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Australian Government
Department of Health

phn
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 **16 December 2020**.

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.

Updated November 2020

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 **30 November 2020.**

Reporting Period

This Needs Assessment report is an update to the three-year Needs Assessment report 2019-2022 and covers the period December 2019 to November 2020. 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 2019-22 Core Needs Assessment submitted in November 2019. In completing this update, the project team has included:

- Additional quantitative data against previously identified needs. This involved sourcing and analysing information on:
    - Key findings from the HNECC PHN After-Hours Primary Care Needs Assessment (2020)
    - Key findings from the HNECC PHN Potentially Preventable Hospitalisations Report (2020)
    - Survey results from the HNECC PHN COVID-19 Impact on Primary Care Survey (2020)
    - Survey results from the HNECC PHN Allied Health - Health Information and Clinical Systems Survey (2020)

- Updates relating to priority health and service needs for the HNECC PHN identified through the Prioritisation Strategy
- Qualitative information gleaned from stakeholder engagement activities undertaken across the organisation in 2020

Any new and updated data has been presented in red text for ease of review. These activities have assisted HNECC PHN 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.

Further detail on key areas of work completed over the prior 12 months is provided below.

Health and Service Needs Prioritisation Strategy

Purpose

HNECC PHN is committed to enhancing the connection and alignment between the Core Needs Assessment and Activity Work Planning processes and documents. To this end, HNECC PHN has implemented the Health Needs Prioritisation Strategy to prioritise the health and service needs identified through the Needs Assessment process. The Strategy was conducted in three stages, with Stage One covering General Population Health and Aboriginal and Torres Strait Islander Health. Stage Two covered Service Needs for General Population Health and Aboriginal and Torres Strait Islander health and Stage Three covered Primary Mental Health Care and Suicide Prevention Needs. The Prioritisation Strategy was completed at the end of 2019. Key updates relating to top prioritised needs are included throughout this update.

Methodology

A Modified Hanlon Method for Prioritising Health Problems was used to score and rank in priority order a sub-set of health and service needs from the Core Needs Assessment. The Hanlon Method for Prioritising Health Problems is a popular technique for objectively scoring health needs to create a list of priorities for targeted action. This technique involves scoring the identified health needs against the factors presented below:

A. size of the health need or population affected e.g. number of current smokers

B. seriousness of the health need e.g. impacts of smoking on mortality, quality of life and on other people
C. the feasibility of HNECC addressing the identified health need.

The original Hanlon Method has been slightly modified by removing one of the original criteria, "*the effectiveness of available interventions for addressing the need",* as there are not concrete, well-established interventions for all identified health and service needs.

For each Stage, the HNECC PHN Executive determined the Feasibility of addressing each health/service need and those needs deemed unfeasible to address by the HNECC PHN were excluded from further analysis. Clinical Council members were asked to score the Seriousness of each need. The Health Planning team calculated the Size of the population affected by each health need. Once the needs were scored against each of the factors, a total priority score was calculated for each using the following formula: Total score = (A+ 2B) x C. The needs were then ranked by score, with the highest scoring need considered to be of the highest priority.

Key Results from Stage One: Top three Health Needs in ranked order (highest-lowest)
• High rates of physical inactivity and poor nutrition
• High rates of overweight and obesity
• High rates of chronic disease

Key Results from Stage Two: Top three Service Needs in ranked order (highest-lowest)
• A lack of health service integration, coordination and information sharing
• Lack of prevention and early intervention services
• Reduced access to services for children and youth

Key Results from Stage Three: Top three Mental Health and Suicide Prevention Health Needs in ranked order (highest-lowest)
- High rates of mental illness, intentional self-harm and suicide
- Needs of people experiencing moderate to severe mental illness
- Mental health and suicide prevention needs of youth

Key Results from Stage Three: Top three Mental health and Suicide Prevention Service needs in ranked order (highest-lowest)
- Lack of cross-sectoral mental health promotion and prevention, and suicide prevention strategies
- Support for GPs to play a central role in mental health care
- Lack of integration and collaboration between mental health services

HNECC PHN After-Hours Primary Care Needs Assessment
This report presents an overview of key after-hours health and services needs in the HNECC PHN region. The report will be made available on the HNECC PHN website soon.

The report presents Composite Index Scores for each LGA in the HNECC PHN region, which comprises population health need for after-hours services, after-hours service availability, and unmet demand for after-hours services. The indexing approach originated from the Composite Index Score created for the purpose of North Western Melbourne PHN's After Hours Gap Analysis and Recommendations report produced by Impact Co. The approach allows LGAs to be ranked in order from most to least need in terms of population need, access to services and unmet demand for services. This was complemented by analysis of Emergency Department data provided by HNELHD and CCLHD. A literature review and jurisdictional scan was conducted to identify effective and efficient service models (including

telehealth) for after-hours primary care, including models that are most appropriate for vulnerable and/or high use populations, key barriers and enablers to effective implementation of after-hours services. Extensive consultation took place with key stakeholders (GPs, primary care nurses, Local Health Districts, after-hours commissioned service providers, Aboriginal Community Controlled Health Organisations) via focus groups, surveys and interviews.

Reducing Potentially Preventable Hospitalisations in the Hunter New England and Central Coast Primary Health Network report

The Reducing Potentially Preventable Hospitalisations in the HNECC PHN project involved a detailed quantitative data analysis; a comprehensive literature review; and a jurisdictional scan of PPH interventions, strategies, and policies. The quantitative analysis covered Potentially Preventable Hospitalisations (PPH) data at a national, state, PHN and local (LGA/SA3 level) to identify PPHs which contribute the most to the total PPH burden on the region's hospital system and the community. A Hot Spot Analysis was conducted, based on the approach by the Grattan Institute to identify locations which have a rate of PPH condition at least 1.5 times higher than the comparable NSW rate for three consecutive years. The rate of PPHs for some of our region's vulnerable population groups, such as Aboriginal and/or Torres Strait Islanders and people living in rural and remote areas was also examined.

The literature review summarised the evidence base on effective interventions for addressing the priority PPHs. This work was complemented by a jurisdictional scan of comparable PHNs and primary care bodies to identify other potential approaches for addressing priority PPHs in the HNECC PHN region. Based on a synthesis of the quantitative data and results of literature and jurisdictional review, recommendations for further work to reduce priority PPHs in the HNECC PHN region, including for vulnerable population groups who experience higher rates of PPHs, have been developed.

COVID-19 Impact Survey

The survey was conducted in mid 2020 to better understand the impact of the pandemic on primary care providers across the HNECC PHN region. The purpose was to:

- Understand the impact of COVID-19 restrictions on activity levels in the workplace, including staffing levels
- Inform the direction of continued support from the HNECC PHN on telehealth implementation, including training and advocacy
- Receive feedback on the current support delivered by the HNECC PHN
- Identify key areas of future support required.

The survey received 298 responses (response rate of 10%) with extensive representation of the HNECC PHN region including, General Practice, Residential Aged Care, Aboriginal Community Controlled Health Organisations, Pharmacy, and Allied Health.

Allied Health – Health Information and Clinical Systems Survey

The survey was conducted in June 2020 to understand usage of electronic health information and clinical systems, including other digital technologies such as telehealth, secure messaging, and My Health Record amongst Allied Health professionals in the HNECC PHN region. The survey received 42 responses (response rate of 4.3%). While the response rate was relatively low, engagement in the use of electronic clinical systems for the purpose of improved patient outcomes and clinical practice amongst respondents was high.

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, with Indigenous rates included;

• 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.

Additional comments or feedback (approximately 500 words)

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	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. 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.	*Australian Commissioning Safety and Quality in Health Care, Health Literacy: A summary for clinicians, 2015, https://www.safetyandquality.gov.au* *Australian Bureau of Statistics, Australian Social Trends, 4102, Health Literacy, June 2009.* *WHO, 7th Global Conference in Health Promotion, Promoting Health and Development: Closing the Implementation Gap, 2009, www.who.int* *Falster, Jorm, Doglas, 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).* *Consultation with key stakeholder groups, including HNECC Clinical Councils.*
Poor self-assessed health status	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%.	*Proportion of persons aged 15 years and above assessing their health as 'fair' or 'poor' 2014-15 (PHIDU).* *Australians Aboriginal and Torres Strait Islander Health Survey: First results, Australia, 2012-13 (ABS, 2015).* *People aged 15 and over living in households, self-assessed health status by disability status, disability group and age group, 2017–18 from People with disability in Australia: health status of people with disability supplementary data tables (ABS National Health Survey 2017–18)*

Outcomes of the Health Needs Analysis		
	People with disability rate their health poorly compared to people without a disability. Nationally, in 2017-18, 41.2% of people with a disability aged 15 years and over rated their health as "Fair/Poor" compared to only 6.7% of people without a disability aged 15 years and over. In HNECC PHN, 6.6% of the population or 1,150,365 people have a severe or profound disability. Self-assessed health status declined with severity of disability with 59.9% of people with severe or profound disability aged 15 years and over rating their health as "Fair/poor". Older people with a disability rated their health lower than younger people with a disability. 44.3% of people with a disability aged 65 years and over rated their health as "Fair/Poor" compared to 39.3% of people with a disability aged 15-64 years of age. Self-assessed health status was lowest for people with head injury, stroke or brain damage and psychological disability. 68.7% of people with head injury, stroke or brain damage aged 15 years and over and 58.5% of people with psychological disability aged 15 years and over rated their health as "Fair/poor".	*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 2019).*
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. It is estimated that the life expectancy gap for homeless people in Australia is more than 30 years.	*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).* *Medical Journal of Australia (2018) Homeless health care: meeting the challenges of providing primary care*
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	*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).*

Outcomes of the Health Needs Analysis		
	(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. Some sub-population groups experience greater socioeconomic disadvantage than the general population. 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). The situation and needs of older culturally and linguistically diverse (CALD) Australians vary greatly. However, in general, older people from CALD backgrounds have poorer socioeconomic status, compared with the older Anglo-Australian population.	*Indigenous Relative Socioeconomic Outcomes Index, 2016, Aboriginal and Torres Strait Islander Social Health Atlas of Australia, Data by Indigenous Area (PHIDU, 2018).* Federation of Ethnic Communities' Councils of Australia (FECCA) 2015. Review of Australian research on older people from culturally and linguistically diverse backgrounds (PDF). Canberra: DSS.
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 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%). 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).	*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).* *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).* *Stroke hospitalisations, Hunter New England and Central Coast PHN, NSW 2001-02 to 2016-17; Coronary heart disease hospitalisations, Hunter New England and*

Outcomes of the Health Needs Analysis		
	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). 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).	*Central Coast PHN, NSW 2001-02 to 2016-17 (Centre for Epidemiology and Evidence, HealthStats NSW, NSW Ministry of Health, 2018).* *My aged care region tool (AIHW, 2018).*
Poorer health outcomes for culturally and linguistically diverse populations	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, with Armidale Regional LGA reporting a higher level at 0.8% (NSW, 3.8%). Stakeholders report social and cultural isolation is being experienced by CALD students of boarding schools or university in Armidale. Additionally, community stakeholders report domestic violence issues with CALD populations with many not seeking medical attention. The health of culturally and linguistically diverse consumers can be affected by poor access to health services and a lack of appropriate information to make informed decisions. Factors that can affect access to appropriate healthcare services include: English language proficiency and access to professional interpreters; lack of knowledge of the healthcare system, particularly primary health care; isolation and absence of social and family support networks; cultural stigma and shame around health issues including disability, sexually transmitted diseases (such as HIV), tuberculosis, mental illness, alcohol and other drug use; previous unfavourable or negative experiences with a health system, overseas or after migration to Australia; and past and ongoing experience of psychological trauma.	*Australian born population 2016; People born in predominantly NES countries 2016; People born overseas reporting poor proficiency in English 2016 (PHIDU 2018).* Consultation with key stakeholder groups. *People from culturally and linguistically diverse backgrounds, The Department of Health, 2006 (Australian Government; Department of Health, 2018).* *Girgis S and Colagiuri R (2009) cited in NSW Plan for Healthy Culturally and Linguistically Diverse Communities 2019-2023. NSW Health. 2019*

