model	<i>Output indicator</i> - Proportion of regional population receiving PHN-commissioned mental health services – Low intensity services <i>Outcome indicator</i> - Clinical outcomes for people receiving PHN-commissioned low intensity mental health services	PMHC-MDS	HNECC	NxMH1 NxMH11 NxMH12 NxMH17 NxMH18
Promotion of existing low intensity services and gateways, including the mental health digital gateway	Increased access to low intensity services across the region within an integrated stepped care model	<i>Output indicator</i> – Non-PHN low intensity services promoted across networks and communication platforms Non-PHN low intensity services built into the stepped care model	HNECC	HNECC	NxMH1 NxMH11 NxMH12 NxMH17 NxMH18
Build the capacity of the low intensity workforce in accordance with locally identified need	Increased growth and development of the low intensity workforce, including the peer workforce	<i>Process indicator</i> – Low intensity workforce gaps are identified Capacity building activities are undertaken in response to locally identified need/s Capacity building initiatives are evaluated	HNECC	HNECC	NxMH1 NxMH17
Develop a Regional Mental Health and Suicide Prevention Plan in collaboration with LHDs and other key stakeholders	Improved coordination and integration of services, and improved mental health outcomes	<i>Process indicator</i> - Evidence of formalised partnerships with other regional service providers to support integrated regional planning and service delivery*	HNECC	HNECC, LHDs	NxMH1 NxMH10 NxMH11

Opportunities and Options

Primary Mental Health Care and Suicide Prevention Needs

Possible Activities	Expected Outcome	Possible Performance Indicators (*Mandatory Performance Indicator)	Data Source	Potential Lead	Need/s
	and reduced suicide rates for the HNECC PHN population				NxMH12 NxMH18 NxMH21
Develop the capacity of primary care to operate within a patient centered stepped care model	Improved integration of services, increased efficiency of services, and improved mental health outcomes for the HNECC PHN population	<i>Process indicators</i> – A stepped care model is developed for the HNECC PHN region Proportion of PHN annual flexible mental health funding allocated to low intensity mental health services, psychological therapies and services for people with severe and complex mental illness	HNECC	HNECC	NxMH1 NxMH10 NxMH17
Facilitate integration and standardisation of governance, clinical information management, performance reporting and consumer/staff feedback processes within primary mental health care services	Improved quality and governance of services, and greater integration of services	<i>Process indicators</i> – Governance standards are developed for primary mental health services Governance standards are incorporated within HNECC contracts Extent to which governance processes are in place and being managed according to national, state and local standards, including the National Standards for Mental Health Services 2010*	HNECC	HNECC	NxMH1 NxMH10 NxMH19
Work with key stakeholders to develop recommendations for addressing the needs of families and carers of people living with mental illness	Greater support is accessible for families and carers of people living with mental illness	<i>Process indicator</i> – A working group of relevant stakeholders is convened <i>Output indicators</i> – Recommendations for addressing the needs of this cohort are developed Recommendations are acted upon	HNECC	HNECC HNELHD CCLHD NGOs	NxMH20
Co-commission an activity aimed at increasing the number of credentialed mental health nurses working in general practice	Increased numbers of mental health nurses working in general practice	<i>Output indicator</i> – An activity to increase the number of mental health nurses in general practice is co-commissioned	HNECC	HNECC HNELHD	NxMH1 NxMH8 NxMH13 NxMH14

Opportunities and Options

Primary Mental Health Care and Suicide Prevention Needs

Possible Activities	Expected Outcome	Possible Performance Indicators (*Mandatory Performance Indicator)	Data Source	Potential Lead	Need/s
		<i>Outcome indicator</i> - Number of mental health nurses working in general practice			NxMH22
Support the provision of specialised mental health and counselling services to people affected by the Williamstown PFAS exposure	Increased access to services and improved mental health outcomes for this cohort	<i>Process indicators</i> – The voluntary PFAS Blood Testing Program is available Support and education of primary care providers around PFAS Exposure is available Establishment of reimbursement program for General Practice for counselling consultations A communications strategy with appropriate messaging is followed <i>Output indicators</i> – Level of service provided to the cohort	HNECC	HNECC	NxMH1
Commission a rural resilience program in response to the drought	Increased access to services for rural and isolated families	<i>Output indicator</i> – Proportion of rural population receiving PHN-commissioned rural resilience services	HNECC	HNECC	NxMH1 NxPH11 NxPH34

