Central and Eastern Sydney PHN
2018 Needs Assessment

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Abbreviations

ABS	Australian Bureau of Statistics
AHP	Allied health professional
AIHW	Australian Institute of Health and Welfare
AMS	Aboriginal Medical Service
ANSC	Antenatal Shared Care program
ASGS	Australian Statistical Geography Standard
CALD	Culturally and linguistically diverse
CESPHN	Central Eastern Sydney Primary Health Network
CPD	Continuing Professional Development
CTG	Closing the Gap
FACS	Family and Community Services
GP	General Practitioner
IARE	Indigenous Area Region
LGA	Local Government Area
LGBTIQ	Lesbian Gay Bisexual Transgender Intersex and Queer
LHD	Local Health District
NDIS	National Disability Insurance Scheme
NGOs	Non-governmental Organisations
NSW	New South Wales
MBS	Medicare Benefits Schedule
PBS	Pharmaceutical Benefits Scheme
PHN	Primary Health Network
PIP	Practice Incentive Program
QI	Quality improvement
RACF	Residential Aged Care Facility
SA3	Statistical Areas Level 3
SESLHD	South Eastern Sydney Local Health District
SHN	Specialty Health Networks
SLHD	Sydney Local Health District
SVHN	St Vincent's Health Network

Executive summary

This is the fourth update to the Central and Eastern Sydney Primary Health Network (CESPHN) Needs Assessment. The process has re-examined the health needs and service gaps of the region, updating data sources, integrating new feedback from key stakeholders, and analysing outcomes from activities undertaken in the previous 12 months.

The needs assessment includes three parts:

- Chapter 1 provides an overview of the region, its geographical and demographic characteristics, CESPHN's stakeholders and partners, and a high-level summary of health services available in the region
- Chapters 2-10 provide the outcomes of the assessment of health and service needs
- Chapter 11 lists the opportunities, options and priorities identified through the needs assessment.

Methods

This needs assessment considered the health and service needs across the lifespan and for population groups who have poorer health outcomes relative to the general population. The needs assessment also considered locations with higher needs, unique challenges or emerging concerns, and the functioning of the primary care system in terms of accessibility, coordination, integration, and staffing.

Like past years, a mixed method approach was used to capture, analyse and triangulate data to obtain an understanding of the health needs and services gaps for the region. Quantitative data were derived from internal, administrative and census-based sources. One area of advancement in this needs assessment is the greater use of the Australian Statistical Geography Standard (ASGS) Statistical Areas Level 3 (SA3) to identify variations at the sub-regional level.

Qualitative data were analysed from a range of purposeful and incidental engagement activities that occurred during 2018. These activities included regular engagements with our 11 advisory groups and seven member networks, and surveys of our stakeholders (e.g. GP Pulse, MyAged Care and National Disability Insurance Scheme (NDIS)).

Qualitative data collected from key informants were considered and where contextually relevant, included in the synthesis of data. Additionally, progress made since the last needs assessment has been considered, together with emerging literature, policies and plans that have potential to influence future activity to provide contextual information and insights not obvious from quantitative data sources.

Findings

Overview of the region

CESPHN is the second largest of the 31 PHNs across Australia, with a resident population of approximately 1.6 million. The region is characterised by cultural diversity (with more than 40% of the community born outside Australia) and high population growth.

The overall health status of CESPHN residents is higher than the national average – life expectancy is higher, there are fewer deaths among infants and young children, lower rates of self-reported long term conditions, and higher rates of self-reported health as being excellent, very good or good. However, there are considerable disparities in health status among certain populations and locations

particularly areas with lower socioeconomic status and more culturally and linguistically diverse (CALD) communities.

Outcomes of the needs assessment

Risk factors and preventive health measures (such as immunisation coverage and screening) are areas where improvement is required across the CESPHN region as rates are often less than national comparisons. Sexual health continues to be another area of need given the CESPHN region has the highest rates of sexually transmissible infections in the state.

Gestational diabetes is increasing across the CESPHN region. Other measures of child and maternal health (such as low birth weight, childhood development, and antenatal care) point to greater need for Aboriginal and/or Torres Strait Islander women and women born overseas in non-English speaking countries.

The region has a significantly higher proportion of people aged 85+ years in comparison to national rates, and this population is expected to increase considerably over the next decade. Falls, dementia, mental illness and social isolation are all prevalent conditions among older people. Rates of advance care planning completion is poor and stakeholder consultations have noted that patients at end of life stage often want to receive home-based palliative care and GP services.

There are high rates of mental illness in the community and a large population in need of early intervention. It is well known that people with mental illness have poorer physical health compared to the general population and require services that focus on both the body and mind.

The profile of clients accessing alcohol and other drug treatment has changed, with amphetamine use (including methamphetamine) now accounting for the most common reason for accessing treatment. Very few general practitioners (GPs) in the region are active accredited Opioid Treatment Program prescribers and there is low participation of community pharmacies in the program. Stakeholders consultations advised that as few as 1 in 6 people who require treatment can access it.

Most general practices in the CESPHN region are computerised, registered to access the My Health Record System and have secure messaging software. However, secure messaging is limited largely to receiving diagnostic results. More needs to be done in the areas of electronic referrals or transfers and discharge summaries from hospitals and the sharing of data for quality improvement activities. Another need is to maximise the secondary use of data collected from CESPHN's commissioned projects and general practices, and transforming this data into meaningful information for planning, co-designing, commissioning and monitoring.

Just over half of the 679 general practices operating within the CESPHN region are accredited and 359 have registered for the After Hours Practice Incentive Program. There is a similar proportion of female and male GPs (much higher than the national female rate of 40%) and 50% of all GPs are 55 years and over. There are 542 practice nurses and 17 Allied Health Professions with 5,809 individual providers in the region.

Key issues impacting the ability to navigate and coordinate health services in the CESPHN region include an inability to systematically and reliably communicate patient information between health care providers, low patient health literacy, and provider issues with identifying and navigating services most appropriate to an individual's disease profile and individual characteristics.

The CESPHN region has several priority populations who have poorer health relative to the general population, higher needs, unique challenges or emerging concerns. These groups include (but are not limited to) Aboriginal and/or Torres Strait Islander peoples, CALD communities, people living with a disability, people experiencing homelessness, people in contact with the criminal justice

system, people experiencing family and domestic violence, high density dwellers, and residents of the remote Lord Howe and Norfolk islands.

Opportunities, options and priorities

This needs assessment has identified 33 priority areas for action, with a range of opportunities and options for each. The priority areas cover:

- Population health
- Child and maternal health
- Aged care
- Mental health
- Alcohol and other drugs
- Digital health and data
- Workforce
- Access, coordination and integration of care
- Priority groups.

Limitations

Over the last three years the amount of data available to the PHN has increased. However, some data is still only available at the state/territory or national level or is becoming dated and may not reflect recent changes to health status. There have also been changes to definitions and area boundaries that inhibits the ability to compare trends over time. The needs identification process will increasingly draw on data derived from the outcomes and outputs of services initiated and commissioned by CESPHN and clinical data derived from general practices that will address some of the current data limitations.

The sheer number of services and providers across CESPHN makes mapping services to population or priority areas a significant and ongoing task. The PHN has recently acquired a new Customer Relationship Management (CRM) system that will be used to store all our stakeholder information, including our interactions with them and their engagement level. This will allow service mapping in the future.

CESPHN is also working on improving its methods for capturing and analysing qualitative data to provide context, analytical rigour and translation.

1. CESPHN region

Key points

- CESPHN is the second largest of the 31 PHNs across Australia by population, with a resident population of around 1.6 million and a non-resident population of approximately 0.5 million who enter the region every day for work, study or travel.
- Most areas have densities above 4,000 persons per square kilometre and the region has some of the fastest growth areas – for example, Waterloo-Beaconsfield and Concord West-North Strathfield had a 100% growth rate from 2006 to 2016.
- Thirteen per cent of the resident population are aged 65 years and over and there is a significantly higher proportion of people aged 85+ (6.5%) living within the region compared to national rates, with an estimated 20% increase in this age group by 2026.
- The total average level of advantage is above that of the Australian average, however there is a gradient from east to west, with the western parts of the region relatively disadvantaged by national standards and the eastern areas relatively advantaged.
- The region is characterised by cultural diversity. There are 13,489 Aboriginal and/or Torres Strait Islander peoples living in the region, with the largest numbers residing in the Inner Sydney City, followed by Eastern Suburbs South. Forty per cent of residents were born overseas, 38% speak a language other than English at home and 6.9% do not speak English well or at all.
- Canterbury, Hurstville, Strathfield-Burwood-Ashfield and Kogarah-Rockdale are the areas with the highest proportion of residents born overseas and who speak a language other than English at home.
- The top five common spoken languages other than English in the region are Mandarin, Cantonese, Greek, Arabic and Italian.
- Four per cent of the population require assistance with core activities, and 11% of the population provide unpaid assistance to a person with a disability.
- There is a high number of people experiencing homelessness – 13,180 people compared to the NSW total of 37,692 people. The highest numbers of people experiencing homelessness were located in Sydney Inner City (4,979), followed by Strathfield-Burwood-Ashfield (2,070) and Canterbury (1,295).
- The region also has a high concentration of same sex couples.
- The region includes the remote islands of Norfolk (1,748 persons) and Lord Howe (416 persons).
- Approximately 19% of all people exiting custodial settings in NSW reside in the region.
- There are numerous services based in the region. It is covered by four NSW Local Health authorities, around 2,300 GPs, more than 5,000 allied health professionals, 500 practice nurses and over 160 residential aged care facilities (RACFs).

1.1. Geography and demographics

CESPHN covers an area of 667 square kilometres in Sydney and is also responsible for the remote Norfolk and Lord Howe islands. It is the second largest of the 31 PHNs across Australia by population, with a resident population of around 1.6 million covering 7 SA4s and 15 SA3s. CESPHN also has a large non-resident population with over 500,000 people entering the region each day, primarily to work, but also to visit or study and inevitably making use of a range of health services.

The boundaries of CESPHN align with those of South Eastern Sydney Local Health District (SESLHD) and Sydney Local Health District (SLHD). The region encompasses central Sydney, the eastern suburbs and inner west, and extends south beyond Botany Bay to include Sutherland. There is no natural separation between Strathfield in CESPHN and Auburn in Western Sydney PHN, and the recently merged Local Government Area of Canterbury-Bankstown is shared with South Western Sydney PHN.

Australian Bureau of Statistics (ABS) data reports that there are 1,609,904 residents in the CESPHN region in 2017, with the highest concentration of the population living in the Sydney Inner City sub-region (14.9%, 239,553), followed by the Strathfield-Burwood-Ashfield sub-region (10.1%, 162,872) and Eastern Suburbs – South (9.4%, 151,986).[(1)]

Table 1: CESPHN estimated resident population by SA3 and SA4, 2017

Statistical Level Area	Total persons	% of region
Marrickville - Sydenham - Petersham	58,342	3.6%
Botany	50,800	3.2%
Sydney Inner City	239,553	14.9%
Sydney - City and Inner South	**348,695**	**21.7%**
Eastern Suburbs - North	137,497	8.5%
Eastern Suburbs - South	151,986	9.4%
Sydney - Eastern Suburbs	**289,483**	**18.0%**
Canterbury	143,894	8.9%
Hurstville	135,105	8.4%
Kogarah - Rockdale	149,641	9.3%
Sydney - Inner South West	**428,640**	**26.6%**
Canada Bay	91,207	5.7%
Leichhardt	59,848	3.7%
Strathfield - Burwood - Ashfield	162,872	10.1%
Sydney - Inner West	**313,927**	**19.5%**
Cronulla - Miranda - Caringbah	115,465	7.2%
Sutherland - Menai - Heathcote	111,530	6.9%
Sydney - Sutherland	**226,995**	**14.1%**
Norfolk Island	1,748	0.1%
Lord Howe Island	416	0.0%
Total	**1,609,904**	**100%**

While the overall population density for Sydney is low in comparison to other major global cities of comparable size at around 2,800 persons per square kilometre, the majority of suburbs in the CESPHN region have densities above 4,000 which rise to over 10,000 in the inner city areas surrounding the Central Business District (CBD) – Pyrmont, Ultimo, Surry Hills, Redfern, Waterloo, Darlinghurst and Potts Point. CESPHN also includes a number of SA2 regions with the largest and fastest growth between 2006 and 2016. This growth is fuelled by extensive precinct development in

places such as Green Square, Mascot and Pyrmont and by construction of high-rise residential dwellings across the CESPHN region.

Age and gender

Comparison of 5-year age groups shows the highest proportion of the CESPHN population are aged 25-29 years (11%). Adults aged 25-64 years constitute 57% of the CESPHN region, slightly higher than the national average, while 13% of the region are aged 65 years and over. There is a significantly higher proportion of people aged 85+ (6.5%) living within the region in comparison to national rates, with an estimated 20% population increase in this age group by 2026.

There are 756,200 males (50.6%) and 737,931 females (49.3%) in the region, consistent with national rates.[(2)]

Social economic circumstances

The total average level of advantage in CESPHN is above that of the Australian average as measured by the ABS Socioeconomic Indices of Advantage. Within CESPHN there is a gradient from east to west, with the western parts of the region relatively disadvantaged by national standards and the eastern areas relatively advantaged. However, this is not an even distribution: there are locations of considerable disadvantage within otherwise advantaged areas.

1.2. Population groups

Aboriginal and/or Torres Strait Islander peoples

The number of CESPHN residents that identified as Aboriginal and/or Torres Strait Islander was 13,489 (0.8%). The distribution of Aboriginal and/or Torres Strait Islander residents varies by sub-region with the highest proportion residing in the Inner Sydney City (2,489 persons), followed by Eastern Suburbs South (2,148 persons) and Sutherland-Menai-Heathcote (1,239 persons).[(2)]

The Aboriginal and/or Torres Strait Islander population has a considerably younger age profile compared to the non-Aboriginal and/or Torres Strait Islander population. Thirty-four percent of the Aboriginal and/or Torres Strait Islander population residing in the CESPHN region were aged 0-19 years.

Culturally and linguistically diverse communities

There is significant cultural diversity across the CESPHN region, including diversity in language spoken and country of birth. Forty per cent of residents were born overseas, 38% speak a language other than English at home and 6.9% do not speak English well or at all.

The areas with the highest proportions of people born overseas are Canterbury (50%), Strathfield-Burwood-Ashfield (50%), Sydney Inner City (47%), Kogarah-Rockdale (47%), and Hurstville (45%), compared to the NSW average of 31%.

The areas with the highest proportions of people who do not speak English well or not at all are Canterbury (15%), Hurstville (12%), Strathfield-Burwood-Ashfield (11%) and Kogarah-Rockdale (9%), compared to the NSW average of 4.5%.[(2)]

The top five common spoken languages other than English and their corresponding areas of high concentration of speakers are:

- Mandarin: Sydney (18%), Canterbury (16%) and Randwick (9%) Local Government Areas (LGAs)

- Cantonese: Canterbury (25%), Sydney (11%) and Rockdale (8%) LGAs
- Greek: Canterbury (34%), Rockdale (17%) and Inner West (10%) LGAs
- Arabic: Canterbury (76%), Rockdale (11%) and Strathfield (3%) LGAs
- Italian: Canada Bay (38%), Inner West (31%) and Sutherland Shire (11%) LGAs. [2]

Asylum seekers and refugees

The CESPHN region also has a significant population of asylum seekers and refugees. In 2018, approximately 230 people arrived and settled in the region on a humanitarian visa.[3] In addition, there were 1,238 people (as at March 2018) who came seeking asylum by boat and resided in the CESPHN region. Of these 1,238 people, 820 resided in Lakemba.[4]

Asylum seekers and refugees can be on a Permanent Protection Visa, a Bridging Visa E, or awaiting a Bridging Visa E while their Protection visa application is being processed.[5] Each visa type confers different entitlements and eligibilities for various services, which has implications for access to health services and the health status of this population group.

People living with a disability

The prevalence of disability in Australia uses the WHO international classifications for disability and data from the ABS on Disability, Ageing and Carers.[6, 7] In 2015, data indicated there were 18.3% (4,290,100) of Australians with a disability, and a further 16% (3,704,100) of people with specific limitation and/or restrictions.[7]

Within the CESPHN region, 4% of the population require assistance with core activities, and 11% of the population provided unpaid assistance to a person with a disability, with the highest numbers of carers residing in SA3s of Strathfield-Burwood-Ashfield, Canterbury, and Hurstville.[8]

People experiencing homelessness or at risk of homelessness

The total number of people who were experiencing homelessness in the CESPHN region was 13,180 compared to the NSW total of 37,692. The highest numbers of people experiencing homelessness by SA3 were located in Sydney Inner City (4,979), followed by Strathfield-Burwood-Ashfield (2,070) and Canterbury (1,295).[2]

CESPHN also has a higher than average number of people living in boarding houses – a total of 4,476 persons which is 67% of the total number of people living in boarding houses in NSW. Within CESPHN, the majority of boarding house residents are located in Sydney Inner City (37%), Strathfield-Burwood-Ashfield (17%) and Marrickville-Sydenham-Petersham (15%).[2]

Lesbian, Gay, Bisexual, Transgender, Intersex and Queer Communities

Data from the 2016 Census identifies that the CESPHN region has a high concentration of same sex couples residing in the region. According to the 2014 General Social Survey, experience of discrimination was higher for people who were gay or lesbian (38%) or other sexual orientations (31%), compared with people who identified as heterosexual (18%). Gay or lesbian people (34%) and people with other sexual orientations (21%) were also more likely to report at least one past experience of homelessness compared with heterosexual people (13%) and to self-report a mental health condition (29% and 38%, respectively) compared with people who were heterosexual (18%).[9]

People in contact with the criminal justice system

NSW has the largest prisoner population with 13,624 persons in custody in 2018.[10] Prisoners are predominately male (92%), young (median age 35 years), with an over representation of Aboriginal and/or Torres Strait peoples (28%).[11]

The prisoner population is fluid with people constantly entering and being released from the system. This constant movement means that the health issues of people in custody become the health issues of the community. The CESPHN region becomes the place of residence for approximately 19% of all people exiting custodial settings in NSW.

Rural and remote populations

CESPHN is responsible for the remote Norfolk and Lord Howe islands. Norfolk Island has a population of 1,748 people with a slightly higher proportion of females (53.2%) than males (46.8%). The median age of people on Norfolk Island is 49 years. Almost one-quarter (24%) of the population is aged 65 years and over, which is the highest percentage in the region.

Lord Howe Island has a population of 416 people, although there are significant fluctuations in the population due to the tourism industry. The median age of people on Lord Howe is 44 years and there is an even distribution of males to females.

1.3. Partnerships and stakeholders

Working with partners in the region is at the core of CESPHN's activities. Our partnerships strengthen our capacity for successful service delivery, allows the sharing of expertise and innovation, and enhances service integration. Through collaborations with our partnership committee, LHDs, Specialty Health Networks (SHNs), universities, local non-governmental organisations (NGOs), government departments, and local councils, we can coordinate services more effectively and efficiently and improve health outcomes for those in our region.

CESPHN continues to work and undertake consultations with its stakeholders. These stakeholders include CESPHN's clinical and community councils, members of our governing member networks, primary health professionals, project advisory groups members, and community groups. Through these engagements we have access to expertise and sector knowledge, and it allows for collaborative planning of future activities based on local health and service needs.

CESPHN's location places the PHN in the advantageous position of having multiple and diverse services based in the region. These include but are not limited to:

- Four NSW Local Health authorities – SLHD, SESLHD, St Vincent's Health Network (SVHN) and the Sydney Children's Hospitals Network (SCHN).
- Along with their acute care services, the two LHDs and St Vincent's have multiple facilities, including services for alcohol and other drugs (AOD) treatment, screening, imaging and pathology, and services for women's, youth, sexual and mental health. They are major employers of allied health and nursing professionals, scientific and technical staff, administrators and volunteer consumer representatives.
- 18 public and 24 private hospitals, and the region is home to the major tertiary referral hospitals of Royal Prince Alfred, Prince of Wales and St Vincent's Hospitals. These provide a range of acute, sub-acute and ambulatory care services and are distributed across the region with the highest concentrations in the inner parts of the region and the eastern suburbs.

- Approximately 2,300 GPs working across the full range of settings, from large corporate to solo practices, registering over 7.5 million claims for standard MBS consultations annually. There are more than 5,000 allied health professionals and more than 500 practice nurses, as well as over 160 RACFs. The region also has a very large number of specialists across all disciplines.
- The region also includes the University of Sydney, University of NSW, University of Technology Sydney and Notre Dame and due to its centrality, it is also the location for many of the main offices of peak bodies, research organisations, NGOs and other entities relevant to primary care.

2. Population health

Key points

- The overall health status of CESPHN residents is better than the national average – life expectancy is higher, there are fewer deaths among infants and young children, lower rates of self-reported long term conditions and higher rates of self-reported health as being excellent, very good or good. However, areas associated with lower socioeconomic status and more CALD communities often had the highest rates of chronic disease and reported higher rates of fair or poor health.
- Chronic kidney disease incidence in CESPHN was one of the highest in the nation and was twice as high in Aboriginal and/or Torres Strait Islander peoples than non-Aboriginal and/or Torres Strait Islander peoples.
- Incidence of new cancers (all types combined) was approximately the national rate. Only the incidence of prostate cancer (186 per 100,000 males) was above the national rate (173 per 100,000 males).
- The top three chronic conditions resulting in preventable hospitalisations were congestive heart failure, COPD, and convulsions and epilepsy.
- The three highest causes of premature mortality were cancer, circulatory system diseases and external causes (intentional and unintentional).
- 35.7% of adults in the CESPHN region are overweight and 21.2% are obese. Males are more likely to be overweight (43.8%) than females (27.7%), while obesity rates were similar in both genders.
- The prevalence of combined overweight and obesity has significantly increased among adolescents from 22% in 2010 to 27% in 2015.
- Fully immunised rates for 5 year old children are slightly lower in the CESPHN region than nationally. The 24-27 months age group had the lowest rates out of the three age groups – nine of the 13 SA3s in CESPHN are below the state and national coverage rate.
- CESPHN is currently below the national average in participation rates for screening in breast cancer (50.3%), cervical cancer (55.3%) and bowel cancer (34.8%). There is also low uptake of preventive health checks for those aged 45-49 years and the 715 preventative checks for Aboriginal and/or Torres Strait Islander peoples (8.8%).
- The CESPHN region continues to have the highest rates of sexually transmissible infections (STIs) in the state, with all STIs increasing across the region except for HIV.