	People residing in the HNECC PHN who were born in the top ten non-English speaking countries were from the following countries, in order of population size: - Philippines (0.5% of the HNECC PHN population) - China (0.4%) - India (0.4%) - Germany (0.4%) - Netherlands (0.2%) - Italy (0.2%) - Malaysia (0.1%) - Thailand (0.1%) - Korea, Republic of (South) (0.1%) - Vietnam (0.1%) In 2017, the Armidale LGA became a regional refugee resettlement site. Approximately 428 Yazidi refugees (initially 200 planned for resettlement) have been settled in Armidale since 2018 (with stakeholders estimating an additional 400 planned). These refugees have primarily arrived from Iraq, Syria and Turkey and the majority are Kurmanji speaking. Stakeholders report this group of refugees are extremely traumatised (all displaced by ISIS with many being captured and tortured by ISIS). Stakeholders also report the lack of translating services (TIS), due to few Kurmunji-speaking interpreters in Australia and Allied Health providers are not able to access free TIS (whereas GPs, Specialists, Hospital can).	
Areas for improvement in childhood immunisation rates	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 (91.5%); Hunter Valley excluding Newcastle (93.5%); Newcastle & Lake Macquarie (93.6%); and Central Coast (93.8%) SA4s.	*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).*

Outcomes of the Health Needs Analysis		
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%).	*Reporting for Better Cancer Outcomes Performance Report 2018, Hunter New England and Central Coast Primary Health Network, Cancer Institute NSW, 2018. 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.*
Poor health and developmental outcomes for infants and young children	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). 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%).	*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.* *Early childhood development: AEDC Developmentally vulnerable on one or more domains, 2015 (PHIDU 2018).*
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 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.	*Consultation with key stakeholder groups.* *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).* *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).*

Outcomes of the Health Needs Analysis		
	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. 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%).	*National Coronial Information System. Intentional self-harm fatalities in the Hunter, New England and Central Coast Region 2000-2013. 2016.* *Reporting for Better Cancer Outcomes Performance Report 2018, Hunter New England and Central Coast Primary Health Network, Cancer Institute NSW, 2018.*
Rural health disparities	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. Stakeholders have identified the Hunter New England rural region as having high rates of neonatal mortality.	*Australian Standard Geographical Classification—Remoteness Areas (ASGC-RA); National data on lifestyle risk factors regional/remote compared to urban populations (AIHW 2014).* *Consultation with key stakeholder groups.*
High proportions of people with severe disability and carers	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 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	*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 2019).* *Consultation with key stakeholder groups.*

Outcomes of the Health Needs Analysis		
	Innes and Tenterfield communities there is reportedly a lack of support for young carers of family members experiencing mental illness. Stakeholders report concerns about the lack of availability of training for people who work with people with a disability in early detection of health problems. Upskilling is needed for a range of personnel who deliver in-home services and basic preventative screening in areas of early identification, particularly in skin and foot problems, medication management and food safety. Stakeholder concerns also include negative experiences with the NDIS, with more severely disabled clients struggling with the paperwork required for NDIS applications. Other concerns include problems navigating the NDIS and ACAT process requiring social workers to help navigate the system (however, social workers are unable to bill via Medicare). Further NDIS funding issues were raised for travel under the NDIS creating disadvantage for clients in rural and remote areas.	
Increasing prevalence of dementia	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. Over 50% of people using permanent residential aged care in the HNECC PHN region have a diagnosis of dementia.	*Australian Bureau of Statistics (2017) Causes of Death, Australia, 2016 (cat. no. 3303.0).* *Dementia prevalence data 2018-2058 (Dementia Australia, 2018). Aboriginal and Torres Strait Islander people and dementia: A review of the research (Alzheimer's Australia, 2014).* *Rate of mental health overnight hospitalisations for dementia per 10,000, age-standardised, 2015-16 (Australian Institute of Health and Welfare, 2018).* *My aged care region tool (AIHW, 2018).*
High rates of overweight and obesity	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. High rates of overweight and obesity were ranked as the second highest priority for the HNECC PHN region in the Prioritisation Strategy Phase One (Health Needs). In 2017-	*Consultation with key stakeholder groups.*

Outcomes of the Health Needs Analysis		
	18, 34.3 in 100 adults were overweight and 37.5 obese in the HNECC PHN region (NSW 34.7; and 30.9). Compared to the NSW averages, all LGAs reported higher rates of obese adults with the Port Stephens LGA (35.3); Newcastle LGA (34.9); Mid-Coast LGA (34.9); Lake Macquarie (34.9) and Glen Innes Severn LGA (34.9) all recording higher rates of overweight adults. Within the HNECC PHN region rates of both overweight and obesity have increased over time in comparison to 2014-15 rates (overweight 34.2; and 33.7 obese). A similar trend has been observed at a state level for obese adults (28.2 increased to 30.9) but there has been little change at a state level in the rate 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. In 2017-18, amongst children aged 2-17 years, 17.1 in 100 were overweight and 9.2 obese in the HNECC PHN region (NSW 17.0; and 7.4). Within the HNECC PHN region rates of both overweight and obesity have increased over time for children aged 2-17 years in comparison to 2014-15 rates (overweight 15.7 to 17,1; and obese 8.0 to 9.2). A similar trend has been observed at a state level for overweight children aged 2-17 years (16.4 to 17.0) but there has been little change at a state level in the rate of obese children. LGAs with higher than NSW average rates of overweight children include Narrabri (20.6); Moree Plains (20.0); Gunnedah (18.0); Liverpool Plains (18.0); Tamworth Regional (18.0); Central Coast (17.7); Walcha (17.5) and Upper Hunter Shire (17.2). All LGAs in the HNECC PHN region reported higher rates of childhood obesity than the NSW average (7.4). People with disability are more likely to be overweight or obese than people without disability. Nationally, in 2017-18, 71.6% of people aged 2 years and over were overweight or obese compared to 54.8% of people without disability. People aged 65 years and over with a disability were more likely to be overweight or obese than people aged less than 65 years with a disability (72.7%; and 52.7%, respectively). Adult males with a disability are more likely to be overweight or obese than females with a disability (80.2%; and 71.4%, respectively). In HNECC PHN, 6.6% of the population have a severe or profound disability. People born in some non-English speaking countries have a higher prevalence of overweight or obesity. 0.2% of the HNECC PHN population were born in Italy and have higher rates of overweight or obesity (72%) when compared to all NSW residents (53%).	*People aged 18 years and over who were overweight (not obese) ASR per 100, 2017-18 (PHIDU 2017); People aged 18 years and over who were obese ASR per 100, 2017-18 (PHIDU 2020).* *Blueprint for the Management of Overweight and Obesity in the Mining Industry 2016.* *Overweight persons aged 2-17 years, 2017-18; Obese persons, aged 2-17 years, 2017-18 (PHIDU 2020).* *People aged 2 and over with disability living in households, Body Mass Index (BMI) by disability group, age and sex 2017–18; People aged 18 and over and over living in households, Body Mass Index (BMI) by disability status and sex, 2017–18 (ABS 2019. Microdata: National Health Survey, 2017–18. Canberra: ABS. Findings based on AIHW analysis of the main unit record file (MURF)).* *NSW Population Health Survey data for 2014–17 cited in NSW Plan for Healthy Culturally and Linguistically Diverse Communities 2019-2023. NSW Health. 2019*

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. High rates of physical inactivity and poor nutrition were identified as the highest priority for the HNECC PHN region in the Prioritisation Strategy Phase One (Health Needs). In 2019 in the HNECC PHN region, 38.1% of people aged 16 years and over consumed the recommended daily consumption of fruit and 7.6% consumed the recommended daily consumption of vegetables (NSW 40.6% and 6.3% respectively). Rates of adequate fruit and vegetable consumption has decreased since 2017 in our region, where recommended intake was 44.8% for fruit and 9.3% for vegetables in people aged 16 and over. A similar trend is observed in recommended daily fruit consumption at a state level since 2017 (NSW 46.4%). In 2019, in the HNECC PHN region 39.9% of people were insufficiently physically active (NSW 38.5%). The rate of people insufficiently physically active has improved over time in our region. In 2017, 46.3% of people aged 16 years and over were insufficiently physically active. A similar trend is observed at a state level (NSW 41.6% in 2017). 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. In 2017-18, nationally 71.7% of people aged 18 and over with a disability living in households and 82.7% of people with a severe or profound disability did not meet recommended levels of physical activity, compared to 49.5% of people without a disability. In HNECC PHN, 6.6% of the population or 1,150,365 people have a severe or profound disability. Females aged 18 and over with a disability were less likely to meet recommended levels of physical activity compared to males (25.3%; and 32.1%, respectively). Older people aged 65 and over were less likely to meet recommended levels of physical activity compared to younger people aged 15 to 64 (17.2%; and 35.3%, respectively). Disability groups most likely not to meet recommended	*Fruit and vegetables: recommended daily consumption by Primary Health Network, percentage of persons aged 16 years and over, NSW 2019; Insufficient physical activity by Primary Health Network, persons aged 16 years and over, NSW 2019 (Centre for Epidemiology and Evidence, HealthStats NSW, NSW Ministry of Health, 2020).* *Consultation with key stakeholder groups.* People aged 18 and over living in households, whether met guidelines for physical activity in the last week by disability status, age group, disability group and sex, 2017–18 (ABS 2019. Microdata: National Health Survey, 2017–18. Canberra: ABS. Findings based on AIHW analysis of the main unit record file (MURF)). *NSW Population Health Survey data for 2014–17 cited in NSW Plan for Healthy Culturally and Linguistically Diverse Communities 2019-2023. NSW Health. 2019*

Outcomes of the Health Needs Analysis		
	levels of physical activity were among adults with head injury, stroke or brain damage (17.4 % compared to 71.7% across all disability groups). Nationally, in 2017-18 people aged 18 to 64 with a disability are less likely than people aged 65 and over to meet recommended guidelines for fruit consumption (44.3%; and 59.4%, respectively). Females are more likely to meet the recommended guidelines for fruit consumption compared to males (55.1%; and 43.9%, respectively). The least likely disability group to meet the recommended guidelines for fruit consumption is intellectual disability (42.5%) followed by psychological disability (44.2%) when compared to other disability groups.	
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. Higher smoking rates were recorded in people with a disability compared to people without. Within Australia in 2017-18, 18.7% of people aged 18 years and over living with a disability were a current daily smoker when compared to 12.2% of people without a disability. Males aged 18 and over living with a disability were more likely to be a current smoker compared to females (22.8%; and 15.4%, respectively). Similarly, in people aged 18 to 64 with a disability were more likely to be a current daily smoker compared to people without (25.3%; and 8.2%, respectively). In HNECC PHN, 6.6% of the population or 1,150,365 people have a severe or profound disability. Certain population groups continue to have higher smoking rates, including some CALD communities. However, overall, smoking rates are lower in CALD populations compared to those from English speaking backgrounds. Nationally, while there has been a statistically significant	*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). Consultation with key stakeholder groups.* *People aged 18 and over with disability living in households, current daily smoker status by age, disability status, sex and disability group, 2017–18 (ABS 2019. Microdata: National Health Survey, 2017–18. Canberra: ABS. Findings based on AIHW analysis of the main unit record file (MURF)).* *Drug use by main language spoken at home, people aged 14 and over, 2010 to 2016 (Alcohol, tobacco and other drug use in Australia, 2019, Populations, Supplementary data tables, AIHW, September 2019)* *Reporting for Better Cancer Outcomes Performance Report 2019; Hunter New England and Central Coast Primary Health Network, Cancer Institute NSW, 2019.*

