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Needs Assessment 2022/23-2024/25

Western Sydney PHN

Contents

SECTION 1 – NARRATIVE

Needs assessment process and issues

Western Sydney Primary Health Network (WSPHN) undertook this needs assessment by building on and learning from previous needs assessments to understand the health and service needs in our region. We took a mixed-methods approach using both quantitative and qualitative research, including data analysis, literature review and stakeholder engagement. This approach analyses available data and information to inform our findings and generate insights into the needs of the community. This process was overseen by a governance model that provided assurance to the depth, quality and rigour of the analysis and the appropriateness of the methodology.

Methodology

The methodology involved the following:

- Environmental scan.
- Interviews with health service providers and stakeholders.
- Development of health gaps and initial validation by the WSPHN executive team.
- Further research and validation with the consumer and clinical councils.
- Consumer engagement.
- Service mapping.
- Prioritisation and finalisation of needs assessment.

Environmental scan

The first step in the needs assessment involved conducting a comprehensive environmental scan of known data. It explored the available health data in depth to identify key themes at the national and state levels. From the themes identified, further datasets were gathered and analysed to determine where there was evidence for key health themes at the primary health care level. The results of both rounds of analysis were distilled into an environmental scan that was tested and validated with internal WSPHN subject matter experts. The environmental scan was then tested with both consumer and clinical councils to validate identified gaps in health service provision and unmet health needs in the region.

Interviews with service providers and stakeholders

WSPHN conducted significant engagement activities with service providers in Western Sydney to analyse and validate the available evidence, understand major trends and begin the service-mapping process. The result of the service provider engagement was a draft needs assessment.

Development of health gaps and initial validation by the WSPHN executive team

Following the drafting of the needs assessment, an initial validation exercise with the WSPHN executive team was undertaken. This identified areas where further research was required.

Further research and validation with consumer and clinical councils

Further data collection, analysis and research were undertaken to fill gaps that had been identified through the senior executive validation process. Once completed, both the consumer and clinical councils were engaged to review the needs assessment and have input to the prioritisation of needs across the Western Sydney population.

Consumer engagement

WSPHN used a combination of a community surveying, interviews, focus groups and workshops to engage with a variety of stakeholders, including patients, community members, local government representatives and health service providers to validate the gaps and quality of service provision for a variety of population groups in the community.

Service mapping

WSPHN completed its service mapping by accessing data sources including the NSW Department of Health workforce data, Medicare Benefits Scheme data, Practice Incentive Program data, NSW Health data, practice reporting and WSPHN internal datasets. It then enriched the data by exploring the experiences of the people, communities, and services the data represented.

Prioritisation and finalisation of needs assessment

To synthesise and triangulate the findings of the health and services needs analysis, WSPHN used an iterative, mixed-methods approach that included cycles of desktop research, interviews, validation and continuous development of the needs assessment. This enabled WSPHN to capture data from emergent reports and publications and leverage the expertise of its experts and key partners across the region.

WSPHN approached the prioritisation process by exploring the health and service needs using whole-of-population and demographic lenses. Underpinning WSPHN's development of priorities is the key role that community engagement and co-design will play in implementing effective health interventions in Western Sydney. WSPHN's priorities will build on existing priorities and address issues identified in the needs assessment. They will also give WSPHN the ability to identify emerging issues proactively, rapidly understand their impact, and co-design holistic solutions that improve health outcomes.

To finalise the process, rigorous internal reviews across the internal subject matter experts and senior executive team were conducted.

To ensure ongoing learning and improvement, a comprehensive review of this needs assessment process will be conducted to evaluate its effectiveness. WSPHN will review its internal processes and will invite feedback from stakeholders, including collaborators in the region, key community contacts, and internal SMEs. WSPHN will consider opportunities for continuous improvement of this process and will seek to incorporate these into the next iteration of the needs assessment.

Additional data needs and gaps

In developing this needs assessment, WSPHN encountered issues accessing relevant, comprehensive data for a number of priority groups and specific health needs.

- **LGBTQIA+:** limited data was available on the specific health needs of the LGBTQIA+ community, partly due to inadequate collection methods at the time of service delivery. Not all people who identify as LGBTQIA+ choose to declare their LGBTQIA+ status to their health service provider. As a result, data on this priority group is often incomplete.
- **People with disability**: although there is a wealth of data and information on people with disability at the national, NSW and Western Sydney levels, there is limited data on the significant health issues impacting this priority group. Despite having access to mortality data and self-reported health data, for example, it was a challenge to point to the health issues that are having the most significant impact on people with disability.
- **Veterans**: the available data on veterans is incomplete as it only reflects veterans who choose to access veterans' services. The number of veterans in the community is likely to be much higher than that reflected in the data, and their specific health needs may not be captured.
- **People experiencing homelessness**: the data on the health needs of people experiencing homelessness is limited, likely due to several factors. People experiencing homelessness can encounter barriers to accessing services, including financial constraints, the inability to travel to services, and the need to prioritise more acute needs, such as personal safety. The data that is available on the health needs of this priority group is therefore likely incomplete.
- **Families with small children**: there is limited data on the whole-of-family mental health needs of families with small children. More data is required to understand the nature and extent of this need and the limitations or barriers to accessing relevant, whole-of-family mental health services. There is currently no single system or entity in Western Sydney that can deliver holistic and cross-sector, wraparound support for vulnerable families. To achieve the best possible outcomes and respond to family needs, WSPHN is leading the multi-agency KEYS Network, which recognises the need for integration, coordination, and accountability in the current system.
- **Cancer screening**: available data shows cancer-screening rates are low across Australia and particularly low in Western Sydney. There is a lack of comprehensive data to understand the drivers of these low cancer-screening rates and what barriers might be preventing people in Western Sydney from accessing these services.
- **Aboriginal health**: there are gaps in Aboriginal-related health system data. Many stakeholders noted that Aboriginal and Torres Strait Islander people often feel over-surveyed as a population, making it even more difficult to collect new data.

Additional comments or feedback

Achieving Aboriginal health equality will require investment in workforce development, education on smoking, alcohol, nutrition, and maternal and child health, and an increased emphasis on trauma-informed practice and culturally appropriate care across all levels of care and support services.

SECTION 2 – OUTCOMES OF THE HEALTH NEEDS ANALYSIS

	Outcomes of the health needs analysis – social determinants of health		
Need Number	Identified Need	Key Issue	Description of Evidence
SDH1	Areas with lower socioeconomic positions	Residents in Blacktown and Cumberland LGAs are more disadvantaged than other areas of Western Sydney.	The SEIFA Index of Relative Socio-economic Disadvantage lists NSW as a whole at 1,002. By this index, a lower score indicates greater disadvantage in general and a higher score more advantage. Blacktown and Cumberland sit below the NSW average at 986 and 930 respectively (PHIDU 2021a). This means there are more households with low income, more people with no qualifications and more people in low-skill occupations in these areas. Socio-economic circumstances are not equally distributed in the Western Sydney population. While Blacktown and Cumberland are more disadvantaged than the NSW average, Parramatta and The Hills Shire have a higher SEIFA index score at 1,040 and 1,106 respectively (PHIDU 2021a). However, these averages may obscure the disadvantages and advantages within each LGA.
SDH2	Lower levels of education	Residents in the most disadvantaged areas have lower levels of education.	Residents in the Blacktown, Cumberland and Parramatta LGAs have on average attained lower levels of education than residents in The Hills Shire LGA (the most advantaged area in the region) (PHIDU 2021a). Auburn (53.8%), Merrylands-Guildford (60.1%) and Mount Druitt (64.1%) have the lowest percentages of preschool enrollment of four-year-olds (PHIDU 2021b). In 2018, Cumberland (26.7%) and Blacktown (23.2%) had the highest proportions of children developmentally vulnerable in one or more domains against the national figure of 21.7% and NSW figure of 19.9% (PHIDU 2021a).

			Cumberland and Blacktown have the lowest percentages of people participating in full-time education (PHIDU 2021c).
SDH3	Limited access to safe and comfortable outdoor environments	There is limited access to safe and comfortable outdoor environments in Western Sydney, particularly in Blacktown and Cumberland.	Modelled estimates suggest fewer people in the Blacktown, Cumberland and Parramatta LGAs felt safe walking outdoors than the NSW average (PHIDU 2021c). Indicative estimates suggest only 37.6% of people in Blacktown, and 41.1% of people in Cumberland felt safe walking alone in their local area after dark (PHIDU 2021a).
SDH4	Negative healthcare experiences and barriers to accessing healthcare	Some residents, particularly vulnerable cohorts in Blacktown LGA, have had negative healthcare experiences and encounter barriers to accessing care.	Community consultations conducted in 2021 suggested priority health populations, including Aboriginal and Torres Strait Islander people, members of CALD communities, people experiencing homelessness, former prisoners, and people with disability are vulnerable people for whom previous negative healthcare encounters have become a barrier to accessing care, and now negatively impact their health. For Aboriginal and Torres Strait Islander peoples, data suggests experiences of discrimination and racism can negatively impact their physical and mental health outcomes (Kairuz et al. 2021). These experiences can reduce access to social resources, including employment, education, housing, health care, and other services (Paradies et al. 2015). They can also cause psychological distress and increased likelihood of engaging in risk behaviors, such as substance use (Kairuz et al. 2021). Nearly 40% of the Western Sydney population was born overseas in a predominately non-English-speaking country and is now considered part of the CALD community (ABS 2021). Health care systems can be intimidating for new immigrants (Weng et al. 2020). 4,084 refugees settled in Western Sydney between 2012 and August 2016 (PHIDU 2021b). A high proportion of Australians with a refugee background

have experienced disturbing events that have led to physical trauma, infectious disease, nutritional deficiencies, obstetric complications, and poor dental health (Russell et al. 2019). New immigrants have difficulties and stress around adapting to a new system. These difficulties can include language barriers and discrimination, poor health literacy and an absence of a family support network (NSW Health 2019).

People who have lived in prison receive healthcare through prison clinics and external services (AIHW 2019a). However, they are at risk of eroding the health benefits they experienced while incarcerated (AIHW 2019a). Many people who have lived in prison in Australia entered the prison system with pre-existing conditions, most commonly a dental condition, a mental health condition, or a condition arising from their use of alcohol or other drugs (AIHW 2019a). Some people living in prison are diagnosed with health conditions for the first time while they are incarcerated (AIHW 2019a). The conditions most commonly diagnosed across Australia include cardiovascular disease, musculoskeletal conditions, diabetes and communicable diseases (AIHW 2019a). Almost one-third of the people living in prisons in Australia were dispensed prescription medication on a typical day, most commonly antidepressants or mood stabilisers (AIHW 2019a).

People transitioning from living in prison can encounter barriers to accessing appropriate health care in the community, including stigma, resulting in the worsening of their existing health conditions (AIHW 2019a). People newly released from prison are also at risk of developing new health conditions, as the transition to life in the community can cause trauma, psychological distress, increased use of alcohol and other drugs and other high-risk behaviours (AIHW 2019a).

			Many people newly released from prison do not have secure housing or accommodation and expect to be homeless on their release (AIHW 2019a). In Western Sydney between 2014 and 2022, the number of people who accessed Specialist Homelessness Services increased by over 75% (from 2,751 people to 4,829 people) (AIHW 2020a). There are many barriers that prevent people experiencing homelessness from accessing services. These include health care (including poor health), physical access to services, not having Medicare cards, competing priorities, affordability and stigma due to their perceived social status within the community (Cohealth 2020; Davies and Wood 2018). Most NSW patients without disability viewed their care in hospital as being good or very good. Patients with disability had significantly fewer positive experiences of care within hospitals (BHI 2017): • One in nine participants feel they were not given enough support once they returned home. • One in nine participants feel that they were not given enough information about their condition. • Almost one in four participants feel that they were not given enough assistance from staff to eat meals. • One in four participants say doctors and nurses did not always explain things in a way that was easy to understand. As determined by community engagements conducted in 2021, other priority groups, including new families and older people, also experience long wait times, confusion accessing the right health care, and limited integrated systems.
SDH5	Increasing social isolation	The numbers of residents feeling isolated from the community are increasing.	An increase in social isolation, anxiety and depression as a result of extended lockdowns and restrictions due to COVID-19 has seen a rise

in demand for mental health services (NCOSS 2020). The isolation and economic loss related to COVID-19 have had a significant impact on the mental health of Western Sydney residents. With evidence suggesting that Google searches for 'depression' spiked in NSW during the onset of social distancing measures (NCOSS 2020).

CALD communities suffered disproportionally from the COVID-19 Delta variant outbreak in 2021**.** A survey conducted by the Ethnic Communities Council of Australia highlighted that the biggest impact on CALD communities were unemployment, financial wellbeing, and social Isolation (Weng et al. 2020).

Additionally, due to the home setup of many CALD communities with multiple generations living in one home, COVID-19 transmission was disproportionately higher in these communities. Merrylands-Guildford is an area in Cumberland LGA that had large concentration of COVID-19 transmission at home. This LGA consists of significant numbers of Australians with backgrounds of Lebanese, Chinese and Indian cultures (Informed Decisions 2021; Weng et al 2020)

People in CALD communities with temporary visa statuses are already at a higher risk of isolation and associated mental health risks as they are less likely to have a strong community network and uncertain separation from their families (NSW Health 2019).

Older Australians, particularly in residential aged care facilities, continue to experience isolation and loneliness (RCACQS 2021a). They may not have community networks and can suffer from mental health issues, including anxiety and depression (RCACQS 2021a). Older people, can be socially isolated – a risk factor for loneliness (Fakoya et al 2020). Some other risk factors for loneliness can be unemployment

			and financial difficulties. Loneliness has been linked to premature deaths and poor physical and mental health (AIHW 2021a). As a result of COVID-19 restrictions, older people and people with disability have become deconditioned because of isolation and restricted movement during lockdowns (Sepúlveda-Loyola et al. 2020). Methods of rehabilitation that were in place before the pandemic will no longer be practical, therefore extensive research will need to be conducted to facilitate rehabilitation support for these people in future (De Biase et al. 2020). The unique physical and mental health issues veterans experience, and their reluctance to access help, can leave them vulnerable to isolation, difficulties in society and in their relationships (AIHW 2018a). Many veterans do not engage with the Department of Veterans Affairs, with only 40% of the full ex-serving cohort engaged as clients. (AIHW 2023d). LGBTQIA+ individuals can face discrimination from their families and community leading to isolation and, in some cases, increased rates of suicide ideation (thinking about or planning suicide) and other health risks (National LGBT Health Education 2018). LGBTQIA+ people need to feel safe accessing support. It is important to understand individual stories of those experiencing homelessness because some people who have severe and persistent mental illness have disengaged from the system and are now homeless as a result (GoShare Health 2023).
SDH6	Disproportionate education and employment outcomes for people with disability	A considerable proportion of people with disability experience barriers to education	Of people with disability aged over five years who live in households, 48% experience barriers to accessing education or employment (AIHW

		and receive government payments as their main source of income.	2020b). Additionally, 43% of people with disability aged 15-64 receive a government payment as their main source of income (AIHW 2020b).
SDH7	Increased health support for youth that are unemployed	Young people are impacted more and for a longer period of time than others in the population when there is an economic crisis leading to increased substance abuse, depression and suicide attempts.	During economic crises, youth unemployment rises faster and recovers more slowly (ILO and ADB 2020). Substance abuse, depression and suicide attempts all increase in times of economic crisis and uncertainty (Godinic et al. 2020).
SDH8	Disproportionate education outcomes in young people	Young people in Cumberland and Blacktown are less likely to be in education, vocational training or employment.	Estimates from 2021 indicated that 79.9% and 81.8% of young people were learning or earning in Cumberland and Blacktown respectively (PHIDU 2021a). While in Parramatta and The Hills Shire 88.1% and 92.6% of young people were learning and earning in the same period (PHIDU 2021a).