2.1. Health status

Life expectancy and infant mortality

During 2014-2016, life expectancy at birth for those living in the CESPHN region was higher (84.0 years) than the national average (82.5 years). Females in the CESPHN region had a higher life expectancy (86.0 years) than males (82.2 years).[12]

The number of deaths among infants and young children aged less than 5 years was also lower in the CESPHN region (3.1 per 1,000 live births) compared to the national average (4.1 per 1,000 live births) during 2013-2015.[12]

Self-reported health status

In 2016-17, long-term health conditions (i.e. those lasting or likely to last six months or more) were reported by 41.3% of CESPHN residents compared to 49.9% nationally. Furthermore, a higher percentage of people living in the CESPHN region (87.4%) reported excellent, very good or good health compared to the national average (82.4%).[12]

While the CESPHN region as a whole is doing well in measures of health status, this is not uniform across all populations. Modelled estimates of self-reported health status by LGA from 2014-15 shows:

- Canterbury (17.0%), Botany (16.4%) and Rockdale (15.2%) are LGAs with the highest percentage of people reporting fair or poor health.
- Woollahra (6.8%), Waverly (9.5%) and Sutherland Shire (11.0%) are LGAs with the lowest percentage of people reporting fair or poor health.

Psychological distress

In 2014-15, the estimated number of people aged 18 years and over with high, or very high psychological distress (based on Kessler 10 Scale) in CESPHN was 9.7% (117,039 persons), compared to 11.0% for NSW. The three regions with the highest incidence of psychological distress were Canterbury (12.6%), Botany (11.6%) and Marrickville-Sydenham-Petersham (11.2%).

Prevalence/ incidence of chronic conditions

Prevalence and patterns of disease in the CESPHN region varied depending on disease type and location. Areas associated with lower socioeconomic status and CALD backgrounds often had the highest rates of chronic disease.

According to 2017 New South Wales HealthStats published by NSW Government, 125,572 persons currently are living with diabetes or high blood glucose in the CESPHN region (7.8% of population).

2011-12 prevalence estimates of other chronic conditions were[13]:

- 26.3% (369,517 persons) for musculoskeletal system diseases, with Sutherland Shire (28.2%), Botany (27.4%) and Canada Bay (27.2%) being LGAs with the highest prevalence
- 25.8% (371,400 persons) for respiratory system diseases, with Sutherland Shire (30.0%), Botany (27.8%) and Georges River (27.2) being LGAs with the highest prevalence
- 17.4% (228,720 persons) for circulatory system diseases, with City of Sydney (18.7%), Botany Bay (18.5%) and Canterbury-Bankstown (18.4%) being LGAs with the highest prevalence

- 13.8% (185,256 persons) for arthritis, with Canterbury-Bankstown (15.2%), Botany Bay (14.7%), Rockdale (14.3%) and Sutherland Shire (14.3%) being LGAs with the highest prevalence
- 7.7% (109,326 persons) for asthma, with Sutherland Shire (10.0%) and Inner West (7.8%) being LGAs with the highest prevalence
- 2.4% (32,168 persons) for chronic obstructive pulmonary disease (COPD), with Sutherland Shire (2.6%), Botany (2.5%) and Canterbury-Bankstown (2.5%) being LGAs with the highest prevalence.

Chronic kidney disease (CKD) incidence in CESPHN was one of the highest in the nation at 14.2-17.7 per 100,000 people, compared to the national incidence of 10.0 per 100,000 people. Tempe, Rozelle, Sutherland, Heathcote, Kogarah, and Riverwood were identified as having higher incidence rates (Biomedical Signs - Stages 1-5). The estimated incidence of CKD in Aboriginal and/or Torres Strait Islander peoples was twice as high than non-Aboriginal and/or Torres Strait Islander peoples.[14]

Incidence of new cancers (all types combined and age-standardised) was 495 per 100,000 for CESPHN between 2009-13, which was just below the national rate of 497 per 100,000. Incidence of specific cancer type varied, with most being either below or at the national level. The exception was for prostate cancer (186 per 100,000 males), which was above the national rate (173 per 100,000 males).[12]

Potentially preventable hospitalisations

In 2015-16, the rate for potentially preventable hospitalisation (PPH) for the CESPHN region was 2,018 per 100,000 people compared to the national rate of 2,643 per 100,000 people. The top three chronic conditions resulting in preventable hospitalisations were congestive heart failure, COPD and convulsions and epilepsy. The top three reasons for preventable hospitalisations for acute conditions were cellulitis, urinary tract infections and dental conditions.

Premature mortality

Between 2011-2015 the three highest causes of premature mortality in persons aged 0 to 74 in the CESPHN region were from[15]:

- Cancer (88.6 deaths per 100,000 people). Lung cancer had the highest mortality at 17.9 deaths per 100,000 people. The LGAs that had the highest mortality rates for all cancers were Botany, Sydney and Canterbury. The LGAs with the highest mortality rates for lung cancer were Botany, Burwood and Canterbury.
- Circulatory system diseases (37.5 deaths per 100,000 people). Ischaemic heart disease had the highest mortality at 19.1 per 100,000. The LGAs with the highest mortality rates from circulatory system diseases and ischaemic heart disease were Botany, Sydney and Inner west.
- External causes (21.3 deaths per 100,000 people). External causes of death can be categorised as both unintentional and intentional. They include, but are not limited to drowning, falls, transport accidents (largest unintentional cause of death), homicide, and suicide (largest intentional cause of death).

2.2. Risk factors

Overweight and obesity

It is estimated that the rate of people over 18 years in CESPHN who are overweight is 42.3% and 16.1% are obese.[12] The male population was more likely to be overweight (43.8%) than the female population (27.7%), while obesity rates were similar in both genders.[13]

Overweight rates were similar across SA3s and ranged from 34.3% in Sydney Inner City to 37.3% in Sutherland-Menai-Heathcote. Obesity rates varied considerably across the SA3s:

- Sutherland-Menai-Heathcote, Botany and Canterbury had the had the highest rates of adult obesity.
- Eastern Suburbs – North, Sydney Inner City and Leichhardt had the lowest rates of adult obesity.[13]

Overweight and obesity in children and adolescents has been linked with an onset of numerous chronic and complex medical conditions and is associated with increased risk of obesity as an adult. Between 2014-15, the estimated rate of children (2-17 years) in CESPHN considered overweight was 16.8%, with more male children being overweight than female. Rates for obesity in this cohort were estimated as 6.7%, and conversely indicated a higher number of female children as obese.[13]

The NSW School Physical Activity and Nutrition Survey (SPANs) report indicated that while the overweight and obesity rates have remained steady for primary schoolchildren since 2010, the prevalence of combined overweight and obesity has significantly increased among adolescents from 22% in 2010 to 27% in 2015.[16]

- Canterbury, Botany and Marrickville-Sydenham-Petersham SA3s had the highest child and youth rates for overweight and are all higher than the NSW rate.
- Canterbury, Botany and Marrickville-Sydenham-Petersham SA3s had the highest child and youth rates for obesity. Canterbury had a higher obesity rate than the NSW rate.[13]

Children from low socioeconomic groups and single-parent households were more likely to be overweight or obese. Other risk factors include inadequate amount of fruit and vegetable intake and insufficient physical activity. It is estimated that only 67.3% of the CESPHN child and youth population are consuming an adequate fruit intake.[13] Furthermore, only 23% of primary school children and 23% of secondary school adolescents met recommended daily physical activity in NSW. Girls were generally less active than boys. Cultural background appeared to be a factor affecting physical activity level. Primary school children from Middle Eastern or Asian cultural background and secondary school adolescents from Asian cultural background were the least active groups.[16]

Physical activity

It is estimated that 42.4% (740,657 people) of the CESPHN population over the age of 18 years undertook no or low exercise in the previous week compared to 56.0% nationally.[12] Canterbury (72.7%), Botany (69.2%) and Kogarah-Rockdale (68.9%) are SA3 areas with the highest proportion of the population with insufficient physical activity.[13]

Nutrition

It is estimated that 50.6% (602,835 people) of the CESPHN population over 18 years of age consumed adequate fruit compared to 49.2% for NSW. The SA3s with the lowest intake of adequate fruit are Sydney Inner City, Canterbury and Botany.It is estimated that 50.6% (602,835) of CESPHN

population over 18 years of age consumed adequate fruit compared to 49.2% for NSW.[12] The SA3s with the lowest intake of adequate fruit are Sydney Inner City, Canterbury and Botany.[13]

Smoking

Rates for smoking varied between males (14.4%) and females (9.5%) for the CESPHN region. The three SA3s with the highest incidence of smoking were: Canterbury, Cronulla-Miranda-Caringbah and Botany.[13]

2.3. Preventive health

Immunisation

Childhood coverage

As at September 2018, fully immunised rates for 5 year old children in CESPHN region was 92.7%[17], which is slightly lower than the national rate of 94.6%.[18] The Eastern Suburbs-North SA3 had the lowest fully immunised rates for 5 year old at 88.4%, followed by Sydney Inner City SA3 at 89.2%. The Eastern Suburbs-North SA3 had the lowest fully immunised rates for 5 year old at 85.2%, followed by Sydney Inner City SA3 at 87.9% and Leichhardt SA3 at 89.6%. There are a multitude of reasons for the lower immunisation rates in these SA3s, including lack of follow-up with GP motivated by reduction in welfare payment, transient populations and transmission errors from practice software to the Australian Immunisation Register (AIR). CESPHN practice support staff work with practice staff to educate on how to overcome these administrative errors.

The 24-27 months age group had the lowest immunisation rates out of the three age groups in all locations. This is a common trend across the state due to recent changes to the NSW Immunisation schedule. Canterbury and Eastern Suburbs-North have the lowest coverage rates respectively (86.41% and 86.81%). Of the 13 SA3s in CESPHN, ten are below the state coverage rate of 90.1% and nine are below the national coverage rate of 90.6%.

HPV vaccine coverage

Fully immunised rates in 2015-16 for HPV for both boys and girls in the CESPHN region (76.7% and 85.6% respectively) are higher than the national rates (74.1% and 80.1% respectively).[12]

Adult vaccines

Vaccinations for shingles was introduced into the National Immunisation Program (NIP) in 2016 and is available free of cost for people aged 70 years and over. Pneumococcal and influenza vaccinations are also available under the NIP for people aged 65 years and over. At this stage there is no available data on the coverage or overdue rates. General practices can identify active patients eligible for these vaccinations from their patient records.

Pregnant women are also eligible for free influenza and pertussis vaccinations under the NIP. However anecdotal evidence suggests that because some pregnant women are less likely to see their GP in place of visiting their obstetrician, there are less opportunities to be provided those vaccinations.

Vaccine storage cold chain management

Vaccines must be kept in fridges between 2°C and 8°C to remain effective – temperature breaches due to improper protocols for transporting vaccines, power outages, and/or human errors can render vaccinations ineffective. General practices with a vaccine account with the NSW Ministry of

Health must own a data logger, have it installed in their fridge, record temperatures twice daily, and download the data weekly to ensure fridge temperatures do not impact the quality of stored vaccines.[19]

Internal databases are currently being updated on practices that have a data logger through ongoing general practice engagement, however it must be noted that not all practices in the CESPHN region engage with the PHN. Practice visits to resolve cold chain breaches is a common reason for visits from CESPHN immunisation program support staff.

Screening

In Australia, there are three population-based cancer screening programs: breast, cervical and bowel. CESPHN is currently below the national average in participation rates for screening in breast cancer (50.3%), cervical cancer (55.3%) and bowel cancer (34.8%).[12]

There is variation in screening rates depending on population groups, with notable differences in:

- Aboriginal and/or Torres Strait Islander peoples
- CALD groups
- persons with disabilities, and
- those from backgrounds of socioeconomic disadvantage.

For instance, during 2016-17, the average breast screening rates in CESPHN for Aboriginal and/or Torres Strait Islander peoples was 32.8% and 45.4% for CALD populations. The CESPHN average was 51.2%.[20] LGAs with the lowest rates were:

- Cervical screening: Burwood, Strathfield, Canterbury
- Bowel screening: Woollahra, Canterbury, Waverly
- Breast screening for Aboriginal and/or Torres Strait Islander peoples: Kogarah, Sydney and Leichhardt
- Breast screening for CALD group: Waverley, Marrickville and Woollahra.

In addition to low screening rates, the number of 715 preventative checks for Aboriginal and/or Torres Strait Islander peoples were low—with an 8.8% utilisation rate in CESPHN. There was also low usage of the 45-49 year old preventative health check in the region. Both checks are potential checkpoints for the early detection and prevention of cancer.[21]

Barriers for the screening of Aboriginal and/or Torres Strait Islander peoples are plentiful and some include: logistical difficulties, lack of trust in mainstream health services based on personal or collective experiences, cultural misunderstandings and experiences of discrimination.[22] Differences in screening rates for CALD groups can be due to lack of health literacy and cultural barriers. CESPHN conducted evaluation activities and performed 16 qualitative interviews in 2017, where GPs flagged lack of health literacy in some CALD populations to be a real barrier in encouraging participation. Cancer screening in those with disabilities is also problematic. For example, a study on breast cancer screening in Australia, noted that women with disabilities were less likely to uptake screening services due to previous negative experiences.[23]

2.4. Sexual Health

CESPHN continues to have the highest rates of STIs in the state,[24] with all STIs increasing across the region with the exception of HIV.[25] The areas within the CESPHN region with the highest STI notification rates tend to be in inner city areas where there is also a higher number of general practices skilled in sexual health, and a higher density of sexual health clinics, therefore a higher detection rate. Whilst there are general notification trends across the region and across STIs, there are variations in notification trends for different cohorts, which are detailed under each STI below.

Hepatitis B

The prevalence of hepatitis B in the CESPHN region is the third highest in Australia. The burden of chronic hepatitis B (CHB) is highest in Hurstville (2.13%), Strathfield Burwood-Ashfield (1.94%), Canterbury (1.88%), Sydney Inner City (1.78%), Kogarah-Rockdale (1.61%), and Botany (1.64%). The national average is 0.98%. The highest absolute numbers of people living with CHB are in Sydney Inner City (3,903), then Strathfield Burwood-Ashfield (3,079) followed by Hurstville (2,848). Of these, Sydney Inner City has the lowest care uptake at 13.4%.[26]

Cohorts more likely to have hepatitis B in this region are people from culturally and linguistically diverse backgrounds – particularly those born in countries with moderate to high rates. They remain the major priority group, along with Aboriginal and/or Torres Strait Islander peoples and people who inject drugs. Cohorts at increased risk of hepatitis B infection are household and sexual contacts of people living with hepatitis B, men who have sex with men, sex workers, and people in or recently in custodial settings.

Primary health care professionals need to play a role in ensuring people diagnosed with hepatitis B are supported into a pathway of care linked with specialist services—this includes effective patient education, follow-up, and contact tracing.[26] Testing and vaccination of contacts is the major need in this area, and involves assessment of viral load and disease phase, as well as surveillance for liver cancer.[26]

Hepatitis C

CESPHN is one of the only two metropolitan PHNs with a prevalence of hepatitis C above the national average. The region also had the highest estimated number of people living with chronic hepatitis C (CHC) of any PHN in Australia.[27]

The burden of CHC is highest in Sydney Inner City (2.72%), Strathfield Burwood-Ashfield (1.48%), Leichhardt (1.34%) and Eastern Suburbs South (1.20%). The national average is 0.94%. The highest absolute numbers of people living with CHC are in Sydney Inner City (5,961), then Eastern Suburbs South (1,897) followed by Strathfield Burwood-Ashfield (1.196). Of these, Sydney Inner City has the lowest care uptake at 17.7%.

While people with a history of injecting drug use (and those at risk) continue to be a priority population, migrants from high-prevalence regions (Egypt, Pakistan, the Mediterranean and Eastern Europe, Africa and Southern Asia) represent a population that is currently under-served with respect to model of care for Hepatitis C treatment uptake.[28] General practice organisations, Aboriginal Community Controlled Health Organisations, drug and alcohol services, mental health services, and Local Health Districts are all listed as partners for strengthening the health system focus on hepatitis C management.[29]

Antimicrobial resistance

Antimicrobial resistance is an emerging and urgent issue to address for STIs. For gonorrhoea there is only one available effective antibiotic for which resistance is rising and there are no other suitable antibiotics.

Multi-drug resistant gonorrhoea is increasing in some countries, particularly Southeast Asian countries. Given that the CESPHN region is a hub for workers, travellers and overseas students, the communicable nature of STIs warrants activities that target non-CESPHN residents.[30]

Chlamydia

CESPHN continues to have the highest numbers of notifications for the state, making up 57% of the entire notifications for NSW (10,421 notifications). In 2017, SESLHD had the third largest increase in the state for Chlamydia in males by notification at 23% from 2016.[24] Across the whole region Chlamydia notifications (male and female) have been steadily increasing since 2012. [31, 32]

- In 2017, Sydney (4358) Marrickville (734), Randwick (796), Waverley (778) and Sutherland Shire (565) LGAs had the highest numbers of notifications for the region.
- In SLHD in 2017, the average annual notification rate for SLHD was 2.0 times the rate for NSW (26) at 4,315 notifications, while SESLHD had even higher rates than SLHD at 6,106 notifications (19% increase from 2016).[31]

Gonorrhoea

Rates for gonorrhoea in CESPHN are the highest in NSW, making up 60% of all the notifications in the state (at 6,166 notifications). In 2017, SESLHD had the third largest notification increase in the state for males at 27%; and across the whole region, gonorrhoea notifications (male and female) have been steadily increasing since 2012.[24] In SLHD, gonorrhoea notification rates were three times higher than the NSW notification rate at 2,275 notifications, while SESLHD had even higher numbers at 2,810 notifications (36% increase from 2016).[31, 32]

- In 2017, Sydney (2,738) Marrickville (414), Randwick (254), Rockdale (206) and Waverley (200) LGAs had the highest numbers of notifications for the region.
- In SESLHD, 89% are male, mean age 35 years, 72% are in the 20-39 year age group
- In SLHD, males continued to have higher notification rates (9-10 times higher) than females. Enhanced surveillance data collected during 2014 indicated that men-who-have-sex-with-men (MSM) were the highest-risk group for gonorrhoea in SLHD.

Syphilis

In 2017, rates for infectious syphilis in CESPHN were the highest in NSW, making up 68% of all the notifications in the state (at 748 notifications). The syphilis notification rates in SESLHD and SLHD were 46.9 and 46.7 notifications per 100,000 population, respectively, compared to 13.9 notifications per 100,000 population for NSW. SESLHD and SLHD also had the third and fourth largest increase in the state by notification at 26% and 25% respectively. [24]

- In SLHD, enhanced surveillance for syphilis reveals that 81% of infectious syphilis notifications are in MSM.[31]
- In 2017, Sydney and Marrickville LGAs had the highest numbers of notifications for the region.

Hepatitis A

From August to December 2017, an outbreak of hepatitis A amongst MSM in NSW affected 37 people. Since April 2018, an increase in hepatitis A cases reporting MSM sexual contact has again been reported.

HIV

In 2017, rates for human immunodeficiency virus (HIV) notification in CESPHN were the highest in NSW, making up 50% of all the notifications in the state. The number of new diagnoses among overseas born MSM was 13% higher in 2017 compared to the previous six-year average.[33]

Sixty-seven people were diagnosed with HIV in 2017 following heterosexual exposure. This is 29% higher than the average number of heterosexual notifications for the previous six years. The increase occurred mainly in Australian born people who had likely acquired HIV outside Australia.

The decline in early stage HIV infections among Australian born MSM demonstrates a decrease in HIV transmission in this group, but this has not been seen in overseas born MSM or heterosexual people. Of 313 NSW residents notified with newly diagnosed HIV infection in 2017:

- 34% were diagnosed by GPs not accredited to prescribe antiretroviral therapy
- 7% were diagnosed by GPs with S100 prescriber status (HIV specialised and accredited to prescribe antiretroviral therapy.

S100 prescribing for HIV, HBV, and PrEP (S85)

CESPHN currently has 42 accredited S100 hepatitis B virus (HBV) prescribers and 106 accredited HIV S100 prescribers. In a 2018 survey of 181 GPs in the CESPHN region, only 4% had completed S100 HIV prescriber training. Fifty-eight per cent said they would manage a newly diagnosed patent with HIV, if they were supported appropriately – this may be a significant opportunity for increasing GP HIV management capacity. Twenty-four per cent were willing but see this as “too complicated”.

Recent data indicates that HIV diagnosis is at its lowest in the last five years, this demonstrates a need to ensure GPs who have completed the S100 prescriber course feel confident in management of HIV, and that HIV patients feel comfortable and supported by their GPs. There is still a strong need for ongoing education, especially in encouraging more GPs to participate in actively providing PrEP to patients at-risk of HIV.