Aboriginal and Torres Strait Islander Health Priority Needs								
Code	Need	No. of Options	Code	Need	No. of Options	Code	Need	No. of Options
NxIH1	Poorer health outcomes for Aboriginal and Torres Strait Islander people	7	NxIH3	Reduced access to health services for Aboriginal and Torres Strait Islander people	7	NxIH5	A low proportion of Aboriginal and Torres Strait Islander people having a 715 health assessment	1
NxIH2	Higher rates of chronic disease amongst Aboriginal and Torres Strait Islander people	2	NxIH4	Lack of integration, flexibility and cultural appropriateness of mental health and drug and alcohol services	4	NxIH6	Lack of culturally safe workplaces for the Aboriginal and Torres Strait Islander workforce	2

Opportunities and Options

Aboriginal and Torres Strait Islander Health

Possible Activities	Expected Outcome	Possible Performance Indicators	Data Source	Potential Lead	Need/s
Commission the Integrated Team Care activity to facilitate access to clinical support and chronic disease management for Aboriginal and Torres Strait Islander people	Improved health outcomes for Aboriginal and Torres Strait Islander people	<i>Output indicators</i> – Proportion of the regional Aboriginal and Torres Strait Islander population receiving PHN-commissioned Aboriginal Health services Proportion of the regional Aboriginal and Torres Strait Islander population having a 715 health assessment <i>Outcome indicators</i> – Clinical outcomes for people receiving PHN-commissioned Aboriginal Health services Rate of potentially preventable hospitalisations, by Aboriginality Patient experience of care	HNECC AIHW NSW HealthStats	HNECC	NxIH1 NxIH2 NxIH3 NxIH5
Provide peer support, professional guidance and mentoring to the Aboriginal workforce delivering the Integrated Team Care activity	Improved cultural safety of workplaces and primary care services. Improved health outcomes for Aboriginal and Torres Strait Islander people.	<i>Outcome indicators</i> – Patient experience of care Health worker experience of care Cultural safety of services	HNECC	HNECC	NxIH6
Partner in key Aboriginal Health Partnerships, including: The Hunter Aboriginal Health and	Improved integration and coordination of services. Increased access to health services for Aboriginal and Torres Strait Islander people.	<i>Process indicator</i> – HNECC actively participates in all relevant activities associated with each of the partnerships	HNECC	HNECC CCLHD HNELHD	NxIH1 NxIH3 NxIH4

Opportunities and Options

Aboriginal and Torres Strait Islander Health

Possible Activities	Expected Outcome	Possible Performance Indicators	Data Source	Potential Lead	Need/s
Wellbeing Alliance; and the Central Coast Aboriginal Partnership Agreement				ACCHOs	
Promote the Aboriginal Health Practitioner model of care through general practice and support Aboriginal Health Workers to gain this qualification	Enhanced capacity of the Aboriginal Health Workforce. Improved cultural safety of general practice. Improved health outcomes for Aboriginal and Torres Strait Islander people.	<i>Output indicator</i> – Number of Aboriginal Health Workers gaining the qualification <i>Outcome indicators</i> – Patient experience of care Cultural safety of services	HNECC	HNECC	NxIH1 NxIH3 NxIH6

Alcohol and Other Drug Treatment Priority Needs

Code	Need	No. of Options	Code	Need	No. of Options	Code	Need	No. of Options
NxAOD1	Higher rates of alcohol misuse	10	NxAOD4	Reduced access to drug and alcohol treatment services for Aboriginal and Torres Strait Islander people	4	NxAOD7	Reduced access to drug and alcohol treatment services for people exiting the criminal justice system	1
NxAOD2	Concerning levels of illicit drug use	10	NxAOD5	Reduced access to drug and alcohol treatment services for pregnant women and/or those with young children	1	NxAOD8	Reduced access to drug and alcohol treatment services for people with co-occurring substance misuse and mental illness	1
NxAOD3	Reduced access to drug and alcohol treatment services for the general population	10	NxAOD6	Reduced access to drug and alcohol treatment services for youth	1			