Outcomes of the Health Needs Analysis		
	increase between 2013 and 2016 in the proportion of people across Australia reporting never smoking, the proportion of 'never smokers' is greater for people from CALD backgrounds (83%) compared with primary English speakers (60%).	
High rates of chronic disease	Chronic diseases are conditions with long lasting and persistent effects. High rates of chronic disease were ranked the third highest priority for the HNECC PHN region in the Prioritisation Strategy Phase One (Health Needs). 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%. **Diabetes.** In 2018-19, there were 905 new cases of Type I diabetes diagnosed in the HNECC PHN region at a rate of 76.5 per 100,000 (NSW 49.7) and 1,972 new cases of Insulin treated Type II diabetes at a rate of 111.7 per 100,000 (NSW 100.5). Since 2017-18 within the HNECC PHN region, the rate for both Type I and Type II diabetes has increased (76.0; 105.4, respectively). A similar trend has been observed at a state level for both Type I and Type II diabetes in 2017-18 (NSW 48.8; 89.6, respectively). In 2019, 13.2% of adult males and 11.5% of adult females reported diabetes or high blood glucose within the HNECC PHN region, slightly higher than the state averages (NSW males 12.3%, females 10.3%). There were 678 diabetes-related deaths in the HNECC PHN region in 2018 at a rate of 33.6 per 100,000 (NSW 27.6). In 2017-18, all LGAs in the HNECC PHN region except for the Central Coast LGA recorded rates of diabetes-related deaths higher than the NSW average (28.6). The highest rates were in Cessnock (46.2); Maitland (41.5); Mid-Coast (38.7); Singleton (37.2); Newcastle (36.5); Dungog (36.0); Gunnedah (36.0); and Glen Innes Severn (35.9). The rate of hospitalisations for diabetes in the HNECC PHN region was 199.5 per 100,000 in 2018-19, which is higher than the NSW average (162.5). In 2018-19, the hospitalisation rate for Type I diabetes in the HNECC PHN region (76.5 per 100,000) was higher than the NSW average (51.7). In 2018-19, all 23 LGAs within the HNECC PHN region recorded higher rates of Type I diabetes hospitalisation than the NSW average and all LGAs except for Port Stephens; Lake Macquarie and Singleton reported higher rates of Type II diabetes hospitalisations. Inverell LGA (215.5 per 100,000) recorded more than double the rate of the total NSW average (100.5).	*Consultation with key stakeholder groups.* *Percentage of adults who reported having a long-term health condition, 2016-17 (Australian Institute of Health and Welfare, 2018).* *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, 2019; Diabetes deaths by Local Government Area: Diabetes-related deaths (total underlying + selected associated), NSW 2018 to 2019; Diabetes as a principal diagnosis: Hospitalisations by Primary Health Network, NSW 2018-19; Diabetes hospitalisations by Local Government Area and type of diabetes: Type 1, NSW 2018-19; ; Diabetes hospitalisations by Local Government Area and type of diabetes: Type 2, NSW 2018-19 (Centre for Epidemiology and Evidence, HealthStats NSW, NSW Ministry of Health, 2020).* *Asthma status by Primary Health Network, children aged 2-15 years, NSW 2018-19; COPD deaths by Primary Health Network, All ages, NSW, 2017-18; COPD hospitalisations by Local Government Area, persons of all ages, NSW 2017-18 to 2018-19 (Centre for Epidemiology and Evidence, HealthStats NSW, NSW Ministry of Health, 2020).* *Circulatory disease by Primary Health Network, All circulatory disease's NSW 2017-18 (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, 2020.*

	People born in some non-English speaking countries are more likely to have diabetes or high glucose compared to all NSW residents. 0.2% of the HNECC PHN population were born in Italy. The prevalence of diabetes or high glucose in this population group is 23% compared 9% for all NSW residents. People born in Italy have some of the highest rates of episodes of admitted patient care per 1,000 persons for diabetes. **Respiratory Disease.** Rates of childhood asthma in the HNECC PHN region in 2018-19 were higher than the NSW average, with 20.9% of children having ever had asthma (NSW 20.6%) and 14.6% with current asthma (NSW 12.9%). The rate of deaths from COPD in 2017-18 in the HNECC PHN region was 31.2 per 100,000, which is higher than the NSW average (22.8). The COPD related hospitalisation rate per 100,000 population for the HNECC PHN region remains higher than the NSW average in 2018-19 (257.0 compared with 224.8). The HNECC PHN COPD related hospitalisation rate per 100,000 population decreased from 275.7 in 2017-18 to 257.0 in 2018-19, which also occurred at the NSW level (NSW 235.8 to 224.8, respectively). LGAs within the HNECC PHN region with higher than the PHN average rate of COPD related hospitalisations include Armidale Regional, Central Coast, Cessnock, Gunnedah, Inverell, Maitland, Mid-Coast, Moree Plains, Muswellbrook, Narrabri, Tamworth Regional and Upper Hunter Shire. Data from general practices across the HNECC PHN region collected through the PATCAT tool indicates that as of September 2020, 4.0% of non-Indigenous and 4.1% of Aboriginal and/or Torres Strait Islander patients aged 16 years+ have COPD (diagnosed or indicated) *. **Circulatory Disease.** The rate of deaths from circulatory disease in 2017-18 in the HNECC PHN region (154.5 per 100,000), was also higher than the NSW average (130.7). The rate of deaths from circulatory disease within the HNECC PHN has decreased since 2016-17 (158.9 per 100,000), with a similar trend observed in NSW (141.6). 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 PATCAT tool indicates that as of September 2020, 10.5% of non-Indigenous and 4.6% of Aboriginal and/or Torres Strait Islander patients aged 16 years+ have a recorded diagnosis of cardiovascular disease *. **Other.**	*NSW Population Health Survey data for 2014–17 and Girgis S and Colagiuri R (2009) cited in NSW Plan for Healthy Culturally and Linguistically Diverse Communities 2019-2023. NSW Health. 2019*

Outcomes of the Health Needs Analysis		
	PATCAT data also indicates that 7.5% of non-Indigenous and 5.0% of Aboriginal and/or Torres Strait Islander patients aged 16 years+ in the HNECC PHN region have a diagnosis of chronic kidney disease (diagnosed and indicated) on record *. People born in some non-English speaking countries are more likely to be admitted to hospital for heart failure, coronary heart disease and dialysis as follows: • 0.2% of the HNECC PHN population were born in Italy - this population group have some of the highest rates of episodes of admitted patient care per 1,000 persons for heart failure • 0.5% of the HNECC PHN population was born in the Philippines – this population group has some of the highest rates of episodes of admitted patient care per 1,000 persons for tuberculosis. 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 in the following need below. **HNECC PATCAT data does not provide a complete picture of disease in the PHN region, but includes characteristics or a profile of patients who attend General Practices in the HNECC PHN region. HNECC PATCAT data is drawn from around 70% of General Practices in the region, representing over 1.2 million 'active' patients (who have visited their General Practice 3 or more times in the past 2 years). Consequently, HNECC PATCAT data does not represent the prevalence or incidence of a disease in the region, but is a good indication of the burden of disease experienced in General Practices.*	
High cancer incidence and mortality	In 2010-14, compared to the NSW average, the HNECC PHN region experienced significantly higher incidence of the following cancers: bowel; cancer with unknown primary; cervical; head and neck; myelodysplasia; respiratory; and skin. Significantly higher mortality 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 behaviour, 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. 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	*Reporting for Better Cancer Outcomes Performance Report 2018, Hunter New England and Central Coast Primary Health Network, Cancer Institute NSW, 2018.* *Consultation with key stakeholder groups.* *Reporting for Better Cancer Outcomes Performance Report 2017, Hunter New England and Central Coast Primary Health Network, Cancer Institute NSW, 2017.* *HNECC PAT CAT data, 2018.*

	(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. 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. 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 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. 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.	

Outcomes of the Health Needs Analysis		
Poorer health outcomes for people experiencing homelessness	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. In 2018-19, stakeholders report some community members are caught in powerless situations related to their poor health and lack of stable housing, with further concerns for the lack of workforce/ services to address these issues. Stakeholders report within the hospital setting people are spending time in acute mental health facilities purely because of nowhere else to go, particularly women across the region with further concerns of the problem only increasing.	*Registry week for rough sleepers, 17-21 October 2016 (Matthew Talbot Homeless Service Newcastle).* *Consultation with key stakeholder groups.*
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	High rates of mental illness, intentional self-harm and suicide was ranked as the top highest priority for the HNECC PHN region in Phase Three of the Prioritisation Strategy (Primary Mental Health Care and Suicide Prevention Health Needs). 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 2017-18, in the HNECC PHN region, the rate at which adults experienced high or very high psychological distress was higher at 13.5 per 100 population than the NSW (12.4) and Australian (12.9) averages. Since 2014-15, the rate at which adults experienced high or very high psychological distress has increased at the HNECC PHN (12.2), state (NSW 11.0) and national level (11.7). LGAs with rates of high or very high psychological stress above the HNECC PHN rate were greatest in Cessnock (16.0), Glen Innes Severn (14.8), Central Coast (13.7), Muswellbrook (14.4), Mid-Coast (14.0), Tenterfield (14.0) and Maitland (13.8).	*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) 2017-18, (PHIDU 2020).* *Intentional self-harm fatalities in the Hunter, New England and Central Coast Region, 2000 (National Coronial Information System, 2016).* *Intentional self-harm hospitalisations, persons of all ages and 15-24 years, Hunter New England and Central Coast PHN (incl. local government areas), NSW 2001-02 to 2018-19 (Centre for Epidemiology and Evidence, HealthStats NSW, 2020).*

Outcomes of the Health Needs Analysis

	The premature mortality rate from suicide and self-inflicted injuries in the HNECC PHN region is higher than the NSW rate. In 2018, there were 178 suicides recorded in the HNECC PHN region, a rate of 14.5 per 100,000 population, which is higher than the rate for NSW (10.5 per 100,000). Since 2017, this rate has decreased within the HNECC PHN region (16.8) with a similar trend observed at a state level (NSW 10.7). Central Coast LHD recorded 41 suicides at a rate of 11.9 per 100,000 and Hunter New England LHD recorded 154 suicides (16.5 per 100,000) in 2017. People living in regional and remote areas and Aboriginal people have higher rates of suicide. While PHN-level data are not available, 2017 suicide rates are higher in outer regional and remote areas of NSW (19.0 per 100,000) than inner regional areas (15.8 per 100,000) and major cities (9.3 per 100,000). 2012-2016 suicide rates for Aboriginal people living in NSW are 17.1 per 100,000 and the rate for Aboriginal males is 27.7 per 100,000. Males have higher rates of suicide than females. Across all ages, the NSW 2017 suicide rate for men is 17.1 per 100,000 in comparison to women at a rate of 4.7 per 100,000. Males aged 55-64 years (24.0 per 100,000), 35-44 years (23.7) 25-34 years (22.7), and 45-54 years (22.0) and 75 years and over (21.2) are most at risk of suicide. The greatest number of suicides in the HNECC PHN occur between the ages of 25 and 55 years, with males accounting for most deaths. In 2018-19, the rate of hospitalisation due to intentional self-harm is consistently higher for the HNECC PHN region than NSW, with higher rates among females, and 15-24 year age group. In 2018-19, the rates of hospitalisations due to intentional self-harm in 13 of our LGAs were significantly higher than the state and include (all rates per 100,000 people): Armidale (196.4), Central Coast (121.5), Cessnock (157.6), Glen Innes Severn (161.5), Gwydir (161.5), Inverell (177.4), Lake Macquarie (149.6), Maitland (136.0), Mid-Coast (160.9), Moree Plains (162.8), Newcastle (168.9), Port Stephens (144.3), and Tamworth Regional (168.9). People with disability experience higher rates of psychological distress than people without disability. Nationally, in 2017-18 12.7% of people with a disability aged 18 years and over were likely to experience a very high level of distress as measured by the Kessler Psychological Distress Scale (K10) compared to only 1.6% of people without disability. Psychological distress increased with severity of disability and age. 18.6% of people with severe or profound disability reported very high levels of distress. People aged 18 to 64 years with a disability were more likely to experience a very high level of distress (17.2%) when compared to people aged 65 years and over (5.4%). There are differences in the extent to which disability groups are likely to experience a very high level of distress. People with a psychological disability aged 18 years and over were the most	*Suicide, Hunter New England and Central Coast PHN (incl. local health districts), NSW, 2017 (Centre for Epidemiology and Evidence, HealthStats NSW, 2020).* *Suicide by Aboriginality, NSW 2006-2010 to 2014-18. Suicide by Remoteness, NSW 2001-2018, Suicide persons aged: all ages, NSW, 1988-2018 (Centre for Epidemiology and Evidence, HealthStats NSW, 2020).* National Coronial Information System Suicide Data by PHN, 2016. Melbourne: National Coronial Information System, 2016. *Considine, R (primary author). HNECC PHN Mental Health Regional Plan 2020-2025 Incorporating Suicide Prevention (2020).* *People aged 18 and over living in households, K10 score(a) by disability status, disability group and age group, 2017–18 ABS 2019. Microdata: National Health Survey, 2017–18. Canberra: ABS. Findings based on AIHW analysis of the main unit record file (MURF).* *Mental Health Commission of NSW, 2014, Living Well: A Strategic Plan for Mental Health:2014-2024, Mental Health Commission, Sydney cited in NSW Plan for Healthy Culturally and Linguistically Diverse Communities 2019-2023. NSW Health. 2019* *Harry Minas, Ritsuko Kakuma, Lay San Too, Hamza Vayani, Sharon Orapeleng, Rita Prasad-Ildes, Greg Turner, Nicholas Procter, Daryl Oehm (2013) Mental health research and evaluation in multicultural Australia: Developing a culture of inclusion* *4326.0 - National Survey of Mental Health and Wellbeing: Summary of Results, 2007 Table 5 12-month mental disorders, by selected population characteristics Australian Bureau of Statistics*