LGBTIQ access to general practice

To improve access for people identifying as Lesbian, Gay, Bisexual, Transgender, Intersex and Queer (LBGTIQ), CESPHN is working with local general practices wishing to be labelled ‘Gay Friendly’. A total of 100 GPs in SESLHD and 80 GPs in SLHD have indicated a ‘Gay Friendly’ status. These GPs have participated in Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM) online learning, disseminate safe sex resources within their practice and have an awareness of testing guidelines for syphilis, gonorrhoea and HIV.

3. Child and maternal health

Key points

- Percentage of low-birthweight babies is 4.4%, compared to 5% nationally. However, Aboriginal and/or Torres Strait Islander women in CESPHN have almost double the rate of low-birthweight babies at 8.2%.
- Four SA3s had higher rates of children with one or more developmental vulnerability domains compared to the NSW average (20.2%) – Canterbury (27.3%), Kogarah- Rockdale (23.0%), Hurstville (22.5%), and Botany (22.1%).
- Prevalence of gestational diabetes in the region has more than doubled between 2007 and 2016.
- 83.1% and 65.6% of women in SLHD and SESLHD, respectively, commenced antenatal care prior to 14 weeks gestational age. However, these rates are significantly lower for women born overseas in non-English speaking countries (56%) and Aboriginal and/or Torres Strait Islander women (52.8%).
- Although there is no regional data on perinatal depression rates, intervention is likely to be needed in areas where there is a high proportion of residents from culturally and linguistically diverse backgrounds and high socioeconomic disadvantage. These areas include Canterbury, Hurstville, Strathfield-Burwood-Ashfield, and Kogarah-Rockdale.
- Most women in SLHD and SESLHD initiate breastfeeding. However, rates decline significantly with time – for example, in SESLHD 61% of mothers were exclusively breastfeeding at the universal home visit (around 2 weeks of age) but this declined to 41% at 6-8 weeks of age.

3.1. Child health

Low birth-weight

Low birth-weight is an important predictor of new-born well-being and survival. It can also be an indicator of complex public health issues, including long-term maternal malnutrition and poor health in pregnancy.[34] The current percentage of low-birth weights in CESPHN is 4.4%, compared to 5% nationally. Aboriginal and/or Torres Strait Islander women in CESPHN have almost double the rate of low-birthweight babies at 8.2%.[12]

Childhood development

The Australian Early Development Census (AEDC) measures development vulnerability through the following domains: physical health and wellbeing; social competency; emotional maturity; communication skills and general knowledge; and language and cognitive skills. The percentage of children who were considered developmentally vulnerable has risen in the domains of emotional maturity, physical health and wellbeing and social competency.[35] The top four SA3s with one or more developmental vulnerability domains were: Kogarah- Rockdale, Hurstville, Canterbury and Botany.[13]

Paediatric hospitalisations

During 2016-17, there were 7.8 million presentations to the Emergency Department (ED) in Australia. Of this figure, 11% of these presentations were children aged 4 and under – who make up less than 7% of the population.[36] Acute viral infections, gastroenteritis and ear infections are frequent presenters to ED – with asthma being the most common.[37] Unscheduled hospital presentations are a marker of poorly controlled health conditions – and are a burden on health systems and families.

3.2. Maternal health

Gestational diabetes

The prevalence of gestational diabetes (GDM) in the region has more than doubled between 2007 and 2016.[15] The rate is greater in mothers from non-English speaking countries or socioeconomically disadvantaged backgrounds.[15] CESPHN has received significant feedback from Canterbury Hospital and St George Hospital on the high rates of GDM and late presentation of pregnant women residing in these LGAs to health professionals. Both hospitals service areas with high percentages of both culturally and linguistically diverse and socioeconomically disadvantaged persons. Therefore, it is likely that the reduction of GDM will require population and location specific strategies.

Antenatal care

Routine antenatal care in the first trimester (before 14 weeks) is known to have better maternal health outcomes. In 2016, 83.1% and 65.6% of women in SLHD and SESLHD, respectively, commenced antenatal care prior to 14 weeks gestational age.[38] The number of antenatal visits accessed in the first trimester has strong links to a woman's socioeconomic background, Aboriginal and/or Torres Strait Islander identification and country of birth. Women born overseas in non-English speaking countries were less likely to access an antenatal visit in the first trimester (56%) than Australian born women (64%). Additionally, Aboriginal and/or Torres Strait Islander women had lower rates of accessing care (52.8%) compared to non-Aboriginal and/or Torres Strait Islander

women (62%).[39] CESPHN continues to prioritise the reduction of late presentation to antenatal care based on data, stakeholder feedback and the region's growing diverse population.

Perinatal mental health

Data informing the incidence of perinatal depression across the region is limited. Significant risk factors associated with the onset of perinatal depression include: culturally and linguistically diverse backgrounds and socioeconomic disadvantage.[40]

These risk factors are important considerations, as the region had higher (6.9%) than the national (3.5%) percentage of persons that do not speak English well or at all.[2] The top four SA3s that had the largest percentages were: Canterbury, Hurstville, Strathfield-Burwood-Ashfield, and Kogarah-Rockdale. CESPHN also holds several areas of socioeconomic disadvantage. The top four SA3's in CESPHN that had the largest percentage of low-income households were: Canterbury-Bankstown, Burwood, Georges River, and Botany—all above the CESPHN (40%) and National (30.45%) average.[2] Canterbury, notably, had both high levels of CALD groups and socioeconomic disadvantage. This could suggest a need for perinatal mental health services, with specific deliberation given to high risk populations. This is in line with feedback received from Child and Maternal Health stakeholders.

Breastfeeding

Most women in SLHD and SESLHD initiate breastfeeding.[38] However, it is well documented that exclusive breastfeeding rates decline with time. For example, an internal CESPHN report indicated, that in SESLHD, 61% of mothers were exclusively breastfeeding at the universal home visit (around 2 weeks of age). This rate declined to 41% at 6-8 weeks of age. Continuing Professional Development (CPD) programs on breastfeeding continue to be in demand with service providers and stakeholder feedback indicating it as an area of need—particularly in quality improvement activities.

4. Aged Care

Key points

- 13% of the region are aged 65 years and over. The SA3 with the highest proportion of people aged 65 years or older are – Lord Howe Island (18.2%), Cronulla-Miranda-Caringbah (17.9%) and Hurstville (15.9%).
- In Australia, estimates indicate one in four older people aged 85 years and older are frail. This equates to 8,437 people or 0.5% of the CESPHN population.
- Approximately 2,200 people within the CESPHN region are currently living with dementia based on national estimates.
- About one in four older people live alone in SESLHD. Social isolation can lead to cognitive decline and dementia and contribute to poor mental health and well-being.
- There are approximately 160 RACFs in the CESPHN region. Ten percent of these facilities only have GP coverage within working hours from Monday through to Friday.
- RACFs have low capacity to provide the following services: dialysis (including overnight), tracheostomy, bariatric, mental health care for residents with psychotic illness and severe and challenging behaviour management.
- There is a low rate of advance care planning completion in Australia despite evidence indicating the benefits to end of life care. The biggest barriers faced by RACFs in preparing advance care plans for their residents were 'language and cultural' barriers at 32%, followed by 'family/ relative reluctance' at 29%, 'capacity - cognitive impairment/ mental illness preventing informed decision' and 'too early to discuss' both at 9%.
- Patients at end of life stage often want to receive home-based palliative care and GP services. However, capacity of GPs to co-ordinate care for these patients is reduced due to factors including lack of confidence in providing care due to the complexity of these patient, insufficient resources and training, problems with communication with specialists and treating teams, and barriers in successfully transitioning patients from acute hospital to home/community settings.

4.1. Population

In the CESPHN region, population predictions show an increase in the proportion of residents aged 65 years or older, as those aged 25-49 years progress in age.[2] Currently, 13% of the region are aged 65 years and over.

The following CESPHN sub-regions (SA3) had the highest proportion of people aged 65 years or older – Lord Howe Island (18.2%), Cronulla-Miranda-Caringbah (17.9%) and Hurstville (15.9%).[2] The region is also characterised by a diverse, multicultural population with more than one third born overseas, with concentrated pockets throughout the region. Therefore, aged care strategies should be specifically targeted with this diversity in mind to ensure appropriate service delivery.

4.2. Health status

Despite the lack of CESPHN-specific data of older persons by age group and health incidence or prevalence, NSW data and stakeholder feedback indicates that older age is correlated to higher risk of harmful health outcomes.

Frailty

Falls are more common amongst people aged 65 years or older, with one in four people of this cohort experiencing at least one fall per year. Fall-related injuries are a significant social, psychological and economic burden on individuals, families and health and aged care systems.[41, 42] In 2014-15, the direct standardised rate for hospital attendances for injuries resulting from falls varied across the region, and by age and geographical region.

Frailty is a risk factor of falls. In Australia, estimates indicate one in four older people aged 85 years and older are frail. For the CESPHN region this equates to 8,437 people or 0.5% of the population, and a recent study found a significant number of older people are pre-frail (38%).[43] Fall prevention remains a priority of CESPHN, and is working in collaboration with other agencies to promote a comprehensive, systemic approach to prevention.

Healthy lifestyles

As Australians live longer, the need for services that focus on healthy ageing and preventive care rises. A significant number of older persons have complex health needs, including chronic conditions such as dementia. Further to that, chronic diseases related to unhealthy eating and sedentary lifestyles are widespread among older adults—with the prevalence of chronic disease and related risk increasing with age. There is a strong demand for home care and community support services which outweighs supply. Currently, older people in NSW report that there seems to be a lack of preventative and early intervention programs that they feel are appropriate to their needs.[44]

Mental health in older persons

Although many older people will experience good mental health, they are at greater risk of anxiety and depression, especially when there is coexisting physical illness: dementia, disability, or difficult life experiences.[44] More than half (52%) of permanent aged care residents in Australia had symptoms of depression, as did 45% of those who were admitted to residential aged care for the first time.[45] This is likely underestimated due to poor data. Furthermore, the highest age-specific suicide rate across all ages is observed in males 85 years or older.[46] Low socioeconomic status is also a potential risk for poor mental health. A recent CESPHN survey found that 31% of RACFs had the capacity to provide mental health care for residents with psychotic illness.[47]

Consultation with the CESPHN Mental Health and Suicide Prevention Advisory Committee identified the following mental health issues and service gaps, and barriers to access to services for older people:

- lack of access to psychologists, particularly for people in RACFs
- increased suicide risk for older people
- issues associated with social isolation as people age and lose support networks
- lack of clinicians trained in geriatric psychology/psychiatry
- certain group activities (for example CBT and DBT) may be ineffective for older people with cognitive impairment
- lack of financial incentive to provide visits to RACFs
- issues with the provision of training for RACF staff such as high turnover.

Dementia

There were an estimated 354,000 people with dementia in Australia in 2016, which equates to approximately 2,200 CESPHN residents.[48] Between 2006 to 2016, there was a 40% rise in people with dementia in Australia, with an estimated 43% of those diagnosed aged 85 years or older. Statistics show an estimated projection of three in 10 (900,000 people) having the disease by 2050.[49]

There is high correlation between dementia and mental health problems, with a reported 40% of aged care residents suffering from dementia also experiencing a comorbid mental health problem.[45]

The capacity for RACFs to cater to the needs of the current and future ageing population with dementia, and younger people with dementia was identified in a recent CESPHN survey, which found that 54% of regional RACFs have a specific unit which provides for residents with dementia, and 32% are specifically able to accommodate younger (under 65) people with dementia.

Social isolation

Social isolation and loneliness have significant health repercussions. Social support has positive benefits, including an improved immune system and a 50% increased likelihood of survival compared to those with weaker social ties. In SESLHD, about one in four older people live alone.[50] Studies have suggested that social isolation in older people was significantly more common in urban areas.[51] Older people in NSW indicated that loneliness, social isolation and stigma associated with ageing can also attribute to poor mental health and well-being.[44] Current evidence demonstrates that social isolation can lead to cognitive decline and dementia. One adverse effect of social isolation is loneliness, which is experienced in one third of people aged over 75 years.[52]

4.3. Aged care facilities and services

Residential care and home care packages

Population projections regarding the number and proportion of people aged 65 years and older may increase demand for existing aged care infrastructure and work force supply, and alternative solutions are needed to create capacity in meeting future demands. Additionally, the complexity of the aged care system and referral arrangements pose barriers to clinicians and consumers in navigating care in a timely manner.

In March 2017, there were approximately 3,900 consumers aged 65 years and older in home care within the region. Approximately two thirds of these consumers were receiving Level 2 packages, which are aimed at supporting people who have low level care needs. It is difficult to identify unmet needs in home care package provision in the region as the current My Aged Care data reporting on consumers on the national prioritisation queue are only identified at the national level, which at June 2017 was almost 89,000 consumers.[53]

There are approximately 160 RACFs in the CESPHN region.[54] Residential aged care supply for those aged 70 years and over in the CESPHN region is 87.5 places per 1,000 population. This is higher than the NSW (83.4 places per 1,000) and National rates (82.6 places per 1,000).[55]

A recent survey highlighted the following key points about the facilities in the region:[47]

- There are on average 81 permanent resident places in RACFs.
- The ratio of registered nurses to residents is high during daytime hours, with 52% of RACFs having between 21 to 35 residents per registered nurse.
- RACFs had low capacity to provide the following services: dialysis (including overnight), tracheostomy, bariatric, mental health care for residents with psychotic illness and severe and challenging behaviour management.
- Looking at GP coverage across RACFs, 10% of facilities only have GP coverage within working hours from Monday through to Friday.
- 17% of RACFs do not have a registered nurse on site 24 hours, 7 days a week.
- 56% of RACFs surveyed catered specifically for CALD communities.

4.4. End of Life Care

Advance Care Planning

Despite evidence indicating the benefits to end of life care, there is a low rate of advance care planning completion in Australia.[56] This could be due to poor patient experience and psychological distress associated with this phase. Additionally, evidence indicates that barriers to the uptake of advance care plans point to information technology/management infrastructure and its inability to facilitate point to point communication. Workforce capacity in addressing difficult end of life conversations is also limited, with RACF workers expressing low confidence in initiating these discussions.[57] This is important to note, as people do not usually return home after admission to RACFs. Approximately 91% of discharges in RACFs are due to death – 20% of deaths occur within 3 months of RACF admission and 40% of deaths occur 9 months.[45] Relying on written advance directives as the dominant approach to advance care planning is not adequate and requires multiple points of access for timely communication of information, such as those offered through the My Health Record.[58]

Additionally, patient attitudes, cultural differences, and clinician self-efficacy regarding establishing plans have been highlighted as barriers and should be considered when implementing strategies.

A recent CESPHN survey highlighted the barriers faced by RACFs in preparing advance care plans for their residents. The largest barrier is ‘language and cultural’ at 32%, followed by ‘family/ relative reluctance’ at 29%, ‘capacity - cognitive impairment/ mental illness preventing informed decision’ and ‘too early to discuss’ both at 9%. Other barriers identified included: ‘too much information on admission’; ‘dementia’; ‘spiritual beliefs of staff’; ‘unwilling resident’; ‘poor skills’; and ‘too little time’.[47]

Palliative Care

A recent CESPHN survey outlined the main barriers and issues with palliative care in RACFs. The foremost issue was 'lack of skilled staff' at 36%, then 'GP support' at 32%, 'availability of specialised palliative care support' at 29%, 'access to appropriate equipment' at 27%, 'access to appropriate medication' at 25%, and 'availability/ support of informal carers' at 23%.[47]

While a proportion of people receive palliative care services as an inpatient and as a resident of an aged care facility, there are many patients at end of life stage who wish to receive home-based palliative care and GP services. Capacity of GPs to co-ordinate care for these patients, in particular those with advanced cancer is reduced due to factors including, lack of confidence in providing care due to the complexity of these patient, insufficient resources and training, problems with communication with specialists and treating teams, and barriers in successfully transitioning patients from acute hospital to home/community settings.[59]

5. Mental health

Key points

- 1,713 hospitalisations were due to self-harm in 2016-17, with an over-representation of young adults aged 15-24 years.
- 114 people died by suicide in 2016.
- People living with mental illness have poorer physical health compared to the general population – they are six times more likely to have dental issues, three times more likely to have cardiovascular disease and respiratory disease, and twice as likely to have diabetes and osteoporosis – and are more likely to die prematurely from causes relating to physical illnesses.
- Stakeholder consultations have noted that mental health services should focus on both the body and the mind.
- Service navigation is a continuing issue for people experiencing mental illness and their carers and is characterised by access issues due to service eligibility, vulnerabilities during transitions between services, and lack of awareness of the most appropriate service available.
- There is a range of low intensity services available to the CESPHN community, including in person, online and phone services.
- There will be a service gap for people not eligible for the NDIS, that is people with severe but not persistent mental health who do not have the severity of functional impairment required to access NDIS. Another service gap is for people who are unable to access the NDIS due to more complex needs (for example, people experiencing homelessness or housing instability, people who have a dual diagnosis, or people who are too unwell to complete an NDIS application) who may be currently supported by the Partners in Recovery program.
- There is currently a waiting list for a CESPHN commissioned program for people with severe mental illness that provides mental health and psychosocial services in a coordinated way by mental health nurses and peer workers. This suggests a need for more support services for people with severe mental illness in the community.
- In 2016-17, the MBS psychiatrist utilisation rates for adults aged 25-64 years was 232.46 per 10,000 people. Significantly lower utilisation rates were found in Kogarah-Rockdale (168.55 per 10,000), Hurstville (171.99 per 10,000), Canterbury (183.00 per 10,000), and Botany (183.04 per 10,000) despite these areas having the highest levels of psychological distress.
- The MBS psychiatrist utilisation rate for young people aged 12-24 years was 188.21 per 10,000 people. Significantly lower utilisation rates were found in Sydney Inner City (103.61 per 10,000), Canterbury (104.21 per 10,000), and Kogarah-Rockdale (109.76 per 10,000).

5.1. Prevalence of mental health

Almost half of Australians aged over 16 years will experience mental illness in their lifetime. Mental health and substance use disorders are the third largest cause of total disease burden (after cancer and cardiovascular disease) and the leading cause of non-fatal burden.

People living with mental illness have poorer physical health compared to the general population: they are six times more likely to have dental issues, three times more likely to have cardiovascular disease and respiratory disease, and twice as likely to have diabetes and osteoporosis.[60] People living with mental illness are also more likely to die prematurely from causes relating to physical illnesses.[44]

5.2. Service navigation and stepped care

Service navigation plays a critical role in the stepped care approach to mental health to ensure people experiencing mental health issues receive the right care, at the right place, at the right time. CESPHN has implemented a stepped care approach to commissioning services by ensuring services are available for all levels of mental health needs, from low intensity to severe and complex needs. However, community and stakeholder consultations have raised that service navigation is a continuing issue for people experiencing mental illness and their carers. This is characterised by access issues due to service eligibility, vulnerabilities during transitions between services, and lack of awareness of the most appropriate service available.

5.3. Psychological therapies for priority groups

Priority groups within the CESPHN region identified as having barriers to accessing Medicare based psychological intervention are: women experiencing perinatal depression, people who have attempted or are at risk of suicide or self-harm, those who identify as Aboriginal and/or Torres Strait Islander, CALD communities, residents of aged care facilities, and children and young people.

Please refer to the Maternal and Child Health, Aboriginal and/or Torres Strait Islander Health, Child and Youth Mental Health, and Suicide Prevention sections for further information.

CALD communities

Access to psychological intervention for CALD communities within the CESPHN region may be impacted by low English language proficiency, cultural stigma, and limited support networks. The SA3s with the highest proportion of CALD persons based on low English proficiency are Canterbury, Hurstville, and Kogarah-Rockdale. These SA3s are also the regions with the lowest utilisation rates for Medicare psychological intervention, indicating barriers to accessing psychological services.

Residents of aged care facilities

Access to psychological services for residents in aged care facilities is limited in the wider scope of personal care and accommodation services provided by facilities. This is significant due to the high prevalence of mental illness in residents of residential aged care facilities. Please refer to Mental Health in Older Persons in Aged Care section for further information.

5.4. Child and youth mental health

The Young Minds Matter data[61] provides synthetic prevalence estimates on mental disorders among 4-17 year-olds, which are based on the second Australian Child and Adolescent Survey of Mental Health and Wellbeing. The data shows that the rates for both 4-11 year-olds and 12-17 year-olds across all mental disorders with the CESPHN region are lower than the national rate, across all severity levels. However, there are SA3 areas where the estimates are higher. For:

- Children aged 4-11 years old with mental disorders, Sydney Inner City (15.4%), Sutherland-Menai-Heathcote (12.9%), and Botany (12%) had higher estimates than the CESPHN mean of 11.7%.
- Youths aged 12-17 years old with mental disorders, Sydney Inner City (18%), Botany (14%), and Marrickville-Sydenham-Petersham (13.7%) had higher estimates than the CESPHN mean of 12.5%.
- Children and youths aged 4-17 years old with moderate mental disorders, Sydney Inner City (3.7%), Cronulla-Miranda-Caringbah (2.9%) and Sutherland-Menai-Heathcote (2.9%) had higher estimates than the CESPHN mean of 2.5%.
- Children and youths aged 4-17 years old with severe mental disorders, Sydney Inner City (3.1%), Hurstville (2.3%) and Botany (2.1%) had higher rates than the CESPHN mean of 1.8%.

headspace

From 1 July 2017 to 30 June 2018, there were 20,337 occasions of service provided to 4,023 young people who accessed one of the five headspace centres in the CESPHN region. The latest headspace report indicates an increasing volume of referrals, which has resulted in extended call back time at intake and has increased the wait time accessing headspace services. This extended wait time also increases the wait time to be allocated to Psychological Support Services and other services more appropriate for an individual. Wait times have also been impacted by physical limitations, where there are insufficient rooms to meet increasing demand and need.[62]

Age and gender

Across the region, females continue to be more likely to access headspace compared to males (59.5% compared to 38.2%, respectively). The rate of young people identifying their gender as 'other' is higher than the national rate, particularly at the Camperdown (3%) and Ashfield (2.7%) sites and has increased slightly in comparison to last year. Age distribution trends are in line with national trends except for headspace Camperdown where 21-23-year-olds and 18-20-year-olds are higher, which is likely due to the closer proximity to tertiary educational institutions.