	Outcomes of the health needs analysis – population health		
	Identified Need	Key Issue	Description of Evidence
PH1	High rates of unhealthy lifestyles	A high proportion of residents in Western Sydney are maintaining unhealthy diets, are inactive and sedentary, are smoking and are otherwise making lifestyle choices that increase their risk of experiencing preventable health conditions and avoidable hospitalisations.	**Poor diets and sedentary lifestyles** A high proportion of children in Western Sydney are also inactive and using screens at an excessive level (CEE 2022a). Data from between 2019 and 2020 from Western Sydney's local health district suggest that only 13.5% of children aged five to 15 years had adequate physical activity, and 48% of children had sedentary lifestyles (including too much screen time) (CEE 2022a). Data from 2020 found that 46.1% of adults in Western Sydney had insufficient physical activity (CEE 2021a). Data from 2021 indicates that up to 53.8% of people in Western Sydney are overweight or obese, lower than the NSW average of 57.8% (CEE 2021b). Residents in Western Sydney are hospitalised due to (over)weight and obesity-related issues at a rate of 655.8 per 100,000 (age-standardised), lower than the NSW rate of 763 per 100,000 (CEE 2021c). However, Blacktown LGA has an obesity and overweight-attributable hospitalisation rate that is significantly higher than the NSW average (2,496.4 per 100,000 vs 730 per 100,000, when spatially adjusted) (CEE 2021d). **Smoking** 12.6% of adults in Western Sydney are still daily smokers despite smoking rates declining in NSW over the past decade (CEE 2022b). Indicative models suggest that lower socioeconomic regions (Blacktown and Cumberland) tend to have more current smokers (14.2% and 15.8% rates per 100) than their wealthier neighbours

			(Parramatta and The Hills Shire) at 10.6% and 7.7% (rates per 100) respectively (PHIDU 2021c). Indicative models also found that the North-West Mount Druitt area has among one of the highest current smoker rates (per 100) in NSW at 26.7% followed by Guilford West-Merrylands-Holroyd at 18.6% and Mount Druitt-Whalan at 18.5%. All are well above the NSW average (PHIDU 2021b). **Alcohol** While only 3.4% of Western Sydney residents drink alcohol daily, 27.5% of Western Sydney residents aged 16 years or over have a long-term risk of alcohol consumption, meaning they consume more than two standard drinks per day (CEE 2021e; CEE 2021f).
PH2	High prevalence of diabetes	More than 60% of Western Sydney residents have or are at risk of developing diabetes.	An estimated more than 60% of adults in Western Sydney either have or are at high risk of developing type-2 diabetes (WSD 2017). • 15% of adults in Western Sydney are estimated to have type-2 diabetes (WSD 2017). • 35% of adults have a high risk of diabetes (WSD 2017). Residents of Blacktown are estimated to have a 7.3% prevalence of diabetes. However, given many remain undiagnosed, combined with the high prevalence in Western Sydney, this number is most likely higher (WSD 2017). In Blacktown, 113.8 of 100,000 people hospitalised was for diabetes, and 113.5 of 100,000 in Cumberland, both accounting for more than the NSW average of 100.5 per 100,000 (PHIDU 2021c). There is a strong link between unhealthy lifestyles such as smoking, drinking excessive alcohol, sedentary lifestyles, inadequate fruit and vegetable consumption, and the prevalence of diabetes. There are

			many health risk behaviours seen in Western Sydney, a number of which at a higher rate than in the rest of NSW. Type-2 diabetes disproportionately impacts Aboriginal and Torres Strait Islander populations (AIHW 2020c). Between 2012/13 and 2018/9, based on age-standardised rates, hospitalisations of people with diabetes as a principal diagnosis increased by 15% for Indigenous Australians and 16% for non-Indigenous Australians. In 2019, the diabetes rates in Aboriginal populations were almost three times those in non-Aboriginal populations (AIHW 2020c).
PH3	Diabetes and other chronic diseases are poorly managed	People with diabetes are experiencing more severe symptoms and complications. Chronic conditions, including COPD, cardiovascular disease and asthma are often poorly managed, resulting in hospitalisations across Western Sydney.	The Diabetes Case for Change report estimates that diabetes is at a record 11.1% across NSW and has been increasing since the early 2000s (NSW Health 2020). It also shows that people who have the disease are experiencing more severe symptoms and complications (NSW Health 2020). For example, rates of leg amputations due to diabetes increased in NSW by more than 25% between 2012 and 2019 (CEE 2021g). Diabetes can have severe effects on a person's vascular system, leading to chronic conditions like coronary heart disease and peripheral vascular disease, and acute conditions like myocardial infarctions and stroke (Long and Dagogo-Jack 2011). Rates of hospitalisation due to diabetes as a comorbidity are significantly higher in Western Sydney at 3,729.4 per 100,000 than the NSW rate of 3,277.3 per 100,000 (CEE 2021h).
PH4	High rates of smoking and dangerous levels of alcohol consumption	Residents in the most socio-economically disadvantaged groups are at increased risk of developing cancer and other chronic conditions due to higher rates of smoking and drinking alcohol at dangerous levels.	12.9% of adults in Western Sydney are still daily smokers despite smoking rates declining in NSW over the past decade. Lower socioeconomic regions (Blacktown and Cumberland) tend to have much higher rates of smoking than their wealthier neighbours (Parramatta and The Hills Shire) (PHIDU 2021c).

			27.5% of Western Sydney residents aged 16 years or over have a long-term risk of alcohol consumption, meaning they consume more than two standard drinks per day (CEE 2021e). Daily cigarette consumption for the most disadvantaged fifth of the population was about 3.7 times higher in 2019 compared to those in the most advantaged fifth (AIHW 2020d). When compared to the NSW general population, people who were not born in Australia have a greater risk of smoking. Particularly men of Arabic (39.3%), Vietnamese (32%) or Chinese (20.3%) decent have been classified as priority communities to address smoking when compared to the NSW population of 14.7% (Cancer Council NSW (2013).
PH5	Low rates of cancer screening	Rates of cancer screening is low in Western Sydney, the drivers for which are not readily understood.	Cancer screening is low in Western Sydney, and this contributes to the higher cancer risk in the area than in the rest of NSW (AIHW 2023a). A key factor contributing to better health outcomes for people with cancer is early identification (AIHW 2018b). There are three cancer screening programs in Australia: BreastScreen Australia, the National Cervical Screening Program, and the National Bowel Cancer Screening Program (AIHW 2018b). These programs aim to improve early identification across Australia and reduce illness and death due to cancer (AIHW 2018b). Western Sydney cancer screening rates are below both the NSW and national average (AIHW 2023a). Screening rates among vulnerable groups in the community are even lower, due to a limited understanding of the importance of cancer screening, and a reluctance of certain community members to attend screening appointments. LGBTQIA+ women, for example, are less likely to access screening

services and face higher risks of cancer mortality even though they are no more likely to have cancer than the general population (Gatos 2018).

35.6% of people in Western Sydney attended bowel cancer screenings between 2020 and 2021. This is lower than the 39.5% who attended bowel screenings across NSW and the 40.9% who attended nationally (AIHW 2023a). Male positive screening results for bowel cancer were most alarming in Blacktown (9.9%) and Cumberland (9.7%), which both had percentages greater than the NSW average (9.1%) (PHIDU 2021c).

Breast cancer screening rates in Western Sydney were 44.4% in 2020–2021, lower than the NSW average of 50.2% (AIHW 2023a).

Aboriginal and Torres Strait Islander people have lower cancer screening rates (Cancer Council Victoria n.d.). This may lead to being diagnosed with cancer at more advanced stages, resulting in lower cancer survival rates, such as the case with bowel cancer (Cancer Council Victoria n.d.).

Female-to-male transgender individuals go to fewer cervical cancer screenings and are less likely to be up to date on their pap tests compared with cisgender women (Gatos 2018). Some studies have demonstrated that as many as one-third of all transgender men are not up to date with screening as per clinical guidelines and are more unlikely to have never undergone cervical cancer screenings (Goldstein et al 2020). Major contributors to this disparity are a lack of knowledge in the trans community associated with human papillomavirus, and a lack of understanding regarding the importance of cervical cancer screening (Gatos 2018).

			COVID-19 restrictions had an impact on the rate of cancer screening nationwide, particularly for breast cancer (AIHW 2021b).
PH6	Disproportionate prevalence of viral hepatitis in some priority groups	The prevalence of viral hepatitis is disproportionately higher in some priority groups, including CALD and Aboriginal and Torres Strait Islander communities.	In Western Sydney, hepatitis B and C have the greatest impact on the community. Risk factor distributions are varied across people diagnosed with hepatitis B and C from different ethnic backgrounds, highlighting the need for tailored approaches among diverse ethic groups (Binka et al 2021). In Australia, people born in Northeast Asia and Southeast Asia make up the largest proportion of those impacted by hepatitis B (MacLachlan et al. 2020). Western Sydney has a culturally diverse population, with many people born in countries where hepatitis is highly prevalent. Despite this, both treatment and care rates for hepatitis B are lower than the national targets in Western Sydney (MacLachlan et al. 2020). In Australia in 2020, 222,559 people were living with hepatitis B, of whom an estimated 23.1% were born in Northeast Asia, 19.3% were born in Southeast Asia, and 7.2% were Aboriginal and Torres Strait Islander people (MacLachlan et al. 2020).
PH7	Low rates of testing and treatment for viral hepatitis	Testing rates are low due to a variety of factors, including a lack of awareness of the prevalence of hepatitis and the requirement to conduct multiple tests to confirm a diagnosis.	Western Sydney had the fourth highest proportion of people living with hepatitis B in Australia (MacLachlan et al. 2020). Western Sydney also has the second greatest proportion of people with chronic hepatitis B who received treatment and care in Australia (MacLachlan et al. 2020). Western Sydney has the eighth lowest proportion of the population with hepatitis C at 0.67% compared to the total proportion of the Australian at 0.78% (MacLachlan et al. 2020). However, treatment of people in Western Sydney with hepatitis C was 41.1% as of 2020, which was lower than the Australian proportion (47%) (MacLachlan et al. 2020).

PH8	Viral hepatitis is a major contributor to liver cancer	Hepatitis B and C are the predominant cause of liver cancer. The prevalence of liver cancer is growing faster than any other cancer in Australia and rates of liver cancer in Western Sydney are higher than the national average.	Liver cancer is the fastest growing cancer in Australia (MacLachlan and Cowie 2012). Hepatitis B and C are the predominant cause of liver cancer, along with behavioural factors that include smoking, alcohol consumption and overweight/obesity (Cancer Council Australia 2022). Western Sydney had a rate of liver cancer above the national average (AIHW 2019b). Merryland-Guilford and Auburn had higher rates of people with hepatitis B than the Australian average (MacLachlan et al. 2020).
PH9	Limited access to dental health services	Residents in Western Sydney – both adults and children – experience higher rates of poor oral health and access dental care less frequently than the NSW average.	As of 30 September 2023, there were 5,625 patients waiting for assessment or treatment with NSW public dental services, which was the fifth highest local health district (NSW Health 2023a). Children in Western Sydney aged 5-14 years have their teeth removed and restored more than the NSW average (296 per 100,000 vs 249.2 per 100,000 in NSW) (CEE 2020a). Western Sydney community members aged 15 and older receive dental removal and restoration health services (when looking at total procedure types) in hospital at rates that are lower than the NSW average (23.9 per 100, 000 compared to 38.3 per 100,000) (CEE 2020a).
PH10	Cavities have the biggest impact on the oral health of children	Tooth decay or cavities are the most common reason for hospitalisations in children.	Between 2017 and 2020, children aged 0-14 years were hospitalised at a rate of 627.4 per 100,000 (about 1,348.3 children per year) in Western Sydney (CEE 2020b). Tooth decay or cavities are the most common reason for hospitalisations in children accounting for an average of 932.3 per year between 2017 and 2020 in Western Sydney (CEE 2020b). Developmental disorders of teeth result from abnormalities in the formation of teeth inside the jaw of children. In Western Sydney, people aged 15 and older were hospitalised at a rate of 314 per 100,000 between 2017 and 2020 (CEE 2020b).

			Developmental disorders of teeth account for most oral health hospitalisations in adults with 1,163 per year (CEE 2020b).
PH11	Violence against women continues to be a major issue in Western Sydney	Victims of domestic violence offences are more likely to be women.	In 2018, there were 7,221 women reported as victims of domestic violence-related assaults in the Greater Western Sydney region. This amounts to 67% of total victims of domestic violence offences (Lawton 2019a). Due to COVID-19, domestic violence, child abuse, and other risk factors in the community have significantly increased (NCOSS 2020). Risks to mental wellbeing, such as social disengagement and isolation have also increased. (AIHW 2021a).
PH12	Children in Western Sydney are at higher risk of being developmentally vulnerable	Children in Western Sydney were the most at risk of being developmentally vulnerable in NSW.	The domains that measure developmental vulnerability in the Australian Early Development Census are physical, social, emotional, language, and communication. More than 22% of children in Western Sydney were developmentally vulnerable in one or more of these domains, which is above the national average (Australian Early Development Census 2021). More than 10% of children in Western Sydney are developmentally vulnerable on two or more of these domains (Australian Early Development Census 2021).
PH13	Smoking by pregnant women	More pregnant women in Blacktown smoke than the NSW average.	In 2021, 6.1% of pregnant women in Western Sydney smoked during pregnancy, which is far lower than the NSW average of 7.9% (CEE 2021i). However, this statistic is not evenly dispersed across the region. 10.9% of pregnant women in Blacktown were smoking (more than the NSW average), 5.7% of pregnant women in Cumberland, 2.9% of pregnant women in Parramatta, and 2.2% in The Hills Shire (PHIDU 2021c).
PH14	Infant health	Western Sydney has a higher infant mortality rate and more babies with low birthweights.	In 2020, Western Sydney had an infant mortality rate of 9.6 per 1,000 individuals, which is higher than the NSW average of 8.6 per 1,000 (CEE 2021j)

			In 2020, Western Sydney had a low birthweight percentage of 7.1% and a total of 1,058 low-birthweight babies, which is higher than the NSW average of 6.4 (CEE 2021j). Low-birthweight rates can occur due to maternal health factors, such as smoking during pregnancy or adolescent mothers – both concerns in Western Sydney (AIHW 2019c). Low birthweights can affect developmental vulnerabilities, childhood (and adult) illness and lower a baby's chance of survival (WHO n.d).
PH15	Poor diets in children and adults	Only half of Western Sydney children eat the recommended intake of fruits and only one in 20 adults eat the recommended daily serves of vegetables.	Many children in Western Sydney do not eat the recommended intake of fruit and vegetables. Estimated from the combined years of 2021-2022 indicate that 56.2% of children meet the daily recommended fruit intake and 2.1% meet the daily recommended vegetable intake when compared to the average NSW recommended intakes of 60% and 5.9% respectively (NSW Health 2022). Adults (all people 16 and older) in Western Sydney eat even fewer fruit and vegetables. In 2021, only 39.5% ate the recommended daily serves of fruit, and only 2% ate the daily recommended serves of vegetables (CEE 2021k).
PH16	High rates of potentially avoidable hospitalisation	Both Cumberland and Blacktown have higher rates of potentially avoidable hospitalisations than the NSW average.	Rates of potentially avoidable hospitalisation in Cumberland and Blacktown are higher than the state rates (2,364.4 per 100,000 and 2,420 per 100,000 vs 1,985.1 in NSW) (PHIDU 2021a). Rates in Parramatta and The Hills Shire, however, are both significantly lower than the state average at 1,641.4 and 1,064.3 respectively (PHIDU 2021a).
PH17	Increases in body mass index	There are links between the average weight of individuals in Western Sydney and increased prevalence of diabetes.	In Western Sydney, the rates of diabetes in adults have been increasing, with 13.6% in 2018, compared to 11.5% in 2017 and 9.9% in 2016 (CEE 2019). This corelates with an increase in body mass indices in all age bands, which has driven the rate of obesity in Western Sydney from 19.6% in 2018 to 23.3% in 2020 (CEE 2021b).
PH18	Disproportionate impact of COVID-19	Blacktown and Cumberland LGAs had a ten-fold greater impact from the Delta variant	Blacktown and Cumberland LGAs acquired 2,602 and 2,514 cases of COVID-19 between the 4 September and the 4 October 2021 (NSW

		of COVID-19 when compared to the Parramatta and The Hills Shire LGAs.	Health 2021a). The Hills Shire and Parramatta, however, experienced 247 cases and 628 cases up to the same point in time, demonstrating the unequal impact of the spread on the LGAs (NSW Health 2021a). Future disease outbreaks may disproportionately impact on certain parts of Western Sydney.
PH19	Low immunisation in children	A significant proportion of children in Western Sydney are not fully immunised in their first year.	In 2018, 93% of children were fully immunised at the age of one in Western Sydney, which is lower than the NSW average of 94% (CEE 2020c).
PH20	Diabetes and associated comorbidities in CALD populations	Diabetes and associated impacts disproportionately affect CALD populations.	Western Sydney Diabetes found that people who were born in countries other than Australia or Europe had up to 3.3 times the risk of diabetes (WSD 2020). In 2020, people from the Philippines in particular were found to have a higher risk of diabetes – translating to a 50% increased likelihood of developing heart disease (WSD 2020). People from Pacific Islands are at 5.6 times greater risk of chronic kidney disease compared to someone born in Australia or Europe (WSD 2020). People born in Africa (2.2 times), Asia (1.9 times) and India (1.9 times) also have greater risk of contracting chronic kidney disease than those born in Europe (WSD 2020).
PH21	Domestic violence in CALD populations	Domestic violence is highly prevalent in CALD communities, but community members are not often well-equipped to contact social services.	People in CALD populations are more likely to experience domestic violence and are less equipped to access social services to get help (Australasian Institute of Judicial Administration 2022). Domestic and family violence in this population group is difficult to estimate and often even more difficult to prosecute (Australasian Institute of Judicial Administration 2022).
PH22	CALD community members have higher rates of hospitalisation	CALD community members are more likely to be hospitalised, and experience poorer outcomes, especially when they and family members have limited English proficiency.	The rates of hospitalisations for all causes were 37,104.6 per 100,000 for Western Sydney local health district residents born in Australia and 20,429 per 100,000 population for those born overseas (WSLHD 2020). Those born in India had the highest proportion of hospitalisations (8.5%) followed by those born in Lebanon (7.4%), China (7.1%) UK (6.9%), and Philippines (5.5%) (WSLHD 2020).

PH23	Support from multiple providers for the same condition	People living with severe and profound impairments may need to see multiple providers for the same condition.	People with severe or profound impairments (aged under 65) are also more likely to seek care from three or four health professionals for the same condition, with 38% of respondents saying they did so (AIHW 2020b). This indicates that these individuals are less likely to gain sufficient support from a single health provider.
PH24	Increased need for chronic disease support in carers	Carers of people with disability often suffer from chronic illness or are people with disability themselves.	In 2018, up to 37% of carers in NSW had experienced a long-term illness or disability themselves in the previous 12 months (Carers NSW 2018). In many cases, the physical and mental strain associated with carer responsibilities worsened the impact of their chronic conditions (Carers NSW 2018).
PH25	Health risk factors in people with disability	People with disability are more likely to have an unhealthy diet, be overweight or obese and receive more negative health outcomes when compared to the general population.	18% of people with disability aged 15 or over engage in smoking daily, while only 12% of people without disability smoke daily (AIHW 2020b). 72% of people with disability aged two or over are overweight or obese compared with 55% of people without disability (AIHW 2020b). Adults with disability (76%) are more likely than those without disability (59%) to have an increased risk of developing chronic health conditions (AIHW 2020b). 12% of people with disability aged two or over consume sugar-sweetened drinks daily, compared with 7.8% of people without disability (AIHW 2020b). Additionally, 47% of people with disability aged two or over do not eat enough fruit and vegetables, compared to 41% of people without disabilities (AIHW 2020b). Eating enough fruit and vegetables is important for preventative health and lowers other health risk factors. 32% of adults with disability experience high or very high psychological distress, compared with 8% of people without disability (AIHW 2020b).