Outcomes of the Health Needs Analysis		
	likely disability group to experience a very high level of psychological distress, (43.6%) compared to people without (1.6%). Other disability groups which experienced very high levels of psychological distress were people aged 18 years and over with intellectual disability (30.2%) and head injury, stroke or brain damage (29.1%). Older culturally and linguistically diverse consumers are at higher risk of mental health issues than their Australian-born peers. They are less likely to use mental health services and are more likely to present at a later stage of their mental illness. Stigma attached to having a mental health problem can lead to delays in diagnosis and treatment. Consistent with studies from other countries, Australian studies have shown that immigrant suicide rates tend to reflect the rates of their country of birth, an association that is particularly evident in males. In general, suicide rates are higher among immigrants born in countries that have higher suicide rates such as Western, Northern, and Eastern European countries, while rates are lower in immigrant groups from countries with lower suicide rates including those in Southern Europe, the Middle East, and South-East Asia.	
Mental health and suicide prevention needs of youth	Young people aged 12-25 years are a priority cohort for mental health and for suicide prevention in the HNECC PHN region. The mental health and suicide prevention needs of youth was ranked as the third highest priority within the HNECC PHN led Prioritisation Strategy Phase Three (Primary Mental Health Care and Suicide Prevention Health Needs). In 2018-19, the rate of hospitalisations due to intentional self-harm in the HNECC PHN region was substantially higher for people aged 15-24 years (339.8 per 100,000) than for all ages (138.5), and was higher than the NSW average (225.9). Rates were much higher for young females (471.9) than males (214.6) within the HNECC PHN region, 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 (NSW females 326.0 and; males 130.6). 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. Factors such as family functioning, exposure to trauma and violence, and parental mental illness are associated with the mental health and wellbeing of children, and on their developmental outcomes. Children who are exposed to trauma and abuse in childhood are also more likely to experience mental illness as adults. Further, children who experience out-of-home care, and who are considered at risk of harm, are more likely to experience adverse mental health and developmental outcomes.	*Intentional self-harm hospitalisations by Primary Health Network, persons of all ages and 15-24 years, NSW 2018-19; HealthStats (Centre for Epidemiology and Evidence, 2020).* *Considine, R (primary author). HNECC PHN Mental Health Regional Plan 2020-2025 Incorporating Suicide Prevention (2020).* *Consultation with key stakeholder groups.* *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.* *Lawrence D, Johnson S, Hafekost J, Boterhoven De Haan K, Sawyer M, Ainley J, Zubrick SR (2015) The Mental Health of Children and Adolescents. Report on the*

	In 2018, the rate per 1,000 population of children and young people in statutory out-of-home care for Central Coast (14.1) and Hunter New England (13.8) were third and fourth highest of all NSW districts, with Aboriginal children relatively more likely to experience out-of-home care. 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. 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. In 2014, children and adolescents aged 4 – 17 who were born overseas had a significantly lower 12-month prevalence of mental disorder than children born in Australia (7.2%; and 14.8%, respectively). Similarly, the 12-month prevalence of major depressive disorder among children and adolescents born in Australia was 3.0% compared to 1.3% for those born overseas.	*second Australian Child and Adolescent Survey of Mental Health and Wellbeing. Department of Health, Canberra.* 2017-18 FACS Annual Report Highlights. Sydney: NSW Family and Community Services, 2018.
Mental health and suicide prevention needs of males aged 25-65 years	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 experience suicidal ideation or complete suicide. The	*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.*

Outcomes of the Health Needs Analysis		
	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.	
Mental health and suicide prevention needs of males aged over 80 years	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. 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.	*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.*
Mental health and suicide prevention needs of Aboriginal and Torres Strait Islander people	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. 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	*Social health atlas of Australia Data by Primary Health Network (incl. local government areas) (PHIDU, 2017).* *Stakeholder consultations (2017).* *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).* *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.*

	rate of hospitalisations for intentional self-harm for Aboriginal people was 481.4 per 100,000, substantially higher 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). 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.	
Mental health and suicide prevention needs of older people residing in aged care facilities	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.	*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.*
Mental health and suicide prevention needs of LGBTIQ community members	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.	*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.* *Consultation with key stakeholder groups.*

Outcomes of the Health Needs Analysis		
Needs of people experiencing moderate to severe mental illness	Needs of people experiencing moderate to severe mental illness were ranked as the second highest priority within the HNECC PHN led Prioritisation Strategy Phase Three (Primary Mental Health Care and Suicide Prevention Health Needs). In 2017-18, the rate at which people experienced chronic mental and behavioural disorders within the HNECC PHN region was 22.7 per 100 population, higher than the national (20.1) and state rates (18.8) and was higher for females (24.6) than males (20.9). 20 out of 23 LGAs within the HNECC PHN region had higher rates of people experiencing mental and behavioural problems than the Australian average, these include: Armidale Regional (20.5); Central Coast (22.5); Cessnock (25.2); Dungog (21.6); Glen Innes Severn (21.6); Gunnedah (20.7); Gwydir (20.6); Inverell (25.2); Lake Macquarie (22.8); Liverpool Plains (21.4); Maitland (23.5); Mid-Coast (23.5); Moree Plains (25.2); Muswellbrook (27.6); Newcastle (23.1): Port Stephens (21.5); Tamworth Regional (21.6); Tenterfield (20.8); Upper Hunter Shire (20.5); and Uralla (21.3). The needs of people experiencing moderate to severe mental illness 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. 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.	*Estimated number of people with mental and behavioural problems 2017-18 (modelled estimates), Estimated number of males with mental and behavioural problems 2017-18 (modelled estimates), Estimated number of females with mental and behavioural problems 2017-18 (modelled estimates). Social health atlas of Australia Data by Primary Health Network (incl. local government areas) (PHIDU, 2020).* *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.* *Consultation with key stakeholder groups (National Psychosocial Support measure needs assessment).*
Stigma associated with mental illness including help seeking	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.	*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.*

Outcomes of the Health Needs Analysis		
	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.	*Consultation with key stakeholder groups, including HNECC Clinical Councils.*
Aboriginal and Torres Strait Islander Health		
Identified need	Key Issue	Description of Evidence
Poorer health outcomes for Aboriginal and Torres Strait Islander people	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%. 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. 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.	*Consultation with key stakeholder groups.* *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).* *Indigenous health check (MBS 715) data tool (AIHW, 2017).*
Higher rates of chronic disease amongst Aboriginal and Torres Strait Islander people	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%).	*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.* *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*

	In 2016-17, the rate of hospitalisations 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 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. Results from a HNECC PHN survey of Aboriginal health needs in 2019 found that 45% of respondents had a health condition or illness that limited their daily activity. While not directly comparable, this result is considerably lower than the prevalence of long-term health conditions in Aboriginal and Torres Strait Islander people reported by the ABS above. The top three health conditions/illness which limited daily activity identified by respondents to the HNECC PHN survey included diabetes (20%), hypertension (20%) and mental illness (9%).	*2016-17 (Centre for Epidemiology and Evidence, HealthStats NSW, NSW Ministry of Health, 2018).* *HNECC PHN Aboriginal Health Needs Survey 2019*

Alcohol and Other Drug Treatment Needs		
Identified need	Key Issue	Description of Evidence
Higher rates of alcohol misuse	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. 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	*Consultation with key stakeholder groups, including HNECC Clinical Councils and Community Advisory Committees.* *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).*

	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 hospitalisations 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). 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. People from CALD backgrounds are less likely to misuse alcohol compared with people from English speaking backgrounds. People from CALD backgrounds (49%) are more likely to be 'abstainers/ex-drinkers' compared with primary English speakers (18.9%). While there has been significant reduction Australia-wide in the proportion of people exceeding lifetime risk guidelines between 2013 and 2016, a much greater proportion of primary English speakers (18.6%) reported exceeding the National Health and Medical Research Council (NHMRC) guidelines for lifetime risk by consuming on average more than two standards drinks per day, compared with people from CALD backgrounds (5.4%). In 2016, 10.3% of people from CALD backgrounds compared with 28% of primary English speakers reported exceeding the NHMRC guidelines for single occasion risk by consuming on average more than 4 standards drink on one occasion and doing so, at least monthly. Further, between 2013 and 2016 there was a significant reduction in people from CALD backgrounds exceeding single occasions guidelines, while the proportion for English speaking backgrounds remained stable.	*HNECC Regional Drug & Alcohol Networks Service Mapping Survey Report (HNECC PHN, HNE LHD, CC LHD, & NADA, 2017).* *Drug use by main language spoken at home, people aged 14 and over, 2010 to 2016 (Alcohol, tobacco and other drug use in Australia, 2019, Populations, Supplementary data tables, AIHW, September 2019)*
Concerning levels of Illicit drug use	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	*Consultation with key stakeholder groups.* *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).*

	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. 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. 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. People from CALD backgrounds are less likely to use illicit drugs than people from English speaking backgrounds. In 2016, 16.4% of people aged 14 years and over from English speaking backgrounds were a recent user of an illicit drug, compared to 7.6% of people aged 14 years and over from CALD backgrounds. Further, in 2016, a much smaller proportion of people from CALD backgrounds reported that they had ever used an illicit drug compared with those from English speaking backgrounds (17.7% compared with 46.0%).	*HNECC PAT CAT data, 2018.* *HNECC Regional Drug & Alcohol Networks Service Mapping Survey Report (HNECC PHN, HNE LHD, CC LHD, & NADA, 2017).* *Drug use by main language spoken at home, people aged 14 and over, 2010 to 2016 (Alcohol, tobacco and other drug use in Australia, 2019, Populations, Supplementary data tables, AIHW, September 2019)*

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	A lack of health service integration, coordination and information sharing was ranked as the top highest priority within the HNECC PHN led Prioritisation Strategy Phase Two (Service Needs). 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. General practice stakeholders have highlighted a need for support with the uptake of MyHealth Record and Secure Messaging. 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. HNECC PHN conducted a survey in 2020 for Allied Health professionals to gauge usage and uptake of electronic health information and clinical systems. Clinical systems encompass platforms used to store health information, as well as electronic technologies such as telehealth (telephone and videoconferencing), secure messaging, and My Health Record. Survey results revealed 75% of respondents used an electronic clinical system to store information. However, the type of system used varied widely. This differs to general practice where a few key clinical systems are used, which enable data extraction technologies for monitoring and quality improvement. Allied Health clinical systems do not currently have a data extraction tool that	*Mapping system and patient flow.* *Consultation with key stakeholder groups, including HNECC Clinical Councils and Community Advisory Committees.* *Central Coast Local Health District, Palliative Care and End of Life Care Review (CCLHD, 2017).* *HNECC PHN Allied Health Strategy - Allied Health, health information and clinical systems survey report (2020).* *Patient experiences in Australia by small geographic areas in 2018-2019. Australian Institute of Health and Welfare (AIHW, 2020).*