LGBTIQ youth

A disproportionate number of LGBTIQ young people experience higher levels of psychological distress and poorer mental health outcomes in comparison to the general population. This is reflected in the higher proportion of younger people accessing headspace who identify themselves as lesbian, gay, bisexual, trans, intersex and questioning (LGBTIQ) (24.7%) compared to the national rate (22.2%) particularly in the Camperdown site (32.8%). Need for services is also indicated by increase in frequency in the Camperdown site's queer peer support group sessions from fortnightly to weekly.

CALD and international students

Rates of young people from CALD backgrounds who attend headspace centres are much higher in the CESPHN region (22.8%) than the national rate (9.9%). Rates are highest in Hurstville (40.3%), Ashfield (27.5%) and Bondi Junction (21.0%). This matches the CALD distribution across the CESPHN region.

headspace centres in the CESPHN region have also observed an increase in international students accessing services. However, support that can be provided to this cohort is limited due to lack of Medicare access. It was also observed that international students do not present to headspace centres until they have very high needs, which may be due to this cohort's low knowledge of available services, cost, and cultural stigma and shame associated with mental health.

Youth homelessness

Across the CESPHN region, 0.8% of youths attending headspace in the past year were at risk of homelessness, which is lower than the national rate of 1.6%. This is likely to be lower than the rate of homelessness in youths in the CESPHN region, indicating a mismatch between headspace services provided and the needs of these cohort. Youth workers in the Inner West Youth Alliance have identified that many of their clients find the appointment-based system of headspace difficult because of their chaotic lives and complex needs. Services that provide case management as well as walk-in or outreach counselling services are necessary to support these clients (see also Youth with complex needs).

Youth with complex needs

Case management is crucial to the wellbeing and recovery of youth with complex and multiple needs. This cohort typically require the support of multiple agencies and services, such as housing, education, employment, and relationships. NSW Family and Community Services (FaCS) currently funds youth services to provide case management for young people and their families, however this is not provided to young people aged 18-25 years. Other youth services available such as headspace do not have the capacity to provide case management.

At Youth Expert Panel at Weave's Mad Pride in 2018, young people identified that a particularly vulnerable times for youths with complex needs are at transition points, such as transitioning out of FaCS services and transitioning from child and adolescent mental health services to adult services. This can impact their recovery if they have difficulty accessing services.

CESPHN commissions headspace Early Intervention Team (HEIT) and Comprehensive Assessment Service for Psychosis and At Risk (CASPAR), which can provide multidisciplinary team care with a focus on early intervention and clinical needs for young people with or at risk of experiencing severe mental illness who present at headspace centres within the CESPHN region.

Access to affordable child and youth psychiatric services

GPs and headspace centres in the CESPHN region have identified low access to free or low cost and youth friendly psychiatric care in the region. MBS psychiatrist utilisation rates in 2016-17 show that for people aged 12-24 years there is inequitable access to psychiatrists in the CESPHN region. SA3s with the lowest utilisation rates are Sydney Inner City (103.61 per 10,000), Canterbury (104.21 per 10,000), and Kogarah-Rockdale (109.76 per 10,000).

These SA3 rates are lower than the region's average (188.21 per 10,000), and significantly lower than SA3s with the highest rates (Eastern Suburbs – North, 387.85 per 10,000). Canterbury and Kogarah-Rockdale are areas with the highest CALD population based on English proficiency, lowest

SEIFA rates and the highest levels of psychological distress for youths, suggesting there may be cost and cultural barriers to accessing psychiatric services.

5.5. Low intensity mental health

Access to low intensity services earlier in the mental health trajectory can improve longer term mental health and wellbeing and reduce the need for higher intensity interventions. However, given the broad and mainstream reach of low intensity interventions, there are times various priority groups in the CESPHN region are unable to access those services, such as people from non-English speaking backgrounds.

Past consultations have identified multiple priority groups within the CESPHN region who would benefit from low intensity mental health services. These populations include those living in regions that are highly disadvantaged, such as Canterbury, Aboriginal and/or Torres Strait Islander peoples and CALD populations. Low intensity mental health needs are ongoing in the CESPHN region as new or different groups emerge over time who are more vulnerable to distress due to various circumstances, such as newly arrived refugees settling in the region, and people experiencing unemployment.

Access to low intensity services

CESPHN commissioned Beyondblue's low intensity NewAccess Coaching in August 2017 and despite the estimated prevalence rates in the region, uptake of the service has been low. Several barriers were identified around the introduction of this new mental health intervention, including the need for robust community engagement with targeted strategies for gaining awareness and acceptability of mental health services that can refer, but also addressing personal barriers of community members who could benefit.

Priority groups

Recent data from CESPHN's commissioned NewAccess coaching service, indicate that from January 2018 Aboriginal and/or Torres Strait Islander peoples and CALD populations were significantly underrepresented in access to the mainstream service. This suggests that despite the availability of the service, there are barriers to accessing low intensity mental health services for these groups.

Potential barriers may include limited access to bilingual coaches, low awareness of the service, and whether the NewAccess model is culturally responsive and accepted. It is important to note that the model is a relatively new service offering, and while there is a strong evidence base for the general population, further research is required on the effectiveness of the program for specific populations.

Other, or more targeted, low intensity models may be more appropriate depending on the needs of specific communities, such as addressing cultural stigma associated with mental health. CESPHN commissions a mindfulness program for Arabic and Bengali speakers, and early feedback from stakeholders have found that the program has had wider benefits in addition to building resilience and skills for managing mental wellbeing. It has also been observed that the program has improved mental health literacy within the targeted communities, and has fostered open communication about mental illness, thereby de-stigmatising mental health.

Services available

There are a range of services available across the CESPHN region. A review of the eMHPrac listing shows 88 types of low intensity e-mental health supports available to the CESPHN community, 70 of which have no charge to access the service (79.5%).

Additional mapping of the CESPHN area identified 129 low intensity services available in the region, 91 of which are free to the consumer: 100 In person, 44 Online, 73 Phone, five 24-hour phone.

CESPHN also commissions the following services free of charge to the end user:

- NewAccess Coaching – goal-focused support to help manage day-to-day pressures
- Mindfulness Program for Arabic and Bengali Speakers – promotion of emotional balance, resilience, wellbeing and stress reduction
- Mental Health First Aid – training to communities and organisations working with Chinese peoples living in Australia; Arabic speakers; Aboriginal and/or Torres Strait Islander peoples; and young people to assist communities and organisations to support people with mental health concerns.

5.6. Severe and complex mental health

Care coordination

The aim of care coordination is to improve the wellbeing of people with mental health problems, particularly for those with severe and complex mental and health needs, through helping a person access and coordinate a range of services that assist in their recovery. Care coordination can involve referrals, links to appropriate mental health and psychosocial services, information provision, and patient advocacy.[63] Co-design workshops identified a continuing need for care coordination in the CESPHN region due to lack of awareness of services for consumers, carers and health professionals alike, and the need to address urgent practical needs that impact their recovery.[64]

Primary integrated care supports

CESPHN currently commissions a service for people with severe mental illness that provides mental health and psychosocial services in a coordinated way by mental health nurses and peer workers. As at November 2018, there is a waiting list for this program, indicating a need for supports for people experiencing severe mental illness in the region.

Partners in Recovery

CESPHN also commissions Partners in Recovery, a care coordination service that supports people with severe and persistent mental illness with complex needs by ensuring the services and supports clients may benefit from work more collaboratively and in an integrated way. This service, along with other similar services such as Day 2 Day Living, is transitioning to the NDIS in mid-2019, creating a service gap for people ineligible for the NDIS.

For more information, please refer to the *Psychosocial needs* section below.

Physical health of people with severe and complex mental illness

The life expectancy for people experiencing severe mental illness is 15 to 20 years less than the general population and is mostly due to chronic physical conditions such as cardiovascular disease, diabetes, and cancer rather than suicide.[65] There is some evidence that people with severe and complex mental illness receive less care and treatment for their physical health in comparison to the general population, despite comparatively higher rates of accessing primary care services. Higher mortality from chronic illnesses in this cohort may be because GPs do not feel confident in addressing a person's severe and complex mental illness, and psychiatrists and other mental health clinicians are not equipped to address physical health complaints.[66] Community consultations have also raised the concern that mental health services focused on the body or the mind separately

rather than considering a holistic approach, addressing basic preventative care and utilising low cost physical activity options in care plans. The consultations also emphasised the significant relationship between social confidence and physical activity that can be a barrier for those with mental health conditions and an area that more support in required. This necessitates further action to improve both the physical and mental health of this cohort, which could be through coordinating physical and mental health services, and other evidence-based interventions.

Mental Health Shared Care programs support the path of recovery and physical health of a consumer whose care is shared by the GP and the Local Health Districts/Networks. The Shared Care model clearly specifies which service will be responsible for identified aspects of their physical health care.

Across the region, CESPHN commissions shared care models across SLHD, SESLHD and St Vincent's Health Network. The SLHD model includes features to support GPs to undertake physical screening and treatment interventions with this vulnerable population. The SESLHD model uses a Mental Health Nurse who provides a recovery orientated shared care service for consumers with complex mental and physical health care needs. Direct support is provided to GPs or other health services in coordinating care and bridging the gap to mental health care. St Vincent Health Network model uses a Shared Care Clinical Nurse Consultant to support a stepped care service model for the district. The nurse will work with GPs to coordinate the provision of services for the client.

Psychosocial needs

People with severe and complex mental illness may require psychosocial support to assist with their day to day functioning and recovery. This includes non-clinical services that assist people in areas such as social life, family connections and employment.

CESPHN Partners in Recovery data indicates that the top five unmet psychosocial needs across the three Partners in Recovery localities (Inner West Sydney, South Eastern Sydney, and Eastern Sydney) are daytime activities, psychological distress, company, employment, and physical health. Further, the highest ratio of unmet needs to met needs were for daytime activities, followed by social life. Community consultations have also indicated the following unmet psychosocial needs: housing, lack of community engagement, isolation and loneliness, education, daily living skills, and employment.

Community consultations have indicated that some Aboriginal and/or Torres Strait Islander peoples and CALD individuals have difficulty accessing psychosocial services. Canterbury was identified as an area with inequitable access to psychosocial services, and service providers observed psychosocial needs in Sydney Inner City, Inner West and Randwick, particularly for people from Chinese speaking backgrounds for which there is a paucity of culturally appropriate services.

The NDIS provides support to people experiencing severe and persistent mental health with significant functional impairment who require ongoing psychosocial support services. Further, Commonwealth funded programs: Partners in Recovery, Day to Day Living, and Personal Helpers and Mentors will be ceasing mid-2019, as clients are transitioned into the NDIS. This has created a service gap for people not eligible for NDIS; that is people with severe but not persistent mental health who do not have the severity of functional impairment required to access NDIS. Community consultations raised concerns that it could also lead to a lack of continuity of support for this cohort, and loss of experienced workforce.

Community consultations also raised NDIS access issues for people who are experiencing homelessness or housing instability, people who have a dual diagnosis (experiencing both mental health issues and drug and alcohol misuse), and people who are too unwell to complete an NDIS

application. Ceasing services such as Partners in Recovery may create a service gap for these people who require coordinated services to address those more complex needs.

Eating disorders

Eating disorders are serious mental health conditions that are common in young people, particularly for young females. A 2018 Mission Australia Youth Survey Report found that 30.4% of survey respondents were concerned about body image.[67] While 12-29 years is the peak period for onset, they affect people throughout the lifespan.[68] It is estimated that eating disorders affect 4% of Australians.[69]

Sydney and South Eastern Sydney LHDs and Sydney Children's Hospital Network ambulatory service data from 2014 shows that 238 people were seen with eating disorder as their primary diagnosis while 44 people were seen with eating disorders as a secondary diagnosis.

Psychiatric comorbidities are very common in people with eating disorders. SLHD data shows that where an eating disorder is a primary diagnosis, the top five secondary diagnosis were anxious (avoidant) personality disorder, borderline personality disorder, mixed anxiety depression disorder, mental and behavioural disorders due to use of alcohol (harmful use), dependent personality disorder.

Evidence shows that individuals who have had an eating disorder for less than two years are likely to respond more quickly to treatment and experience fewer health consequences. Affected individuals are more likely to access primary health care for other conditions rather than the eating disorder, making primary health care professionals ideally placed to detect and intervene. This requires GPs and other primary health care professionals to be confident in their ability to identify, diagnose, and manage eating disorders early, or refer appropriately, to minimise long term physical and mental health consequences.[70, 71]

The following service gaps were identified in community consultations:

- Limited capacity to support young people presenting with eating disorders for clinicians experienced in treating eating disorders
- Limited treatment available with binge eating disorders
- Limited multi-disciplinary support consisting of psychiatry, dietetics, and family-based therapy.
- Medicare provides limited funding for psychological treatments
- No free or low-cost primary care options outside of headspace.

Personality disorders

The prevalence of personality disorders in the CESPHN region is difficult to determine but is associated with high utilisation of mental health services and emergency department presentations.[72] People experiencing personality disorders are also more likely to have other coexisting mental health issues such as depression, and more likely to self-harm, particularly if they are not receiving treatment. They also experience service barriers, including not receiving care that aligns with best practice clinical guidelines, receiving care consistently across health services and issues with interactions with other agencies such as housing and the justice system.[72]

People with personality disorders typically require longer term treatments than what is available to manage their symptoms and improve every day function. There is a lack of services specifically for the treatment of personality disorders in primary care, and few options at the community and sub-acute level. Services that are available are not sufficient to support recovery according to clinical

guidelines:[72] the Medicare Better Access program provides up to 10 sessions per calendar year, and Psychological Support Services can potentially provide up to 18 sessions but is a service more appropriate for people with mild to moderate psychological needs. CESPHN commissions Dialectical Behaviour Therapy (DBT) which is effective treatment for Borderline Personality Disorder[73], however services are limited to location and availability. Consultations with providers in the CESPHN region have also raised that there is a lack of clinicians in the region trained in providing DBT and a lack of confidence to deliver this intervention.

Access to psychiatric services

Feedback from GPs in CESPHN has identified low access to bulk billing psychiatric care in the region. MBS psychiatrist utilisation rates in 2016-17 show that for adults aged 25-64 years there is inequitable access to psychiatrists in the CESPHN region. SA3s with the lowest utilisation rates were Kogarah-Rockdale (168.55 per 10,000), Hurstville (171.99 per 10,000), Canterbury (183.00 per 10,000), and Botany (183.04 per 10,000). These SA3 rates are lower than the region's average (232.46 per 10,000), and significantly lower than SA3s with the highest rates (Eastern Suburbs – North, 347.60 per 10,000). Regions with the lowest psychiatrist utilisation rates are also the regions with the lowest SEIFA rates and align with the LGAs with the highest levels of psychological distress, indicating a cost barrier.

CESPHN commissions a psychiatry support line exclusively for GPs, which provides advice on the diagnosis and management of people experiencing mental health issues who can be treated effectively within primary care. Although this addresses GPs capability to provide effective treatment for people with mental health needs within the primary care setting, it does not address the cost barriers to psychiatric services.

5.7. Suicide prevention

There is limited data available at the local level regarding suicide attempts and self-harm, however it has been identified as an issue within pockets of the CESPHN population.

Suicide

In 2017, there were 880 deaths due to suicide in NSW (10.5 per 100,000).[46] The rate of male suicide (16.1 per 100,000) was more than three times the rate of female suicide (5.1 per 100,000).

In the CESPHN region there were 114 deaths (7.0 per 100,000) in 2016.[15] Suicide rates in the CESPHN region have fluctuated over the last ten years, with the lowest recorded rate in 2016 (7.0 per 100,000) and the highest recorded rate in 2014 (10.2 per 100,000).

Intentional self-harm

In the CESPHN region in 2016-17 there were 1,713 hospitalisations due to self-harm. There is limited data available at the local level regarding intentional self-harm rates, however our region has a higher proportion of non-specialised care compared to specialised care for intentional self-harm (7 per 10,000 versus 4 per 10,000).[74]

In 2016 nationally, intentional self-harm accounted for over one-third of deaths (35.4%) among people 15-24 years of age, and over a quarter of deaths (28.6%) among those 25-34 years of age. For those people 35-44 years of age, 16.0% of deaths were due to intentional self-harm.[15, 46]

Across CESPHN in 2015-16, intentional self-harm overnight hospitalisations were at a rate of 12 per 10,000, lower than the national rate of 17 per 10,000. Residents living in Botany SA3 had the highest rate of hospitalisation (20 per 10,000), followed by Marrickville–Sydenham–Petersham (18 per

10,000), Sydney Inner Sydney (17 per 10,000), Eastern Suburb South (15 per 10,000) and Leichhardt (15 per 10,000) SA3s. The SA3 with the lowest hospitalisation rate was Canada Bay (7 per 10,000). Except for Sydney Inner City SA3, all the above SA3s rates have increased from 2014-15.

Bed days for intentional self-harm across CESPHN were 87 per 10,000. This is higher than the national rate of 81 per 10,000 and an increase on the 2014-15 rate (66 per 10,000). This increase is reflected across the different SA3s in the region. Botany SA3 has significantly increased from 2014-15 (48 per 10,000) to 2015-16 (215 per 10,000) where it now has the highest rate of bed days within the CESPHN region. Eastern Suburbs – South (180 per 10,000) has the second highest rate, which has doubled from 2014-15 and Leichhardt (158 per 10,000) has tripled.

There are significant differences in self-harm hospitalisations between males and females, and between young adults aged 15-24 years and all ages. Females were more likely to be hospitalised than males, and young adults were more likely to be hospitalised than all ages. Furthermore, there has been an upward trend in hospitalisation rates for young adults, particularly young females, between 2010 and 2017.

CESPHN community consultations which included LHDs highlighted a need for better integration between services and a need for more awareness of services available to reduce hospital emergency admissions from intentional self-harm.

Identified service gaps

Consultation with the CESPHN Mental Health and Suicide Prevention Advisory Committee found the following service gaps around youth suicide prevention:

- lack of youth friendly service providers and services
- the need for peer support networks and more resilience and health promotion strategies, and
- supporting police to respond to a mental health crisis.

The strongest risk factor for suicide is a previous suicide attempt.[75] Research conducted by the Black Dog Institute found that assertive aftercare has the potential to reduce the number of suicide attempts by 19.8%.[75] CESPHN commissions suicide prevention service SP Connect, which is delivered in partnership with Neami National, SVHN, SESLHD and SLHD. Since operation in April 2018 it has provided services to 149 people.

Research shows that for every suicide, 10-135 people are affected. This equates to approximately 1,310 to 17,685 individuals affected by suicide in 2013. This cohort are more likely to be highly distressed and there is evidence that people bereaved by suicide have a higher risk of developing suicidal behaviours.[76] This is supported by community consultations in which carers, family members and friends reported being affected by suicidal behaviour of a loved one or bereaved by suicide. Attendees reported being “left alone” by the system and often did not have any contact with the hospital system. This indicates a need for services addressing people who are impacted by attempted or completed suicide who require support.

Research on primary care contact prior to completing suicide found that on average 45% of suicide victims across all ages had contacted primary healthcare services within one month of completing suicide, and on average 77% has made contact with primary healthcare services within one year of completing suicide. This highlights the need to support our primary care professionals in identifying individuals at risk of attempting suicide.[77]

6. Alcohol and other drugs

Key points

- There has been a significant shift in the profile of clients accessing AOD treatment – amphetamine (including methamphetamine) now accounts for 39% of primary drug of concern presentations, increasing from 27% in 2015-16, and alcohol is the second primary drug of concern accounting for 22% of presentations.
- CESPHN is ranked the highest PHN nationally in terms of number of bed days for all alcohol and other drug related hospitalisations, with 2,041 per 100,000 compared to the national rate of 1,369 per 100,000.
- Prevalence predictions suggest that within the CESPHN population aged 12 years and over: 115,000 people will have an alcohol use disorder, 30,000 people will have a cannabis use disorder, 10,500 people will have a non-medical opiate use disorder, 8,500 people will have a methamphetamine use disorder and 6,000 people will have a benzodiazepine use disorder.
- Certain population groups are disproportionately represented and therefore should be prioritised to ensure equity, access and appropriateness of treatment services. These groups include Aboriginal and/or Torres Strait Islander peoples, CALD communities, LGBTIQ communities, people in contact with the criminal justice system, youth, people experiencing homelessness, people with comorbid mental health and alcohol and other drug conditions, older people, and families.
- In 2016-17, there were 118 active accredited Opioid Treatment Program prescribers in the CESPHN region. This equates to 5% of all GPs in the region.
- There is a low participation rate of community pharmacies in the Opioid Treatment Program – 10% in the CESPHN region compared to a national participation rate of 30%.
- There is an emerging sector-wide understanding and commitment towards establishing a person centred rather than service centred system.
- While it is difficult to ascertain the level of regional need due to delays in treatment seeking, stakeholders predict that approximately 1 in 6 people who require treatment can access it.

6.1. Prevalence and treatment rates

According to the NADAbase National Minimum Data Set (NMDS) collection, 3,103 clients accessed treatment from 37 NGO services within the CESPHN region in 2016-17. A significant shift in client profile has occurred, with amphetamine (including methamphetamine) accounting for 39% of primary drug of concern presentations, increasing from 27% in 2015-16. Alcohol was identified as the second primary drug of concern at 22%.[78]

An analysis of Public Health Information Development Unit (PHIDU) data show that the estimated number of people aged 15 years or over who consumed more than two standard drinks per day in the CESPHN region is 195,499 (15.7 per 100 people).[13] This places the CESPHN region lower than NSW state rates of 16.7 per 100 people. Six SA3 regions have rates higher than the state rate:

- Cronulla- Miranda – Caringbah (22.7 per 100)
- Eastern Suburbs – North (21.4 per 100)
- Leichhardt (20.6 per 100)
- Sydney Inner City (19.3 per 100)
- Sutherland - Menai – Heathcote (18.6 per 100)
- Eastern Suburbs – South (17.2 per 100).