			42% of adults with disability experience low levels of psychological distress, compared to 70% of adults without disability (AIHW 2020b). 54% of people with disability (aged 18 and over) have hypertension, compared with 27% of people without disability (AIHW 2020b). 24% of adults with disability experience very good or excellent health, compared with 65% of people without disability (AIHW 2020b). People with disability are overrepresented in the criminal justice system, particularly those exposed to intersectional discrimination like Aboriginal and Torres Strait Islander peoples with disability (Fortune et al. 2021; McCausland and Baldry 2017).
PH26	Physical activity in children	An increasing number of young people are at risk of being overweight and obese	In Western Sydney in 2017–18, it was estimated that children aged between two and 17 years were overweight at an age-standardised rate of 16.7 per 100 and obese at a rate of 6.6 per 100 (PHIDU 2021b).
PH27	Comorbidities in Veterans	Veterans experience more than three health issues at once in proportions greater than the general population.	A study conducted by the Department of Veterans Affairs with a total of 22,2236 veterans documented 85,509 health conditions at an average of 3.85 conditions per veteran (DVA 2022a). The veterans in this study served in the selected conflicts of East Timor, Solomon Islands, Afghanistan, and Iraq (DVA 2022a). The most common conditions that impacted these veterans were (DVA 2022a): • Tinnitus (12,276) • Sensorineural hearing loss (7,964) • Post-traumatic stress disorder (7,070) • Lumber spondylosis (5,746) • Osteoarthritis (5,119) • Depressive disorders (4,760) • Alcohol dependence and abuse (3,289) • Acute sprain and acute strain (2,362)

- Rotator cuff syndrome (2,218)
- Erectile dysfunction (1,934)

	Outcomes of the health needs analysis – Aboriginal and Torres Strait Islander people		
	Identified Need	Key Issue	Description of Evidence
ATSIH1	The intersectionality of vulnerabilities experienced by Aboriginal and Torres Strait Islander people	Many Aboriginal and Torres Strait Islander people have experienced discrimination and lack of culturally appropriate care that can have a negative impact on physical and mental health outcomes. These experiences can reduce access to social resources, including employment, education, housing, health care and other services.	Many Aboriginal and Torres Strait Islander people have experienced trauma lack of culturally appropriate care, with negative health impacts. Service providers are treating health needs that are complex and intersectional. Mental health needs are one of the main issues in these communities (AIHW and NIAA 2023 c). Compared with the general population, there is a higher proportion of Aboriginal and Torres Strait Islander people with alcohol and other drug use, cognitive disability, mental health needs, histories of incarceration, homelessness, experience of domestic violence, and histories of sexual assault (ALRC 2018a). In a study conducted by Western Sydney University and ACON, Aboriginal and Torres Strait Islander community leaders identified access to culturally safe services and the absence of a holistic approach to wellbeing as critical issues impacting their community members in Western Sydney (Robinson K et al 2020).
ATSIH2	Many Aboriginal and Torres Strait Islander people experience insecure housing	Aboriginal and Torres Strait Islander people are at a greater risk of homelessness than the general population.	110 per 10,000 Aboriginal and Torres Strait Islander people were experiencing homelessness in Western Sydney in 2018, significantly higher than the overall homeless rate of 60.9 per 10,000 (Lawton 2019b).
ATSIH3	Aboriginal and Torres Strait Islander young people have more economic and social risk factors relating to health	Young Aboriginal and Torres Strait Islander people are more likely to be unemployed, to engage in receptive syringe sharing and/or to have hepatitis B.	The unemployment rate for Aboriginal and Torres Strait Islander people was 3.8 times the rate of non-Indigenous people in 2018-19 (19% compared with 5% respectively) (NIAA 2021b). Receptive syringe sharing was higher among Aboriginal and Torres Strait Islander survey respondents (26%) than among non-Aboriginal and Torres Strait Islander respondents (15%) (Kirby Institute 2018a).

			In 2018, the hepatitis B notification rate in the Aboriginal and Torres Strait Islander population was 1.5 times the rate of non-Indigenous Australians (NCCI 2020).
ATSIH4	Aboriginal and Torres Strait Islander people disproportionately experience serious respiratory infections	Rates of hospitalisation due to respiratory infections have remained consistently higher in Aboriginal populations when compared to non-Aboriginal populations in NSW.	Based on age-standardised rates, hospitalisation due to respiratory disease increased faster in Aboriginal and Torres Strait Islander people than in non-Indigenous people from 2009 to 2019, with the gap widening from 19 per 1,000 to 28 per 1,000 (AIHW 2020f).
ATSIH5	High rates of diabetes among Aboriginal and Torres Strait Islander people	Aboriginal and Torres Strait Islander people are disproportionately affected by diabetes.	The rate of Aboriginal and Torres Strait Islander people with diabetes-related hospitalisations was 9,800 per 100,000 (AIHW 2023b). This is significantly higher than the Australian rate of 184 per 100,000 (ACSQHC 2021). In 2019, Aboriginal and Torres Strait Islander people were 2.8 times more likely to report having diabetes for high blood/urine sugar levels as non-Indigenous people (NIAA 2019).
ATSIH6	Aboriginal and Torres Strait Islander people are increasingly attending hospitals to treat avoidable conditions	Rates of hospitalisation of Aboriginal and Torres Strait Islander people for preventable conditions have increased dramatically.	In the two-year period between July 2017 to June 2019, 15% of all hospitalisations of Aboriginal and Torres Strait Islander people were potentially preventable (AIHW 2023c).
ATSIH7	Aboriginal and Torres Strait Islander people are disproportionately imprisoned	Higher rates of incarceration among Aboriginal and Torres Strait Islander people.	From 2012 to 2021, there was a 40% increase in the age-standardised imprisonment rate of Indigenous adults compared with an increase of 28% among non-Indigenous adults, resulting in an absolute widening gap (AIHW 2023c). More than one in three people in prison are Aboriginal or Torres Strait Islander people (ABS 2022). Aboriginal and Torres Strait Islander people are less likely to be granted bail than non-Indigenous people (ALRC 2018b).

ATSIH8	Aboriginal and Torres Strait Islander people are more likely to experience poor health outcomes	Aboriginal and Torres Strait Islander people experience negative health issues at a disproportionate rate and earlier in their lives	Life expectancy at birth for Aboriginal and Torres Strait Islander people and non-Indigenous people differs significantly (9.4 years for men and 7.6 years for women respectively in NSW between 2015 and 2017) (ABS 2018). There is a considerable difference in the age profile of Aboriginal and Torres Strait Islander people using aged care services compared with non-Indigenous Australians (AIHW 2023e). 17% of Aboriginal and Torres Strait Islander people aged over 50 accessed the aged care system, compared to 27% of the non-Aboriginal and Torres Strait Islander population (AIHW 2020e, AIHW and NIAA 2023a). After adjusting for differences in age, the hospitalisation rate for cardiovascular disease for Indigenous Australians was 1.6 times the rate of non-Indigenous Australians from July 2017 to June 2019 (NIAA 2021a). Aboriginal and Torres Strait Islander people are almost four times more likely than non-Indigenous people to have diabetes or pre-diabetes (Diabetes Australia 2020a). The rate of notification of Aboriginal and Torres Strait Islander people with chlamydia was almost three times the rate for non-Indigenous people between 2016 and 2018 (1,208 per 100,000 and 423 per 100,000 respectively) (NIAA 2023). Aboriginal and Torres Strait Islander people have lower cancer screening rates and are more likely to be diagnosed with cancer at more advanced stages, resulting in lower cancer survival rates (AIHW 2018d). 35% of Aboriginal and Torres Strait Islander women aged 50-70

participated in BreastScreen Australia. Participation in this program was overall 26% lower for Aboriginal and Torres Strait Islander women than non-Indigenous women adjusted for age (AIHW 2023f).

Compared to non-Indigenous people, cardiovascular disease is more common in Aboriginal and Torres Strait Islander populations and onset typically occurs between 10 to 20 years younger than non-Indigenous people(AIHW and NIAA 2023b). After adjusting for age, Indigenous Australians are 1.5 times more likely to die of cardiovascular disease than non-Indigenous Australians (AIHW and NIAA 2023b).

	Outcomes of the health needs analysis – mental health		
	Identified Need	Key Issue	Description of Evidence
MH1	Limited access to mental health care	Despite the high prevalence of mental illness in Australia, few people receive the mental healthcare they need.	The National Study of Mental Health and Wellbeing (2021) indicated that an estimated 21% of Australians aged 16 to 85 had experienced a mental health disorder in the previous 12 months. However, only 1.3% of the Australian population received clinical mental health care in 2021 (AIHW 2021c). Counselling continues to be the most common treatment type provided to most alcohol and drug clients, comprising almost two in five (37%) of all closed treatment episodes (AIHW 2021d). 1.1% of adults in WSPHN experience a persistent mental illness that requires ongoing services and 0.4% of the adult population experiences severe and persistent mental illness that requires multi-agency support (DHAC 2021a). Community engagement conducted in 2021 revealed strong demand for mental health assistance in bordering LGAs. Many individuals travel to Western Sydney to seek mental health support. There appears to be increased demand for mental health support amongst young people in The Hills Shire, with limited transport and access to these services in that LGA. This may result in increased pressure on service providers in Northern Blacktown. It is possible that regions where mental health service provision is close to matching demand may in fact reflect services that are at capacity.

			Additional individuals who are deterred by long wait times may not be represented. WSPHN does not have robust data in The Hills Shire LGA due to limited commissioned services in the region and insufficient data regarding mental health need in the community.
MH2	Increasing rates of psychological distress	An increasing number of people in Western Sydney are experiencing psychological distress.	The number of people in Western Sydney with high or very high levels of psychological distress increased from 9.7% in 2013 to 16.7% in 2019 (CEE 2021l). Modelled estimates suggest that in 2019, residents in Blacktown and Cumberland exhibited rates of distress at 14.1 and 16.2 per 100 people, exceeding both the Australian and NSW rates of psychological distress (12.9 and 12.4 per 100 people respectively) (PHIDU 2021c).
MH3	Suicide rates have risen considerably, particularly since COVID-19	Suspected suicides in NSW in January 2021 were greater than in January 2020.	The NSW suicide rate in 2021 was 12.6 per 100,000, which is significantly higher than the 2011 rate of 8.9 per 100,000 (AIHW 2021e). In terms of the potential impact of the Covid-19 pandemic, the number of suspected suicides across the country in January 2021 was greater than in January 2020 (AIHW 2021e). In the Western Sydney LHD, the rate of suicide is 6.5 per 100,000, lower than the NSW rate of 12.6 per 100,000 (AIHW 2021e).
MH4	Impact of mental health on comorbidities	Men with diabetes are more likely to develop mental illness.	Men with diabetes are more likely to be diagnosed with a comorbid mental issue (27.5%) than the general population (17.5%) (Patterson C, Moxham L 2016). The occurrence of diabetes is higher in those experiencing a psychotic illness with a rate of three times higher than that of the general population (Patterson C, Moxham L 2016). Men are also more likely to have diabetes compared to women at 4.8% compared to 3.8% (AIHW 2023g).

			Living with a chronic condition like diabetes, coping with biological and hormonal factors, plus needing to manage the condition daily may increase the risk of depression. Up to 50% of people with diabetes may also have a mental illness such as depression or anxiety (Diabetes Australia 2021).
MH5	Post-traumatic stress disorder impacts on the mental health of veterans	Post-traumatic stress disorder disproportionally affects veterans.	Post-traumatic stress disorder (PTSD) is the second most common mental health condition in Australia, and one of the most common conditions in military populations (DVA 2022b). The rate of PTSD amongst current serving members is 8%, rising to 17.7% among ex-service men and women (DVA 2022b). According to the 2007 National Survey of Mental Health and Wellbeing, an estimated 17% of the total Australian population experiences PTSD in their life (AIHW 2022a).

	Outcomes of the health needs analysis – alcohol and other drugs		
	Identified Need	Key Issue	Description of Evidence
AOD1	High rates of dangerous drinking levels	Some residents in Western Sydney are regularly drinking alcohol at dangerous levels.	Between 5-10% of Western Sydney residents consume a risky amount of alcohol. However, it can be difficult to accurately measure the harmful use of alcohol in the population. 27.5% of Western Sydney residents aged 16 years or over have a long-term risk of alcohol consumption, meaning they consume more than two standard drinks per day (CEE 2021e). Aboriginal and Torres Strait Islander people are more likely to abstain from alcohol than the general population, but those who do drink are more likely to drink in excess (DHAC 2020a). A meta-analysis of 39 publications conducted on the prevalence of any mental disorder in homeless populations in any high-income country found that alcohol dependance was the most common mental disorder at 35.7% and drug use disorders at 21.7% (Gutwinski et al 2021). There is a strong association between problematic alcohol or drug use and experiences of homelessness. In 2018-19, 10% of clients presenting to specialist homelessness services reported having problematic drug or alcohol use (The Deck 2020). Substance abuse in young people increase their risk of incarceration and psychological trauma. Out of the 37 assessments completed, 79% of young people identified another individual's substance use as their main concern. This could include a sibling, parent or peer (NSW Justice Health 2015).

			A survey conducted by the AIHW (2020d) found that 21% of young people identify alcohol as their highest-concern substance, followed by cannabis and nicotine. A study conducted by the Department of Veterans Affairs with a total of 22,236 veterans documented 85,509 health conditions at an average of 3.85 conditions per veteran (DVA 2022a). The veterans in this study served in the selected conflicts of East Timor, Solomon Islands, Afghanistan, and Iraq. One of the most common conditions that impacted these veterans was alcohol dependence and substance abuse (2,585) (DVA 2022a).
AOD2	Some illicit drugs are increasingly accessible	Some illicit drugs, including methamphetamines, are perceived to be increasingly accessible.	From 2001 to 2019, there was a significant increase in the use of illicit drugs, including cannabis, cocaine and ecstasy (increase of 1.2%, 1.7% and 0.8% respectively) (AIHW 2021f). Findings from the Illicit Drug Reporting System shows that people who inject drugs commonly report it as 'easy' or 'very easy' to obtain methamphetamines. Perceived availability was the highest for crystal methamphetamine, with 92% of respondents in 2021 rating it as 'easy' or 'very easy', up from 82% in 2020 (AIHW 2021g). Methamphetamine use accounted for 8.2% of all drug-related hospitalisations in 2020-2021 (AIHW 2021g). In 2021, amphetamines were the second-most common principal drug of concern in treatment episodes provided for clients' own drug use (24%) (AIHW 2021g).
AOD3	Heroin continues to contribute to hospitalisation rates	Heroin continues to account for the majority of opioid-related hospitalisations.	In 2019, heroin use in NSW accounted for most individuals presenting to emergency departments for opioid-related issues, with 2,197 presentations and 563 hospital admissions. Almost one-third of these individuals were aged 35 to 44 years (NSW Health 2021b).

			Substance abuse in young people increases their risk of incarceration and psychological trauma. Out of the 37 assessments completed, 79% of young people identified another individual's substance use as their main concern. This could include a sibling, parent or peer. The remaining 21% of young people identify alcohol as their own substance use of highest concern, followed by cannabis and nicotine (NSW Justice Health 2015). Between 2016 and 2019, the proportion of people who had ever used e-cigarettes rose from 9% to 11%. More young people are vaping. The long-term health impacts of vaping are still unknown (ADF 2019).
AOD4	High alcohol and other drug use amongst priority groups	Priority groups in Western Sydney use more alcohol and other drugs than the general population.	Compared with heterosexual people in 2019, people who identified as LGBTQIA+ were nine times more likely to use inhalants, 3.9 times more likely to use methamphetamines and 3.5 times more likely to use hallucinogens (AIHW 2020d). Self-reported data shows that individuals who identify as LGBTQIA+ are more likely to be daily smokers and to have recently used an illicit drug (Jenkins et al. 2022). About two in five (40%) prison entrants in 2019 and prison discharges (37%) reported a previous diagnosis of a mental health condition, including alcohol and other drug use disorders. Additionally, two in three prison entrants in Australia used illicit drugs in the previous year. Three in four people who enter prison are current smokers (AIHW 2019a).
AOD5	Strong connections between AOD use and mental health conditions	Western Sydney residents experiencing mental illness are more likely to engage in alcohol and other drug use.	The Ecstasy Drugs Reporting System (2021) found that the number of participants who had experienced mental health issues in the preceding six months increased from 52% in 2020 to 58% (EDRS 2021).

			Compared to people without mental health conditions, people with mental health conditions were 1.7 times as likely to have recently used an illicit drug (AIHW 2019d).
AOD6	Health literacy for young people on the use of e-cigarettes	A significant proportion of high school students are using e-cigarettes.	Estimates from one study suggest that from 2013 to 2019, e-cigarette use amongst adolescents has significantly risen, from 4.3% of the population aged 13-17 to 9.6% (Jenkins et al. 2022).

	Outcomes of the health needs analysis – aged care		
	Identified Need	Key Issue	Description of Evidence
AC1	Older people are more likely to die from chronic diseases	As people age, they are more likely to experience multiple health conditions at the same time.	Multi-morbidity (having multiple health conditions at once) becomes more common with age. In 2017-18, people aged 65 and over were more likely to have two or more of the ten selected conditions compared with people aged 15-44 (51% compared with 12%) (AIHW 2019e). According to the AIHW National Mortality database (2020), the leading underlying cause of death for men was coronary heart disease, and for women it was dementia (including Alzheimer's disease) (AIHW 2020g).
AC2	Older people in Western Sydney struggle to access health services	Older people in Western Sydney, particularly vulnerable groups such as CALD people or those experiencing homelessness, can face barriers to accessing health services.	In Western Sydney, 5.8% of the population reported needing help in their day-to-day lives due to disability, with access to health care services being a significant barrier (Informed Decisions 2019). Under the Commonwealth Home Support Program in 2018-19, around 77% of clients received either one or two service types and only 5% received five or more service types (DHAC 2020b).
AC3	Isolation and loneliness	Older people, particularly those living alone, can be socially isolated – a risk factor for loneliness. Some other risk factors for loneliness can be unemployment and financial difficulties.	Loneliness has been linked to premature deaths and poor physical and mental health (AIHW 2021a).
AC4	Long-term vision disorders	Almost all people aged 65 and older have long-term vision disorders.	In 2017-18, long-term vision disorders affected 93% of people aged 65 and over, compared to only 12% of the 0-14 population (AIHW 2020h).