Outcomes of the Service Needs Analysis		
	enable data collection and analysis. 54% of respondents reported they were not using secure messaging systems. The main barriers to use were a lack of perceived benefits, no impetus to change current practice and a lack of compatibility with current clinical systems. Results also highlighted challenges in ensuring safe and secure methods of telehealth videoconferencing platforms. 98% of respondents reported they were not using My Health Record. Good patient experiences are an important component of quality health care, along with clinical effectiveness and patient safety. In 2018-2019 in the HNECC PHN region, 28.7% of adults reported they could not access their preferred GP in the preceding 12 months (National 26.9%), 22.4% of adults felt they waited longer than acceptable to get an appointment with a GP (National 18.8%), and 26% of adults referred to a medical specialist waited longer than they felt acceptable to get an appointment in the preceding 12 months (National 23.8%).	
Areas of primary care workforce vulnerability	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. 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 110.93 (1 FTE = 37.5hr/wk). This suggests a region fairly well serviced, however there is maldistribution, with the least serviced LGAs being: Uralla (54.44); Liverpool Plains (77.28) and Narrabri (77.85). There is an identified need to minimise workforce vulnerability in communities across the HNECC PHN region. Key contributors include: • 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;	*Consultation with general practices and other key stakeholder groups, including HNECC Clinical Councils and Community Advisory Committees.* *HNECC Internal Data.* *HNECC PHN COVID-19 Impact Survey (2020)* *HNECC PHN After-Hours Primary Care Needs Assessment, (2020).*

Outcomes of the Service Needs Analysis		
	• 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. Workforce vulnerabilities was identified as a priority need from a recent COVID-19 Impact survey conducted by HNECC PHN. Many general practices within the HNECC PHN region have been impacted by the rapid transition to telehealth, a reduction in caseloads and changes to staffing levels. 46% of general practices reported they have had a severe impact on caseloads, and 37% of general practices have had a serious to severe impact on their workforce. Stakeholder feedback and community consultation regarding after-hours care has highlighted the burden of excessive after-hours on call arrangements in some parts of our region. Younger clinicians who are prepared to move to regional areas were seen as having expectations of a work-life balance that does not extend to providing after-hours services or being regularly on-call. Similarly, GP representatives from the New England region indicated that after-hours work in their community is exhausting and exacts a considerable personal toll. A number of GPs stated that the shortage of GPs was compounded by a lack of access to allied health services and support services, including pharmacy, imaging and pathology. That is, even if patients were able to access after-hours GP care, they may not be able to obtain medications or diagnostic services without visiting an emergency department or waiting until the next day.	
Locally relevant professional development and education for primary care clinicians	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: • 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 • GP education of the recognition of people experiencing homelessness and their needs (e.g. mental health, drug and alcohol, diabetes).	*Consultation with general practices and other key stakeholder groups, including HNECC Clinical Councils and Community Advisory Committees.* *Consultation with HNECC PHN Clinical Council and Community Advisory Committee (2019/2020)* *HNECC PHN Allied Health Strategy - Allied Health, health information clinical systems survey report (2020)* *Incorporating Telehealth into the Future of Australian Primary Healthcare. NSW and ACT PHNs (2020).*

Outcomes of the Service Needs Analysis		
	HNECC PHN's Allied Health – Health Information and Clinical Systems survey (2020) highlighted the need for support and education of allied health professionals in relation to their use of telehealth platforms, including security and privacy compliance. During the COVID-19 pandemic, the use of videoconferencing platforms to deliver key services represents a fundamental component of how services are currently being delivered in this sector. Current usage reflects variable understanding of these requirements and may place some providers at risk of compliance breeches. The vast number of clinical systems used amongst allied health professionals presents some challenges in providing widespread education and professional development.	
Targeted support for general practice	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: • 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 • 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 The HNECC PHN's COVID-19 Impact survey (2020) revealed staff emotional wellbeing, caseloads, financial viability and a reduction in staff levels have had the biggest impact primary Care. These needs were identified as crucial areas of support required in the recovery of the COVID-19. Results revealed 42% of staff in the Hunter, 43% of staff in the New England, and 22% of staff in the Central Coast regions experienced a serious or severe impact on staff wellbeing, with 60% of the respondents overall concerned for the future emotional wellbeing of staff. 59% of Hunter general practices, 72% of New England general practices, and 70% of Central Coast general practices are concerned about their future financial viability due to COVID-19. 42% of Hunter general practices, 53% of New England general practices, and 50% of Central Coast general practices have experienced a serious to severe impact on caseloads. A reduction in staff levels during the pandemic has also affected general practices with 32% of Hunter general practices, 48% of New England general	*Consultation with general practices and other key stakeholder groups, including HNECC Clinical Councils and Community Advisory Committees.* *HNECC PHN COVID-19 Impact Survey (2020)*

Outcomes of the Service Needs Analysis		
	practices, and 43% of Central Coast general practices having reported changes to their workforce. Clinician wellbeing also comes up as a major priority of the clinical councils, with more support requested from the PHN. Ongoing support for telehealth usage was seen a major priority moving into the COVID-19 recovery phase, with 97% of respondents wanting the PHN to advocate for ongoing Medicare rebate eligibility for telehealth consultations. The survey revealed a rapid uptake in telehealth usage with 48% of providers reported they were using telehealth for 50-100% of appointments, 22% of providers reported using it for 25-50% of appointments, 23% of providers reported using it for up to 25% of appointments, and only 6% reported not using telehealth for appointments. Telehealth use was particularly high amongst Aboriginal Medical Services, with 100% using telehealth and 78% using telehealth for more than 50% of consultations.	
Limited access to dental services	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. 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%). 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.	*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).* *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).* *Consultation with key stakeholder groups.*
Limited capacity of services to address dementia	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	*Consultation with key stakeholder groups.*

Outcomes of the Service Needs Analysis		
	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 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	Lack of prevention and early intervention services was ranked as the second highest priority within the HNECC PHN led Prioritisation Strategy Phase Two (Service Needs). 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. Feedback from Clinical Councils and Community Advisory Committees both share the need to focus on prevention and early intervention measures. Healthy weight and lifestyle promotion have been raised in meetings as ongoing issues within the region. Consideration into early intervention for alcohol misuse and domestic violence were also raised by council members, particularly as a result of COVID-19 lockdown measures.	*Consultation with key stakeholder groups, including HNECC Clinical Councils.*
High rates of chronic disease hospitalisations	The Australian health system is experiencing an increased demand on services due to an ageing population and a shifting burden of disease from acute to chronic and complex conditions. High rates of chronic diseases place a significant burden on the health of our community and on the health system, including through chronic Potentially Preventable Hospitalisations (PPH). A PPH is an admission to hospital for a condition whereby the hospitalisation could potentially have been prevented through primary care and community-based care settings. In 2017-18 chronic PPH conditions in the HNECC PHN region were an age-standardised rate of 1,192 per 100,000, which was slightly below national rate (1,233). In 2017-18 in the HNECC PHN region the top five highest chronic PPH conditions by age-standardised rate per 100,000 population being COPD at a rate of 301 followed by iron deficiency anaemia (215), congestive cardiac failure (205), diabetes complications (194) and asthma (115). The chronic PPH ASR has increased from 1,099 PPHs per 100,000 population (age standardised) in 2013-14 to 1,192 in 2017-18, representing an 8% increase over the five-year period. Chronic PPH bed days increased from 81,463 in 2013-14 to 92,392 in 2017-18, representing a 13% increase over the	*Potentially preventable hospitalisations by category, Primary Health Network and Year, 2018-19; Potentially preventable hospitalisations by condition, Primary Health Network and Year, 2018-19; Potentially preventable hospitalisations by category Aboriginality Primary Health Network and Year, 2016-17; Potentially preventable hospitalisations total NSW 2018-19 by Socioeconomic status; Potentially preventable hospitalisations total NSW 2018-19 by remoteness area; Potentially preventable hospitalisations total NSW 2018-19 by Aboriginality (Centre for Epidemiology and Evidence, NSW Health, 2020).* *AIHW (Australian Institute of Health and Welfare) 2019. Potentially preventable hospitalisations in Australia by national, state, PHN, age groups and small geographic areas, 2017–18 . Cat. No. HPF 36. Canberra: AIHW. 2020.*

	five-year period. Average length of stay in hospital has remained stable between 2013-14 and 2017-18. Further, in 2017-18 within the HNECC PHN region there were a total of 191,782 hospital bed days. The top five PPH chronic conditions by total hospital bed days included: COPD (27,844); congestive cardiac failure (27,465); diabetes complications (18,782); iron deficiency anaemia (4,977) and asthma (3,973). A person's likelihood of having a preventable hospitalisations varies by where they live and their individual circumstances. Analysis of PPH rates for the following population subgroups was conducted within the HNECC PHN region, these included: Aboriginal and/or Torres Strait Islander people, people from a low socioeconomic background, people living in rural and remote areas and people aged 65 years and over. <u>Indigenous status</u> Aboriginal Australians, on average, have lower levels of education, employment, income and poorer quality housing than non-indigenous Australians. Likewise, Aboriginal Australians on average have higher rates of smoking and risky alcohol consumption, do less exercise, and have greater risk of high blood pressure also reporting greater difficulty in accessing affordable health services within a close distance. Socioeconomic factors account for more than one-third (34%) of this health gap, health risk factors contributing 19%. Aboriginal Australians tend to be more likely than non-Indigenous Australians to have the conditions for which hospitalisations are regarded as potentially preventable and to live in remote areas where non-hospital health services are more limited. While PHN level data are not available, NSW level data provides an indication of the top PPH conditions for Aboriginal people within the HNECC PHN. In 2018-19, the top chronic PPH conditions in NSW for Aboriginal and/or Torres Strait Islander people were COPD at a rate of 1224.3 per 100,000 population followed by diabetes complications (497.8), congestive cardiac failure (383.4), iron deficiency anaemia (369.0), and asthma (212.8). Furthermore, in 2016-17 in the HNECC PHN region, the age-standardised rate for chronic PPH conditions was substantially higher for Aboriginal and/or Torres Strait Islander people than non-indigenous Australians (2,365; and 959, respectively). <u>Socioeconomic status</u> Socioeconomic factors are fundamental determinants of health. Commonly, people in lower socioeconomic groups are at greater risk of poor health, having higher rates of illness, disability and death, and living shorter lives compared to people from higher socioeconomic groups. A phenomenon termed the 'social gradient of health' shows the higher a person's socioeconomic position, the healthier they are likely to be. For nearly all health measures, people from lower socioeconomic groups in Australia have an inferior quality of health. This is reflected in PPH rates, where PPH rates decreased with increasing levels of socioeconomic advantage.	Clinical Epidemiology & Health Service Evaluation Unit. *Potentially preventable hospitalisations: a review of the literature and Australian policies-Final report*. 2009. Victoria: Royal Melbourne Hospital. *Australian Institute of Health and Welfare (AIHW)* The Health and Welfare of Australia's Aboriginal and Torres Strait Islander peoples, 2015. Canberra. Australian Institute of Health and Welfare (AIHW), *Admitted patient care 2016-17: Australian hospital statistics,* 2018. Canberra. *Australian Institute of Health and Welfare (AIHW), Potentially Preventable Hospitalisations in Australia by small geographic areas, 2018. Canberra.* Australian Institute of Health and Welfare (AIHW) 2018., Australia's Health 2018. Australia's health series no. 16. AUS 221. Canberra; AIHW. *Consultation with key stakeholder groups including HNECC Internal Advisory group.*

Outcomes of the Service Needs Analysis		
	In 2018-19, NSW data shows that the rate of chronic PPH per 100,000 population for people in the 1st or most advantaged quintile was 626.5 compared with 1,179.3 for people in the least advantaged or 5th quintile. While PHN level data are not available, NSW level data provides an indication of the top PPH conditions for people with low socioeconomic status within the HNECC PHN. In 2018-19, the top chronic PPH conditions in NSW for people in the 5th or most disadvantaged quintile were COPD at a rate of 302.0 per 100,000 population followed by diabetes complications (197.8), congestive cardiac failure (195.0), iron deficiency anaemia (193.6) and asthma (132.8). Remoteness area Due to geographic isolation rural and remote populations face multiple challenges often experiencing poorer health and welfare consequences than people living in cities. Around 3 in 10 (29% or 7 million) Australians live within rural and remote areas. Engaging in many risky health behaviours such as such as tobacco smoking and excessive alcohol consumption are higher in rural and remote areas compared with metropolitan areas. Contributing factors to poorer health outcomes include disadvantage in employment opportunities, income, education and access to services. While PHN level data are not available, NSW 2018-19 data shows that the rate of chronic PPH conditions per 100,000 population for people living in major cities in NSW was 856.2 compared to 1539.1 for people living in remote areas and 1766.1 for people living in very remote areas. In 2018-19, the top PPH conditions in NSW for people living in remote and very remote areas were by remoteness area were COPD at a rate of 537.9 followed by diabetes complications (424.5), congestive cardiac failure (180.7), iron deficiency anaemia (119.8) and angina (98.2). People aged 65 years and older In 2017-18 people aged 65 and over in HNECC PHN had a rate of total chronic PPH conditions at 5,421 per 100,000 population (crude) in comparison to under 65 years (657). Chronic PPHs are the highest priority category of PPHs for older people in the region. The rate of chronic PPH conditions for people aged 65 and over is eight times the rate of chronic PPH conditions for people aged under 65. The top eight PPH conditions which are experienced at a much higher rate for people aged 65 and over are ranked in descending order these include: congestive cardiac failure, bronchiectasis, COPD, hypertension, perforated/bleeding ulcer, angina, urinary tract infections including pyelonephritis and iron deficiency anaemia. 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.	