In 2015-16, the CESPHN region had a methamphetamine related hospitalisations rate of 126.7 per 100,000 population and a persons hospitalised rate of 81.4 per 100,000 population (persons ages 16 and over). The CESPHN region has the fifth highest hospitalisation rate per 100,000 population, out of ten NSW PHNs, however CESPHN has the fourth lowest rate per 100,000 population of persons hospitalised. This indicates that, within the CESPHN region, unique individuals are more frequently hospitalised for methamphetamine compared to other PHN regions in NSW.[15]

For all alcohol and other drug related hospitalisations, CESPHN is ranked the highest PHN nationally in terms of number of bed days, with 2,041 per 100,000 compared to the national rate of 1,369 per 100,000. This indicates that people within our region require longer periods of hospitalisation for drug and alcohol related issues.[79] Within the CESPHN region the SA3 with the highest rate, Sydney Inner City SA3 (3,487 per 100,000) has the fourth highest rate of bed days per 100,000 nationally. Leichhardt (3,171 per 100,000) has the sixth highest rate followed by Marrickville – Sydenham – Petersham (2,948 per 100,000) with the seventh highest rate. Sydney Inner City falls within the top 1 percentile, and Leichhardt and Marrickville – Sydenham-Petersham fall into the top 2 percentile nationally.

Prevalence predictions suggest that within the CESPHN population aged 12 years and over[2, 80]:

- 115,000 people will have an alcohol use disorder
- 8,500 people will have a methamphetamine use disorder
- 6,000 people will have a benzodiazepine use disorder
- 30,000 people will have a cannabis use disorder
- 10,500 people will have a non-medical opiate use disorder.

In 2016 the National Drug Strategy Household Survey found pharmaceuticals were among the most frequently misused illicit drugs, with 26% reporting daily or weekly use. One in twenty (4.8%) of people had misused a pharmaceutical in the previous 12 months with 75% of this population

reporting misuse of over the counter codeine products. People who misused pharmaceuticals were older than illicit drug users and most common among those in their 40s.[81]

Australia wide there has been a substantial increase in the number of people seeking treatment for pharmaceutical opioid dependence, but this is noted as a small fraction of the estimated number of people who experience pharmaceutical opioid use disorders. Around 750,000 of the 3 million Australians who are annually prescribed opioids are using them long-term and 75,000 meet the diagnostic criteria for pharmaceutical opioid dependency.[82]

Stakeholders have noted that the increase in pharmaceutical opioid use disorders has been associated with dramatic rises in associated harms including dependence, morbidity and mortality. Around 800 opioid-related deaths occur in Australia every year, with 32% of these deaths occurring in NSW. Seventy per cent of all opioid related overdose deaths are attributable to pharmaceutical opioid, overtaking overdose mortality rates of both heroin and methamphetamine. The last available data is from 2013, but projected estimates suggest there will be a continued upward trend in accidental overdose deaths.[83-86]

6.2. Priority populations

While drug and alcohol related harm can affect the whole population, certain population groups are disproportionately represented within AOD services and should be prioritised in CESPHN strategies to ensure equity, access and appropriateness of treatment services. These priority populations have been identified using the latest available population health and health related harm data.

Aboriginal and/or Torres Strait Islander peoples

Aboriginal and/or Torres Strait Islander peoples experience a disproportionate amount of harm from drug and alcohol use. Drug-related problems play a significant role in the health and life expectancy disparities between Aboriginal and/or Torres Strait Islander peoples and the non-Aboriginal and/or Torres Strait Islander population. Illicit drugs represent 3.4% of the burden of disease and 2.4% of deaths amongst Aboriginal and/or Torres Strait Islander peoples, compared to 2% and 1.3% respectively within the non-Aboriginal and/or Torres Strait Islander population. The interconnected issues of cultural dislocation, trauma and ongoing stress of disadvantage contributes to heightened risk of harmful drug and alcohol use, poorer health outcomes and deterioration of family and community. These factors can affect employment, education, health and have a whole of life and intergenerational impact.[87]

Aboriginal and/or Torres Strait Islander peoples comprise 0.93% of the CESPHN region population, but account for 15.7% of the presentations at Drug and Alcohol treatment services within the region. It is recognised that the majority of Aboriginal and/or Torres Strait Islander peoples do not use illicit drugs, however, national surveys have consistently reported higher rates of ‘recent’ (within the last 12 months) illicit drug use compared to the non-Aboriginal and/or Torres Strait Islander population.[2, 78, 88]

Culturally and Linguistically Diverse Communities

CESPHN recognises that CALD communities are not homogenous in nature and a best practice approach that seeks to understand a particular communities’ substance use practices, help-seeking behaviours and associated harms will achieve the best treatment outcomes. CESPHN commissioned the Drug and Alcohol Multicultural Education Centre (DAMEC) to conduct a scoping exercise to better understand CALD communities residing within the CESPHN catchment. DAMEC identified the

following communities as having potential for increased vulnerability to particular health issues and likely to experience service access barriers: Nepalese, Bangladeshi, Indonesian, and Thai.[2, 89]

North American and Middle Eastern communities were reported as having lower awareness of blood borne virus status, higher reports of recent receptive needle sharing and lower access to diagnostic testing. Analysis of Drug and Alcohol data relating to CALD population found that being born outside of Australia was associated with lower levels of contact with drug and alcohol treatment services.[89]

DAMEC's report found those who do access AOD services from a CALD background often receive less than adequate care and barriers such as language and unfamiliarity with the Australian healthcare system lead to an inability to engage in a meaningful way.[89]

Lesbian, Gay, Bisexual, Transgender, Intersex and Queer Communities

The CESPHN region has a high concentration of LGBTIQ couples residing in the area as identified in the Census. LGBTIQ communities are identified as a priority population at both national and state level due to experiencing significant health inequalities compared to their heterosexual counterparts, specifically pertaining to higher rates of recent illicit drug use.[2, 90]

Findings from the 2016 National Drug Strategy Household Survey have shown that recent use of illicit drugs by those who identify as part of the LGBTIQ communities is up to 5.8 times higher than those who identify as heterosexual.[81]

A 2017 survey on gay men found 63.2% of gay and bisexual men recruited from the CESPHN region had reported any drug use in the six months prior to the survey, compared to the 15.6% of men nationally who reported illicit drug use in the previous 12 months in the general population (NDSHS, 2016). The most frequently used drugs identified were cannabis (32.2% compared to 10.4% of the general population), ecstasy (24.3% compared to 2.2% of the general population) cocaine (23% compared to 2.5% of the general population and GHB (13.8%; no national comparison).[91]

HIV positive men are disproportionately more likely to report recent drug use (78.7%) and more likely to report using crystal methamphetamine (27.8% compared to 1.4% of general population) with 15.1% reporting recent injecting drug use compared to 0.3% of the general population.[91]

The 2016 Sydney Women and Sexual Health (SWASH) survey found that 45% of women identifying as lesbian, bisexual or queer had used any illicit drug in the preceding six months compared to the 13% of women who reported illicit drug use in the previous 12 months in the general population over the previous 12 months (NDSHS,2016). Tobacco (30% compared to 18% of the general population), alcohol (83% compared to 75% of the general population), cannabis (29.4% compared to 8% of the general population), ecstasy (18.8% compared to 1.9% of the general population) and pharmaceuticals/ benzodiazepines (18.5% compared to 3.6% of general population) were each found to be used at a disproportionally higher rate amongst women who identified as lesbian, bisexual or queer.[92]

NADAbase data around the proportion of LGBTIQ individuals presenting at services is problematic due to gender and sexuality indicators being new fields, which are non-compulsory and not collected at an NMDS level. Amongst presentations where sexuality data was captured, 12% of respondents identified as LGBTIQ.

People in contact with the criminal justice system

In the 2016 CESPHN Baseline Alcohol and Other Drugs Needs Assessment, it was identified that the CESPHN region becomes the place of residence for approximately 19% of all people exiting custodial settings in New South Wales. [80]

The 2015 NSW Inmate Health Survey conducted by Justice and Forensic Mental Health Network found:

- 86% were smokers
- 13% had been diagnosed with an alcohol use disorder
- Cannabis was the most common drug ever used (82%), followed by methamphetamine (67%), amphetamines (57%), and cocaine (50%).[93]

Reintegration into society from custodial settings is fraught with difficulty. The risk of death is twelve times higher for individuals with a history of illicit drug use in their first week post release than it is for the general population, and the risk of overdose is 129 times higher.

Youth

Drug and Alcohol use amongst young people can have substantial associated impacts on brain development, as well as contributing towards poorer long-term health and social outcomes. Young people are less likely to access treatment support or engage with health care professionals.

The 2016 NDSHS data showed an increase in the proportion of young people who had never smoked tobacco, with the most significant increase being in the 14-19 age group, increasing from 89% in 2013 to 94% in 2016. The proportion of youths aged 14-19 years who consume more than five or more drinks at least monthly declined from 25% in 2013 to 18% in 2016. There were no significant changes in illicit drug use rates, with the most commonly used illicit substances identified as cannabis and ecstasy.[81]

Three per cent of young people across the region are presenting with alcohol and or other drugs being their primary issue. This is higher than the national rate of 2.4%. Miranda (5.4%), Hurstville (3.7%), Camperdown (3.2%) and Bondi Junction (3.0%) all have higher rates the national rate.[94]

People experiencing homelessness

The 2016 CESPHN baseline alcohol and other drugs needs assessment identified that while the total number of people experiencing homelessness are relatively small as part of the general population, they are disproportionately represented in the CESPHN region, particularly in inner city areas.[80]

The population of people experiencing homelessness have higher prevalence rates of substance use dependence disorders and co-occurring mental health conditions than the general population, as well as more complex histories of drug and alcohol use.[95]

People with comorbid mental health and alcohol and other drug conditions

Comorbid mental health and alcohol and other drug use disorders have been identified as one of health's most significant challenges. Individuals experiencing comorbid conditions often present to treatment services with more complex needs and face more barriers and difficulties in accessing care. The siloed treatment approach results in fragmented care, with many individuals falling through the gaps.[96]

Comorbid mental health and substance use disorders are one of the more complex areas to treat, as once they are established, they can perpetuate and exacerbate one another.

Individuals who experience comorbid mental health and substance use disorders have an average life expectancy of 20 to 30 years shorter than the general population, with the last ten years of life spent living with disabling chronic illness.[97]

It is estimated that up to three quarters of those using mental health services also have drug and alcohol issues, and 90% of those in drug and alcohol treatment settings have a co-occurring mental health condition.[97]

Older People

Available national data and stakeholder consultation have identified people aged 50 or older as an emerging priority population. Despite widespread under recognition and under diagnosis within this age cohort, problematic drug and alcohol use is increasing.

The 2016 NDSHS showed a decline in risky drinking in all age groups except those aged 50 and over. The largest increase from 2013 to 2016 in drug misuse was in those aged 60 and over, with the key drug of concern being non-medical use of pharmaceutical opioids (rising from 11.1% to 11.7%).[81]

Substance use in older populations can present with more complex challenges. Physiological changes associated with ageing can lead to an increased risk of associated adverse physical effects, such as physical health, risk of falls and negative medication interactions.

Access to treatment for families

In 2015 the National Ice Action Strategy identified a role for greater family inclusion in both the prevention and treatment process, as well as a need for an increase in accessible information, education and support for communities, families and carers of those affected by substance misuse.[98]

A loved one experiencing problematic drug and alcohol use can cause significant emotional and psychological effects on families, families of choice and their communities. Feelings of powerlessness to assist loved ones can significantly impact their own mental health and wellbeing. The role of the family is increasingly becoming recognised as a critical factor for influencing substance use behaviour as well as enhancing treatment outcomes. The role of families need to be considered as part of the holistic treatment model, treating the family unit as opposed to just the individual experiencing problematic substance use.[99]

The 2016-17 NADAbase figures show that family members make up 8.3% of the referrals into treatment, with very few services being dedicated to working with families in their own right.[78]

As part of a commissioned process, CESPHN conducted a mapping project to assess current levels of access to treatment and support for families. The report highlighted the need for 'Child and Family Sensitive Practices,' focusing on raising awareness of the impacts of substance use on families, with a need to see the family as the unit of intervention rather than the individual.[80]

This approach is essential for working effectively with Aboriginal and/or Torres Strait Islander peoples to achieve positive outcomes, create significant change and break the intergenerational cycle of disadvantage by addressing the complex and interwoven needs of children, parents, families and communities.

6.3. Role of primary care

In 2016, 84% of the CESPHN population saw one of the region's 2,300 GPs within the previous 12 months making them ideally placed to provide screening and assessment, conduct early and brief interventions, manage treatment and create holistic care plans for patients presenting with drug and alcohol concerns. However, there is little evidence to show what does occur around drug and alcohol treatment in a community-based setting. NADAbase data for 2016-17 shows only 1.1% of all referrals into a treatment setting came from general practice settings, compared to 45% being self-referred.[78] While self-referral to treatment indicates an individual is ready to engage in their recovery journey, the median delay among those with alcohol use disorders who eventually make treatment contact is 18 years.

While there is little evidence to show what does occur in a general practice setting, there is evidence detailing why the involvement of general practice in drug and alcohol treatment and formal shared care arrangements are low.[100] The barriers identified for involvement include[101]:

- A lack of adequate training and support
- Perceived patient resistance
- Discomfort around discussing substance use
- Time constraints
- Lack of awareness around MBS items for drug and alcohol
- Stigma around drug users being chaotic and non-compliant
- Perception that involvement in drug and alcohol is not part of their role.

It is not possible to divorce the practice of medicine from the society in which it is practiced. The prevalence rates of people experiencing substance use disorders within the CESPHN region as well as the high percentage who visit a general practice setting annually, highlights the pivotal role that primary care providers have in ensuring equitable access to healthcare and providing drug and alcohol support within a community-based setting.

In 2016-17 there were 118 active accredited Opioid Treatment Program prescribers in the CESPHN region. This indicates a low participation rate; with only 5% of all CESPHN region GPs who are confident, capable and willing to engage in prescribing of pharmacotherapy options for opioid dependency.[102]

The 2016 CESPHN baseline Alcohol and other drugs needs assessment identified an exceptionally low participation of community pharmacies in the Opioid Treatment Program. CESPHN had a 10% participation rate compared to a national participation average of 30%. Pharmacy involvement is essential for increasing access to treatment and reducing stigma by normalising Opioid Substitution Therapy as medical treatment.

6.4. Service accessibility

Improving the capacity of Primary Health to respond to Drug and Alcohol concerns in a community-based setting

In 2016-17, there are 118 GPs actively prescribing pharmacotherapy for opioid dependency within the CESPHN region – 103 of these GPs are accredited and serving the SA3 areas:

- Sydney Inner City n=67
- Kogarah-Rockdale n= 12
- Eastern Suburbs-North n=12
- Eastern Suburbs-South n=2
- Strathfield-Burwood-Ashfield n=8
- Botany n= 6
- Canterbury n= 5
- Marrickville-Sydenham-Petersham n=2

The SA3s of Sutherland-Menai-Heathcote, Canada Bay, Cronulla-Miranda-Caringbah and Hurstville do not have any accredited prescribers serving these regions. There are 15 non-accredited prescribers located in the below SA3s:

- Sutherland-Menai-Heathcote n=3
- Cronulla-Miranda-Caringbah n= 1
- Canada Bay n=1
- Cronulla-Miranda-Caringbah n=1
- Eastern Suburbs-North n=1
- Kogarah-Rockdale n=1
- Strathfield-Burwood-Ashfield n=1

As identified earlier, primary health practitioners are ideally placed to provide assessment and intervention and create appropriate referral pathways specific to the presenting individual's unique needs. Treatment within the community is a cost-effective model that is more accessible for individuals and more conducive to maintaining work and family commitments. Current barriers for general practice such as low confidence, knowledge, skills and attitudes can be addressed through education. Motivational interviewing skills have been identified as an area of need to effectively engage patients in an open, non-stigmatising, constructive dialogue around problematic use.

Community based treatment will become increasingly important with the rescheduling of codeine from an over- the-counter analgesic to prescription only medication on 1 February 2018. While it is difficult to predict the impacts of the change, it is anticipated by stakeholders that there will be a rise in people accessing general practice settings for pain management who meet the criteria for codeine dependency. As noted in the health needs section, this demographic may have other factors to consider, such as being of an older age and with higher rates of employment.[(103)]

Another factor which will impact the capacity of general practice to better respond to and manage drug and alcohol concerns within the community is the release of the new Opioid Treatment

Guidelines. It is anticipated that the new guidelines will allow for GPs to prescribe buprenorphine for up to 20 patients and methadone for 10 stable patients without having to complete the Opioid Treatment Accreditation Course (OTAC).

Stakeholders have identified that the following strategies will be important to address the above changes:

- Formal shared care arrangements
- Utilisation of clinical nurse consultants
- Promotion of MBS item numbers to encourage the development of care plans development and promotion of HealthPathways including prescription of Naloxone to prompt conversations about overdose risk.

Low rates of pharmacy participation in Opioid Treatment Program

CESPHN's low pharmacy participation rate in OTP is a factor that impacts access to treatment. Strathfield and Woollahra LGA's were identified as having no participating pharmacies. This low participation rate could cause additional pressure on participating pharmacies should there be an increase in individuals accessing pharmacotherapy treatment for codeine dependency after 1 February 2018.[104]

Stakeholders identified that the most significant barrier to engagement of pharmacies is stigma and discrimination, with pharmacies being reluctant to have their business associated with treatment of addiction medicine clients. This can be ameliorated through education and training and is important for removing a moral perspective and treating addiction medicine clients the same as any client seeking treatment of a health condition.

Encouraging engagement of pharmacies will increase accessibility to and ease of treatment for people engaged in OTP, minimising the impact on everyday life and promoting wellbeing. Engagement of pharmacies will allow for increased communication and care planning in consultation with GPs. Pharmacists are well placed to identify high prescribing doctors who may need additional education, as well as identification of people who meet the criteria for dependency and deliver alternative referral points.

Increase access to treatment for families

A report CESPHN commissioned to NADA identified limited services which cater for women with children. The report recommended that CESPHN should prioritise community-based treatment models which provide after hours and weekend treatment options or provide childcare facilities.[104]

6.5. Focus on person-centred, quality service delivery

Through consultations it is understood that there is an emerging sector-wide understanding and commitment towards establishing a person centred rather than service centred system. To attain positive outcomes, treatment should be holistic and integrated and meet individual AOD needs at their point of access. A cross sectoral care approach across all health and social service systems and community is required. Stakeholders noted that the current funding system creating a fragmented and siloed treatment approach. A population and public health preventative approach should be implemented through engagement of the AOD sector with the wider service system to meet the holistic and interrelated needs of individuals. CESPHN will continue to commission evidence-based programs and actively contribute towards sector activity to establish a quality framework and standardised patient outcome and experience measurements.

This strategy is in line with commitments outlined by the National Drug Strategy and includes building workforce capacity, building sector partnerships and encouraging the enhancement of quality service provision.

Equity of access for priority populations and workforce development opportunities

Ensuring the delivery of culturally appropriate treatment for priority populations is essential to ensure ongoing engagement with the treatment process and ensure a person-centred treatment approach to meet the individuals needs and enable positive treatment outcomes.

Stakeholders have identified that the sector has inconsistent capacity in the delivery of culturally sensitive care for Aboriginal and/or Torres Strait Islander peoples. The CESPHN region encompasses one Aboriginal Community Controlled Health Organisation, the Aboriginal Medical Service that operates in Redfern, and Aboriginal Community Controlled Organisations. It is essential to strengthen the capacity and capability of services to address and understand unique individual needs which impact on treatment outcomes; utilising best practice approaches in treatment.

Use of inclusive language is an essential component for ensuring cultural appropriate service delivery and is both a powerful deterrent and enabler to accessing treatment and support. Language use which is perceived as stigmatising, judgmental or culturally inappropriate will make service engagement and retention challenging. This can be ameliorated through targeted training for priority populations, including Aboriginal and/or Torres Strait Islander peoples, LGBTI communities and people from CALD backgrounds.

Stakeholders have identified the importance of treatment services implementing a trauma informed best practice approach, recognising the relationship between trauma histories and substance use dependency. It is recognised that further training opportunities for the AOD workforce in this area is required, increasing sensitivity to and skills in understanding and responding to the impacts of trauma. This is especially important for women accessing treatment, with additional consideration applied to Family and Domestic Violence factors.

CESPHN will continue to ensure commissioned services work to ensuring equity of access by requesting the development and implementation of strategies to ensure service appropriateness for CESPHN region priority populations.

Role of families

Families play an important role in the treatment process, as well as the need to provide support for those affected by a loved one's problematic substance use in their own right. There is a need for providers to demonstrate how they create safe and accessible service environments for families and include the needs of family members, carers and significant others. This is imperative for achieving and sustaining change, particularly in the context of family functioning and breaking intergenerational cycles of disadvantage. A holistic model should address the complex and interwoven needs of children, parents and families.

Consultations with stakeholders identified that implementing Child and Family sensitive practice is essential for seeing the family, rather than the individual, as the unit of intervention.[104] This is especially important for closing the gap in disadvantage experienced by Aboriginal and/or Torres Strait Islander peoples, who have a holistic view of health which focuses on the spiritual, physical, cultural, emotional and social wellbeing of the individual, family and community. An effective holistic approach will strengthen cultural systems of care.