	Outcomes of the health needs analysis – workforce		
	Identified Need	Key Issue	Description of Evidence
WF1	Western Sydney's growing population threatens to put pressure on the current health system	People in Western Sydney's heath system are vulnerable to incredible pressure as high-density housing and population growth increases in Western Sydney.	Data suggests that Western Sydney's population in 2016 was just short of 1,000,000 and is expected to grow to 1,471,430 in 2041 (NSW Government 2019; NSW DPE n.d.).
WF2	There are not enough GPs or nurses in Western Sydney	Ratios of general practitioners and nurses to the population show that the Blacktown and Parramatta LGAs both have a significantly lower number of GPs than the NSW and Australian average.	Rates of general practitioners per 100,000 people: Australia 97.3, NSW 91.8, Blacktown 80.8, Cumberland 99.2, Parramatta 71.6, The Hills Shire 111.3 (PHIDU 2021c). Rates of registered nurses per 100,000 people: Australia 1,018.9, NSW 934.3, The Hills Shire 623.3, Blacktown 502.5, Parramatta 327.1 (PHIDU 2021c).
WF3	There are not enough specialist practitioners in Western Sydney	Ratios of specialist practitioners to the population show that the Blacktown and Parramatta LGAs both have a significantly lower number of specialists than the NSW and Australian averages. There are also fewer dentists and midwives compared to the state and national averages.	Rates of specialists per 100,000 people: Australia 142.1, NSW 141, Blacktown 53.5, Parramatta 43.8, Cumberland 380.8, The Hills Shire 121.8 (PHIDU 2021c). Rates of dental practitioners per 100,000 people: Australia 82.4, NSW 79.2, Blacktown 43.1, Parramatta 73.6 (PHIDU 2021c). Rate of midwives per 100,000 people: Australia 105.5, NSW 85.7, The Hills Shire 60.3, Blacktown 45.0, Parramatta 17.5 (PHIDU 2021c).

	Outcomes of the health needs analysis – digital health		
	Identified Need	Key Issue	Description of Evidence
DH1	Older people have limited engagement with digital health	Rates of digital literacy are lower among older Australians	Approximately 8% of Australians aged 50 and over are digitally disengaged and do not perform any online activities. Additionally, approximately 11% of the population aged 50 years and over did not have any internet access in 2018 (Office of the eSafety Commissioner 2018).
DH2	Increased use of telehealth services	In Australia, the COVID-19 pandemic and associated restrictions across the country resulted in a significant increase in telehealth service provision.	A survey of health professionals found that respondents reported a higher volume of telephone-based care (91% of respondents) since COVID-19 and an increased use of video consultations (60% of respondents) (Taylor et al. 2021).

SECTION 3 – OUTCOMES OF THE SERVICE NEEDS ANALYSIS

	Outcomes of the service needs analysis – Aboriginal and Torres Strait Islander Health		
Service Needs Number	Identified Need	Key Issue	Description of Evidence
AHS1	Low cancer screening rates	Cancer screening rates for Aboriginal and Torres Strait Islander people are lower than the national average.	Aboriginal and Torres Strait Islander people have higher incidence rates of cancer across all brackets than non-Indigenous people. This is especially true for people aged 75 and over (NIAA 2020a; NIAA 2020b). In 2018, the estimated participation rate in bowel cancer screening for Aboriginal and Torres Strait Islander people aged 50-75 was 11% lower than for non-Indigenous people (35% and 46% respectively) (AIHW 2023c; DHAC 2022). In 2019, the estimated participation rate for breast cancer screening for Aboriginal and Torres Strait Islander people aged 50-75 was 14% lower than for non-Indigenous people (36% and 50% respectively) (AIHW 2022b).
AHS2	Social and cultural barriers to accessing care	There is a lack of culturally safe service providers who understand issues specific to Aboriginal and Torres Strait Islander people and who can provide services in a way that builds trust with members of these communities.	In a study conducted by Western Sydney University and ACON, Aboriginal and Torres Strait Islander community leaders identified limited access to culturally safe services and the absence of a holistic approach to wellbeing as critical issues impacting their community members in Western Sydney (Robinson K et al 2020).
AHS3	Limited access to mental health care	Aboriginal and Torres Strait Islander mental health services are difficult to access in Western Sydney and are not always welcoming.	Reifels (et al. 2018) indicated that mental health services can be difficult to access, as many service providers are unaware of appropriate referral pathways for vulnerable community members. Increased demand for available services has resulted in long wait times for individuals with mild to moderate mental illness to see a counsellor or psychologist. If not treated early, these mild to moderate mental

			illnesses can progress into severe mental health conditions, resulting in increased attendance in emergency departments. Kairuz (et al. 2021) indicated that Aboriginal and Torres Strait Islander people experience discrimination and racism that negatively impact their physical and mental health outcomes. Experiences of racism can have an impact on health. These experiences can reduce access to social resources, including employment, education, housing and health care. They can cause psychological distress and increased likelihood of engaging in risk behaviors, such as substance use.
AHS4	Barriers to accessing aged care	Despite experiencing complex health needs and lower life expectancy, many older Aboriginal and Torres Strait Islander people are not accessing aged care at the same rate as the general population.	Aboriginal and Torres Strait Islander people over the age of 55 are included in the category of older Australians, on the basis that this population statistically tends to suffer from health issues earlier in life (AIHW 2020e). People in aged care come from very diverse backgrounds. The Royal Commission into Aged Care Quality and Safety found that the needs of some groups were not being met by service providers (RCACQS 2021b). This includes Aboriginal and Torres Strait Islander people, who do not access aged care services at a rate that matches their level of need (RCACQS 2021b). Older Aboriginal and Torres Strait Islander people have higher rates of disability, comorbidities, homelessness, and dementia (RCACQS 2021b).
AHS5	Low rates of Aboriginal-specific health checks	Low rates of MBS 715 Indigenous health checks in Western Sydney	In 2021-22, only 22% of Aboriginal and Torres Strait Islander people in Western Sydney accessed Medicare Benefits Scheme 715 assessments (AIHW 2023h). This is lower than the proportion of Aboriginal and Torres Strait Islander people who had health checks across Australia at 24% (AIHW 2023i).

			In Western Sydney, the number of Aboriginal and Torres Strait Islander people who accessed health checks has increased from a 12.6% uptake in 2016-17 to 22% in 2021-22 (AIHW2023i).
AHS6	Low rates of follow-up service access	People who did access health checks had low rates of attending follow-up services.	Of the Aboriginal and Torres Strait Islander people in Western Sydney who accessed a health check in 2020-21, only 32.2% accessed a follow-up service within 12 months of the health check (AIHW 2023h). This rate has increased in Western Sydney from 23.2% in 2016-17 (AIHW 2023h), however, it is lower than the national rate of 46% in 2020-21 (AIHW 2023i).
AHS7	There is a need for better communication and cultural awareness in service providers in Western Sydney	Evidence supports experiences of care being dramatically improved through clear communication and cultural safety.	Better communication, information and cultural knowledge in hospital care that can improve the experiences of Aboriginal and Torres Strait Islander people admitted to hospital is required. Between 2014 and 2019, the rating given by Aboriginal and Torres Strait Islander patients for health professionals in the category of “respect for cultural beliefs” declined (BHI 2021).

	Outcomes of the service needs analysis – mental health		
Service Needs Number	**Identified Need**	**Key Issue**	**Description of Evidence**
MHS1	Specialist mental health care	Patients receiving mental health care from their GP and not from specialist mental health services (for example psychologist or psychiatrist) may not be getting the care they need.	The 2020-21 National Study of Mental Health and Wellbeing indicated that 3.4 million Australian adults saw a health professional for their mental health in the previous 12 months. Of this, 38% consulted a GP, 22% consulted a psychologist and only 8% consulted a psychiatrist (AIHW 2021h).
MHS2	Increasing demand for mental health care	Residents in Western Sydney are increasingly seeking to access mental health care, including for acute conditions such as psychological distress and suicide ideation.	In 2020-21, the Medicare services per 100 people for allied mental health care in Western Sydney was 20.3, compared to the national average of 27.91 (AIHW 2021i). In the Auburn, Blacktown, Mount Druitt and Parramatta statistical areas (SA3s), the percentage increase in patients accessing allied mental health care grew faster than the number of services accessible from 2018 to 2021 (AIHW 2021i) (AIHW 2018c). The SA3s with the greatest increase in patients accessing allied mental health care in Western Sydney from 2018 to 2021 were Baulkham Hills (9.1% increase) and Auburn (12.7% increase) (AIHW 2018c; AIHW 2021i).
MHS3	Intersection between mental health and alcohol and other drugs	Some residents with mental health needs also have alcohol and other drug-related needs.	Approximately 20% of Australians with a substance use disorder also experience affective disorders, such as depression or bipolar disorder (dual diagnosis). Around 35% of Australians with a substance use disorder also experience any mental health disorder (BetterHealth 2021).
MHS4	Allied health professionals are providing mental health services	Mental health services are being provided by allied health professionals.	Between 2017-18 and 2021-22, the percentage increase in the number of clinical psychologist services in NSW was 8%, psychiatrists at 3% and other allied health providers at 8% (AIHW 2019f).

MHS5	Limited awareness of referral pathways	Mental health services can be difficult to access, as many service providers are unaware of appropriate referral pathways for vulnerable community members. General practitioners have limited awareness of psychological service referral pathways	Community engagement conducted in 2021 revealed gaps in current services, including care for children under 12, LGBTQIA+ people, CALD communities and Aboriginal and Torres Strait Islander people.
MHS6	LGBTQIA+ mental health	LGBTQIA+ individuals have specific mental health needs.	Findings from the National LGBTI Health Alliance (2020) suggest: ▪ 41.4% of LGBTQIA+ people aged 16 and over met the criteria for a mental disorder and had symptoms in the past 12 months. ▪ LGBTQIA+ people aged 16 to 27 are five times more likely to attempt suicide in their lifetime. ▪ LGBTQIA+ people score higher on the Kessler Psychological Distress (K10) Scale, indicating moderate levels of psychological distress. ▪ 24.4% of LGBTQIA+ people aged 16 and over currently meet the full criteria for a major depressive episode.
MHS7	Youth mental health	Young people in Western Sydney struggle to access affordable mental health services, resulting in mild to moderate mental health issues progressing and becoming more severe.	Young people aged 15-24 were the highest percentage of people accessing allied mental health services (8.67%) and GP mental health support (14.62%) compared to all other age brackets in Australia (AIHW 2021i). This is also consistent in the Western Sydney PHN, with 7.3% of 15-24-year-olds receiving allied mental health services and 12.05% receiving GP mental health support (AIHW 2021i)
MHS8	A need for increased primary mental health services	Group therapy session use declined across the state due to a combination of increased demand for one-to-one support	Group therapy has been found to be cost-effective and just as beneficial as individual therapy (PC 2020). Group therapy items under the MBS are underused due to a number of barriers including time investment and logistics management, identifying large enough groups

		and difficulties with delivering group services in COVID-19 conditions. Individuals face barriers when trying to access psychologist services.	to cover costs of providing the service and other fixed costs such as renting or setting up large enough rooms (DHAC 2021b). Medicare-subsidised psychiatrist use declined from 2018-19 through the onset of COVID-19 in 2020-21 (1,883,775 total services down to 1,749,006 total services respectively) (AIHW 2019f; AIHW 2021i). Community engagement conducted in 2021 indicated that there is strong demand for mental health services within Western Sydney and in neighboring LGAs, resulting in long wait times and a stretched workforce. The same community engagement also revealed that those who cannot afford to see private psychologists are experiencing long wait times for subsidised services, due to increasing unmet demand. In the Western Sydney PHN between 2018-2019, medicare-subsidised clinical psychologist use increased from 5.9 to 6.9 per 100 people, medicare-subsidised psychologist use rose from 10.55 to 12.31 per 100 people and medicate-subsidised other allied mental health services use rose from 0.95 to 1.02 per 100 people (AIHW 2019f; AIHW 2021i).
MHS9	Limited access for Aboriginal and Torres Strait Islander people	Aboriginal and Torres Strait Islander people face additional barriers when seeking access to mental health services.	Aboriginal and Torres Strait Islander people experience a higher rate of mental health issues than non-Indigenous Australians. Research has shown that mental health care remains inadequate, inequitable and lacked an understanding of the experiences faced by Indigenous Australians (AIHW and NIAA 2023d).
MHS10	Reduced access to mental health services	Residents in Western Sydney have experienced adverse effects on their mental health from the COVID-19 restrictions. Research indicates there is	Medical practices have adjusted and settled into new ways of working, adopting more telehealth methods of service delivery (AIHW 2021j). In 2021 there was an estimated increase of 21% more people with self-reported mental health issues (NCOSS 2022). Between 2019 and 2021, there was a 28% increase in emergency department presentations in

		benefit to investing further funding in mental health services.	the Western Sydney LHD for self-harm or suicidals thoughts (NCOSS 2022). As of 2022, NSW spent $53 per person below the national average on community mental health (NCOSS 2022). The lack of funding has led individuals with severe and complex mental illnesses to miss out on psychosocial support services (NCOSS 2022).
MHS11	COVID-19 reduced access to mental health support for Aboriginal and Torres Strait Islander people.	COVID-19 associated restrictions reduced the ability of outreach workers to connect Aboriginal and Torres Strait Islander people to mental health service providers.	COVID-19 has urgently heightened the need for accessible and affordable digital and telehealth services for Indigenous communities which require culturally safe and trauma-informed care (AIHW and NIAA 2023d)
MHS12	Whole-of-family mental health	Young mothers and fathers are more susceptible to depression and anxiety.	Studies suggest that one in six women experience postnatal depression and postnatal anxiety (Austin and Highet 2017). According to a meta-analyisis of 43 studies, 10.4% of new fathers experience depression compared to 4.8% of the general population (Kumar et al 2018). New parents experiencing depression are less likely to seek individual professional care for their conditions (Schmied et al. 2016).

	Outcomes of the service needs analysis – population health		
Service Needs Number	**Identified Need**	**Key Issue**	**Description of Evidence**
PHS1	High reliance on secondary care	There is a higher reliance on secondary care within Western Sydney for treatment of population health issues such as potentially preventable chronic illnesses.	Residents in Western Sydney struggle to maintain access to primary health services when they need them. 19% of residents in Western Sydney could not access their preferred GP, much lower than the Australian average of 28% (AIHW 2021k). Additionally, people who need to see more than one professional for the same condition find it more difficult in Western Sydney. Only 13.7% of people in Western Sydney have accessed three or more professionals, which is lower than the Australian average of 16.8% (AIHW 2021k). Community engagement conducted in 2021 suggests there is limited data on the number of people turned away from services that are at capacity.
PHS2	Limited domestic and family violence services	There are too few services available to Western Sydney families to tackle the prevalence and effects of domestic and family violence.	There are several family violence support services operating in Western Sydney (NSW Government 2024); evidence suggests that instances of family and sexual violence can escalate during and after large-scale disasters such as COVID-19 (NCOSS 2020) and may require additional investment to manage the increased load on services.
PHS3	Barriers to accessing dental care	For residents of lower socio-economic status, it can be difficult to access affordable dental services for acute oral health conditions. Long wait times for publicly funded services can exacerbate conditions.	Community engagement conducted in 2021 suggested that long wait times and high costs were barriers to accessing dental care. There is high demand for public dental services in New South Wales with patients triaged and placed on a waitlist to be seen within clinically recommended timeframes. These timeframes can be anywhere between 24 hours for urgent care and 24 months for non-urgent conditions (NSW Health 2017).

PHS4	Barriers to antenatal care	Fewer women in Western Sydney accessed antenatal care than the NSW average.	Between 2016 and 2018 in Western Sydney, 57.9% of women did not attend an antenatal visit in the first ten weeks of pregnancy, much higher than the 42.7% of women across NSW (PHIDU 2021c). This statistic is higher in Blacktown at over 65% (PHIDU 2021c). Pregnant women in Blacktown and Cumberland LGAs are less likely to attend antenatal care when compared to those in Parramatta and The Hills Shire. The proportion of the population that did not attend antenatal care within the first 10 weeks are: Blacktown 52.3%, Cumberland 44.1%, Parramatta 40.3% and The Hills Shire 38.1% (PHIDU 2021c).
PHS5	Barriers to perinatal care	Some parents experience barriers to accessing perinatal care	Research indicates that screening availability is lower for parents of non-English speaking backgrounds due to unavailability of adequate interpreter services, screening tools and other barriers like associated stigma (COPE 2017).
PHS6	Allied health for developmentally vulnerable children	Developmentally vulnerable children in Western Sydney require additional support. Some families are struggling to access allied health services, including speech pathology.	The domains that measure developmental vulnerability in the Australian Early Development Census are physical, social, emotional, language, and communication. More than 22% of children in Western Sydney were developmentally vulnerable in one or more of these domains, which is above the national average (AEDC 2021). More than 10% of children in Western Sydney are developmentally vulnerable in two or more of these domains (AEDC 2021). This means that children in Western Sydney were the most developmentally vulnerable in NSW and had statistics above the national average (AEDC 2021). Systemic factors impact the health of young children in Western Sydney. • Modelled estimates indicate that between 2014 and 2015, only 23.6% of infants were fully breastfed for their first six

			months, lower than the NSW average of 24.6% (PHIDU 2021c). • 5.9% of the Western Sydney region's population experiencing homelessness are babies aged between zero and three years (Lawton 2019b). • Domestic violence statistics vary between the Western Sydney LGAs. Blacktown saw domestic assault incidents occur at a rate of 521.6 per 100,000 population, much greater than the NSW rate (420.3 per 100,000) (NSW Bureau of Crime Statistics and Research 2023). • Rates of domestic assault in Cumberland and Parramatta, however, are both below the NSW average (389.5 and 312 per 100,000) (NSW Bureau of Crime Statistics and Research 2023). Domestic assault rates in Parramatta increased 6.2% between 2019 and 2021 (NSW Bureau of Crime Statistics and Research 2021). • One in five children in Blacktown come from a home in which the female parent's education level was year ten or lower (PHIDU 2021c). This has been identified as a key risk factor for health outcomes in children (Davey et al. 2015).
PHS7	A consistent trend of semi-urgent or non-urgent emergency department attendance in Western Sydney	A considerable percentage of patients attending the emergency department could be better served in after-hours care and do not require admission to hospital.	There were 259,650 unplanned presentations to the emergency department in 2020-21 (NSW Health 2021c). This trend is consistent with long-term emergency department trends in Western Sydney, with presentations having seen a 13.14% increase between 2015-16 and 2018-19 (CEE 2021m). In 2022-23, 14,834 non-urgent patients and 55,529 semi-urgent patients presented to Western Sydney emergency departments (AIHW 2023j). Research indicates that there is potential to strengthen community care

			and after-hours primary care services through alternative models of care to reduce emergency department presentations (PHIDU 2023).
PHS8	Limited health checks in primary care	There is a considerable proportion of general practitioners who do not conduct and/or record health risk factor information regularly.	Only 50.5 % of clients with type-1 diabetes had their HbA1c result recorded by their GP in the last 12 months. Only 63.3% of patients with type-2 diabetes had their HbA1C recorded in the last 12 months in Western Sydney (AIHW 2022c). 61.5% of regular GP clients had their smoking status recorded and only 13.3% of current smokers had their result recorded in their GP record. 20.9% of clients aged 15 and over had their height and weight recorded by their GP in Western Sydney and of those, 34.5% were overweight and 35.3% obese (AIHW 2022c). 51.3% of clients aged 65 and over had their immunisation record for influenza recorded in the previous 15 months with a GP in Western Sydney, the second-lowest proportion of any Australian PHN (AIHW 2022c).
PHS9	Low rates of cervical cancer screening	Females in Western Sydney have low rates of cervical cancer screening in primary care settings.	In 2022, it was noted that only 30.5% of females in Western Sydney aged 25-74 had an up-to-date cervical screening testing record with their GP in the previous five years (AIHW 2022c).
PHS10	Lower ratios of health service providers to consumers in select locations	Blacktown and Parramatta have lower ratios of GPs, dental practitioners and specialists to the population. Blacktown, The Hills Shire and Parramatta have a low number of registered nurses and midwives compared to the population.	Ratios of general practitioners for the population show that the Blacktown and Parramatta LGAs both have a significantly lower number of GPs to people than the NSW and Australian averages (PHIDU 2021c). Rates of general practitioners per 100,000 people: Australia 97.3, NSW 91.8, Blacktown 80.8, Cumberland 99.2, Parramatta 71.6, The Hills Shire 111.3 (PHIDU 2021c).