Outcomes of the Service Needs Analysis		
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 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. 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 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.	*Consultation with key stakeholder groups, including GPs and Practice Nurses.* *GP coverage; female GP coverage; and number and location of practice nurses who have completed the Well Women's Screening course.* *RBCO Report* *HNECC PATCAT data.*

Outcomes of the Service Needs Analysis		
Barriers to accessing disability services	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. 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 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. Stakeholder consultation conducted for the After-Hours Primary Care Needs Assessment also identified the need for improved access to after-hours primary care for people with disabilities, including those living in group homes. It was reported that many people living in group homes do not have a regular GP and therefore are transferred to EDs for lower urgency care. These transfers could be better managed within a primary care setting and are disruptive to the individual's care routine. This issue is not limited to the after-hours period and there is scope for improved access and inclusivity of people with a disability in future urgent care initiatives. Key stakeholders identified models of care that could support people with a disability, such as phone-based clinical support to staff in participating services.	*Consultation with key stakeholder groups, including HNECC Clinical Councils.* *HNECC PHN After-Hours Primary Care Needs Assessment, (2020).*
Reduced access to services for children and youth	Reduced access to services for children and youth was ranked as the third highest priority within the HNECC PHN led Prioritisation Strategy Phase Two (Service Needs). 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	*Consultation with key stakeholder groups.* *Consultation with community and key stakeholder groups* *Considine, R (primary author). HNECC PHN Mental Health Regional Plan 2020-2025 Incorporating Suicide Prevention (2020).*

Outcomes of the Service Needs Analysis		
	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. The estimated prevalence of mental illness amongst populations aged 12-25 years with moderate to severe mental illness in 2018 was 10% in the Central Coast, 9.3% in Newcastle, 9.4% in the Hunter, and 9.3% in the New England. Community and Clinical consultations have highlighted significant areas of unmet need and service gaps for youth mental health within the Mid-Coast region, which comprises Greater Taree, Forster, Gloucester Local Government Areas (LGAs). The Mid-Coast as a rural and regional area is impacted by high demand and access barriers for mental health services, distance to services, difficulties getting an appointment, reduced availability of public transport (or cost of private travel), and limited availability of services and health workforce in rural, isolated and small communities.	
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. Between 57-70% of respondents to the 2019 HNECC Urgent and After-Hours Care Survey reported that it is easy to find and understand health information and determine what health care they need. However, only 40% of respondents found it easy to determine what health services are available and just 31% of respondents found it always or usually easy to access the health provider they need to see. Respondents relayed significant difficulty accessing GPs for urgent care during business hours due to long waiting lists (particularly in the New England and Mid Coast). Respondents frequently expressed that there were limited, or no after-hours GP services available, particularly in the New England and Mid Coast regions. Many commented that their only option for after-hours health care was the Emergency Department. However, they also noted this was not their preferred option. Other barriers to accessing after-hours GP services included limited services offering bulk billing, travel time and limited ancillary services such as pharmacy and imaging. 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 2017-18 there were 99.5 after hours lower urgency ED presentations in the HNECC PHN region per 1,000 population, this was higher than the national average (63.3) and the regional average (82.9). There was also considerable variability across the region from 44.8 in Great Lakes SA3 to 179 in the Upper Hunter SA3. In 2018-19 in the HNECC PHN region, the age categories 0-14 years and 15-24 years had the highest number of lower urgency after-hours ED	*Consultation with key stakeholder groups, including Karuah and Tilligerry Peninsula community members and service providers.* *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).* *Use of Emergency Departments for lower urgency care, 2015-16 to 2017-18; Medicare-subsidised GP, allied health and specialise health care across local areas, 2013-14 to 2017-18 (AIHW, 2019)* *Stakeholder consultation HNECC PHN Urgent and After-Hours Care Survey. (2019).* *HNECC PHN After-Hours Primary Care Needs Assessment, (2020).*

presentations per 1,000, at 137.5 and 139.4 respectively. Lower urgency after-hours ED presentations per 1,000 decrease with age, with the 80+ years age category having the lowest overall number of presentations per 1,000 population (46.3).

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. During the after-hours period, residents of Aged Care Facilities are reliant on access to primary care via home visits or on call (phone based) support. During the HNECC PHN led After-hour Needs Assessment focus groups and interviews, several GPs reported that most of the demand for after-hours on-call services through their practice came from Residential Aged Care Facilities.

A Composite Index Score for each LGA in the HNECC PHN region was developed based on the North Western Melbourne PHN's After Hours Gap Analysis and Recommendations report produced by Impact Co. to understand and quantify the relative need for and access to after-hours primary care across the HNECC PHN region. The Composite Index Score was based on three sub-indices including the After-hours Health Need Index, After-hours Service Availability Index and the Unmet AH Demand Index. The approach allows LGAs to be ranked in order from most to least need, with a high score indicating high need combined with high unmet demand and low service availability. Regional clusters (regional groupings of LGAs) were prioritised based on the Composite Index Score, stakeholder and community consultation and survey results. Clusters (with the Composite Index Score included with each LGA) in order of need were:

- Priority 1 – Peel: comprising the LGAs of Gunnedah (3.32), Liverpool Plains (2.33), Tamworth Regional (3.03) and Walcha (12.17)
- Priority 2 – Mehi: comprising the LGAs of Gwydir (10.98), Moree Plains (4.79), and Narrabri (2.69)
- Priority 3 - Mid Coast: comprising the LGA of Mid Coast (4.44)
- Priority 4 – The Tablelands: comprising the LGAs of Armidale Regional (3.89), Glenn Innes Severn (5.42), Inverell (5.28), Tenterfield (2.19) and Uralla (4.86)
- Priority 5 - Lower Hunter Valley: comprising the LGAs of Cessnock (3.68), Dungog (3.64) and Maitland (3.51)
- Priority 6 - Upper Hunter Valley: comprising the LGAs of Muswellbrook (3.67), Singleton (3.19) and Upper Hunter Shire (3.99)
- Priority 7 - Central Coast: comprising the LGA of Central Coast (3.05)
- Priority 8 - Greater Newcastle: comprising the LGAs of Newcastle (1.37), Port Stephens (4.17) and Lake Macquarie (2.42)

Outcomes of the Service Needs Analysis		
High proportions of semi-urgent and non-urgent emergency department presentations	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 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.	*Consultation with key stakeholder groups.* *Emergency department care 2016-17, Australian hospital statistics (AIHW, 2017).*
Reduced access to services for older people	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. People aged 65 years and over represent 20% of the total HNECC PHN population (NSW 16.1%). 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. 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: • 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;	*Consultation with key stakeholder groups, including HNECC Clinical Councils.* *My aged care region tool (AIHW, 2018).* *HNECC PHN After-Hours Primary Care Needs Assessment, (2020).*

Outcomes of the Service Needs Analysis		
	• Improved access to GPs and allied health professionals through funded telehealth consultations; and • A review into RACF clinical information storage systems. HNECC PHN commissioned Aged Care Emergency Service (ACE) provides phone based clinical support to staff in RACFs to manage residents' acute non-life-threatening conditions within the nursing home, or when hospital transfer is required support high quality handovers to be provided. RACFs that do not have access to the ACE program rely on GP arrangements, which can often result in challenges and hospital transfers when their usual GP is not available. In the after-hours focus groups, representatives from Aged Care Facilities on the Central Coast reported significant difficulty at times accessing GP services for simple reasons such as phone orders for medications.	
Reduced access to services in rural and remote areas	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; educed availability of health services; fewer health professionals per capita; and lack of anonymity in small communities. Additional specific needs identified in rural areas include: • 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. With the influx of Yazidis refugee families, access to healthcare in the Armidale LGA remains a significant concern reported by stakeholders. While Armidale was identified as having the infrastructure and capacity	*Australian Standard Geographical Classification—Remoteness Areas (ASGC-RA); National data on access to health services regional/remote compared to urban populations (AIHW 2014).* *Consultation with local resettlement organisations, the Local Health District, General Practitioners and other primary care staff, Department of Human Services, The Primary Health Network, NDIS, Renu Armidale (Town revival & renewal group) and Armidale Sanctuary Humanitarian support* *HNECC PHN After-Hours Primary Care Needs Assessment, (2020).*

to meet the medical needs of refugees, the additional 200-300 refugees the town has accepted above the original forecast numbers has created capacity concerns for GP's. General Practice is already stretched meeting the needs of the existing community and there is potential that additional incoming patients will pose further demands on access to medical services. Armidale LGA, unlike other resettlement areas, does not have a GP run Refugee Clinics within the Hospital. The Hospital Refugee Clinic is run by Registered Nurses, meaning refugees experiencing serious/urgent health matters find it increasingly difficult to obtain correct care immediately.

In addition, existing restrictions with access to specialist care in Armidale LGA, and regional areas in general, often see patients required to travel large distances to access the care required, either to Tamworth or Newcastle. While this is not a specific issue to just refugees and migrants themselves, it certainly creates greater challenges for this patient cohort stakeholders report. The communication challenges for refugees and some migrant groups can make travelling these distances extremely difficult, expensive or prohibitive all together. Stakeholders also report there is urgent need to access allied health service providers, particularly social workers and physiotherapists. Provisions for these services are minimal and difficult to access for refugee groups. This creates slower progression towards health and social wellbeing goals, placing this already vulnerable group at further risk.