Stakeholders also noted that access to parenting programs from treatment services was limited, as well as recommending the incorporation of family function questions into the assessment processes to ensure holistic, best practice and effective intervention for people engaged in treatment for problematic drug and alcohol use.

Role of a peer

Stakeholders have identified the importance of consumer participation as an essential component in codesigning treatment services and programs.[104] The Drug and Alcohol sector is absent of the peer based work force present in the Mental Health sector and there is an increasing move by services toward ensuring meaningful consumer participation. Meaningful engagement of lived experience needs to be incorporated into the service philosophy and reflected in the attitudes and beliefs of the organisation to deliver a holistic and person-centred treatment.

Stakeholders reflected the success of peer delivered initiatives in service initiatives including engagement in Hepatitis C treatment, increasing the delivering harm reduction information and increasing the distribution of sterile injecting equipment.

Stakeholders identified that people may be reluctant to involve themselves in participation during their treatment, particularly in short-term detox settings. An additional barrier is a reluctance to self-identify as having lived experience due to stigma and discrimination. Stakeholders identified a gap as a lack of formal training opportunities on advocacy and participation, a barrier which prevented active consumer involvement.

6.6. Integrated service delivery

CESPHN's vision is to work collaboratively to support a flexible, coordinated, responsive and person centred treatment system. In order to create effective and seamless pathways of care for individuals accessing treatment support it is essential to establish robust and effective partnerships between Local Health Districts, Local Hospital Networks, primary care, non-government organisations and ACCHOs. In order to create holistic treatment plans that promote long term sustainable outcomes, a greater connection with social support services is required to meet the other interrelated needs of people presenting with substance use dependency.

The siloed treatment approach has been identified as a barrier to effective person-centred treatment by stakeholders. A fragmented approach to care creates a more complex treatment service system for people to navigate despite a large intersection of services treating the same client base. Stakeholders have identified that comorbidity is an area which requires training and development, with mental health services often having exclusion criteria for people engaged in substance use, and drug and alcohol services having exclusion criteria pertaining to people experiencing severe mental health symptoms.

A suite of service options

All stakeholders identified a lack of service capacity and difficulties accessing appropriate treatment support as an important issue. While it is difficult to ascertain the level of regional need due to delays in treatment seeking, it is predicted by stakeholders that approximately 1 in 6 people who require treatment can access it. Other noted issues include[104]:

- Limited access to detox facilities (requirement for residential rehabilitation)
- Long waiting periods and the importance of engaging people in treatment when they seek support

- Lack of withdrawal management supports within the community for low-moderate symptoms
- Limited aftercare/continuing care service provision, essential in promoting sustainable long term wellbeing and preventing relapse
- Recognition that many services utilise a recovery model that is abstinence based and will not be homogenously congruent to all individual's treatment goals.

An effective treatment system will utilise a stepped care approach and offer a suite of person-centred and integrated treatment services.

Stakeholders recognised the essential role harm reduction services play in reducing harms associated with drug and alcohol use, as well as providing opportunistic and non-stigmatising engagement with health care providers and encouraging empowerment and help-seeking behaviour. Needle and Syringe Programs are essential for ensuring the continued increase in distribution of injecting equipment, reducing receptive needle sharing and the transmission of blood-borne viruses.

7. Digital health and data

Key points

- As at June 2018, approximately 87% of general practices in the CESPHN region are computerised, of which 70% are registered to access the My Health Record System and 23% share data with CESPHN as part of quality improvement activities.
- There are 493 general practices with secure messaging software, however this is used almost exclusively to receive diagnostic results, with few, if any, providers using secure messaging for electronic referrals or transfers.
- Limited uptake of electronic referrals is due to limited capability and confidence, issues with data integrity and interoperability between secure messaging vendors, and the high cost.
- GPs would like to receive high quality discharge summaries. The key barrier to enabling electronic clinical handover is interoperability issues between hospital patient information systems and general practices.
- From December 2017 to December 2018, there has been an increase in the number of discharge summaries uploaded from 6,326 to 8,360, an increase in event summaries uploaded from 181 to 248, and an increase in pathology reports uploaded from 34,358 to 37,073.
- Since diagnostic imaging was introduced, it has risen from 5 uploaded in July 2018 to 1,913 uploaded in December 2018.

7.1. Digital health

Streamlining the flow of relevant patient information between service providers is a continuing challenge for the region. Consultations with GPs, allied health professionals, hospitals and local health districts showed the digital health needs were related to a practitioners or practices' level of maturity of digital health use, and interoperability between digital health systems across service providers.

Uptake and knowledge

Primary health practitioners have varying degrees of knowledge, confidence and capability in the use of technologies in their practices. These variations in the level of use maturity range from full integration with clinical services to non-computerised and naïve digital health users. As at June 2018, approximately 87% of general practices in the CESPHN region are computerised, of which 70% are registered to access the My Health Record System, 23% share data with CESPHN as part of quality improvement activities, and few utilised the referral capabilities of secure messaging software.

During consultations, GPs demonstrated limited knowledge of digital health initiatives such as My Health Record, HealthPathways and the secure messaging process and address book management. GPs who are digital health supporters also demonstrated limited knowledge or understanding of digital health initiatives. GPs interviewed identified the following issues with digital health technologies:

- Substantial problems with receiving electronic discharge summaries
- Poor understanding of the My Health Record system
- Inconsistent use of secure messaging for referrals
- Limited or no contextual understanding of the digital health landscape.

The level of maturity required to meaningfully use digital health solutions varies significantly between primary care specialties and individual providers, including allied health and pharmacy. Increasing digital health maturity across the region will be necessary to improve the quality and coordination of patient care.

Data-driven quality improvement

The introduction of the new Quality Improvement Practice Incentive Program (QI PIP) presents a significant opportunity to increase the number of practices that submit data to CESPHN, which in turn will benefit population health planning capabilities and inform the PHN commissioning process.

As at June 2018, 23% of computerised general practices shared data with CESPHN as part of quality improvement practices. It is expected that CESPHN will become the custodian of data for practices participating in QI PIP, which will require participating practices to submit de-identified data to CESPHN. It is also expected that CESPHN will play a role in supporting participating practices with designing, implementing and monitoring data-driven quality improvement activities.

Secure messaging interoperability

Secure messaging is a core capability for safe, seamless, secure, and confidential provider-to-provider communication, enabling electronic access to patient information. However, it has not reached its potential in terms of application. In the CESPHN region, there are 493 general practices with secure messaging software, but used almost exclusively to receive diagnostic results, with few, if any, providers using secure messaging for electronic referrals or transfers.

Limited uptake of electronic referrals amongst primary and secondary care providers can be attributed to limited GP capability and confidence in sending electronic referrals, issues with general practice data integrity, and interoperability issues between secure messaging vendors. It can also be attributed to the high cost of secure messaging services, which limits secure messaging to those who are both able to afford the service and have the digital health maturity to use it.

GPs have expressed the need to receive high quality discharge summaries, which could be sent electronically from hospitals to ensure patients receive safe, appropriate, and timely continuity of care. The key barrier to enabling electronic clinical handover is interoperability issues between hospital patient information systems and general practices.

HealtheNet has been implemented across NSW public hospitals enabling clinicians to view a patient's My Health Record in emergency departments, at pre-admission clinics, on admission and on discharge. Despite these advances in digital technology, HealtheNet does not provide community health discharge summaries, ED attendance letters or outpatient clinic letters to GPs.

In addition to HealtheNet, different solutions are used by each LHD for additional types of discharge summaries. SLHD uses GP Communication system for those discharge summaries not included in HealtheNet and some admission notices, this being a legacy product with minimal technical support. SESLHD uses Argus. The different solutions complicate troubleshooting with both workflow and technical troubleshooting. In SESLHD, Argus is also used by South Eastern Area Laboratory Services (SEALS) to send investigation results, SLHD currently sends no investigations results electronically.

My Health Record use by other health providers

Meaningful use of My Health Record can improve health outcomes by supporting the sharing of patient information between providers across health system, which can reduce duplication of services, reduce medication errors, and increase patient participation in their care. Information that can be uploaded and shared with other providers include prescription and dispense records, discharge summaries from hospitals, and shared health summaries.

My Health Record statistics demonstrate increases in uploads by various health care services in the CESPHN region. Comparing December 2017 to December 2018, there has been an increase in the number of discharge summaries uploaded from 6,326 to 8,360, an increase in event summaries uploaded from 181 to 248, and an increase in pathology reports uploaded from 34,358 to 37,073. Since diagnostic imaging was introduced, it has risen from 5 uploaded in July 2018 to 1,913 uploaded in December 2018. However, efforts need to continue to ensure providers and patients are fully engaged in the My Health Record system to support further integration of care in the CESPHN region.

Remote access (Norfolk Island and Lord Howe Island)

Lord Howe and Norfolk Islands have restricted access to health care services, and residents would benefit from accessing remote health care solutions such as telehealth. Norfolk Island telehealth infrastructure is currently being implemented, and the sole primary health care provider on Norfolk Island has telehealth facilities set up.

The primary health care facility in Norfolk Island has registered with My Health Record, and compliance with My Health Record is being implemented in Lord Howe Island. In 2018, there were 23 shared health summaries uploaded from the primary health care facility in Norfolk Island. Continued support is required to improve the meaningful use of My Health Record and is particularly crucial to the continuity of care for residents who access health care services on the mainland, and for visitors who access services on the island.

7.2. Data for health planning

Understanding the health and service needs of the community requires input from three sources:

- data from administrative data sets, surveys, general practice databases and evaluations of commissioned projects
- service information such as type and location, and
- the voice of stakeholders and the community.

CESPHN is working to develop robust methods for capturing, monitoring and evaluating data. This includes establishing and implementing an organisation-wide monitoring and evaluation framework and real time data capture tools. Over time the needs identification process will increasingly draw on data derived from the outcomes and outputs of services initiated and commissioned by CESPHN and clinical data derived from general practices.

The sheer number of services and providers across CESPHN makes mapping services to population or priority areas a significant and ongoing task. The PHN has recently acquired a new Customer Relationship Management system that will be used to store all our stakeholder information, including our interactions with them and their engagement level. This new information source will allow improved service mapping in the future.

CESPHN is also working to improve its methods for capturing and analysing qualitative data from stakeholders and the community to provide context, analytical rigour and translation for our planning, commissioning, co-design and monitoring functions.

8. Workforce

Key points

- As at November 2018, there were 679 general practices operating within the CESPHN region. Of these practices, a total of 365 are accredited.
- There are 2,322 GPs, with 50% aged 55 years and over. Many GPs across the region speak a language other than English with the top five languages spoken being Arabic, Greek, Cantonese, Mandarin and Vietnamese.
- There are 542 practice nurses working across the CESPHN region. Of these practice nurses, 58% are registered nurses, 12% are enrolled nurses, and 1% are nurse assistants.
- There are 17 Allied Health Professions represented in the CESPHN region, with 5,809 individual providers. The professions most represented are Pharmacy (921), followed by Physiotherapy (609) and Psychology (677).
- Translating and Interpreting Services National provides free interpreting services to medical practitioners and pharmacies, but do not provide free services for Allied Health Professionals.
- There are 330 Psychiatrists working in a clinical role in the CESPHN region.
- The CESPHN database of health professionals identifies 636 psychologists and 202 clinical psychologists working in the region. Twelve per cent of psychologists in the region speak a language other than English with the top languages being Cantonese, Greek, Spanish and Mandarin.

8.1. General practice

As at November 2018, there were 679 general practices operating within the CESPHN region. Twenty per cent of GP practices in the region have only one GP. There is one Aboriginal Medical Service operating in the region.

A total of 2,322 GPs are delivering services within these practices, which equates to 650 residents per GP. There is a similar proportion of female and male GPs, with the rate of female GPs working within the region higher than the national rate of 40%. The areas within the region with the highest number of general practices are City of Sydney (18%), Sutherland (11%) and Canterbury (11%).

CESPHN has an ageing GP workforce, with 50% of GPs aged 55 years and over.[105] Approximately 40% of all GPs within the region are members of one of CESPHN's GP network groups.

Accreditation status

There are 365 general practices that are accredited in the CESPHN region out of 679 general practices (53.7%). One of the key reasons for general practices choosing not to be accredited is the high cost and work involved in achieving accreditation; it is a particularly high cost and time burden for small general practices and solo GPs. Whilst accreditation status is not necessarily an indication of the provision of quality and coordinated care, the proportion of accredited practices in the CESPHN region could indicate an overarching need to improve the overall quality and safety of general practices.

Speak languages other than English

Many GPs across the CESPHN region speak a language other than English. The top 5 languages spoken in the region are Arabic, Greek, Cantonese, Mandarin and Vietnamese. This closely reflects the CALD community makeup of the CSE region.

Antenatal Shared Care Program registration

There was a total of 1,036 GPs registered and actively participating the CESPHN Antenatal Shared Care (ANSC) Program, in partnership with local hospitals. GPs were either registered in a single local hospital, or with multiple local hospitals. The highest proportion of GPs (45.1%) were registered to the Royal Prince Alfred (RPA) and Women and Babies Canterbury ANSC program (45.8%).

Table 2: GP registrations in CESPHN region by Antenatal Shared Care Program

ANSC Program	No. of GPs registered	% of total GPs registered
RHW	150	14.5
RHW, RPA and Canterbury	111	10.7
RHW, RPA and Canterbury, SGS	34	3.3
RHW, SGS	10	1.0
RPA and Canterbury	475	45.8
RPA and Canterbury, SGS	66	6.4
SGS	190	18.3
Total	**1,036**	**100**

Access to general practice

The 2015-16 ABS Patient Experience Survey reported relatively low rates (8.5%) of patients that sought care from a GP for more than 12 times in a year. The frequency of visits equates to once per month and would likely relate to patients with chronic and complex medical condition.[106]

For the CESPHN region, there were more than three quarters (79.4%) of respondents that indicated they had seen a GP in the previous 12 months in 2015-16. Of those people who had seen a GP in the previous 12 months, 8.5% of respondents indicated that it was for urgent care. Similarly, the majority (80.5%) of CESPHN respondents indicated they have a preferred GP in the preceding 12 months.

CESPHN does not currently capture consumer and/or provider experience for activities. From time to time, discrete activities have been undertaken to capture experience with the health care sector, however this is not a systematic or mandatory activity except for some discrete commissioned activities. CESPHN is largely reliant on outcomes from the ABS Patient Experience Survey. Whilst this data source offers a standardised set of indicators that can be compared against other PHNs, there is no mechanism to systematically capture patient experience that represents local initiatives and/or the work that CESPHN is responsible and/or associated with.

General practice support

A comprehensive general practice support program is delivered to local general practices covering the following areas – continuing professional development (CPD), accreditation, digital/e-health, cultural awareness, quality improvement, use of MBS items, immunisation and sexual health.

CESPHN continues to provide a comprehensive and high CPD program across the region, incorporating a variety of delivery methods and targeting a multidisciplinary audience including GPs, Practice Nurses, Allied Health Professionals and Practice Support staff (practice managers and medical receptionists). CPD topics (including delivery method and location) are determined by:

- Surveys and feedback from GPs, allied health professionals and practice support staff
- Regional GP advisory committee
- Maternal health antenatal shared care advisory committees
- Program/initiative driven topics.
- Program/initiative driven topics

CESPHN is currently exploring successful models of small group learning to provide GPs with an opportunity to be involved in small group leaning opportunities to maintain and improve skills specific to daily practice.

8.2. Practice nurses

There was a total of 542 practice nurses working across the CESPHN region. The highest proportion of nurses work in the City of Sydney LGA, followed by Sutherland and then Canterbury. Of these practice nurses, 58% are registered nurses, 12% are enrolled nurses, and 1% are nurse assistants.

8.3. Allied health professionals

In 2018, there were 17 Allied Health Professions (AHP) represented in the CESPHN region, with 5,809 individual providers. The profession most represented was Pharmacy (921), followed by Physiotherapy (609) and Psychology (677). The professions least represented were Mental Health Nurses (18), followed by Diabetes Educators (13) and Audiologists (30).

The distribution of AHPs was varied with the highest number of all professions located in the City of Sydney LGA (1,005), followed by Sutherland (704) and then Randwick (488). In contrast, the regions with the least number of AHPs were Strathfield (87), followed by Botany Bay (81) and then Rockdale (160).

There are limitations with the availability of data regarding the number and distribution of AHPs across the region as existing data has relied on self-report from AHPs in the region.

Table 3: Number of Allied Health Professionals in CESPHN region, by LGA

LGA name	No.
Ashfield	187
Botany Bay	81
Burwood	236
Canada Bay	296
Canterbury	255
City of Sydney	1005
Hurstville	284
Kogarah	165
Leichhardt	310
Marrickville	237
Randwick	488
Rockdale	160
Strathfield	87
Sutherland	704
Waverley	327
Woollahra	198
Total	**5,809**

Source: CESPHN database

Interpreter and translating services for Allied Health Professionals

There are several allied health professionals providing services in the region that speak a language other than English. The highest numbers of AHPs speaking a language other than English were Mandarin (423), Cantonese (79), Greek (66), Arabic (50) and Spanish (36).

Translating and Interpreting Services (TIS) National provides free interpreting services to medical practitioners and pharmacies, but do not provide free services for Allied Health Professionals. This poses a language barrier for people with low English proficiency needing to access services from allied health professionals and can negatively impact effective management of chronic conditions for people requiring care across the health sector.

8.4. Mental health workforce

Health Workforce Australia data shows that in 2015 there were 330 Psychiatrists working in a clinical role in the CESPHN region, however the availability of access to bulk billing Psychiatrists across the region is unknown.

The CESPHN database of health professionals identifies that 12% of psychologists in the region speak a language other than English. The top languages include Cantonese, Greek, Spanish and Mandarin.

The CESPHN database of health professionals identifies 636 Psychologists and 202 Clinical Psychologists. The SA3s with the lowest number of clinical psychologists and psychologists are Botany and Canterbury, which are also the SA3s that correspond to areas with the lowest SEIFA scores and highest psychological distress.

Table 4: Number of psychologists in CESPHN region, by SA3

SA3	Number of clinical psychologists	Number of psychologists
Botany	3	1
Canada Bay	11	30
Canterbury	5	22
Cronulla-Miranda-Caringbah	22	39
Eastern Suburbs – North	20	104
Eastern Suburbs – South	6	59
Hurstville	19	24
Kogarah – Rockdale	8	29
Leichhardt	19	56
Marrickville-Sydenham-Petersham	16	20
Strathfield-Burwood-Ashfield	19	62
Sutherland-Menai-Heathcote	8	27
Sydney Inner City	46	163
Total	**202**	**636**

9. Access, coordination and integration

Key points

- The number of practices registered for an After Hours Practice Incentive Program (PIP) reached 359 in May 2018. Most practices (67%) have level 1 status.
- The number of MBS claims of Item 5020 (i.e. the after hours equivalent of a standard consultation) increased by 11.4% between 2012-13 and 2016-17, from 475,038 to 529,268.
- Botany, Canterbury and Kogarah-Rockdale had the highest rates of ED attendances for the 2015-16 period.
- Key issues impacting the ability to navigate and coordinate health services in the CESPHN region include: inability to systematically and reliably communicate patient information between health care providers, low patient health literacy, and provider issues with identifying and navigating services most appropriate to an individual's disease profile and individual characteristics.

9.1. After hours

The number of practices receiving the new five-tiered After Hours PIP has increased by 24% since its introduction in 2015. Proportions of this increase have remained similar throughout this period, with roughly two thirds of practices accessing the lowest Level.[107]

The total number of practices registered for an After Hours PIP reached 359 in May 2018, which is still well below the average of around 600 in the period 2011-13 when a three-tiered PIP was offered. The reduction is likely a result of the tightening of eligibility requirements, which requires that the practice provide evidence of "formal arrangements" for care in the after hours period.[108]

Table 5: Approved After Hours PIP practices in CESPHN region, May 2018

After Hours PIP level	No. practices	% of total practices
1	241	67%
2	34	9%
3	26	7%
4	12	3%
5	46	13%
Total	359	100%

Source: Department of Health PHN Practice Incentives Program Data

The number of MBS claims increased by 11.4% between 2012-13 and 2016-17, based on the use of item 5020, from 475,038 to 529,268. The number of providers, however, increased by 20%.[109] Using item 5020 (which is the after hours equivalent of a standard consultation) as a surrogate may not provide a full picture of patterns of:

- after hours non-urgent care
- the relationship between urgent and non-urgent
- distribution across the SA3s in the CESPHN region
- the alternative use of EDs, and
- the impact of Health Direct and other web or phone-based referral or triage services.
- Work is continuing with a number of partners to refine this data.

GP attendances in aged care facilities within the CESPHN region has risen between 2013-14 and 2016-17, potentially indicating the greater need for after hours care for older persons in RACFs. Meanwhile, only 7.7% of those in the region have seen a GP after hours, compared to 8.4% nationally.[12] Botany, Canterbury and Kogarah-Rockdale had the highest rates of ED attendances for the 2015-16 period. These three sub-regions are characterised by at least one of following factors: low health literacy, greater than 25% CALD population and socioeconomic disadvantage.

The gap in these sub-regions suggests that strategies specifically targeting Aboriginal and/or Torres Strait Islander peoples, CALD groups, paediatrics, and vulnerable populations could be implemented. This lack of access has been substantiated through extensive consultation with representatives from LHDs, SHNs and RACFs. The After Hours PIP data also suggests that access should be a consideration, as there are a small number of level 2-5 after hour practices in comparison to the relatively large number of level 1 practices that offer more limited services.

9.2. Coordination and integration of care

The CESPHN region has a high density population with a significant number of services available. Community and stakeholder consultations have repeatedly raised the need for improving integrated care, coordination of care, and service navigation to increase the efficiency and effectiveness of the healthcare system and improve patient experience.