The Blacktown and Parramatta LGAs both have significantly lower numbers of specialist practitioners to people than the NSW and Australian averages (PHIDU 2021c).

Rates of specialist practitioners per 100,000 people: Australia 142.1, NSW 141, Blacktown 53.5, Parramatta 43.8, Cumberland 380.8, The Hills Shire 121.8 (PHIDU 2021c.).

The Blacktown and Parramatta LGAs both have significantly lower numbers of dental practitioners to people than the NSW and Australian averages (PHIDU 2021c).

Rates of dental practitioners per 100,000 people: Australia 82.4, NSW 79.2, Blacktown 43.1, Parramatta 73.6 (PHIDU 2021c).

The Hills Shire, Blacktown and Parramatta LGAs have significantly lower numbers of registered nurses to people than the NSW and Australian averages (PHIDU 2021c).

Rates of registered nurses per 100,000 people: Australia 1,018.9, NSW 934.3, The Hills Shire 623.3, Blacktown 502.5, Parramatta 327.1 (PHIDU 2021c).

The Hills Shire, Blacktown and Parramatta LGAs have a significantly lower number of midwives to people than the NSW and Australian averages (PHIDU 2021c).

Rates of midwives per 100,000 people: Australia 105.5, NSW 85.7, The Hills Shire 60.3, Blacktown 45.0, Parramatta 17.5 (PHIDU 2021c).

PHS11	Barriers to accessing primary care	A considerable segment of the population experiences long wait times when seeking support from general practitioners. Many residents in Western Sydney do not feel they can see a general practitioner when they need to, and those who need to see more than one professional to manage complex conditions struggle to do so in Western Sydney.	In Western Sydney between 2019 and 2020, 18.6% of patients felt as though they waited longer than acceptable for a GP appointment (AIHW 2021k). Many residents in Western Sydney struggle to maintain access to primary health services when they need them. 19% of residents in Western Sydney could not access their preferred GP, much lower than the Australian average of 28% (AIHW 2021k). Additionally, people who need to see more than one professional for the same condition find it difficult in Western Sydney. Only 13.7% of people in Western Sydney have accessed three or more professionals in Western Sydney, which is lower than the Australian average (16.8%) (AIHW 2021k).
PHS12	Emergency department presentations in children	There is a noticeable decrease in presentations between younger and older children, indicating an opportunity for specialized pediatric services in emergency settings.	In 2020-21, 313,843 patients aged between 0-4 years, 139,272 patients aged between 5-9 years and 154, 231 patients aged between 10-14 years (totaling 607,328 patients between 0-14 years) presented at emergency departments in NSW (NSW Health 2021d). This indicates that NSW children represent a total of 20.1% of all emergency department presentations.
PHS13	Young mothers	Western Sydney still has a considerable number of young mothers who require additional support.	Data from Western Sydney's local health district indicates maternal age has decreased, but as of 2020, 1.1% of mothers were still under 19 years of age, compared to 1.6% in NSW (CEE 2021j). Young mothers can be especially vulnerable and have increased health risks at birth, such as babies with low birthweight (WHO 2023).
PHS14	LGBTQIA+ safe and inclusive health services	LGBTQIA+ people need better access to safe, inclusive and relevant medical care.	Many LGBTQIA+ people determine a medical service's likelihood to welcome them based on whether it uses visual cues (such as rainbow flags) and whether it includes sexuality and gender diverse people in its communications (Robinson et al. 2020). Participants in a University of Western Sydney study said they preferred to travel to other neighbourhoods to receive inclusive services that were safe, anonymous, and confidential (Robinson et al. 2020).

PHS15	People with disability have less access to primary care	People with disability have lower rates of access to primary, community and preventative health care.	An exploration of causes of death for people with disability observed that across jurisdictions in Australia there is a lack of proactive support for preventative care measures, including vaccinations, preventative dental care and annual checkups (Salomon and Trollor 2019). Additionally, one in four people with disability aged 15 to 64 in Australia experience delays in getting an appointment with a general practitioner (AIHW 2020b).
PHS16	The need for tailored care for people with disability	People with disability and their carers do not feel as though they receive sufficient information in hospital or once they return home after being discharged.	Most patients without disability view their care in hospital as being good or very good (BHI 2017). However, people with disability had significantly fewer positive experiences of care within hospitals (BHI 2017). One in nine participants feel they were not given enough support once they returned home (BHI 2017). One in nine feel that they were not given enough information about their condition (BHI 2017).

	Outcomes of the service needs analysis – workforce		
	Identified Need	Key Issue	Description of Evidence
WFS1	Predicted increased demand for health services	Western Sydney has a growing population that will require a commensurate increase in health service provider capacity.	Current data predicts that Western Sydney's population will grow to 1,471,430 in 2041 – a 37.73% increase from the 2021 population (NSW DPE n.d.). This will place pressure on the health system in its current form, particularly with the increase in high-density housing. Research conducted by Deloitte in 2019 projected that in urban areas the GP workforce is likely to be undersupplied by 31.7% relative to current service provision by 2030 (Cornerstone Health 2019).
WFS2	There are fewer GPs and specialist practitioners serving the communities in some Western Sydney LGAs	Ratios of general practitioners to the population show that the Blacktown and Parramatta LGAs both have a significantly lower number of GPs to people than the NSW and Australian averages.	Rates of general practitioners per 100,000 people: Australia 97.3, NSW 91.8, Blacktown 80.8, Cumberland 99.2, Parramatta 71.6, The Hills Shire 111.3 (PHIDU 2021c). Blacktown and Parramatta LGAs both have significantly lower numbers of specialist practitioners to people than the NSW and Australian averages (PHIDU 2021c). Rates of specialist practitioners per 100,000 people: Australia 142.1, NSW 141, Blacktown 53.5, Parramatta 43.8, Cumberland 380.8, The Hills Shire 121.8 (PHIDU 2021c).
WFS3	There are fewer registered nurses and midwives serving the communities in some Western Sydney LGAs	The Hills Shire, Blacktown and Parramatta LGAs have significantly lower numbers of registered nurses and midwives to people than the NSW and Australian averages.	Rates of registered nurses per 100,000 people: Australia 1018.9, NSW 934.3, The Hills Shire 623.3, Blacktown 502.5, Parramatta 327.1 (PHIDU 2021c). Rates of midwives per 100,000 people: Australia 105.5, NSW 85.7, The Hills Shire 60.3, Blacktown 45.0, Parramatta 17.5 (PHIDU 2021c).
WFS4	There are fewer dental practitioners serving the	The Blacktown and Parramatta LGAs both have significantly lower numbers of dental	Rates of dental practitioners per 100,000 people: Australia 82.4, NSW 79.2, Blacktown 43.1, Parramatta 73.6 (PHIDU 2021c).

	communities in some Western Sydney LGAs	practitioners to people than the NSW and Australian averages.	
WFS5	Patient experiences of care with GPs	Some patients experience long wait times to access care from GPs.	Between 2019 and 2020, 18.6% of patients felt as though they waited longer than acceptable for a GP appointment (AIHW 2021k).
WFS6	Difficulty accessing continuous care	Residents in Western Sydney struggle to maintain access to primary health services when they need them.	19% of residents in Western Sydney could not access their preferred GP, much lower than the Australian average of 28% (AIHW 2021k). Additionally, people who need to see more than one professional for the same condition find it more difficult in Western Sydney. Only 13.7% of people in Western Sydney have accessed three or more professionals in Western Sydney, which is lower than the Australian average (16.8%) (AIHW 2021k).
WFS7	There is limited availability of after-hours medical care	Some residents in Western Sydney requiring after-hours medical care are presenting at emergency departments in hospital with non-urgent conditions.	There is a long-term trend of Western Sydney emergency department presentations increasing, totaling a 13.14% increase between 2015-16 and 2018-19 (CEE 2021m).

	Outcomes of the service needs analysis – digital health		
	Identified Need	Key Issue	Description of Evidence
DHS1	Improving digital literacy in older Australians	Digital literacy rates are lower among older Australians. They are less comfortable using digital technology and may not understand the value of digital participation, particularly to access health services.	Approximately 8% of Australians aged 50 and over are digitally disengaged and do not perform any online activities (Office of the eSafety Commissioner 2018). Additionally, approximately 11% of the population aged 50 years and over did not have any internet access in 2018 (Office of the eSafety Commissioner 2018).
DHS2	Video conferencing should continue to be used by GPs so patients can access timely primary care	As states and regions have emerged from lockdown, the use of telehealth services declined, as most communities prefer face-to-face consultation.	In Australia, the COVID-19 pandemic and associated restrictions across the country resulted in a significant increase in telehealth service provision (Taylor et al. 2021). One survey of health professionals found that of the 91 respondents, 73% reported a higher volume of telephone-based care since COVID-19 and an increased use of video consultations (60% of respondents) (Taylor et al. 2021).
DHS3	Improved data collection methods and collation to understand health needs	Organisations should collect and analyse data in real time to collaborate and tackle issues that impact the community at scale.	In collaboration with PHN's, LHD's and general practices, efforts are underway across NSW to collaborate information via integrated dashboard that display health data from general practices and service providers in close to real time (NSW Health 2023b).
DHS4	Limited use of digital health by health service providers	Only a minority of general practices regularly use HealthPathways. Allied health providers are less likely than general practices to consistently use digital health platforms.	Prior to COVID-19, there were varying levels of HealthPathways usage in Western Sydney. In 2019, usage rates per 100,000 population were 64,929, the fifth highest usage out of surrounding NSW regions (Love et al 2023). Across NSW, there is low usage of HealthPathways, with the number of regular uses increasing since COVID-19 (Love et al 2023).
DHS5	Limited use of patient experience mapping software	The general practices that are currently subscribed to Lumos are first adopters and mature when it comes to	The program is currently limited by the number of general practices that signed up. The program continues to mature and is actively searching for

		transformation. Patient journey data from practices that could benefit more from capability building is limited.	additional data linkages, for example the Medicare Benefits Scheme data, to enhance the experience (NSW Health 2023c).
DHS6	Limited data on people with disability	More granular statistical data is required to allow indicators and outcomes for people with disability to be accurately tracked against those for people without disability.	In order to determine whether people with disability are receiving equitable access to services, statistical data is required that enables the development of indicators that can report against the four domains of the Australian Health Performance Framework (Fortune et al. 2021).

	Outcomes of the service needs analysis – aged care		
	Identified Need	Key Issue	Description of Evidence
ACS1	Accessing appropriate care	Many older people from diverse backgrounds, including CALD communities, veterans, people experiencing homelessness and LGBTQIA+ individuals, struggle to access non-discriminatory, culturally appropriate care.	In Western Sydney, older people, particularly vulnerable people such as people from CALD backgrounds (Weng et al. 2020) or those experiencing homelessness, can face barriers to accessing health services. Community engagement conducted in 2021 revealed some barriers to accessing services in Western Sydney for older people: • Language and cultural barriers for older people from culturally and linguistically diverse communities. • Services are not marketed well for the Western Sydney population. • A lack of awareness regarding services and service pathways for older Australians. People from CALD communities in particular struggle to access health services due to: • A lack of awareness of available health service pathways. • A lack of understanding due to language and cultural differences of what their symptoms may mean for underlying conditions. • Influences outside of their control, for example immigration statuses that lead to social isolation and family separation. • Cultural stigma and shame around health issues, for instance disability, sexually transmitted disease and mental illness (NSW Health 2019). Health care systems can be intimidating for new immigrants (Weng et al. 2020). 4,084 refugees settled in Western Sydney between 2012 and

			August 2016 (PHIDU 2021b). Australians with a refugee background have suffered many traumatic events that have led to physical trauma, infectious disease, nutritional deficiencies, obstetric complications, and poor dental health (Russell et al. 2019). New immigrants have difficulties and stress around adapting to a new system. These can be language barriers and discrimination, poor health literacy, and an absence of a family support network (NSW Health 2019).
ACS2	Maintaining healthy lifestyles	Older Western Sydney residents, including those in residential aged care, have limited access to services from allied health professionals, including dietitians, exercise physiologists, speech pathologists and dental health professionals.	Under the Commonwealth Home Support Program in 2018–19, more than 50% of people received fewer than five allied health services per year (RCACQS 2021a).
ACS3	Social isolation	Older people in Western Sydney are at higher risk of experiencing social isolation and loneliness, especially during periods of COVID-19 restrictions. This can have adverse effect on their mental health. Older people in aged care suffer from depression and do not have equal access to mental health services.	Older Australians, particularly in residential aged care or living alone, experience isolation and loneliness (RCACQS 2021a). They may not have community networks and can suffer from mental health issues, including anxiety and depression (RCACQS 2021a). Social isolation is a risk factor for loneliness. Some other risk factors for loneliness can be unemployment and financial difficulties. Loneliness has been linked to premature deaths and poor physical and mental health (AIHW 2021a). COVID-19-related restrictions have increased the risk of social isolation and loneliness for older people across Australia (Sepúlveda-Loyola et al. 2020). People in the aged care system suffer from depression but do not have as much access to mental health care as the rest of the population (RCACQS 2021a). Additionally, many staff in aged care do not have

			sufficient training to support people with mental health needs (RCACQS 2021a).
ACS4	Rehabilitation for deconditioning	Older people and people with disability have become deconditioned as a result of isolation and their restricted movement during lockdowns. Older people in general lack access to mobility assistance.	Mobility continues to be an area of concern in aged care. Older people do not receive sufficient support with the maintenance and improvement of their mobility (RCACQS 2021a). There will be an increased need for rehabilitation services at scale due to COVID-19. Methods of rehabilitation that were in place before the pandemic will no longer be practical, therefore extensive research will need to be conducted to facilitate rehabilitation support for these people in future (De Biase et al. 2020).
ACS5	Difficulties navigating the aged care system	Older people struggle to navigate the complexities of the aged care system.	The current aged care system is difficult to access and navigate for older people. It does not offer personalised information and support making it more difficult for older people to make decisions about their care (RCACQS 2021a).
ACS6	A lack of respite services	Respite services are not widely available in Western Sydney.	Older Australians do not receive sufficient respite care when they need it (RCACQS 2021a). In Western Sydney, while four of the LHD community health centres offer respite services, they are not offered in the Doonside, Merrylands and Blacktown centres.
ACS7	The need for Aboriginal and Torres Strait Islander peer workers in the aged care system	Older Aboriginal and Torres Strait Islander people face significant barriers to aged care due to social determinants of health, limited cultural safety in service providers, and disproportionate impact of chronic and complex health conditions.	Aboriginal and Torres Strait Islander people face significant barriers to accessing aged care services. Economic and social disadvantage, a lack of culturally safe care and the ongoing impacts of colonisation and discrimination are significant barriers (RCACQS 2021a). Additionally, these community members suffer disproportionate impact from chronic and complex health conditions, disability and homelessness, which further serves to impact their access to aged care services (RCACQS 2021a). These individuals often prefer to receive care from other Aboriginal and Torres Strait Islander people (RCACQS 2021a).
ACS8	Improving the quality of service delivery	Aged care service providers require more training and recruitment.	From a workforce perspective, the aged care system was found to be understaffed and undertrained (RCACQS 2021a).

		There will be a need for greater transparency in service delivery in the aged care ecosystem to ensure service providers are adequately meeting the needs of older Australians.	There is a need for transparency and accountability to be embedded the new aged care system (RCACQS 2021a).
ACS9	Improved primary care provision	Those receiving aged care services need improved access to general practitioners.	From a primary healthcare perspective, it was noted that general practitioners do not deliver sufficient care to meet the needs of people receiving aged care (RCACQS 2021a).
ACS10	Effective management of chronic conditions	Multi-disciplinary teams will be crucial to ensure adequate management of chronic conditions in older people. More frequent medications management will be required for older Australians in Western Sydney.	Multidisciplinary teams will be of critical importance to older people with chronic complex health conditions (RCACQS 2021a). People in residential aged care need to have medications management reviews more frequently than the current rate of every 24 months (RCACQS 2021a).