Analysis of after-hours primary care service supply conducted for the After-Hours Primary Care Needs Assessment found that the LGAs with relatively low levels of after-hours service supply were based in rural and remote parts of the HNECC PHN region. Many respondents to an after-hours community survey conducted by HNECC PHN, particularly those from the Mid-Coast and New England reported waiting times of several weeks to see the local GP during business hours. They expressed that often their only option was to attend the ED, though this was not their preferred option. In the after-hours focus groups and interviews, GPs indicated that many practices, especially those in regional and rural areas, did not provide after-hours care or, where they did, it was often practice-based and only available for patients of that practice. The factors driving the low uptake of after-hours service delivery included:

- the physical inability of small or single doctor practices to provide after-hours care
- the lack of demand in smaller, less populous areas
- the associated lack of financial incentive in the face of insufficient demand
- the personal toll on doctors being on call on top of their busy practice workload during standard hours
- safety concerns in staffing practices late at night, especially for female doctors and patients

Outcomes of the Service Needs Analysis		
	• the high cost of locums for rural locations if practices did wish to employ someone to provide after-hours care.	
Transport limitations	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). 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: • the coordination of transport services with timing of medical appointments; • limited transport services to / from Singleton hospital, including for dialysis patients; • 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. Transport to medical appointments remains a significant challenge for newly arrived refugees and migrants in Armidale. This patient cohort can struggle to attend appointments as transport is not available or can be too expensive. This is especially the case when having to attend appointments out of town. In addition, current transport options are provided through volunteer organisations who can find the cost and process associated with working with children checks prohibitive. A recent HNECC PHN survey of Aboriginal health needs found that 32% of respondents travelled more than 30 minutes to access the last health service they used.	*Social health atlas of Australia Data by Primary Health Network (incl. local government areas) (PHIDU, 2018).* *Consultation with local resettlement organisations, the Local Health District, General Practitioners and other primary care staff, Department of Human Services, The Primary Health Network, NDIS, Renu Armidale (Town revival & renewal group) and Armidale Sanctuary Humanitarian support* *HNECC PHN Aboriginal Health Needs Survey 2019*
Cost barriers to healthcare	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	*Consultation with key stakeholder groups, including HNECC Clinical Councils and Community Advisory Committees.*

Outcomes of the Service Needs Analysis		
	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. 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. Cost was identified during the After-Hours Primary Care Needs Assessment stakeholder consultations as a barrier for accessing after-hours primary care services. Consumer stakeholders commented that out of pocket costs are common in after-hours primary care services and there are limited bulk billed services available, which is particularly problematic for financially disadvantaged and vulnerable groups. Community survey respondents from the Central Coast were the most likely to identify cost as a barrier to access. A key driver for private billing in after-hours care is the limited rebates available under the MBS, which GPs indicate is insufficient to cover the rising costs of providing care.	*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).* *HNECC PHN After-Hours Primary Care Needs Assessment, (2020).*
Reduced access to services for people experiencing homelessness	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. Improved access to safe, appropriate and non-judgmental primary health care, including in the after-hours period is required.	*Consultation with key stakeholders groups, including HNECC Clinical Councils and Community Advisory Committees and St Vincent de Paul.* *Table 6.1 and 6.2 ALL HOMELESS PERSONS, by place of enumeration, Local Government Area, 2016 and 2011. 2049.0 - Census of Population and Housing: Estimating homelessness, 2016 (2018)* *NewsGP Overcrowding leads to poorer health outcomes for Aboriginal and Torres Strait Islander peoples 19 February 2018* *Medical Journal of Australia (2018) Homeless health care: meeting the challenges of providing primary care*

Outcomes of the Service Needs Analysis		
	The number of homeless people in the HNECC PHN has increased since 2011. There were an estimated 3,751 homeless people in the HNECC PHN in 2016, which represents an increase of 18.10% since 2011. This is higher than the national increase since 2011 (13.70%) but lower than the NSW increase (37.30%). The homelessness rate per 10,000 of the population for the HNECC PHN in 2016 was 30.10, compared to the NSW rate of 48.72 and the national rate of 49.80. LGAs with the highest number of homeless people included Central Coast LGA (1,031), Newcastle LGA (797), Lake Macquarie LGA (403) and Armidale Regional LGA (259). While PHN level data was unavailable, data on homeless people in NSW in 2016 indicates: • 58.2% were born in a country outside Australia • 5.0% had a need for assistance with core activities (16% "Not stated") • 6.0% identified as Aboriginal and/or Torres Strait Islander (10.9% "Not stated") • 60.2% identified as Male; 39.8% identified as Female • 10.5% were under the age of 12 and 7.3% were 65 years and over The HNECC PHN's Hunter Manning Community Advisory Committee has identified homelessness as a growing area of concern. This Committee covers the LGAs of Cessnock, Dungog, Lake Macquarie, Maitland, Mid Coast, Muswellbrook, Newcastle, Port Stephens, Singleton and Upper Hunter Shire. Being homeless puts an individual at increased risk of many health problems including psychiatric illness, substance use, chronic disease, musculoskeletal disorders, skin and foot problems, poor oral health, and infectious diseases such as tuberculosis, hepatitis C and HIV infection. Overcrowded living environments have been found to lead to negative health outcomes, such as chronic ear infections, eye infections, skin conditions, gastroenteritis, respiratory infections, and exacerbation of family violence and mental health issues. In NSW in 2016, 70.2% of homeless people living in severely crowded dwellings were born in a country outside Australia.	
Primary Mental Health Care and Suicide Prevention Needs		
Identified need	Key Issue	Description of Evidence

Outcomes of the Service Needs Analysis		
Lack of integration and collaboration between mental health services	Lack of integration and collaboration between mental health services were ranked as the third highest priority within the HNECC PHN led Prioritisation Strategy Phase Three (Primary Mental Health Care and Suicide Prevention Service Needs). In 2017-18 the rate of overnight hospitalisations for mental illness in the HNECC PHN region was higher (110.9 per 10,000) than the NSW (105.3) and Australian rate (105.1). 8 out of the 15 SA3s in the HNECC PHN region recorded rates higher than the Australian average, including Newcastle (131.1), Wyong (117.2), Tamworth-Gunnedah (116.2), Great Lakes (116.2), Gosford (113.1), Taree-Gloucester (112.1), Moree-Narrabri (110.1), and Lake Macquarie-West (107.0) (noting there were no data available for Inverell-Tenterfield SA3 and Upper Hunter SA3). 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. 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. 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. 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; 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.	*Consultation with key stakeholder groups, including HNECC Clinical Councils and Community Advisory Committees.* *Mental Health Overnight Hospitalisations, Australian Institute of Health and Welfare. My Healthy Communities; 2020.* *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.* *HNECC PHN After-Hours Primary Care Needs Assessment, (2020).*

Outcomes of the Service Needs Analysis		
	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. During consultations for the After-Hours Primary Care Needs Assessment, several stakeholders, including mental health professionals, noted that people with mental ill-health often need support or care outside of traditional hours. While some of these people may have regular GPs, many practices do not offer after-hours services and LHD community-based mental health crisis services are often stretched or not readily accessible. As a result, it was noted that people with mental health conditions or co-morbidities often present to EDs, a setting that is often busy and frantic, which may be detrimental to the patient's condition.	
Cost barriers to accessing mental health and suicide prevention services	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.	*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.*
Transport barriers to mental health services	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.	*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.*

Outcomes of the Service Needs Analysis		
Limited services for people experiencing moderate to severe mental illness	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 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	*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.* *Consultation with key stakeholder groups (National Psychosocial Support measure needs assessment).* *2018-19 Primary Mental Health Care Minimum Data Set (PMHC-MDS)*

Outcomes of the Service Needs Analysis		
	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. 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. 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. Some vulnerable population groups access HNECC PHN commissioned primary mental health services at a lower or higher rate compared to their population prevalence. 2018-19 data from the Primary Mental Health Care Minimum Data Set (PMHC-MDS) suggests that people from a CALD background I.e. people from a non-English speaking background in the HNECC PHN access commissioned primary mental health services at a substantially lower rate (2%) than their population prevalence (5.2%). Conversely, the same dataset suggests that homeless people in the HNECC PHN access commissioned primary mental health services at a higher rate (3.4%) than their population prevalence (0.3%). However, these data should be used with caution due to the high rate of not-stated/unknown/etc. entries in the MDS.	
Support for GPs to play a central role in mental health care	Primary mental health care is a necessary part of comprehensive mental health care, provided at a primary (frontline) care level and is an essential part of general primary care. Support for GPs to play a central role in mental health care was ranked as the second highest priority within the HNECC PHN led Prioritisation Strategy Phase Three (Primary Mental Health Care and Suicide Prevention Service Needs). In 2018-19, in the HNECC PHN region, there were 209,187 GP mental health services provided through the MBS to 126,057 patients. At a local level, the rate at which services were delivered ranged considerably from 7,652 per 100,000 in Moree-Narrabri SA3 to 19,495 per 100,000 in Wyong SA3. Lower rates were recorded in Inverell-Tenterfield (9,147), Armidale (9,834) and Tamworth-Gunnedah (10,449) SA3s. Common across all levels of the service system for mental health care and suicide prevention, is the provision of care by GPs. GPs are often the first point of contact for people experiencing mental illness and potentially play an essential role in the mental and physical health care of patients and in coordination of	Medicare-subsidised GP, allied health and specialist health care across local areas: 2018-19 (AIHW) *Australian Institute of Health and Welfare. My Healthy Communities; 2020.* *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.*

	their care. However, 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. 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. 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. 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. During consultations for the After-Hours Primary Care Needs Assessment, stakeholders identified the need for improved access to qualified primary mental health care practitioners during the after-hours period. Stakeholders reported this would improve access to care in the community for people experiencing mental ill-health and reduce the need for them to seek care via emergency departments. While many people experiencing mental health issues have regular GPs, many practices don't offer after-hours services and community-based services are not readily available.	*Considine, R (primary author). HNECC PHN Mental Health Regional Plan 2020-2025 Incorporating Suicide Prevention (2020).*

Outcomes of the Service Needs Analysis		
Reduced access to psychiatrists	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. 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. 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.	*MBS Mental Health Data by Primary Health Network; MBS Mental Health Data by ABS SA3 (Australian Government Department of Health, 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 70, 73, 81, 86.*
Reduced capacity of services to recruit and retain allied health staff	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 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.	*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.*
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	*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.* *Consultations with key stakeholder groups, including Tilligerry Peninsula community members and services.*

Outcomes of the Service Needs Analysis		
	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.	
Lack of cross-sectoral mental health promotion and prevention, and suicide prevention strategies	Lack of cross sectoral mental health promotion and prevention, and suicide prevention strategies was ranked as the highest priority within the HNECC PHN led Prioritisation Strategy Phase Three (Primary Mental Health Care and Suicide Prevention Service Needs). In 2017-18, in the HNECC PHN region the rate of admissions into all hospitals for mental health related conditions was 2,206.5 (age standardised) per 100,000 population, which was higher than the NSW average (1,961.4). The premature mortality rate from suicide and self-inflicted injuries in the HNECC PHN region is higher than for NSW. In 2018, there were 178 suicides recorded in the HNECC PHN region, which translates to a rate of 14.5 per 100,000 population, which is higher than the rate for NSW (11.0 per 100,000). 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.	*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.* *Admissions for mental health related conditions, all hospitals, 2017-2018 by Primary Health Network(PHN)/ Local Government Area (LGA) (PHIDU, 2020).* *Suicide, Hunter New England and Central Coast Primary Health Network, NSW 2001 to 2018 (Centre for Epidemiology and Evidence, NSW Health, 2020).*
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. 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	*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.*

Outcomes of the Service Needs Analysis		
	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.	
Limited support for families and carers of people living with mental illness	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.	*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.*
Lack of a systematic evidence-based post-vention strategy across communities	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. 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.	*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.*
Barriers for mental health nurses to gain credentials to	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.	*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.*

Outcomes of the Service Needs Analysis		
work in general practice	Stakeholders indicate the role of general practice in mental health care needs to be strengthened by supporting multidisciplinary teams located in general practice.	
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	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. 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. Specific service needs include: • GP education on available services for Aboriginal and Torres Strait Islander patients; • 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;	*Consultation with key stakeholder groups, including Karuah and Tilligerry Peninsula community members and service providers.* *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).* *HNECC PHN Aboriginal Health Needs Survey 2019* *HNECC PHN After-Hours Primary Care Needs Assessment, (2020).*

- 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.

A recent HNECC PHN survey of Aboriginal health needs in Tuggerah on the Central Coast found that of people who used a health service in the past 12 months, 49% used an Aboriginal Medical Service and 40% used a GP. Respondents who used a hospital, community health service, NDIS service provider or mental health service comprised the remaining 11%. Distance to appropriate health services remains an issue, with 32% of those who reported using a health service in the past 12 months reporting they needed to travel more than 30 minutes to access the health service.

The survey also found that respondents rated the cultural appropriateness and other quality indicators of health services highly. For example, of people who used a health service in the past 12 months:

- 98% felt respected
- 89% felt culturally safe
- 97% felt that the staff listened to them and understood their problem
- 89% felt that staff helped them to understand their health problems, treatment and any medicines needed
- 91% felt that staff helped them or their family/carer to understand their health problems
- 85% felt that staff involved them in making decisions about health treatment.