Opportunities and Options

Alcohol and Other Drug Treatment Needs

Possible Activities	Expected Outcome	Possible Performance Indicators	Data Source	Potential Lead	Need/s
Commission drug and alcohol treatment services in response to local need	Increased access to drug and alcohol treatment services	<p><i>Output indicator</i> – Proportion of regional population receiving PHN-commissioned drug and alcohol treatment services</p> <p><i>Outcome indicators</i> - Clinical outcomes for people receiving PHN-commissioned drug and alcohol treatment services</p> <p>Proportion of people aged 16 years+ consuming alcohol at level posing long-term risk to health</p> <p>Rate of mental health hospitalisations for drug and alcohol use</p> <p>Rate of alcohol-attributed deaths</p> <p>Rate of methamphetamine-related hospitalisations</p> <p>Rate of active patients with a record of drug misuse</p>	HNECC NSW HealthStats AIHW PAT CAT	HNECC	NxAOD1 NxAOD2 NxAOD3
Support a GP and Practice Nurse Clinical Mentoring Program delivered by a multidisciplinary team of drug and alcohol experts	Increased routine screening and evidence-based treatment within General Practice	<i>Outcome indicator</i> – Change in practice reported by GPs and Practice Nurses	HNECC	HNECC	NxAOD1 NxAOD2 NxAOD3
Support the delivery of the Drug and Alcohol First Aid Program with workshops across the region	Increased capacity to recognise and respond to substance misuse	<i>Output indicator</i> – Increase in confidence of participants in recognising and responding to substance misuse	HNECC	HNECC	NxAOD1 NxAOD2 NxAOD3
Support Regional Drug and Alcohol forums targeting General Practice, Community Pharmacy and Psychologists and the administration of addiction medicines, S8 prescription monitoring,	Improved service integration	<p><i>Process indicator</i> - Evidence of effective partnerships between service providers to support integrated collaborative care</p> <p><i>Outcome indicator</i> – Patient experience of care</p>	HNECC	HNECC	NxAOD1 NxAOD2 NxAOD3

Opportunities and Options

Alcohol and Other Drug Treatment Needs

Possible Activities	Expected Outcome	Possible Performance Indicators	Data Source	Potential Lead	Need/s
collaborative care arrangements and clinical pathways					
Support the Psychology Drug and Alcohol Clinical Mentoring Project, delivering clinical supervision and mentoring to psychologists in primary health care	Increased number of drug and alcohol-specialist psychologists in primary health care	<i>Output indicator</i> - Increase in confidence of participants in providing drug and alcohol treatment <i>Outcome indicator</i> – Number of drug and alcohol-specialist psychologists in primary health care	HNECC	HNECC	NxAOD1 NxAOD2 NxAOD3
Develop a training package to support GPs in the treatment of chronic pain using psychotherapy and self-management rather than opioid substitution	Increased non-pharmacological treatment of chronic pain	<i>Output indicator</i> - Increase in confidence and likelihood of participants in providing non-pharmacological treatment <i>Outcome indicator</i> – Change in practice reported by GPs and/or through practice software	HNECC PAT CAT	HNECC	NxAOD1 NxAOD2 NxAOD3
Develop a drug and alcohol referral and service navigation resource	Improved referral pathways for drug and alcohol services, and increased access to drug and alcohol treatment services	<i>Process indicator</i> – Referral and service navigation resource is developed <i>Output indicator</i> – Referral pathways are improved <i>Outcome indicator</i> – Patient experience of care	HNECC	HNECC	NxAOD1 NxAOD2 NxAOD3
Facilitate a clinical placement program for GPs in LHD drug and alcohol specialist services	Increased GP skills and knowledge in prescribing S8 medications, and awareness of clinical pathways	<i>Process indicator</i> – Clinical placement program is established <i>Output indicators</i> – Number of GPs completing the program Increase in knowledge of participants <i>Outcome indicator</i> – Patient experience of care	HNECC	HNECC	NxAOD1 NxAOD2 NxAOD3
Support drug and alcohol partnership networks in the HNECC PHN region	Improved regional coordination and improved sector capacity	<i>Process indicator</i> – Drug and alcohol partnership networks are established <i>Output indicators</i> – Networks include representation from all services in the sector	HNECC	HNECC	NxAOD1 NxAOD2 NxAOD3