The key issues impacting the ability to navigate and coordinate health services in the CESPHN region include:

- Inability to systematically and reliably communicate patient information between health care providers
- Low patient health literacy
- Provider issues with identifying and navigating services most appropriate to an individual's disease profile and individual characteristics.

Communicating patient health information between providers

Meaningful use of My Health Record and secure messaging can support the delivery of integrated and coordinated care by improving communication between providers across health systems, reducing duplication of services, reducing medication errors, and increasing patient participation in their care. However low levels of digital maturity among providers and interoperability issues remain barriers to information integration.

For more detail see Secure messaging interoperability and My Health Record in the Digital Health section.

Patient health literacy

Low health literacy is associated with poorer health outcomes, limited engagement with the healthcare sector, limited ability to navigate the healthcare system, limited knowledge and uptake of preventive actions, impaired self-management and increased use of emergency care, hospitalisations and mortality rates. The combination of low health literacy and complex health needs amplify the difficulties patients experience when navigating a fragmented health care system.

In the 2006 Health Literacy Survey, only 41% of adult Australians had a level of literacy that would allow them to meet their complex health needs.[(69)] The survey also indicated that health literacy was lower in those who speak English as a second language (21%). Recent literature indicates that an estimated 6.8% (102,739) of CESPHN residents have limited English literacy and language skills.

Identifying and navigating services

Identification and navigation of services most appropriate to a patient's needs is a challenge for providers, particularly when their patients have complex health needs. One strategy CESPHN employs to integrate primary health care services with both the Sydney and South Eastern Sydney Local Health Districts is the development and implementation of HealthPathways, which provides recommended diagnosis and management options for specific conditions, and options for referral pathways across health systems.

10. Priority population groups

Key points

- Aboriginal and/or Torres Strait Islander peoples have poorer health and reduced access to healthcare services, with higher rates of chronic conditions, higher numbers of avoidable hospitalisations and reduced life expectancy.
- Access to more early intervention and prevention programs for Aboriginal youth, more outreach services – particularly a regular GP for the La Perouse community, more culturally appropriate initiatives, better transition services in child and youth and services for prisoners on release are needed.
- A CESPHN NDIS survey of health providers and community organisations found that the majority of those with patients/clients with specific disabilities were dissatisfied with how their patients/clients were accessing the NDIS or receiving NDIS support and services.
- Adults with a disability have higher rates of risk factors associated with the onset of chronic and complex medical conditions, and the median age at death for people with intellectual disability is 54 years (compared to the NSW median of 81 years) with many of these deaths being preventable.
- The health and social needs of the people experiencing homelessness are great and complex. The last City of Sydney street count identified that 35% of those experiencing homelessness in the area had a disability, 72% reported substance abuse, 53% reported a mental health issue, 64% reported both substance abuse and mental health issues, and 14% of those surveyed under the age of 25 were HIV positive.
- The constant movement of people through the criminal justice system means that the health issues of people in custody become the health issues of the community. There are few organisations that provide support specific to the needs of people released from the system.
- There were almost 5,000 recorded domestic violence related assault incidents in the CESPHN region. Research has found that women were two times more likely to disclose domestic violence to their GP if asked.
- Increasing urban development in the CESPHN region will impact the health, health needs, and service requirements of residents. There is an expectation that the demand for health services across the sector will increase as the population in the region increases and changes.
- The CESPHN region includes the remote islands of Lord Howe and Norfolk. These populations are geographically isolated and have limited health services available to those living or visiting the islands.

10.1. Aboriginal and/or Torres Strait Islander peoples

Aboriginal people of NSW have poorer health and reduced access to healthcare services when compared with non-Aboriginal people, with higher rates of chronic conditions, higher numbers of avoidable hospitalisations and reduced life expectancy.[110]

For Aboriginal and/or Torres Strait Islander peoples, good health is more than just the absence of disease or illness; it is a holistic concept that includes physical, social, emotional, cultural, spiritual and ecological wellbeing, for both the individual and the community. In 2014-15, the majority of Aboriginal and/or Torres Strait Islander people aged 10-24 years assessed their health as either 'excellent' or 'very good' (63%). Across younger age groups the proportions who rated their health as excellent or very good decreased rapidly with age from 79% of those aged 10-14 years to 60% of those aged 15-19 years and 48% of those aged 20-24 years.[111]

Overall in NSW, Aboriginal people are over represented in the rates of chronic conditions and the risk factors contributing to these diseases in comparison to non-Aboriginal people especially in the areas of alcohol consumption, overweight and obese rates, smoking rates, premature death from endocrine disease cardiovascular and respiratory diseases, behavioural and mental disorders, disability rates, and hospitalisations due to potentially preventable conditions.[110]

The 2018 SESLHD Population Health Plan for Aboriginal People living in Randwick and Botany Areas 2017-2022 identified the following health and service priority areas for this population:

- drug and alcohol
- early childhood and youth
- chronic conditions including management of risk factors
- aged care including services for older women
- mental health including suicide health literacy and health promotion, especially in youth/teen years
- transport
- counselling
- sexual health/family planning services
- disability services
- men's health, and
- GP services at the La Perouse Aboriginal Community Health Centre.[110]

There is a significant over representation of this population in the justice system, with 28% of all prisoners in Australia identifying as Aboriginal and/or Torres Strait Islander. The health needs of this priority population are outlined in 10.4 People in contact with the criminal justice system.

Health status

Maternal Health

There is variation between Aboriginal and non-Aboriginal maternal health such as the number of births, perinatal mortality, smoking during pregnancy, gestational diabetes and early childhood development. Fertility rates are higher, maternal age is lower and low birth weight babies is more common.[111]

The first antenatal visit before 14 weeks was lower for Aboriginal and/or Torres Strait Islander women within the CESPHN region (67.5%), than non-Aboriginal and/or Torres Strait Islander women (76.8%).[15]

Smoking during pregnancy was more common in Aboriginal women (39.7%) compared to all women (2.9%) between 2014-2016.[12]

Youth and Child Health

The Aboriginal population has a younger age structure than the non-Aboriginal population with the median age at 21.8 years compared with 37.6 years.[110] There are significantly higher rates of infant and child (<5y) mortality and child hospitalisations in the Aboriginal population of NSW. Aboriginal children consistently score more poorly across all five domains of the Australian Education Development Index which measures school readiness with almost 40% of children having a score that identifies them as "developmentally vulnerable".[112]

The proportion of Aboriginal children achieving standard benchmarks in reading, writing and numeracy are lower than non-Aboriginal children, as are school retention rates.[112]

Child immunisation rates for Aboriginal and/or Torres Strait Islander children in the region where lower than the NSW average for 1 year old (91.7%), 2 year old (89.1%), and 5 year old (92.0%) fully immunised status.[12]

Ageing

Whilst Aboriginal people over 65 years of age account for a small proportion of the Aboriginal population they have much greater rates of morbidity and mortality. The 3% of the Aboriginal population in NSW were aged over 65 but they accounted for 13% of the total burden of disease. The main conditions contributing to this burden are coronary heart disease, COPD, dementia, lung cancer and stroke.[110, 112]

Chronic conditions

At the State and National level, Aboriginal and/or Torres Strait Islander peoples experience higher rates of chronic disease such as diabetes, chronic kidney disease, heart/circulatory and respiratory problems, and mental health. Health and behavioural risk factors such as overweight and obesity, lack of physical activity, smoking and sexual health are disproportionally higher when comparing the Aboriginal and non-Aboriginal populations of NSW.[13]

The management of these chronic conditions requires a coordinated approach across all health providers and culturally-competent communication between providers and patients. The focus should not only be on the management of the existing condition, but also mitigation of health risk factors and early intervention in younger communities, in the form of health education and promotion.

The estimated incidence of Chronic Kidney Disease in Aboriginal people is twice as high as non-Aboriginal people, and care involving dialysis accounts for the largest difference in hospitalisation rates between Aboriginal and non-Aboriginal people (3.5 times higher). This holds true in CESPHN, where in 2014-15, dialysis hospitalisation rates were highest for Aboriginal people (16285.4 per 100,000) compared to non-Aboriginal people (4427.7 per 100,000). This rate has continued to climb over the last eight years.[113]

Acute respiratory disease rates (including asthma) across NSW are higher in Aboriginal residents than non-Aboriginal residents across all age groups.[15]

Mental health

Aboriginal and/or Torres Strait Islander's people have significantly higher rates of hospitalisation due to mental health problems and intentional self-harm for all age groups,[114] than the non-Aboriginal population, with rates as high as 2.7 times for hospitalisation due to intentional self-harm. The rate of suicide is double that of non-Aboriginal people, and the rates of high/very high psychological distress is 2.6 times higher.[114] Of the total health burden on the Aboriginal and/or Torres Strait Islander's people, 19% were due to mental and substance disorders.[115]

Among younger people, in 2014–15, most Aboriginal and/or Torres Strait Islander peoples aged 15–24 (67%) experienced low to moderate levels of psychological distress in the previous month, while 33% experienced high to very high levels of psychological distress. Leading contributors to the mental health disease burden were suicide and self-inflicted injuries (13%) anxiety disorders (8%), alcohol use disorders (7%) and road traffic accidents (6%).[111] Health loss due to anxiety and depressive disorders constitute for 3 of the top 4 causes of health loss in children in the 5-14 age group.[112, 116]

Consultation with the CESPHN Mental Health and Suicide Prevention Advisory Committee found the following service gaps around access to service for Aboriginal and/or Torres Strait Islander people: a lack of Aboriginal and/or Torres Strait Islander staff and cultural competency, poor service alignment to where the community needs services resulting in lack of access to (competent) services, poor data collection and the need for further consideration of social and emotional well-being being greater than Mental Health.

Homelessness

Nationally 20% of all estimated people experiencing homelessness identified as Aboriginal and/or Torres Strait Islander,[117] equating to 105.4 per 10,000 in NSW. Of these, almost 10% are living in improvised dwellings, tents, or sleeping out, and 16% in supported accommodation or boarding houses.

In the last City of Sydney Street Count, 17% of those experiencing homelessness identified as Aboriginal and/or Torres Strait Islander, but stratified into age, the youth Aboriginal and/or Torres Strait Islander rate rose to 35%.[118]

Although rates of Aboriginal and/or Torres Strait Islander's people are high on measuring those at risk of homelessness or experiencing homelessness, it's important to note that there are aspects of Aboriginal and/or Torres Strait Islanders people's concept of home and homelessness that results in underenumeration in ABS census data by 17.5%[119]

Hospitalisations

In 2012-13, 5,406 Aboriginal and/or Torres Strait Islanders across the Indigenous Area Region (IARE) – which covers a large portion of the PHN – were hospitalised, representing approximately one third of the CESPHN Aboriginal population. The highest rate of hospitalisations and ambulatory sensitive hospitalisations was for those living in the IARE Sydney-City area, both rates were higher than the State.

National data indicates that the most common reason for the hospitalisation for Aboriginal and/or Torres Strait Islander peoples in Australia was for 'Factors influencing health status and contact with health services' (mostly for care involving dialysis), accountable for 50% of hospital attendances. Hospitalisations for circulatory disease, respiratory diseases and injury and poisoning are at a higher rate than for non-Aboriginal people. Injury and poisoning is third highest for hospitalisations among

Aboriginal people (3613.6) compared to non-Aboriginal people (2114.7) across the PHN but still lower than NSW (3870.8) per 100,000 population (2014/15).

Potentially preventable hospitalisations tell the same story. In 2014-15, the rate of overall (national) rate for potentially preventable hospitalisations was around three times higher for Aboriginal and Torres Strait Islander people than those for non-Aboriginal people. The highest hospital utilisation was emergency departments, with the majority of these, same day separations.[120]

There is a significant over representation of this population in the justice system, with 28% of all prisoners in Australia identifying as Aboriginal and/or Torres Strait Islander. The health needs of this priority population are outlined in 10.4 People in contact with the criminal justice system.

Barriers to access

There were several barriers in accessing health services identified by community members, these included, cost, transport (particularly early morning and late afternoon appointments for dialysis treatment)[121] and lack of culturally sensitive services. Access to more early intervention and prevention programs for Aboriginal youth, more outreach services – particularly a regular GP for the La Perouse community, more culturally appropriate initiatives, better transition services in child and youth and services for prisoners on release are needed.

Wide availability and knowledge of the Aboriginal health assessment and 'CTG' medication was noted as a barrier for Aboriginal people accessing services. Priority areas highlighted included the need for better Aboriginal identification, easier navigation of health services and better communication and coordination between services.

Primary Health Services for Aboriginal peoples in CESPHN

There is one Aboriginal Medical Service operating in the region – at Redfern – with 12 GPs employed by the Service. Less than 8% of the practices in the CESPHN region are registered to the Aboriginal Health incentive, which impacts on access to primary health care services for Aboriginal people. Limited numbers of practices offering health assessment and PBS entitlements ('CTG script') is an ongoing issue, particularly in areas with high proportions of Aboriginal residents. In 2016-17, 1,696 MBS Item 715 were completed by up to 222 practitioners across the CESPHN region; this is an increase from 2014-15, where 945 MBS Item 715 were completed by up to 110 practitioners.[109]

10.2. Culturally and linguistically diverse communities

There is significant cultural diversity across the CESPHN region, including diversity in language spoken and country of birth, and further diversity exists within cultural groups that creates an additional level of heterogeneity. CALD communities tend to be more vulnerable to poor health outcomes due to issues related to access. Access to health services and engagement with the health care sector by this cohort may be impacted by limited English language skills (and by extension low health literacy), general lack of awareness of services available, limited support networks, cultural barriers, and confidence in authority.[122, 123] Furthermore, refugees and asylum seekers may have conditions attached to their visa that restrict their access to Medicare and the Pharmaceutical Benefits Scheme.

One regional initiative to reduce the barriers to services is the utilisation of bilingual community educators, who are local people with links to their respective CALD communities and provide cultural and linguistic input for health promotion initiatives. CESPHN's bilingual community educator program addresses access to primary health care and hospital-based services issues, focusing on the areas of maternal and child health, cancer screening, diabetes, and access to health care, for the

region's priority language groups of Mandarin, Arabic, Cantonese, Vietnamese, Korean, Bengali, Nepali, Greek, Italian, Rohingya and Mongolian.

Across the CESPHN region, CALD communities have been found to have higher rates of chronic conditions and risk factors such as smoking, lower rates of cancer screening and lower access to mental health services. The area with the greatest concentration of people born overseas in the CESPHN region is Canterbury with half of its residents born overseas. The population of Canterbury have high mortality rates for all cancers, high rates of chronic diseases, high overweight and obesity rates for adults and children, high rates of children with one or more developmental vulnerability domains, and the highest rates of psychological distress, smoking, and percentage of people reporting fair or poor health. The place-based program Can Get Health in Canterbury was developed to reduce health inequities for marginalised CALD communities in the Canterbury area by improving access to appropriate primary health services, improving health literacy, and working with stakeholders to address a social determinant of health.

10.3. People living with a disability

The disability sector is undergoing major reform with the implementation of the NDIS. The CESPHN region commenced its NDIS roll-out 1 July 2017.

The central basis of the NDIS is the development of individualised plans unique to each person with significant and permanent disability, to enable them to lead a normal life and contribute socially and economically, just as do people without disabilities. However, the NDIS does not cover all needs – people with lived experience of disability are certain to require support not directly funded by the NDIS, including support from the health and mental health systems.

Cohorts that have been affected during this transitional period include those who:

- are now NDIS participants
- NDIS participants but whose plans do not adequately cover their needs
- are yet to transition to NDIS, and
- have functional impairment but who will not be eligible for NDIS.

Disability type

The NDIS includes people with different types of disabilities, such as: psychosocial, intellectual, sensory, and physical. There is little data surrounding the prevalence and health issues of those with specific disabilities. However, a CESPHN NDIS survey identified the majority of those with patients/clients with specific disabilities (listed below) were dissatisfied with how patients/clients were accessing the NDIS or receiving NDIS support and services.[124]

Table 6: CESPHN NDIS Survey on Patient/ Client Satisfaction, 2018

Disability Type	% of those dissatisfied
Psychosocial	77%
Intellectual	62%
Sensory	65%
Physical	58%

Intellectual disability

Persons with intellectual disability (ID) die prematurely, specifically those in the 20-44 and 45-64-year age groups. The median age at death in people with ID was 54 years, compared to the NSW median of 81 years. At least 31% of these deaths were preventable, with the top avoidable deaths being: cardiovascular, infections, cancer, other and respiratory. These higher rates of potentially avoidable deaths suggest a problem in our health system for those with ID. Some potential barriers to quality care include: difficulty identifying or communicating health needs, lack of specific health services, lack of skilled and confident health professionals, avoidance of tests and procedures, and under-diagnosis and management of chronic conditions.[125]

Psychosocial disability

People with severe and complex mental illness may require psychosocial support to assist with their day to day functioning and recovery. This includes non-clinical services that assist people in areas such as social life, family connections and employment

People living with mental illness have poorer physical health and higher rates of mortality compared with people with good mental health. Poor mental health is a risk factor for chronic physical health conditions, while conversely, people with chronic physical health conditions are at risk of poor mental health.

Health status

There is an association between the incidence of disability and the onset of major long-term health conditions and related health risk factors/behaviours. In 2011–12, adults aged 18–64 years categorised with a disability had higher rates for risk factors associated with the onset of chronic and complex medical conditions.[125]

Aboriginal and/or Torres Strait Islander young peoples

The 2014-15 National Aboriginal and Torres Strait Islander Social Survey indicated that almost one in three (32%) Aboriginal and/or Torres Strait Islander peoples aged 15-24 reported living with a disability. Of those living with a disability, 15% had a profound or severe core activity limitation, 17% had a moderate or mild core activity limitation, 25% had a schooling or employment restriction, and 43% had no specific limitation or restriction. A higher proportion of females (37%) than males (28%) reported having a disability.[126]

Priority groups

Stakeholder feedback also identified gaps in NDIS of addressing the needs of priority populations. It is well documented that vulnerable population groups have more complex needs. Therefore, special consideration should be given to these cohorts when implementing strategies moving forward. These vulnerable groups include but are not limited to:

- CALD persons
- Refugees and/or Asylum seekers
- People at risk of homelessness or experiencing homelessness
- LGBTIQ persons
- Families and carers

Disability Workforce Capacity and Development

A CESPHN survey was completed by health providers and community organisations to identify strategies to better support people in the region who participate in the NDIS scheme. Feedback included the need to support the education of health and mental health providers to better serve the region. Currently, only 63% of those who responded were somewhat confident/very confident/extremely confident in helping patients/clients access NDIS. Furthermore, only 64% have participated in NDIS education activities, while 74- 83% of respondents expressed high interest in attending educational events.[124]

Four key implications arising from the Survey report include:

1. Stronger engagement with primary care providers to support the implementation of the NDIS in the CESPHN region
2. Enhanced communication and collaboration with the National Disability Insurance Agency to support primary health providers
3. Increased opportunities for further education tailored to the needs of health providers for them to more adequately support people on their NDIS journey
4. Continued workforce development efforts to build the skills of the primary health care workforce.

10.4. People experiencing homelessness

The total number of people who were experiencing homelessness or at risk of homelessness in CESPHN region was 13,180 compared to the NSW total of 37,692. The highest rates of homelessness in CESPHN by SA3 were in Sydney Inner City (4,979), followed by Strathfield-Burwood-Ashfield (2,070) and Canterbury (1,295).[2] The latest city street count's profile of this population highlights their complex needs: 100% live under the poverty line, 53% have been in prison, 8% are veterans, and 34% of young people experiencing homelessness were in foster care.[118]

A range of geographical locations across the CESPHN region have clusters of people experiencing homelessness who create a unique social dynamic. These clusters provide opportunities for intervention with access to multiple people at one time. Locations with clusters of those experiencing homelessness, include: Woolloomooloo, Wentworth Park and Belmore Park, but as this population is transient and vulnerable to forceful displacement, health services must be adaptable in their service delivery.[2]

The health and social needs of this population are great and complex. Research investigating the profile of adults experiencing homelessness within the greater Sydney area found that 42% met criteria for severe depression, 57% were currently experiencing Post Traumatic Stress Disorder and 37% had a lifetime psychotic disorder. The last City of Sydney street count identified that 35% of those experiencing homelessness in the area had a disability, 72% reported substance abuse, 53% reported a mental health issue, 64% reported both substance abuse and mental health issues, and 14% of those surveyed under the age of 25 were HIV positive.[118]

Of standout for the CESPHN region is the higher than average rates of people living in boarding houses, with a total of 4,581 people living in boarding houses compared to the entire rate for NSW of 6,853 people.[2] Research participation rates depict that most boarding house residents are male (82%). Many have chronic conditions with comorbidities including high rates of mental health conditions (59%). An average of 12% are identified as Aboriginal and/or Torres Strait Islander.[2]

People experiencing homelessness or at risk of homelessness have more complex needs and face higher barriers to service accessibility due to not having identification, phone, access to emails and no stable accommodation. This can present as a challenge for accessing pathways to care, as services can be unwilling to discharge an individual into homelessness.

Homelessness services

CESPHN is working collaboratively with the following key stakeholders to address the primary care needs of homeless residents.

- NSW Family and Community Services
- St Vincent's Health Network (SVHN)
- Aboriginal Housing Company
- Launchpad Youth Services
- Innari Housing
- NSW Police
- SLHD and SESLHD
- Neami National
- City of Sydney
- Mission Australia
- Other specialist homelessness services.

Since November 2016, CESPHN has undertaken extensive consultation with key stakeholders in the homeless health space. These include SLHD, SESLHD, SVHN, local boarding houses, Family and Community Services (FACS), LGAs, Department of Education and NGOs. Formal partnerships have been forged to assist in efforts to address the health care needs of homeless residents and provide stable physical, social and psychological environment in transitioning to permanent residency.