None of the nine Aboriginal Community Controlled Health Organisations (ACCHOs) in the HNECC PHN region are open during the after-hours period and over two thirds direct patients to their local hospital in the after-hours period. Aboriginal people present at the ED for lower urgency issues at a much higher rate than non-Aboriginal people. Aboriginal and / or Torres Strait Islander people make up 6.4% of the HNECC PHN region. However, 12% of after-hours lower urgency ED presentations in the HNECC PHN region are by people who identify as Aboriginal and / or Torres Strait Islander and in some LGAs this increases up to 48%. Moree Plains LGA has the highest proportion of after-hours lower urgency ED presentations by Aboriginal and / or

Outcomes of the Service Needs Analysis		
	Torres Strait Islander people (48.1%) followed by Narrabri LGA (28.5%) and Gunnedah LGA (27.5%), whereas the proportion of Aboriginal people living in these LGAs is 26.6%, 15.2% and 15.3%.	
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.	*Consultation with key stakeholder groups.*
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. Despite this, results from a recent HNECC PHN survey of Aboriginal health needs in Tuggerah on the Central Coast found that 70% of respondents had received a 715 health assessment in the last 12 months, and 16% had received a 715 health assessment in the one to three years prior. Over 85% of respondents who had previously received a 715 health assessment had followed through with the recommendations following the assessment. Only 7% of respondents had never received a 715 health assessment.	*Australian Institute of Health and Welfare (AIHW). (2017). Indigenous health check (MBS 715) data tool. Retrieved from: http://analytics.aihw.gov.au/* *Consultation with key stakeholder groups.* *HNECC PHN Aboriginal Health Needs Survey 2019*
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 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	*Consultation with key stakeholder groups.*

Outcomes of the Service Needs Analysis		
	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
Reduced access to drug and alcohol treatment services	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. 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. 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.	*Consultation with key stakeholder groups, including HNECC Clinical Councils.* *HNECC Regional Drug & Alcohol Networks Service Mapping Survey Report (HNECC PHN, HNE LHD, CC LHD, & NADA, 2017).*
Reduced access to drug and alcohol treatment services for Aboriginal and	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;	*Consultation with key stakeholder groups.*

Outcomes of the Service Needs Analysis		
Torres Strait Islander people	ongoing support and referral pathways; and targeted support for services to provide treatment for this population group.	
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.	*Consultation with key stakeholder groups.*
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.	*Consultation with key stakeholder groups.*
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.	*Consultation with key stakeholder groups.*
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.	*Consultation with key stakeholder groups.*

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	*Output indicator* – Number of participants Proportion of RACFs in the area with access to the service *Outcome indicator* – 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	*Process indicator* – Investigation is completed *Output indicator* - 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	*Outcome indicator* – 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	*Process indicator* – Strategy is developed *Output indicators* – Strategy is implemented and evaluated *Outcome indicators* – 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	*Process indicator* – Investigation is completed *Output indicator* - 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	*Output indicator* – 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	*Process indicator* – Services are commissioned in accordance with local need *Output indicator* - Proportion of the rural population receiving PHN-commissioned allied health services *Outcome indicator* – 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	*Output indicators* – Number of telehealth ENT consultations performed Increase in confidence of GPs in managing ENT conditions *Outcome indicator* – 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	*Process indicators* – Rural communities strategy is developed Local health and service needs are identified Solutions are developed to address identified needs *Output indicator* - 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	*Process indicator* – 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	*Process indicator* – Investigation is completed *Output indicator* - 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	*Outcome indicators* – 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	*Output indicator* – Rate of calls to the NSW Quitline *Outcome indicator* – 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	*Outcome indicators* – 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	*Outcome indicator* – 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	*Outcome indicators* – 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.	*Output indicator* – Number of Practice Nurses completing training *Outcome indicators* – 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	*Outcome indicators* – 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
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.	*Output indicators* – 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	*Process Indicators* – Updates are provided to NHSD NHSD is promoted to stakeholders Contact database of health care providers is maintained *Output indicators* – 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 management of health conditions and enhanced quality of life.	*Process indicators* – HNECC participates in the Stage 1 roll-out of the initiative	HNECC	DoH HNECC	NxPH2 NxPH3 NxPH20 NxPH27
Form health sector partnerships with other primary care agencies i.e. GP Collaboration Unit; service delivery reform partnerships; Central	Improved service integration and coordination, increased access to services and improved health outcomes for the HNECC PHN population	*Process indicators* - Evidence of formalised partnerships with other regional service providers to support integrated regional planning and service delivery	HNECC HNELHD CCLHD	HNECC HNELHD CCLHD	NxPH5 NxPH11 NxPH13 NxPH20

Opportunities and Options					
General Population Health					
Possible Activities	Expected Outcome	Possible Performance Indicators	Data Source	Potential Lead	Need/s
Coast Aged Care Task Force; Hunter Dementia Alliance; and Central Coast Dementia Alliance		HNECC actively participates in all relevant activities associated with each of the partnerships			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	*Outcome indicators* – 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	*Process indicators* – 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 *Output indicators* – 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
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	*Process indicator* – Data extraction and aggregation function is commissioned *Output indicator* – Data is used to identify areas for continuous quality improvement	HNECC	HNECC	NxPH20 NxPH23

Opportunities and Options					
General Population Health					
Possible Activities	Expected Outcome	Possible Performance Indicators	Data Source	Potential Lead	Need/s
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	*Output indicator* – 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	*Output indicator* – Capacity building activities are undertaken according to locally identified need *Outcome indicators* – 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.	*Output indicators* – Number of assessments performed *Outcome indicators* – 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	*Process indicator* – Research is undertaken *Output indicators* - Recommendations are provided Services are commissioned in response to identified need *Outcome indicator* – Rates of potentially preventable hospitalisations	HNECC AIHW NSW HealthStats	HNECC	NxPH11 NxPH17 NxPH27 NxPH34
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	*Outcome indicator* – Rates of semi-urgent and non-urgent emergency department presentations	AIHW	HNECC NSWA	NxPH20 NxPH32

Opportunities and Options					
General Population Health					
Possible Activities	Expected Outcome	Possible Performance Indicators	Data Source	Potential Lead	Need/s
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	*Output indicator* – Proportion of RACFs participating Number of telephone consultations provided to RACFs *Outcome indicators* – 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	*Output indicator* – Proportion of small communities covered by the program *Outcome indicator* – 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	*Output indicators* – Number of patients seen Number of transfers / referrals from local EDs *Outcome indicators* – 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 underserviced and hard-to-reach groups, including rural and remote communities	Increased access to primary mental health care services for underserviced groups	*Output indicator* - Proportion of regional population receiving PHN-commissioned mental health services – Psychological therapies delivered by mental health professionals*	PMHC-MDS	HNECC	NxMH1 NxMH11 NxMH12 NxPH10 NxPH34

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
		Outcome indicator - Clinical outcomes for people receiving PHN-commissioned Psychological therapies delivered by mental health professionals*			
Commission suicide prevention services in areas of identified need	Increased access to services for people at risk of suicide	*Output indicator* - 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	*Output indicator* – 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	*Outcome indicators* – 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.	*Output Indicator* - 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	*Output Indicator* - Proportion of regional youth population receiving youth-specific PHN-commissioned mental health services*	Headspace MDS PMHC-MDS	HNECC	NxMH1 NxMH2 NxMH11 NxMH12 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
Commission low intensity youth services (LITe Model) in areas of identified need	Improved outcomes for youth at risk of, or experiencing, mental illness	*Output Indicators* - 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* *Outcome Indicator* - 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	*Process Indicators* – Communities with highest unmet need identified Services commissioned in response to need *Output Indicators* - 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	*Output indicator* - 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 integrated approach to primary mental health services for this population group*	HNECC	HNECC	NxMH1 NxMH2 NxMH17 NxPH10 NxPH30
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	*Output indicator* – Proportion of this cohort receiving PHN-commissioned mental health services	HNECC PMHC-MDS	HNECC	NxMH1 NxMH3

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
		Outcome indicator – Clinical outcomes for this cohort receiving PHN-commissioned mental health services			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	*Output indicator* – Proportion of this cohort receiving PHN-commissioned mental health services *Outcome indicator* – 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	*Output indicator* - 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	*Process Indicators* – Appropriate initiatives are identified Low intensity social and emotional health and suicide prevention services are commissioned *Output indicator* - Proportion of Indigenous population receiving PHN-commissioned mental health services where the services were culturally appropriate* Proportion of regional population receiving PHN commissioned mental health services – Low intensity interventions	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
		Outcome indicator – 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	*Output indicator* – Improved cultural safety of services *Outcome indicator* – 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	*Output indicator* - Proportion of the regional cohort receiving PHN-commissioned mental health services *Outcome indicator* – 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	*Process indicator* – 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	*Output indicator* - 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

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 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	*Process indicator* – Needs assessment completed Services commissioned in accordance with identified need *Output indicator* - Proportion of the regional cohort receiving PHN-commissioned psychosocial support services *Outcome indicator* – 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	*Output indicator* - 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	*Process indicator* – 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	*Output indicator* – Reduction in hospitalisation rates attributed to eating disorders	NSW Ministry of Health	HNECC, LHDs, Butterfly Found'n	NxMH1 NxMH2 NxMH8 NxMH13 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
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	*Process indicator* – 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	*Process indicator* – 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	*Output indicator* - Proportion of regional population receiving PHN-commissioned mental health services – Low intensity services *Outcome indicator* - 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	*Output indicator* – 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	*Process indicator* – 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 and reduced suicide rates for the HNECC PHN population	*Process indicator* - Evidence of formalised partnerships with other regional service providers to support integrated regional planning and service delivery*	HNECC	HNECC, LHDs	NxMH1 NxMH10 NxMH11 NxMH12 NxMH18

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
					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	*Process indicators* – 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	*Process indicators* – 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	*Process indicator* – A working group of relevant stakeholders is convened *Output indicators* – 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	*Output indicator* – An activity to increase the number of mental health nurses in general practice is co-commissioned *Outcome indicator* - Number of mental health nurses working in general practice	HNECC	HNECC HNELHD	NxMH1 NxMH8 NxMH13 NxMH14 NxMH22

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
Support the provision of specialised mental health and counselling services to people affected by the Williamtown PFAS exposure	Increased access to services and improved mental health outcomes for this cohort	*Process indicators* – 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 *Output indicators* – 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	*Output indicator* – 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	*Output indicators* – 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 *Outcome indicators* – 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.	*Outcome indicators* – 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.	*Process indicator* – 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.	*Output indicator* – Number of Aboriginal Health Workers gaining the qualification *Outcome indicators* – 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	*Output indicator* – Proportion of regional population receiving PHN-commissioned drug and alcohol treatment services *Outcome indicators* - Clinical outcomes for people receiving PHN-commissioned drug and alcohol treatment services Proportion of people aged 16 years+ consuming alcohol at level posing long-term risk to health Rate of mental health hospitalisations for drug and alcohol use Rate of alcohol-attributed deaths Rate of methamphetamine-related hospitalisations Rate of active patients with a record of drug misuse	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	*Outcome indicator* – 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	*Output indicator* – 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	*Process indicator* - Evidence of effective partnerships between service providers to support integrated collaborative care *Outcome indicator* – Patient experience of care	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	*Output indicator* - Increase in confidence of participants in providing drug and alcohol treatment *Outcome indicator* – 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	*Output indicator* - Increase in confidence and likelihood of participants in providing non-pharmacological treatment *Outcome indicator* – 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	*Process indicator* – Referral and service navigation resource is developed *Output indicator* – Referral pathways are improved *Outcome indicator* – 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	*Process indicator* – Clinical placement program is established *Output indicators* – Number of GPs completing the program Increase in knowledge of participants *Outcome indicator* – 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	*Process indicator* – Drug and alcohol partnership networks are established *Output indicators* – 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 *Outcome indicator* – 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	*Process indicator* - Activities utilise a program logic approach to demonstrate alignment between need, input, output and outcome *Output indicator* – 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	*Output indicator* – Proportion of the population receiving PHN-commissioned drug and alcohol treatment services who are Aboriginal and Torres Strait Islander people *Outcome indicators* - 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	*Output indicator* – Number of scholarships issued *Outcome indicators* – 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	*Output indicators* – Guidelines are developed Guidelines are implemented Use of the guidelines is evaluated *Outcome indicator* – 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	*Process indicator* - Activities utilise a program logic approach to demonstrate alignment between need, input, output and outcome *Output indicator* – Workforce capacity and development activities are targeted to identified areas of need	HNECC	HNECC	NxAOD4
Commission drug and alcohol treatment services targeted at: • 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	*Output indicator* – Proportion of the population receiving PHN-commissioned drug and alcohol treatment services within each target cohort *Outcome indicator* - 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).	✓