	Outcomes of the service needs analysis – alcohol and other drugs		
	Identified Need	Key Issue	Description of Evidence
AODS1	Whole-of-family services	There appears to be a lack of whole-of-family services to address alcohol and other drug use and it's impacts, with patient counselling being the most commonly accessed treatment method.	Counselling is the most common type of treatment being accessed with assessment only and withdrawal management being the next most commonly accessed treatment methods (AIHW 2014).
AODS2	Early intervention for young people	There may be a lack of services targeting early intervention in young people using alcohol and other drugs.	Young people are increasingly presenting with mental health issues and using alcohol and other drugs. Substance abuse in young people increase their risk of incarceration and psychological trauma (NSW Justice Health 2015). In 2021-22, 11.1% of all Western Sydney clients receiving their own alcohol or other drug treatments were aged between 10 and 19 years old. This number noticeably increases to 27.3% for clients aged 20 to 29 years old (AIHW 2020l)
AODS3	Limited access to detoxification and rehabilitation services	There is increasing demand for detoxification and rehabilitation services in the Western Sydney community. Residents struggle to access appropriate detoxification and/or rehabilitation services that are culturally safe and are tailored to their specific needs.	There is a lack of specialist residential rehabilitation programs located in Western Sydney.
AODS4	COVID-19 and associated restrictions severely limited service delivery	There was reduced service delivery across NSW due to a range of factors. This reduction in service delivery coincided with an increase in service demand across NSW.	In NSW, some services were forced to close and then reopened with reduced capacity (AIHW 2021d). Face-to-face service provision reduced and services including group therapy moved online (AIHW 2021d). Increases in alcohol and other drug service demand in NSW was influenced by a range of factors:

			• People seeking assistance due to unavailability of services or a lack of access in their area. • An increase in unemployment and travel restrictions resulting in more people being at home. • Increased online service offerings which made it easier for young people to access services. • Increased phone services improving access to treatment and support (AIHW 2021d). Decreases in AOD service provision were influenced by: • Fewer people wanting to go out during lockdowns. • The cancellation of group treatment work. • Limited access to ICT infrastructure and digital capability in some service providers. • The suspension of home visits. • Difficulty accessing technology for vulnerable groups. • Decreased availability of withdrawal detox and residential rehabilitation services (AIHW 2021d).
AODS5	More effective referral pathways	Referrals to alcohol and other drug services occur primarily through individuals or their family members. GPs in Western Sydney have a limited understanding of the alcohol and other drug services that are available.	In Western Sydney, 45.5% of referrals for closed episodes originated from family or oneself and 36% of referrals came from health services (AIHW 2021l). GPs in Western Sydney have limited awareness of the alcohol and other drug services that are available in Western Sydney. For instance, a survey conducted by WSPHN found that at least 75% of GPs have never heard of four of the major alcohol and other drug service providers in Western Sydney (WentWest 2018).

	Outcomes of the service needs analysis – chronic disease		
	Identified Need	Key Issue	Description of Evidence
CDS1	Early identification	Residents in Western Sydney are hospitalised for some chronic diseases at rates higher than the NSW average, suggesting early identification is not always effective in avoiding severe symptoms or complications.	More Western Sydney residents were hospitalised due to asthma and chronic obstructive pulmonary disease than the rest of NSW in 2016-17 (at a rate of 212.9 per 100,000 and 177.2 per 100,000 respectively). Within Western Sydney in 2016-17, Blacktown had the highest rate of chronic obstructive pulmonary disease deaths compared to neighbouring suburbs (at 30.4 per 100,000 and 23.4 per 100,000 respectively) (WentWest 2018). Between 2017 and 2018, men in Western Sydney were hospitalised for circulatory disease at a rate of 2,130.5 per 100,000, whereas women were hospitalised at a rate of 1,460.3 per 100,000. For NSW, these rates for men and women were 2,792.2 and 1,974.5 respectively (AIHW 2021m).
CDS2	Continuous care	The rates of hospitalisations of Western Sydney residents with chronic diseases indicates their conditions are not always well managed. Asthma hospitalisations, for example, suggest some residents are not accessing the continuous care of a general practitioner who is managing their condition over time.	Chronic diseases can be managed through the effective use of secondary prevention activities, including early identification and appropriate medication or treatments (AHMAC 2017). For those with complex chronic diseases, it is imperative they maintain access to continuous care to ensure the appropriate ongoing management of their conditions. Continuous care from a consistent team of health professionals can reduce the likelihood of avoidable hospitalisations (AHMAC 2017). In Western Sydney, those with chronic diseases present more often to emergency departments than the NSW average (King et al 2016). This indicates that a greater proportion of people in Western Sydney are not effectively managing their chronic diseases. This trend is most observable in the following conditions in Western Sydney (King et al 2016):

			• Chronic obstructive pulmonary disease • Asthma • Hepatitis B • Chronic kidney disease and • Cardiovascular disease
CDS3	Reducing diabetes risk factors	38% of adults in Western Sydney are at high risk of type-2 diabetes due to lifestyle risk factors, including smoking, poor diet and inadequate exercise.	The mortality rate of diabetes has remained stable in the last 20 to 30 years, both in instances where diabetes was the underlying cause and where diabetes was a comorbidity (the presence of two or more diseases or medical conditions in a person at once) factor (AIHW 2023g). In Western Sydney, the rates for diabetes are substantially higher than national and state averages with risk factors (WSD 2021) including: • Smoking: over 10% of the adult population smoke daily (CEE 2022b); • Exercise: the rates of inactivity and being overweight continue to rise (CEE 2021a); and • Diet: many residents not reaching the recommended consumption of fruit and vegetables (CEE 2021k). An estimated half of all adults in Western Sydney either have or are at high risk of developing type-2 diabetes. • 12% of adults in Western Sydney are estimated to have type-2 diabetes. • 38% of adults have a high risk of diabetes. • 50% have a low risk of diabetes (WSD 2021). Residents of Blacktown are estimated to have a 7% prevalence of diabetes; however, the Western Sydney Local Health District fears that this may underestimate the true rate by up to 50% (WSD 2020).

			Accurate information about diabetes relies on data from multiple sources that include hospital glycosylated hemoglobin (HbA1c) data, participants in the National Diabetes Service Scheme, and projections based on diabetes risk factors (AIHW 2020c).
CDS4	Early diabetes diagnoses and improving diagnosis	Low rates of testing for diabetes by general practices mean the prevalence could be much higher in parts of Western Sydney. Misdiagnosis is also common.	Since the beginning of the COVID-19 pandemic, fewer people have presented to emergency departments to manage their diabetes. As restrictions begin to ease, rates of attendance have not reverted to pre-COVID-19 rates of hospitalisation. This suggests people with diabetes are waiting for their conditions to become more severe before seeking clinical support. Indeed, of those patients with diabetes who do present at hospital, the percentage of those with severe and poorly managed diabetes increased by 9% between January and November 2020 (WSD 2020).
CDS5	Diabetes management	Residents may be delaying seeking medical care for their symptoms of diabetes. Of those who do present at hospitals, many are found to have been prescribed older, less effective medications to treat their conditions.	type-2 diabetes can lead to acute infections and hospitalisations and, in some people, the development of additional chronic diseases (AIHW 2023k). The Diabetes Case for Change report estimates that a record 11.1% of the NSW population had diabetes in 2018, up from 6.5% in 2002. It also shows that people who have the disease are experiencing more severe symptoms and complications (NSW Health 2018). For instance, Diabetes Australia indicates that the rate of diabetes-related amputations in Australia increased over 30% between 1998 and 2011 (Diabetes Australia 2020b).
CDS6	Integration of care for diabetes management	Though a lot of work is being done, there are still some gaps in the integration and collaboration between dietitians, endocrinologists, general practitioners, and mental health professionals when treating patients with diabetes.	Living with a chronic condition like diabetes, coping with biological and hormonal factors plus needing to manage the condition daily may increase the risk of depression. Up to 50% of people with diabetes are thought to have a mental illness such as depression or anxiety (Diabetes Australia 2021).

			In NSW hospitals in 2018, 95% of patients were treated for complications of diabetes rather than diabetes itself (WSD 2021). Diabetes can have severe effects on a person's vascular system, leading to chronic conditions like coronary heart disease and peripheral vascular disease, and acute conditions like myocardial infarctions and stroke (Long and Dagogo-Jack 2011). In 2019, the Western Sydney LHD reported 13% of its population had diabetes, which is 2% higher than the NSW-wide figure of 11% (WSD 2021).
CDS7	Improved testing for viral hepatitis	There are low rates of testing for hepatitis B and C by general practitioners, including of vulnerable cohorts such as Aboriginal and Torres Strait Islander people and people born in countries with high rates of hepatitis. Low testing rates are potentially due, in part, to the need for several tests to confirm a diagnosis.	Both hepatitis B and C affect people from some backgrounds disproportionately. In Australia, people born in Northeast Asia and Southeast Asia make up the largest proportion of those impacted by viral hepatitis B (MacLachlan et al. 2020). Over 80% of people diagnosed with hepatitis B in Western Sydney were born overseas (MacLachlan JH et al 2020). Western Sydney has a culturally diverse population, with many people born in countries where hepatitis is highly prevalent. Despite this, both testing and treatment rates for hepatitis B and C are low in Western Sydney (MacLachlan et al. 2020). There is a misconception among some general practitioners that hepatitis is not an issue in Australia. As a result, symptoms are not always identified as possibly related to viral hepatitis and relevant tests are not always requested. This, coupled with the need for several tests to confirm a diagnosis of hepatitis, could explain the low rates of testing by general practitioners.

			Liver cancer is the fastest-growing cancer in Australia (MacLachlan and Cowie 2012). Hepatitis B and C are the predominant cause of liver cancer, along with behavioural factors that include smoking, alcohol consumption and overweight/obesity (Cancer Council Australia 2022). 73.5% of Western Sydney had a rate of liver cancer above the national average. Merrylands-Guilford and Auburn had the greatest proportion of above national average liver cancer rate. These same areas had more people with Hepatitis B than the Australian Average (MacLachlan et al. 2020).
CDS8	Increasing uptake in treatment of viral hepatitis	Almost two-thirds of people living with hepatitis B and C are not receiving treatment, despite simpler and more comfortable treatment options available to patients. Those who resist hepatitis treatments do so for several reasons, including the presence of additional health concerns such as mental health issues.	Hepatitis C affects 0.67% of the Western Sydney population. However, only 41.4% of affected people in Western Sydney have received treatments for hepatitis C (MacLachlan et al. 2020). The locations of most concern and with the lowest treatment percentage in Western Sydney are Mount Druitt (10.6%), Dural-Wisemans Ferry (10.7%) and Parramatta (11.4%) (MacLachlan et al. 2020). In 2018, hepatitis B affected 1.25% of the population in Western Sydney, with treatment uptake at 16.4% and care uptake at 36.1% (MacLachlan et al. 2020).
CDS9	Reducing risk factors for cancer	Cancer risk factors, including smoking, alcohol consumption and poor diet, are prevalent among Western Sydney residents. These risk factors contribute to the higher rates of cancer in the community.	When compared to people across Sydney more broadly, residents in Western Sydney have higher rates of risk factors for cancers. These include: • Higher rates of smoking (PHIDU 2021b), which can lead to lung, oral and throat cancers. • Poor diets (CEE2021k), which can increase risks of contracting bowel cancers.

			• Unsafe sexual practices, as human papillomavirus increases the likelihood of contracting a range of cancers (Kirby Institute 2018b). • Poor health literacy, demonstrated through lower rates of cancer screening (AIHW 2023a). Smoking on average in Western Sydney has decreased from 10.0% in 2016 to 8.7% in 2019 (AIHW 2020d). Lower socioeconomic regions (such as Blacktown and Cumberland) tend to have much higher rates of smoking than their wealthier neighbours (Parramatta and The Hills Shire) (PHIDU 2021c). Cancer was the cause of 36% of alcohol-related deaths in 2015 in Australia (NDRI 2016). 27.5% of Western Sydney residents drink in excess of lifetime risk alcohol guidelines, meaning they consume more than two standard drinks per day (CEE 2021e).
CDS10	Increasing cancer screening rates	Fewer people attend cancer screening for colon, breast and cervical cancer in Western Sydney than in Sydney more broadly and most other areas in NSW. Some vulnerable groups have particularly low rates of screening, such as LGBTQIA+ women. This suggests screening services might not be widely known or understood or are not sensitive to the particular needs of these groups.	A key factor contributing to better health outcomes for people with cancer is early identification. There are three population-based cancer screening programs in Australia: ▪ BreastScreen Australia program ▪ National Bowel Cancer Screening program ▪ National cervical Screening program These programs aim to improve early identification across Australia and reduce illness and death due to cancer (DHAC 2023). Western Sydney cancer screening rates are below both the NSW and national averages (AIHW 2023a). Screening rates among vulnerable groups in the community are even lower, due to a limited

understanding of the importance of cancer screening, and a reluctance of certain community members to attend screening appointments. LGBTQIA+ women, for example, are less likely to access screening services and face higher risks of cancer mortality even though they are no more likely to have cancer than the general population (Gatos 2018).

Breast cancer screening rates in Western Sydney were 44.4% in 2020-2021, lower than the NSW average of 50.2% (AIHW 2023a). Between 2018-19, 39.5% pf Western Sydney women aged between 25-74 participated in cervical screenings, lower than the NSW average of 44.1% (Cancer Institute NSW 2022).

35.6% of people in Western Sydney attended bowel cancer screens between 2020-2021. This is lower than the 39.5% who attended bowel screens across NSW and the 40.9% who attended nationally (AIHW 2023a).

Bowel cancer is more common in men than women. The percentage of positive results in 2016-17 within Western Sydney being 9% and 7.6% respectively (PHIDU 2021c).

Male positive screening results for bowel cancer were most alarming in Blacktown (9.9%) and Cumberland (9.7%), which both had percentages greater than the NSW average (9.1%) (PHIDU 2021c).

Cancer screening rates of colon, breast and cervical cancers are lower in the Western Sydney region than in Sydney and most other areas in NSW (PHIDU 2021c). The average incidence of cancer was 5.4% lower for women in the region compared to NSW women in general (WSLHD 2020).

27% of Aboriginal and Torres Strait Islander people in Australia will statistically participate in bowel cancer screens, compared to 43% of the non-Indigenous population (DHAC 2023).

	Outcomes of the service needs analysis – culturally appropriate care		
	Identified Need	Key Issue	Description of Evidence
CAC1	There is a lack of identified Aboriginal and Torres Strait Islander positions and difficulty in hiring for these positions.	Aboriginal and Torres Strait Islander people struggle to access culturally safe service providers who understand and can address their specific needs. This includes in areas of general practice, mental health and sexual health.	Improving cultural safety for Aboriginal and Torres Strait Islander health care users can improve access to and the quality of health care. This requires a health system that respects Indigenous cultural values, strengths and differences, and also addresses racism and inequity (AIHW 2021n).
CAC2	Communication barriers to care	Communication barriers can limit a health service provider's ability to accurately diagnose and treat health conditions before they become acute and life threatening.	People who migrate to Australia face challenges as they seek to adjust to a new culture. These include practical barriers like speaking English and understanding the primary health care system (Khatri and Assefa 2022). People from culturally and linguistically diverse backgrounds still experience a range of factors that negatively impact their health, including: • conflicting sociocultural values and beliefs • high unmet needs of health services • low literacy on health and health care • language and communication problems • inadequate interpreter services (Khatri and Assefa 2022). Community engagement conducted in 2021, revealed that communication barriers that limit health service providers' ability to accurately diagnose and treat health conditions before they become acute and life threatening.
CAC3	Access to services for CALD communities	Many culturally and linguistically diverse residents experience barriers in accessing healthcare, including language barriers, a lack of cultural understanding, and difficulty navigating a complex health system.	People from CALD populations struggle to access health services due to: • A lack of awareness of available health service pathways. • A lack of understanding due to language and cultural differences of what their symptoms may mean for underlying conditions.

			• Influences outside of their control, for example immigration statuses that lead to social isolation and family separation. • Cultural stigma and shame around health issues for instance disability, sexually transmitted disease and mental illness (NSW Health 2019).
CAC4	LQBTQI+ access to safe services	LGBTQIA+ individuals find it difficult to access services that are safe. This can be particularly difficult for transgender/gender diverse individuals who need gender-affirming services.	Participants in a joint study completed by Western Sydney University and ACOON (2020) indicated they would prefer to travel to a neighbouring area for inclusive service options. This provides them the benefit of anonymity, confidentiality, and perceived increased safety. This study also found that racism, homophobia and transphobia were identified as limiting culturally safe access to services (Robinson K et al 2020). According to literature, female to male transgenders individuals obtain cervical cancer screening less frequently and are less likely to be up to date on their pap tests compared with cisgender women (Gatos 2018).
CAC5	Veterans access to safe services	Veterans are hesitant to access healthcare	65% of former Australian Defence Force members believe in at least one stigma about seeking mental health care, while 33.6% hold at least four of those beliefs (Van Hooff et al. 2018). The full list of stigma-related beliefs from that study is: • They would not understand. • I would feel inadequate. • I am embarrassed by mental health problems. • I would feel worse if I could not solve the problem. • I am losing control of my emotions. • They will treat me differently. • I would be seen as weak. • They would have less confidence in me. • I don't trust mental health professionals. • That it is beyond my control (Van Hooff et al. 2018).

	Outcomes of the service needs analysis – Health Literacy		
	Identified Need	Key Issue	Description of Evidence
HL1	Low health literacy in culturally and linguistically diverse communities	Low health literacy in community members, particularly those from culturally and linguistically diverse backgrounds.	Community engagement indicates that people from culturally and linguistically diverse communities have been found to have poor health literacy, which is associated with poor health outcomes and low confidence in taking an active role in their own health management. Some residents from CALD backgrounds experience cultural stigma and shame around health issues, for instance disability, sexually transmitted disease and mental illness (NSW Health 2019).
HL2	Health literacy for children and young people	Children and young people are not maintaining healthy lifestyles.	The majority of children and adolescents are not meeting physical activity and guidelines for limiting sedentary screen-based behaviour, meaning they are not active enough and using screens too much (CEE 2022a).
HL3	Health literacy for older people	Older people face barriers accessing appropriate care and navigating the health system	Community engagement conducted in 2021 revealed a lack of awareness regarding services and service pathways for older Australians, particularly the availability of services for those with dementia.
HL4	Low rates of cancer screening	Fewer people attend cancer screening for colon, breast and cervical cancer in Western Sydney than in Sydney more broadly and most other areas in NSW. Some vulnerable groups have particularly low rates of screening, such as LGBTQIA+ women. This suggests screening services might not be widely known or understood or are not sensitive to the particular needs of these groups.	Breast cancer screening participation rates in Western Sydney in 2016-17 for women aged 50 to 74 was 48.2%, which was lower than the NSW rate (53.2%) (AIHW 2021o). Cervical cancer screening rates in Western Sydney in 2018-21 for women aged 25 to 74 was 55.4%, which was lower than the NSW rate (67.2%) (AIHW 2021o). In 2018-19, Aboriginal and Torres Strait Islander people had lower participation rates in the National Bowel Cancer Screening Program compared to non-Indigenous people (27% and 43% respectively) (AIHW 2023d; DHAC 2022).