Opportunities and Options

Alcohol and Other Drug Treatment Needs

Possible Activities	Expected Outcome	Possible Performance Indicators	Data Source	Potential Lead	Need/s
		Evidence of effective partnerships between service providers Strategies for improving regional coordination and sector capacity are developed Strategies are executed <i>Outcome indicator</i> – Patient experience of care			
Utilise partnerships and sector engagement opportunities to identify emerging workforce capacity and development needs	Increased capacity of primary care clinicians and services to respond to drug and alcohol needs of the region. Increased access to drug and alcohol treatment services	<i>Process indicator</i> - Activities utilise a program logic approach to demonstrate alignment between need, input, output and outcome <i>Output indicator</i> – Workforce capacity and development activities are targeted to identified areas of need	HNECC	HNECC	NxAOD1 NxAOD2 NxAOD3
Commission drug and alcohol treatment services targeted at Aboriginal and Torres Strait Islander people, including priority groups: pregnant women and/or those with young children; youth; people exiting the criminal justice system; and people with co-occurring substance use and mental illness.	Increased access to drug and alcohol treatment services for Aboriginal and Torres Strait Islander people	<i>Output indicator</i> – Proportion of the population receiving PHN-commissioned drug and alcohol treatment services who are Aboriginal and Torres Strait Islander people <i>Outcome indicators</i> - Clinical outcomes for Aboriginal and Torres Strait Islander people receiving PHN-commissioned drug and alcohol treatment services Rate of active Aboriginal and Torres Strait Islander patients with a record of drug misuse	HNECC PAT CAT	HNECC	NxAOD4
Support the Aboriginal Drug and Alcohol Scholarship Incentive Program encouraging attainment of the Certificate IV in Drug and Alcohol and Mental Health	Growth of the Aboriginal and Torres Strait Islander primary health care workforce	<i>Output indicator</i> – Number of scholarships issued <i>Outcome indicators</i> – Number of people completing the certificate Number of scholarship recipients gaining employment within primary care	HNECC	HNECC	NxAOD4

Opportunities and Options

Alcohol and Other Drug Treatment Needs

Possible Activities	Expected Outcome	Possible Performance Indicators	Data Source	Potential Lead	Need/s
Collaborate in the NSW PHN Aboriginal Drug and Alcohol Best Practice Guidelines development, evaluation and training	Increased access to drug and alcohol treatment services for Aboriginal and Torres Strait Islander people	<i>Output indicators</i> – Guidelines are developed Guidelines are implemented Use of the guidelines is evaluated <i>Outcome indicator</i> – Patient experience of care	NSW PHNs HNECC	NSW PHNs	NxAOD4
Utilise partnerships and sector engagement opportunities to identify emerging Aboriginal and Torres Strait Islander workforce development needs	Increased capacity of the Aboriginal and Torres Strait Islander workforce and increased access to drug and alcohol treatment services for Aboriginal and Torres Strait Islander people	<i>Process indicator</i> - Activities utilise a program logic approach to demonstrate alignment between need, input, output and outcome <i>Output indicator</i> – Workforce capacity and development activities are targeted to identified areas of need	HNECC	HNECC	NxAOD4
Commission drug and alcohol treatment services targeted at: <ul style="list-style-type: none"> • pregnant women and/or those with young children • youth • people exiting the criminal justice system • people with co-occurring substance misuse and mental illness 	Increased access to drug and alcohol treatment services for each of the target population groups	<i>Output indicator</i> – Proportion of the population receiving PHN-commissioned drug and alcohol treatment services within each target cohort <i>Outcome indicator</i> - Clinical outcomes for each target cohort receiving PHN-commissioned drug and alcohol treatment services Rate of mental health hospitalisations for drug and alcohol use	HNECC AIHW	HNECC	NxAOD5 NxAOD6 NxAOD7 NxAOD8

Section 5 - Checklist

This checklist confirms that the key elements of the needs assessment process have been undertaken. PHNs must be prepared, if required by the Department, to provide further details regarding any of the requirements listed below.

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 Annual Plan and for the department to use for programme 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).	✓