			27% of Aboriginal and Torres Strait Islander people in Australia will statistically participate in bowel cancer screens, compared to 43% of the non-Indigenous population (AIHW 2023d; DHAC 2022). In NSW, bowel cancer is more common in men than women (one in 12, and one in 16 respectively) (Cancer Institute NSW 2021). Western Sydney bowel cancer screening program participation rates in 2020-21 were 35.6%, which is 5.3% lower than the national participation rate (40.9%) (AIHW 2021o). Male positive screening results for bowel cancer were highest in Blacktown (9.9%) and Cumberland (9.7%), and both greater than the NSW average (9.1%) (PHIDU 2021c).
HL5	Aboriginal and Torres Strait Islander health literacy	Health information does not meet the needs of Aboriginal and Torres Strait Islander audiences	Health information presented to Aboriginal and Torres Strait Islander people is not presented in a culturally appropriate manner. More work can be done to ensure health literacy encompasses the critical appraisal of health information from different sources, the social support needed to access services and maintain good health and understanding people's rights as healthcare consumers (NSW Health 2019).
HL6	Health literacy in culturally and linguistically diverse communities	While not consistent across communities, many residents from culturally and linguistically diverse backgrounds are more likely to smoke, have poor diets and maintain inactive lifestyles.	When compared to the NSW general population, people who were not born in Australia have generally poorer health and a higher prevalence of health risk factors including smoking (in men), overweight or obesity, and physical inactivity (King M et al 2016).
HL7	Health literacy among transgender and gender diverse people	Transgender/gender diverse individuals are often not screened for diseases and are often diagnosed at later stages of disease progression, particularly in the cases of cervical cancer, hepatitis, and HIV.	Some studies have demonstrated that transgender men are less likely to be up to date on their Pap testing or cervical cancer screening in their lifetime (Gatos 2018). Major contributors to this disparity are a lack of knowledge in the trans community associated with human

			papillomavirus, and a lack of understanding regarding the importance of cervical cancer screening (Gatos 2018).
HL8	Health literacy among people with disability	Some people with disability are at risk of chronic disease due to unhealthy lifestyle choices.	In Australia, 47% of people with disability aged two or over do not eat enough fruit and vegetables compared to 41% of people without disabilities (AIHW 2020b). 18% of people with disability aged 15 or over engage in smoking daily, while only 12% of people without disability smoke daily (AIHW 2020b). 72% of people with disability aged two and over are overweight or obese compared with 55% of people without disability (AIHW 2020b). Adults with disability (76%) are more likely than those without disability (59%) to have an increased risk of experiencing poor health (AIHW 2020b). 12% of people (aged two or over) with disability consume sugar-sweetened drinks daily, compared with 7.8% of people without disability (AIHW 2020b).
HL9	Sexual health literacy among young people	Sexually transmitted diseases continue to impact young people more than the general population.	Chlamydia was the most frequently notified sexually transmissible infection in Australia in 2017, with a total of 101,183 notifications (Kirby Institute 2018b). 73% of these notifications were among people aged 15-29 years (Kirby Institute 2018b).

SUMMARY OF HEALTH NEEDS BEING ADDRESSED BY CURRENT SERVICES

Western Sydney PHN takes an iterative and proactive approach towards identifying and addressing the health needs of our region throughout the cycle of assessment and implementation. The benefits of this process are highlighted by the fact that we have responded successfully to a range of needs over the past few years. As we move into the next phase in this ongoing process, we continue to develop new commissioning strategies and ways to build on the strong platforms we have already put in place.

Some examples of how Western Sydney PHN has moved effectively to address previously identified needs are outlined below.

Suicide prevention

In response to the need for more specialised services for people experiencing a suicidal crisis, WSPHN commissioned programs, including **Safe Space** and **The Way Back Support Service**. Safe Space offers people aged 16 years and over experiencing psychological distress access to timely and responsive support from trained non-clinical mental health professionals within their community, outside a clinical setting. The Way Back Support Service is an aftercare service for people who have attempted suicide or experienced a suicidal crisis. It provides non-clinical care and practical support for up to three months, along with effective follow-up support.

Youth mental health

The **Youth Enhanced Support Service (YESS)** outreach program provides support for young people aged 12-25 who have or are at risk of developing mental health concerns. YESS provides mental health support, treatment and case management. This service was commissioned in response to the identified need to address the "missing middle" between early intervention programs (headspace, for example) and services targeting the more severe end of the mental health continuum (for example, the headspace Youth Early Psychosis Program).

Specific services for Aboriginal and Torres Strait Islander people

In response to previously identified needs, we commission several services targeted at improving the mental health, cultural, social and economic wellbeing of First Nations communities in Western Sydney.

Aboriginal Counselling Services delivers culturally sensitive and safe mental health intervention and therapeutic counselling services. Aboriginal Counselling Services supports, empowers, and assists clients with navigating the health system, and managing their mental and chronic health conditions.

Baabayn Aboriginal Corporation offers a range of wellbeing services, along with a building community resilience program, which provides support for community Elders and their families. This service assists the community in its own work of healing from inter-generational trauma and in building resilience.

Marrin Weejali delivers the **Healing Minds, Healing Spirits** program, which provides treatment and case management to adults and their families experiencing the harmful effects of alcohol and illicit substance use. The program aims to help participants to move beyond addiction and trauma to achieve physical, social, and emotional well-being.

The Shed in Mount Druitt is a community-based initiative that provides holistic support to Aboriginal and Torres Strait Islander men and women struggling with isolation, mental distress or at risk of suicide. With the help of support workers, counsellors and other support networks, The Shed aims to improve the health and wellbeing of its members by addressing preventable health issues associated with isolation, stress and other forms of disadvantage.

People who are newly released from or living in prison

The **Community Restorative Centre (CRC)** provides a prison transition program to deliver holistic support for people on remand within or due to exit the prison system who may be engaged in a cycle of crime, problematic drug use, crime, homelessness, and/or incarceration. CRC also delivers the **Pathways Home – Pilot Youth Program**, which specifically targets the needs of young people aged ten to 24 who have been involved with the criminal justice system and alcohol and other drug misuse to build sustainable pathways towards living safely in the community.

SECTION 4 – OPPORTUNITIES AND PRIORITIES

	Opportunities and priorities				
Needs Number	Priority	Priority area	Priority sub-category	Expected Outcome	Potential lead agency and/or opportunities for collaboration and partnership
AHS1	Explore with the community opportunities to create a peer support network for the Aboriginal workforce	*Aboriginal and Torres Strait Islander health*	*Workforce*	Opportunities for a peer support network are identified	NSW Health, community Elders, educational institutions, WSLHD
ATSIH2	Through education, training and commissioned services, increase the capability of health providers to understand and address the specific needs of Aboriginal and Torres Strait Islander people in culturally appropriate ways.	*Aboriginal and Torres Strait Islander health*	*Aboriginal and Torres Strait Islander health*	Improved health outcomes for Aboriginal and Torres Strait Islander people	Educational institutions, community Elders, WSLHD, ITC
ATSIH5	Work with healthcare providers to develop and deliver appropriate materials to support education of the community, with a particular focus on cultural awareness training.	*Aboriginal and Torres Strait Islander health*	*Appropriate care, including cultural safety*	Improved access to culturally sensitive care and culturally appropriate health information and materials	WSLHD, general practices
AHS4	Work with the community for Aboriginal and Torres Strait Islander Elders to access culturally safe aged care services from the age of 50.	*Aboriginal and Torres Strait Islander health*	*Aged care*	Improved access to culturally appropriate aged care	My Aged Care
ATSIH3	Working closely with Elders, who have the trust and confidence of the community, to encourage the community in maintaining a healthy lifestyle, and improve issues with chronic illnesses, alcohol and other drugs, mental health and youth justice.	*Aboriginal and Torres Strait Islander health*	*Health literacy*	Reduced risk factors for chronic disease	Commissioned providers, for example Marrin Weejali and Baabayn
AHS3	Build capability of Aboriginal health care providers to deliver tailored services and accurately report measurable health data.	*Aboriginal and Torres Strait Islander health*	*Appropriate care, including cultural safety*	An increase in Aboriginal and Torres Strait Islander people accessing health services	WSLHD, NSW Health
ACS2	Identify programs that enable older residents to meet, socialise, be active, develop social networks, and encourage participation across WSPHN programs and services.	*Aged care*	*Early intervention and prevention*	Improved quality of life and reduced risk factors for chronic disease and mental	RACFs, Aged Care Team, commissioned service providers

	Opportunities and priorities				
Needs Number	Priority	Priority area	Priority sub-category	Expected Outcome	Potential lead agency and/or opportunities for collaboration and partnership
				health issues among older people	
AC2	Continue to develop pathways to increase access to allied health services for senior Western Sydney residents.	*Aged care*	*Allied health*	Improved access to allied health for older people	RACFs, Aged Care Team, commissioned service providers
ACS5	Support the community in connecting end-of-life palliative care providers, after-hours services, dementia care (including HealthPathways and digitisation) and at-home care in order to maintain good physical and mental health in older age.	*Aged care*	*Care coordination*	Improved ability of older people to navigate the health system and access the care they need	RACFs, Aged Care Team, commissioned service providers, WSLHD
ACS1	Supporting residential aged care facilities around integration with general practice and the broader health system, after-hours services, digitisation of care coordination and quality improvement.	*Aged care*	*Care coordination*	Increased access to primary care for individuals in residential aged care facilities	My Aged Care, WSLHD, general practices
ACS5	Work with Western Sydney collaborators to support the development of a dementia support pathway.	*Aged care*	*Access*	An increase in ease of access for older people and their carers to dementia support services	My Aged Care Services, WSLHD
ACS5	Work with Western Sydney collaborators and community leaders to support the development of more accessible information on aged care services.	*Aged care*	*Health literacy*	An increase in health literacy in older people and their carers	My Aged Care Services, WSLHD
ACS9	Support the design and implementation of a new model of care at home in which primary care facilitates increased independence in older Australians.	*Aged care*	*Care coordination*	Increased independence in older people in Western Sydney	My Aged Care Services, WSLHD, PCMH
AOD1	Collaborate with communities to co-design solutions to reduce alcohol and other drug use and associated harms.	*Alcohol and other drugs*	*Appropriate care*	Innovative solutions to reduce alcohol and other drug use	NSW Health, NGOs, NSW DCJ,
AOD1	Continue to support services that assist young people involved in the criminal justice system due to alcohol and other drugs use to build sustainable pathways out of the justice system.	*Alcohol and other drugs*	*Vulnerable population (non-First Nations specific)*	Reduced rates of alcohol and other drug misuse and incarceration for young people	Community Restorative Centre

	Opportunities and priorities				
Needs Number	Priority	Priority area	Priority sub-category	Expected Outcome	Potential lead agency and/or opportunities for collaboration and partnership
AODS3	Support the strengthening of detoxification and rehabilitation services to increase the reach of services in Western Sydney, including services to meet tailored requirements of groups. These groups include families, LGBTQIA+ people, young people, older people, people from culturally and linguistically diverse communities and people engaging in polysubstance use (using more than one substance at once).	*Alcohol and other drugs*	*Access*	Improved access to alcohol and other drug services	NSW Health, WSLHD, NADA
SDH4	Continue to support health service providers to deliver multiple services in one location, including support for mental health and drug and alcohol dependence.	*Alcohol and other drugs*	*System integration*	People experiencing homelessness encounter fewer barriers to accessing the care they need	Allied health professionals, general practitioners, WSLHD
DHS1	Work with Western Sydney collaborators and health care service providers to improve digital health literacy and access in priority populations, such as the CALD community, low-income households, and the elderly, to increase self-management and to encourage people to seek early intervention.	*Digital health*	*Access*	Increased digital health literacy in priority populations	NSW Health, WSLHD
DHS4	Increase the adoption of digital health services, particularly with Allied Health Service Providers.	*Digital health*	*System integration*	Increased digital health capability in allied health providers	NSW Health, WSLHD, Western Sydney Migrant Resource Centre
DHS5	Embrace patient journey modelling software to further understand the patient experience across the NSW Health system and how it interfaces with primary care in Western Sydney. For example, to reduce ED presentations for lower category triages.	*Digital health*	*System integration*	Wider adoption of Lumos by general practices in Wester Sydney	WSPHN, NSW Health
DHS4	Understand the efficacy of HealthPathways for different priority groups and support service providers to increase uptake across the Western Sydney Primary Health Network.	*Digital health*	*Appropriate care (including cultural safety)*	Additional HealthPathways to support patent referrals by GPS.	PCMH, general practices
DH4	Work with Western Sydney collaborators to enhance and integrate digital health systems that amplify GPs as the first point of contact for mental health and chronic conditions	*Digital health*	*System integration*	Increased use of general practices and a decrease in	Community Restorative Centre

	Opportunities and priorities				
Needs Number	Priority	Priority area	Priority sub-category	Expected Outcome	Potential lead agency and/or opportunities for collaboration and partnership
	(for example) to reduce the burden on NSW Ambulance, emergency departments and hospital admissions.			category 4-5 ED presentations	
MH1	Promote the increase of services to meet identified service gaps in Western Sydney to prevent mild to moderate needs from becoming severe, including use of peer support workers.	*Mental health*	*Early intervention and prevention*	Increased access to mental health care and improved management and treatment of mild to moderate conditions	Lead MH agencies/ commissioned services
MH1	Engage research partners to understand the barriers to people with severe mental health needs accessing specialist mental health services to increase ability to meet the growth in demand, and over time, reduce that demand.	*Mental health*	*Access*	Improved access to specialist mental health care for people with severe mental health needs	Western Sydney University, University of Sydney
MH1	Improve data-gathering in areas where data gaps exist, such as The Hills Shire to improve understanding of service needs in all LGAs.	*Mental health*	*System integration*	Improved access to data on the service needs in certain areas where there are currently gaps in data collection	NSW Health, Profile ID
MH4	Work with Western Sydney collaborators to deliver against the seven priorities of the Integrated Mental Health and Suicide Prevention Regional Plan.	*Mental health*	*System integration*	Enhanced system integration for mental healthcare and reduced rates of suicide	WSLHD
MHS1	Build capability of GPs to improve management of patients with mental health concerns to reduce the need to access specialist services. Support service providers that are affordable and culturally and linguistically appropriate.	*Mental health*	Appropriate care (including cultural safety)	Increased primary mental health support in Western Sydney	General practices, NSW Health
MHS1	Support and promote the strengthening of pathways and navigation for those transitioning between services from acute services to community-focused care so they may participate successfully in the community again.	*Mental health*	*Care coordination*	Improved coordination as people transition between service providers	WSLHD
MHS2	Explore ways to increase collaboration between GPs and allied health practitioners to provide integrated, wraparound support for patients.	*Mental health*	*Multi-disciplinary care*	Enhanced collaboration between service providers and improved mental health outcomes	PCMH

	Opportunities and priorities				
Needs Number	Priority	Priority area	Priority sub-category	Expected Outcome	Potential lead agency and/or opportunities for collaboration and partnership
MHS5	Support, either through funding or co-ordination, accessibility to affordable mental health services for LGBTQIA+ people where it is required, such as in instances of those experiencing domestic and family violence.	*Mental health*	*Access*	Increased access to affordable mental health care for LGBTQIA+ people	WSLHD, NSW Health, ACON
MHS5	Develop pathways to specialist health services for LGBTQIA+ residents in areas such as mental health, sexual health and drug and alcohol dependence.	*Mental health*	*HealthPathways*	Improved pathways to care for LGBTQIA+ people	ACON, NSW Health
MHS7	Enhance and enable pathways for school children and young people to access timely, affordable mental healthcare.	*Mental health*	*Access*	Reduced rates of moderate to severe mental health issues among children and young people	headspace lead agencies
PHS5	Improve access to services that support perinatal care, particularly for individuals experiencing mental health conditions.	*Mental health*	*Access*	Improved mental health outcomes for new parents	WSLHD
PH12	Advocate for the importance of positive experiences that act as protective factors against adverse childhood experiences and intergenerational trauma.	*Mental health*	*Vulnerable population (non-First Nations specific)*	Improved health outcomes for vulnerable children	NSW Education, WSLHD
SDH4	Engage research partners and explore suicide rates in Western Sydney prison discharges and co-design pathways with people who have lived experience to reduce suicide rates in people who are newly released from prison	*Mental health*	*Early intervention and prevention*	Reduced rates of suicide among people newly released from prison	Community Restorative Centre
SDH5	Encourage and support evidenced-based initiatives that improve the uptake of health and mental health services in veterans, such as use of peer support workers with lived experience.	*Mental health*	*Vulnerable population (non-First Nations specific)*	Improved health and mental health outcomes for veterans	DVA, service providers with experience supporting this cohort
SDH5	Work with research partners to further understand the best approach to addressing the health needs of veterans in Western Sydney.	*Mental health*	*Early intervention and prevention*	Increased uptake of mental healthcare among veterans	Western Sydney University
AOD5	Increase health literacy in understanding the link between mental health issues and engagement in alcohol and other drug use for early prevention.	*Population health*	*Health literacy*	Reduced risk factors for alcohol and other drug use	NADA; commissioned alcohol and other drug treatment providers

	Opportunities and priorities				
Needs Number	Priority	Priority area	Priority sub-category	Expected Outcome	Potential lead agency and/or opportunities for collaboration and partnership
				among people with mental health issues	
AOD5	Work with Western Sydney collaborators to address the stigma surrounding access to services related to AOD use	*Population health*	*Access*	Improved access to alcohol and other drug services	Commissioned alcohol and other drug treatment providers
CDS1	Work with Western Sydney collaborators to increase health literacy about chronic disease prevention, early detection and continuous care pathways in the community to reduce the risk of avoidable diabetes.	*Population health*	*Early intervention and prevention*	Improved health outcomes for people with chronic conditions	Western Sydney Diabetes, WSLHD, PCMH, WSPHN PHN
PH1	Continue to engage with health care providers to improve community health literacy around hepatitis prevention and care and to ensure early identification of patients at risk.	*Population health*	*Health literacy*	Improved health outcomes for people with viral hepatitis	Hepatitis NSW, Storr Liver Centre
PH5	Empower the community to increase health literacy about cancer prevention in Western Sydney.	*Population health*	*Health literacy*	Reduced risk factors for cancer	Cancer Council NSW, WSLHD
PH5	Support methods that increase understanding of barriers and stigma relating to screening throughout the community and support health service providers to increase screening rates in Western Sydney through research partnerships, consultation and engagement in groups with low screening uptake.	*Population health*	*Early intervention and prevention*	Design of interventions to increase cancer screening rates	Western Sydney PHN, WSLHD, Cervical Screening Australia, BreastScreen
PH5	Support the delivery of integrated care to people living with chronic disease in consideration of the relevant NSW Health Integrated Care Key Initiatives.	*Population health*	*Multi-disciplinary care*	Improved health outcomes for people with chronic conditions	NSW Health, WSLHD, Western Sydney PHN
PH6	Raise awareness on medication side effects, such as mental health issues related to treatment.	*Population health*	*Safety and quality of care*	Improved health outcomes for people with hepatitis	PCMH
PH6	Support the community and communicate pathways for testing and vaccination to increase rates in the community, taking into consideration sensitivity and stigmas they might face.	*Population health*	*Immunisation*	Reduced risk factors for viral hepatitis	PCMH, WSLHD

	Opportunities and priorities				
Needs Number	Priority	Priority area	Priority sub-category	Expected Outcome	Potential lead agency and/or opportunities for collaboration and partnership
PHS11	Seek to understand barriers and enablers to early access to chronic disease care within the Western Sydney community through research partnerships	*Population health*	*Early intervention and prevention*	Design of interventions to increase early access to care for chronic conditions	Western Sydney University, University of Sydney
PHS16	Support health service providers to ensure services consider the specific circumstances of people with disability.	*Population health*	*Appropriate care (including cultural safety)*	Greater capability in health service providers	NDIS, The Disability Council NSW, NSW Health
PHS16	Work with education partners to better utilise lived experience to improve services.	*Population health*	*Appropriate care (including cultural safety)*	Greater experiences of service provision for people with disability and/or other health conditions	NDIS, The Disability Council NSW
PH16	Explore and participate in research partnerships to enhance understanding of ways we can support better provision of primary care to achieve prevention, increase self-management, and reduce the burden on secondary care use.	*Population health*	*Potentially preventable hospitalisations*	Reduced burden on secondary care for the management of chronic conditions	Western Sydney University, WSLHD, NSW Health
PH22	Seek to understand underlying causes of some CALD communities being hard to reach to improve health communication channels and understanding of health needs.	*Population health*	*Appropriate care (including cultural safety)*	A detailed understanding of the health needs of CALD community members	Western Sydney University, University of Sydney
PH7	Endorse pathways that increase compliance with continuous care and the likelihood of patients maintaining ongoing treatment for hepatitis B or C.	*Population health*	*Continuity of care*	Improved health outcomes for people with hepatitis	ASHM, Kirby Institute
PH9	Support consumers and stakeholders to understand the drivers for poor oral health in Western Sydney.	*Population health*	*Early intervention and prevention*	Enhanced understanding of oral health and its links to chronic disease	The Australian Dental Association
PH9	Engage Western Sydney collaborators to increase the literacy of the community regarding the benefits of maintaining oral hygiene and the importance of diet for good oral health.	*Population health*	*Health literacy*	Improved oral health	The Australian Dental Association, WSLHD
PH19	Coordinate the development and review of pathways to support the Western Sydney community	*Population health*	*HealthPathways*	Improved pathways for COVID-19 services	NSW Health, WSLHD
SDH5	Collaborate with allied health professionals to provide physical services and rehabilitation at scale for those who have been isolated or had their movement restricted.	*Population health*	*Allied health*	Improved physical, social and mental health outcomes for people who experienced restricted	My Aged Care, WSLHD

	Opportunities and priorities				
Needs Number	Priority	Priority area	Priority sub-category	Expected Outcome	Potential lead agency and/or opportunities for collaboration and partnership
				physical movement during COVID-19 lockdowns.	
PHS3	Empower stakeholders to promote publicly funded options for preventative oral care.	*Population health*	*Access*	Improved access to oral health services	The Australian Dental Association
PHS3	Encourage service providers to increase NSW government referral pathway options for subsidised dental care, including access to special needs dentistry for people with additional needs.	*Population health*	*Access*	Improved access to oral health services	The Australian Dental Association
PH9	Work with Western Sydney collaborators to trial oral health care services and initiatives for identified communities, such as with children and older people.	*Population health*	*Access*	Design of programs and initiatives to increase access to oral health services for vulnerable groups	The Australian Dental Association
MHS12	Improve literacy of families in Western Sydney of the significance of the first 2,000 days of life.	*Population health*	*Health literacy*	Reduced risk factors for chronic disease	KEYS, DCJ
PH12	Support services that improve child development and opportunities.	*Population health*	*Social determinants*	Improved outcomes for children experiencing social determinants of poor health and inequity of healthcare	Sydney Children's Hospital Network, NSW Education
PHS2	Improve service provision for victim-survivors and perpetrators of family and domestic violence to access needed services to break the cycle of domestic violence.	*Population health*	*Access*	Improved access to support for victim-survivors of family and domestic violence	NSW DCJ, WSLHD, NSW Specialist Homelessness Services
PH12	Enable health services, social services and education to collaborate in ways that enable families to tell their story once and to benefit from connected service provision.	*Population health*	*Care coordination*	Enhanced collaboration between service providers to benefit families	KEYS, WSLHD, commissioned providers delivering navigator functions
CAC3	Develop processes that result in continuous quality improvement of services.	*Population health*	*Care coordination*	Improved quality in health service provision	NSW Health, WSLHD, Curtin University
PHS3	Work with the WSLHD and Blacktown City Council to ensure that the proven impact of Tiny Tots program is taken to scale within Western Sydney.	*Population health*	*Early intervention and prevention*	Expanded delivery of a service proven to improve	Blacktown City Council, WSLHD

	Opportunities and priorities				
Needs Number	Priority	Priority area	Priority sub-category	Expected Outcome	Potential lead agency and/or opportunities for collaboration and partnership
				health outcomes for children	
HL6	Support services providers to identify hard-to-reach CALD communities and engage organisations working with these communities.	*Population health*	*Appropriate care (including cultural safety)*	An increase in Aboriginal and Torres Strait Islander people attending community health services	Commissioned providers, for example STARTTS
PH21	Develop pathways for culturally and linguistically diverse residents to identify and seek care for early signs of chronic disease.	*Population health*	*Early intervention and prevention*	Improved health outcomes for people experiencing chronic disease	NSW Health, general practices
PH22	Support programs that enable people from culturally and linguistically diverse communities to meet, socialise, be active and develop strong social networks, as the infrastructure for achieving improved health outcomes, using peer-led models of support.	*Population health*	*Early intervention and prevention*	Reduced risk factors for chronic disease and mental health issues	NSW DCJ, NSW Health, Western Sydney Diabetes, Infrastructure NSW
HL6	Develop targeted, linguistically compatible initiatives to communicate with culturally and linguistically diverse communities on health information.	*Population health*	*Health literacy*	Improved access to culturally appropriate and language compatible information and materials	Western Sydney University, WSLHD
MHS6	Determine the demand for services that actively welcome LGBTQIA+ persons and encourage primary health care service providers to actively welcome the LGBTQIA+ community.	*Population health*	*Access*	Improved access to health care for LGBTQIA+ by reducing a key barrier to care	Western Sydney University, WSLHD, ACON
MHS6	Working with research partners to research the specific health needs of LGBTQIA+ residents.	*Population health*	*Vulnerable population (non-First Nations specific)*	Improved health outcomes for LGBTQIA+ people	Western Sydney University, ACON
PHS14	Encourage service providers to outwardly identify as inclusive by displaying visual cues, such as rainbow flags or motifs.	*Population health*	*Vulnerable population (Non-First Nations specific)*	Reduced barriers to access to care for LGBTQIA+ people	ACON, General practices, WSLHD
PHS15	Ensure people with disability are supported to access vaccination and other preventative services in a timely manner and in ways that meet their holistic needs.	*Population health*	*Early intervention and prevention*	Equity of access to vaccination and preventative health	NDIS, The Disability Council NSW, NSW Health, WSLHD

	Opportunities and priorities				
Needs Number	Priority	Priority area	Priority sub-category	Expected Outcome	Potential lead agency and/or opportunities for collaboration and partnership
				programs for people with disability	
PHS15	Explore solutions that support people with profound and severe disabilities to gain access to high quality, personalised, and timely primary healthcare.	*Population health*	*Access*	Improved access to primary care for people living with disability	NDIS, The Disability Council NSW, NSW Health
PH25	Support the increased use of annual health assessments and other MBS items for people with intellectual disability.	*Population health*	*System integration*	Improved health outcomes for people living with intellectual disability	NDIS, The Disability Council NSW, NSW Health
PH23	Work with Western Sydney collaborators and services to enhance the management of chronic health conditions in people with disability.	*Population health*	*Chronic conditions*	Reduced hospitalisations in people living with disability	NDIS, The Disability Council NSW, NSW Health, WSLHD
PH24	Support initiatives that recognise, support and empowers the carers of people living with disability.	*Population health*	*Health literacy*	Reduced risk factors for chronic disease	Carers NSW
SDH4	Strengthen pathways for people transitioning out of prison to access continuous care for chronic conditions, including hepatitis, diabetes and asthma.	*Population health*	*Continuity of care*	Improved management of chronic conditions for people transitioning out of prison	Western Sydney Diabetes
AOD4	Support health programs that use peer support workers who have lived experience of the prison system to assist people who are newly released or have lived in prison.	*Population health*	*Workforce*	Increased use of peer support programs for people transitioning out of prison	Community Restorative Centre
SDH4	Continue to enable and strengthen transition services that provide support to people experiencing homelessness following release from hospital.	*Population health*	*Care coordination*	Reduced rates of hospital readmission among people experiencing homelessness and living with chronic conditions	WSLHD
SDH4	Build capability of service providers to ensure that the correct referral pathways are being used to reduce homelessness rates in people newly released from prison.	*Population health*	*Care coordination*	Accurate statistics on the risk of homelessness for those living prison	Community Restorative Centre

	Opportunities and priorities				
Needs Number	Priority	Priority area	Priority sub-category	Expected Outcome	Potential lead agency and/or opportunities for collaboration and partnership
SDH4	Strengthen pathways for people who are homeless or with recent experience of homelessness to access primary healthcare for identification and management of their ongoing healthcare needs.	*Population health*	*Access*	Improved access to primary care for people experiencing homelessness	NSW specialist homelessness services
SDH4	Work with agencies to strengthen services for people experiencing homelessness to improve access to continuous care for chronic conditions.	*Population health*	*Continuity of care*	Improved health outcomes for people experiencing homelessness and chronic conditions	NSW Specialist homelessness services, WSLHD, Western Sydney Homeless Connect
HL2	Assist organisations to increase health literacy of young people to maintain healthy lifestyles.	*Population health*	*Early intervention and prevention*	Improved health and social outcomes for young people	WSLHD
PHS14	Support service providers to welcome LGBTQIA+ persons within primary health service settings in Western Sydney.	*Population health*	*Appropriate care (including cultural safety)*	Reduced barriers to LGBTQIA+ accessing appropriate care	Rainbow Health Alliance
SDH4	Work with partner agencies to enable and enhance development of early intervention strategies to engage young people at risk of experiencing homelessness, including those experiencing domestic and family violence.	*Population health*	*Early intervention and prevention*	Improved health and social outcomes for young people at risk of experiencing homelessness	Commissioned providers, for example Youth Off the Streets
SDH5	Work with service providers to de-stigmatise service use, improve the mental health wellbeing of veterans and reduce the effects of PTSD, feelings of isolation and suicide rates.	*Population health*	*Appropriate care (including cultural safety)*	Design of initiatives and approaches that provide appropriate health care to meet the unique needs of veterans	Service providers with experience supporting this cohort
PH15	Work with Western Sydney collaborators to increase literacy of the community around fresh food options and encourage healthy and active lifestyles.	*Population health*	*Early intervention and prevention*	An increase in vegetable consumption in children and adults	Western Sydney Diabetes, WSLHD, WSPHN
PH4	Work with area-based health agencies and primary care service providers to reduce smoking rates in Aboriginal people and in suburbs with significantly elevated levels of smoking.	*Population health*	*Early intervention and prevention*	A decrease in smoking rates in Aboriginal and Torres Strait Islander people	WSLHD, Aboriginal and Torres Strait Islander Elders

	Opportunities and priorities				
Needs Number	Priority	Priority area	Priority sub-category	Expected Outcome	Potential lead agency and/or opportunities for collaboration and partnership
PH1	Increase literacy of communities to understand how to achieve healthy diet, active lifestyle and reduce unhealthy behaviours, particularly with identified hard-to-reach communities.	*Population health*	*Early intervention and prevention*	A decrease in potentially preventable hospitalisations	WSLHD, WSPHN
PH1	Work with Western Sydney collaborators to develop holistic preventative health initiatives.	*Population health*	*Early intervention and prevention*	A reduction in preventable chronic conditions in Western Sydney	WSLHD, WSPHN
PH2	Support pathways that enhance diabetes early detection and continuous care in the community.	*Population health*	*Early intervention and prevention*	A more accurate understanding of the prevalence of diabetes	WSLHD, Western Sydney Diabetes
PH17	Enable pathways that increase community literacy about diabetes prevention and management, including early detection, weight reduction, and healthy lifestyles.	*Population health*	*Early intervention and prevention*	A reduction in the BMIs of Western Sydney community members	Western Sydney Diabetes
WF2	Support the development of a workforce strategy that will enable a skilled and sustainable primary care workforce at a local level that meets current and future demands in primary care.	*Population health*	*Workforce*	More secure staff retention in health service providers	All PHNs, universities, DOH, NSW Health, private service providers
WFS6	Implement a stakeholder engagement framework to enhance partnership working between WSPHN and internal and external stakeholders.	*Population health*	*Integrated care*	An increase in co-designed interventions in Western Sydney	All Western Sydney health service providers, community Leaders, WSLHD, consumer and clinical councils
WF1	Engage healthcare services providers to expand the number of patient-centered Medical Homes and Urgent Care Services in line with demand across Western Sydney PHN.	*Population health*	*Continuous care*	Increased general practice attendances and use of after-hours care in Western Sydney	General practices, clinical council, NSW Health
PHS7	Work with NSW Collaborators to enhance Central Intake Line services to ensure effective triage of patients into Urgent Care Services.	*Population health*	*After Hours*	Reduced ED attendances in Western Sydney	PCMH, WSPHN
PHS1	Engage health care providers to expand Care Collective models of care, creating true system change across Western	*Population health*	*Integrated Care*	An increase in community members with chronic	WSLHD, GPs, allied health professionals

	Opportunities and priorities				
Needs Number	Priority	Priority area	Priority sub-category	Expected Outcome	Potential lead agency and/or opportunities for collaboration and partnership
	Sydney e.g. Expanding cardiology in the community practices to meet demand.			disease receiving services closer to home	
PHS7	Work with Western Sydney collaborators to coordinate the development of after-hours services for acute patients with low-acuity conditions to avoid admission to hospital, where it is not required.	*Population health*	*After hours*	Increased availability of after-hours services in Western Sydney	WSPHN, WSLHD,
CDS5	Continue to support Western Sydney Diabetes' secondary prevention and management programs to reduce the number of people developing diabetes and to reduce co-morbidities. Priorities include diabetes detection, building capacity of health care providers, digital solutions for patient self-management and connections with hospital departments.	*Population health*	*Chronic conditions*	A reduction in diabetes-associated hospitalisations	Western Sydney Diabetes, WSLHD
CDS5	Enable pathways that enhance the integration of services and collaboration of health care professionals for diabetes early detection and continuous care management. This could include co-designing pathways for collaboration between dietitians, endocrinologists, general practitioners, and mental health professionals.	*Population health*	System integration	Improved patient pathways for those with diabetes	WSLHD, NSW Health, Western Sydney PHN
PH5	Support primary care health system reform measures that enable GPs to increase screening rates including multi-disciplinary teams and technology support.	*Population health*	System integration	Higher cancer screening rates	PCMH, Western Sydney PHN, Department of Health, NSW Health
PH3	Support pathways that aim to increase the uptake of continuous care when needed in relation to chronic disease management.	*Population health*	Continuous care	Reductions in the rates of ED attendances for those with chronic disease	NSW Health, WSLHD, WSPHN
SDH4	Develop pathways for residents experiencing mental health needs to access timely and culturally safe mental health care services.	*Population health*	Appropriate care (including cultural safety)	Increased access to mental health for CALD community members	NSW DCJ, NSW Health, WSLHD

SECTION 5 – CHECKLIST

Requirement	✓
Provide a brief description of the PHN's needs assessment development process and the key issues discovered.	✓
Outline the process for utilising techniques for service mapping, triangulation, and prioritisation.	✓
Provide specific details on stakeholder consultation processes.	✓
Provide an outline of the mechanisms used for evaluating the needs assessment process.	✓
Provide a summary of the PHN region's health needs.	✓
Provide a summary of the PHN region's service needs.	✓
Summarise the priorities arising from needs assessment analysis and opportunities for how they will be addressed.	✓
Appropriately cite all statistics and claims using the Australian Government Style Manual author-date system.	✓
Include a comprehensive reference list using the Australian Government Style Manual.	✓
Use terminology that is clearly defined and consistent with broader use.	✓
Ensure that development of the needs assessment aligns with information included in the PHN Needs Assessment Policy Guide.	✓

APPENDIX – REFERENCES

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