There are multiple barriers to accessing primary health care for people experiencing homelessness. These include individual related barriers such as mistrust of health services (often arising from previous negative experiences); lack of awareness of available services; financial and transport difficulties; and difficulty managing structured appointment times. Service provider barriers include lack of flexibility in service delivery (including service location and appointment times); insufficient focus on care coordination; lack of assertive follow up and integrated care; lack of provision of trauma informed care; and discriminatory attitudes and practices towards people experiencing homelessness.

Opportunities for Service improvement

In 2017, a project was initiated to examine the needs of CESPHN residents experiencing homelessness and to identify the role of inter-sectoral agencies to support approaches to attaining housing security. The final report, “Enhance Primary Health Care Services for People Experiencing Primary Homelessness in the Central and Eastern Sydney Primary Health Network Region” was completed in February 2018.

Different service models across the CESPHN region exemplify characteristics of good practice in primary health care for people experiencing homelessness. Four services were showcased in the

report, including: Kirketon Road Centre, St Vincent's Homeless Health Service, the Wayside Chapel and Youthblock.

Key areas of service and action were also identified. They include:

- National and/or state homelessness health policies
- Integrated holistic primary health care services
- Standardised and routine data collection with regional analysis
- Universal trauma-informed care and practice (TICP) training
- After hours assertive outreach primary health services.

10.5. People in contact with the criminal justice system

NSW has the largest prisoner population with 13,624 persons in custody in 2018.[127] Prisoners are predominately male (92%), young (median age 35 years), with an over representation of Aboriginal and/or Torres Strait peoples (28%).[11] Identifying the numbers of people entering, exiting, and re-entering prison is difficult, with people constantly entering and being released from the system. This constant movement means that the health issues of people in custody become the health issues of the community. The CESPHN region becomes the place of residence for approximately 19% of all people exiting custodial settings in NSW.[80]

Inmates have a complex and diverse health profile. They have higher levels of mental health disorders, alcohol and other drug use, chronic conditions, communicable diseases and disability. The most recent NSW inmate health survey found the following health concerns and issues commonly reported by prisoners:

- 23% of men and 29% of women described their health as either fair or poor
- 27% reported having three or more health conditions
- 20% had been diagnosed with Hepatitis C
- the vast majority are smokers (86%)
- 13% of inmates had been diagnosed with an alcohol use disorder
- cannabis was the most common drug ever used (82%), followed by methamphetamine (67%), amphetamines (57%), and cocaine (50%), 63% of methamphetamine users reported having used on a daily or almost daily basis prior to incarceration. In addition, 57% of cannabis users, 29% of amphetamine users and 22% of cocaine users reported daily or almost daily use.
- 60% of prisoners has been diagnosed with a mental illness; of these, 55% of these diagnosed between the ages of 18-24, and almost half reporting having no previous contact with a mental health clinician
- almost half of prisoners had received some form of psychiatric care prior to their current period of incarceration.
- a significantly higher proportion of women in prison suffering from schizophrenia (29%) compared to 1% of the general population, and approximately 23% of prison population on psychotropic medications.
- 18% had made at least one suicide attempt at some stage throughout their lifetime.

Upon release many ex-prisoners face barriers to accessing basic services. A vast number of prisoners are released without identification or Medicare cards, and with little support or planning on release into society (especially those who are released without parole).[128] Older prisoners face barriers in receiving aged care on exiting, as RACFs are often cautious to provide housing and care for these clients upon release.[128] Other vulnerable groups include people who have a cognitive impairment, people who have a mental illness, Aboriginal and/or Torres Strait Islander peoples, and women with dependent children.

There are few organisations that provide support specific to the needs of ex-prisoners. Post-release transitional services based on a flexible, through-care outreach model of long-term, wrap-around support, a housing first approach and strong interagency partnerships need to be developed to ensure basic needs are met, and appropriate referral pathways into primary health care, LHD services, and other support services are made.

10.6. People experiencing family and domestic violence

There were almost 5,000 recorded domestic violence related assault incidents in the CESPHN region[129] from October 2017 to September 2018. Sydney LGA ranked highest in the CESPHN region with 457.6 recorded incidents per 100,000 population and ranked 52 out of 120 LGAs in NSW.

Table 7: Recorded domestic violence assault incidents in CESPHN region by LGA, October 2017 to September 2018

LGA	No. of incidents	Rate per 100,000 population	CESPHN Rank	NSW Rank
Sydney	1,026	457.6	1	52
Bayside	545	330.5	2	73
Strathfield	139	328.4	3	74
Canterbury-Bankstown[a]	1,131	312.8	4	79
Georges River	413	269.1	5	87
Randwick	352	235.8	6	93
Sutherland Shire	461	203.9	7	98
Inner West	376	195.8	8	100
Waverley	138	191.4	9	102
Burwood	61	158.5	10	108
Woollahra	91	156.1	11	109
Canada Bay	109	118	12	116

(a) Canterbury-Bankstown LGA includes region and population that are not part of the CESPHN region
Source: NSW Bureau of Crime Statistics and Research

GPs and other primary health care providers play a key role in identifying, intervening and treating patients who are at risk of or affected by domestic violence.[130] In a qualitative study conducted in Australia, women were two times more likely to disclose domestic violence to their GP if asked.[131] Despite the influence GP inquiry into abuse has on disclosure rates, few women in the study were asked by their GPs.

In order to respond effectively and appropriately to patients experiencing domestic violence, GPs need to have the knowledge and skills to facilitate disclosure and provide evidence-based support to minimise long term physical and mental health consequences.

10.7. High density dwellers

Increasing urban development and density is an emerging population health and health service challenge in the CESPHN region. The CESPHN region has a high population density in which most suburbs have densities above 4,000 persons per square kilometre and rising above 10,000 persons per square kilometre in the inner-city areas surrounding the CBD, including Pyrmont, Ultimo, Surry Hills, Redfern, Waterloo, Darlinghurst and Potts Point.[132] The CESPHN region also includes SA2 regions with the largest and fastest growth between 2006 and 2016 – Waterloo-Beaconsfield (101.9%), Concord West-North Strathfield (99.9%), Arncliffe-Bardwell Valley (59.4%), Sydney-Haymarket-The Rocks (35.1%).[133]

This growth is fuelled by extensive precinct development in places such as Green Square, Mascot and Pyrmont and by construction of high-rise residential dwellings across the CESPHN region and will likely place increased pressure on the health care services in areas where there is substantial development. Further, the significant influence the built environment has on health and health behaviours warrants designing these environments to mitigate social and health risks and increase opportunities for physical activity and social connection to improve the health and wellbeing of residents and visitors.[134]

Changing demographics

There has been a trend for high rise residential living in Sydney which has been influenced by proximity to employment, housing affordability, and changes to lifestyle preferences.[135] These factors also drive the changing demographics of apartment dwellers in the CESPHN region, with implications for health and service needs. The demographics of people currently living in, and future residents of high residential dwellings in the CESPHN region need to be further identified, however the biggest demographic trend in apartment living is an increase in children residing in apartments.

Families with young children

There is an increasing prevalence of families with children living in apartments in the CESPHN region. Analysis of the latest Census data show that families with children under the age of 15 comprise 25% of Sydney's apartment population.[135] This shift in demographics has implications for child health needs and child health services.

There are child health and development issues that could plausibly be impacted by high-rise apartment living. A rapid review conducted on the effects of high-density housing on children's health and development found evidence of possible associations between living on higher floors of apartments and worse mental health, and behavioural problems in children living in high rise apartments.[136] Possible influences on physical health could include delayed development in running in early childhood if there is little space to learn to run and practice. It is also plausible that children living in apartments engage in less noisy play and may have more screen time to minimise disruption to neighbours, which could plausibly hinder the sort of play crucial to a child's cognitive and language development.[136]

A lack of local or easily accessible early child health and development services was an identified service gap raised in community consultations held in Green Square to inform the development of a Health One facility.[137] Some parents in attendance also believed that local GPs were not skilled enough in early child health and would travel outside the area to visit a recommended GP or paediatrician. The consultation also identified that the lack of a primary public school would decrease the opportunities for health prevention such as immunisation, child-related screening services, and active transport to school.

Planning for health services

The expected increase in population and changes in demographics warrants comprehensive and predictive modelling of health service gaps. Local hospital networks in the CESPHN region have identified urban growth as an area that will impact health, health needs, and service requirements, and there is an expectation that the demand for health services across the sector will increase as the population in the region increases and changes.

A HealthOne facility is being planned for the Green Square precinct (RPA HealthOne East) in response to the expected rise in population in the area. This facility combines both primary health care services and community health care services in one location, and services have been planned according to the needs of the people moving into and living around the area.

At this stage there is a lack of analysis of proximity and capacity of general practices and allied health services in areas with expected rapid increases in population. As the populations in development precincts rise, the need for primary and allied health care will inevitably increase, and developments will need to plan for those amenities to exist. This was also recognised at RPA HealthOne East community consultations where residents experienced the following issues with access to GPs in Green Square: lack of bulk-billing or affordable GPs, long wait times for local GPs, and difficultly with obtaining appointments and home visits.

10.8. Rural and remote populations

Lord Howe Island

Lord Howe Island is a remote Island located off the east coast of NSW. It has a small population of residents that mirrors many rural locations. There are fluctuations in the population due to the tourism industry. The population is serviced by one health service located on the Island, operating as both a primary, secondary and tertiary care facility. There are limited specialist services available due to the geographical distance from the mainland, however access is facilitated through a selection of medical specialists flying in periodically from the mainland. Access to these specialists is at the expense of the individual provider.

Population

Lord Howe Island has a population of 416 people. The median age of residents is 44 years, higher than the NSW median age (38 years). There is an even distribution of males (50%) to females (50%).[(2)]

Health services

Lord Howe Island has one medical facility service, Gower Wilson Memorial Hospital, providing primary, secondary and tertiary care for residents and visitors. The service has three inpatient beds currently used for acute medical and/or surgical admissions. Complex cases are transferred to the mainland. A summary of primary care services delivered using MBS items is provided in the table below.

Table 8: Summary of MBS Items claimed during 2015-16

MBS Item	Total claimed	Description of MBS Item
3	97	Level A attendance
23	1,464	Level B attendance (less than 20 minutes)
36	677	Level C attendance (at least 20 minutes)
37	11	Level C (not at consulting room)
161	7	Prolonged attendance (2-3 hrs), patient in imminent danger of death
597	98	Urgent attendance after hours (not more than one patient on the 1 occasion)
73806	6	Pathology (pregnancy test)

Between 2015-16 there were 2,360 primary care MBS services delivered to residents and/or visitors of Lord Howe Island. Most services were for regular attendances (Item 23: 1,464), followed by Item 36 (677). There was a small number of services delivered outside of the consulting rooms, likely as home visits. There were 98 attendances for urgent after hours services (Item 597).

Coverage rates for childhood vaccinations are 100% for the 12-<15 Month and 24-<27 Month points, however coverage rates drop for the Polio and MMR vaccinations, and combination vaccine diphtheria, pertussis and tetanus at the 60-<63-month point.

SESLHD Clinical Service Plan encompasses Lord Howe Island. This includes their responsibilities for the Gower Wilson Memorial Hospital, of which the general practice services operate. CESPHN continues to support SESLHD in the delivery of health services, particularly in relation to general practice accreditation to ensure access to MBS incentives, medical software and using MBS items for management of vulnerable groups.

Norfolk Island

Population

Norfolk Island became an external Australian territory in July 2016 and is located 1,600km off the eastern coastline of NSW. The population is 1,748 (0.12% of the CESPHN population) with a slightly higher proportion of female residents (53.2%) than males (46.8%). The median age of people in Norfolk Island is 49 years. People aged 65 years and over comprise more than 24% of the population, and children (aged 0 - 14 years) 16.9%. There were 491 families making up the population, with an average of 1.8 children per family.[2]

It is estimated that 0.5% of the Norfolk Island population identifies as Aboriginal and/or Torres Strait Islander. Of this population, 75% are female and 25% male. The median age of the Aboriginal population is 49 years.[2]

Australian residency

The Norfolk Island community has a distinct cultural heritage with its composition still reflecting elements of its settlement history, including ancestry from co-located Pacific nations such as Pitcairn. Australian citizenship is a majority with 94% of residents, however an estimated 6% of residents do not have permanent residency, limiting access to social services such as those provided through Medicare and the PBS.[2]

Socioeconomic status

The 2016 Census data indicates that Norfolk Island income levels were on average lower than in the rest of the Australian community. The median Norfolk family income was $1,290, compared to $1,734 for the rest of Australia.[2]

Household status

On the Island, there is a total of 1,080 private dwellings, with an average 2.2 people per household. In 2016, most residents (64.1%) were either married or in a de facto relationship.[2]

Patient experience

Medicare became accessible to Norfolk Island residents in July 2016. Previously, residents had to pay a flat fee per visit to access healthcare, which has limited their familiarity with the health care system resulting in low levels of health literacy and an understanding of what general practice can provide. The self-reported health status of the Norfolk Island population was comparable to the NSW rate (82%) with 83% of residents reporting "good" to "very good" health status. However, there was variation in those that reported "excellent" health status, with only 13% of Norfolk Island residents reporting "excellent" compared with 22% for NSW population.[138, 139]

Chronic disease

A survey of Norfolk Island residents reported 64% of the Norfolk Island population were overweight or obese which is higher than the equivalent NSW population (53%), but like other outer regional and remote areas of NSW (65%). Of note is the 78% of the male population reporting being overweight or obese – significantly higher than the comparator population.

Estimates indicate unacceptable rates of hypertension amongst the Norfolk Island population. These rates, upwards of 17% of the total population, are indicative of a range of risk factors in addition to genetic predisposition including lifestyle behaviours such as smoking, overweight, physical inactivity and alcohol consumption. Related to the prevalence of these risk factors are rates for the prevalence of type 2 diabetes which is estimated to be up to 40% of the population.[113, 140]

With the introduction of Medicare, the community are accessing GP services more regularly and there has been an increased diagnosis of chronic health conditions including diabetes, cardiovascular disease and cancer (including skin cancer).

Mental health

There are gaps in the number and distribution of mental health service providers on the Island, limited access to psychological and counselling services. Current staff is limited to: 1 employed counsellor, 1 employed social worker at Norfolk Island Health and Residential Aged Care Service (NIHRACS), 1 private psychologist and 1 Fly-in fly-out (FIFO) school counsellor, 4 weeks per term. CESPHN commissioned a child, youth and family counsellor who started at the beginning of November 2018.

The Norfolk Island population reported higher levels of 'High' to 'Very High' psychological distress compared to the NSW population (13% compared with 10%), but similar levels to the Outer Regional and Remote areas of NSW. The rationale for this higher level is not clearly known but may relate to the poor economic conditions and geographic isolation factors.

Drug and alcohol

There are relatively high rates of drug and alcohol misuse, particularly among youth residents. Several data sources indicate that binge drinking is the growing social issue on the Island, with an association between mental health distress, secondary high school students and limitations with health literacy and the risk associated with alcohol misuse.[15]

Health services

Access to specialist medical providers is limited to those located or visiting the Island. Options to deliver services via telehealth are under development, however, require implementation, together with relevant infrastructure and resourcing to service residents.

An estimated 19.2% of the Norfolk Island households do not have access to the internet or readily available within their place of residence.[2] Limited access to internet has implications for healthcare communication tools such as access to My Health Record, certain health literacy strategies and telehealth style responses to delivery of healthcare for remote regions.

Primary services to be targeted for telehealth service provision should include those related to urgent medical care and life limited conditions such as chronic disease.

The SESLHD Clinical Service Plan encompasses Norfolk Island. This includes their responsibilities for the Norfolk Island Health and Residential Aged Care Service (NIHRACS), out of which the general practice services operate. CESPHN continues to work with SESLHD to support community access to health services.

CESPHN's work on Norfolk Island has identified the need for health promotion and health literacy to promote an understanding as to why services might be accessed. Both the school and the child welfare and wellbeing coordinators identified the need for ongoing clinical support including around drug and alcohol issues to promote an understanding as to why services might be accessed. This has been addressed with the recruitment of a health and wellbeing coordinator.

11. Opportunities, options and priorities

Key points

This needs assessment has identified opportunities and options against 33 priority areas for action.

Population health

1. Screening and management of chronic and complex diseases and associated risk factors
2. Increase immunisation coverage rates in line with national aspirational targets
3. Increase screening rates for breast, bowel and cervical cancer
4. Support primary care providers to address STIs and other blood borne conditions

Child and maternal health

5. Refine pathways for children with developmental delays
6. Maintain access to maternal primary care services

Aged care

7. Increase community-based services for aged care priorities

Mental health

8. Stepped Care
9. Mental health services for children and young people
10. Psychological therapies for priority populations in the CESPHN region
11. Increase awareness and uptake of low intensity mental health
12. Severe and complex mental illness
13. Psychosocial support for people not eligible for NDIS
14. Suicide prevention
15. Aboriginal and/or Torres Strait Islander mental health
16. Older persons mental health

Alcohol and other drugs

17. Increase access to AOD treatment services
18. Enhanced access for AOD treatment in the primary care setting
19. Person centred, quality service delivery
20. Integrated service delivery

Digital health and data

21. Empower primary care providers for the digital health journey
22. Strengthen systematic, accurate and reliable discharge summaries between hospitals and GPs
23. Explore innovative approaches to the use of digital health solutions
24. Develop robust methods for capturing, monitoring and evaluating data

Workforce

25. Develop a workforce and primary care service plan

Access, coordination and integration

26. Ensure appropriate use, mix and distribution of after hours services for the CESPHN population
27. Service integration with a focus on high priority groups and local disease prevalence

Priority groups

28. Improve access to culturally appropriate adult chronic disease, mental health and drug and alcohol services for Aboriginal and/or Torres Strait Islander peoples
29. Improve access to culturally appropriate youth mental health services for Aboriginal and/or Torres Strait Islander peoples
30. Develop a culturally appropriate workforce for Aboriginal and/or Torres Strait Islander health
31. Disability service integration and coordination
32. Meeting the primary healthcare needs of people experiencing homelessness
33. Rural and remote - Lord Howe and Norfolk Islands

11.1. Priorities and options

This needs assessment has identified opportunities and options against 33 priority areas for action. Many of these priority areas have been identified in previous iterations of CESPHN's needs assessments and focus on a people, places and system approach:

- People – priority populations in our region including Aboriginal and/or Torres Strait Islander peoples, CALD communities, children and youth, older people, people living with a disability or experiencing homelessness, and our remote residents on Lord Howe and Norfolk islands.
- Places – the locations that are known to have poorer health status such as Canterbury.
- System – the coordination and integration of services that are accessible with adequate staff resourcing to ensure the patient receives the right care at the right place at the right time.

Population health

1. Screening and management of chronic and complex diseases and associated risk factors

Work with GPs across the region to appropriately screen, diagnose and manage patients with chronic and complex medical conditions such as Type 2 Diabetes, Chronic Kidney Disease and Chronic Obstructive Pulmonary Disease and associated risk factors. Options include:

- Using the model of the Person-Centred Medical Neighbourhood, build capacity in general practices to implement systematic screening and recall systems for risk stratified patients
- Implement clinical auditing activities to enhance the integrity of general practice patient data including rates for data completion
- Link with activities under the quality improvement program to extract and integrate patient data for My Health records and use of such data to develop improvement plans, monitor and evaluate outcomes periodically
- Commission specific services for individuals and communities with identified barriers to accessing general practice
- Reduce child Emergency Department presentations for common paediatric conditions by improving community and primary care management
- Continue to promote access to existing and new HealthPathways for chronic disease and lifestyle and biomedical risk factors
- Explore partnership opportunities for the delivery of better dental care in the region
- Increase the number of patients with chronic diseases managed under GP Management Plan and/or Team Care Arrangements
- Work with partner organisations to disseminate resources to increase population awareness of screening, eligibility, access and requirement screening, with a focus on identified areas of low participation rates
- Identify and implement relevant professional development opportunities to support prevention and management of chronic disease, with a focus on addressing barriers experienced by GPs.

2. Increase immunisation coverage rates in line with national aspirational targets

Work to increase immunisation coverage rates across the region. Options include:

- Provide immunisation support programs with a focus on priority populations and populations with low childhood immunisation coverage rates
- Cold chain management education and support in general practice
- Collaboration with LHD Public Health Units to communicate timely information to general practices.

3. Increase screening rates for breast, bowel and cervical cancer

Work with GPs across the region to increase cancer screening rates, adhering to relevant guidelines for screening, with a focus on identified areas of low participation. Options include:

- Build capacity in general practices to implement systematic screening and recalls for eligible patients, based on the model of the Person-Centred Medical Neighbourhood
- Implement clinical auditing activities to enhance the integrity of general practice patient data including rates for data completion relevant to cancer screening measures
- Link with activities under the quality improvement program to increase the number of GPs uploading screening data to My Health Record
- Commission specific services for individuals and communities with identified barriers to accessing general practice
- Health promotion activities with partner organisations to increase community literacy regarding eligibility and local access points and disseminating resources to increase population awareness of cancer screening, eligibility, access and requirements
- Strengthen the clinical leaders program to increase GP/clinician confidence and knowledge regarding cancer screening
- Promote changes to screening practice, such as new guidelines and testing protocols
- Identify and implement relevant professional development opportunities to support cancer screening, with a focus on addressing barriers experienced by GPs
- Explore ways of measuring patient and provider experience with cancer screening programs.

4. Support primary care providers to address STIs and other blood borne (HIV and Viral Hepatitis) conditions

Options relate to primary care development, targeted responses and quality improvement:

- Increase the role of practice nurses around STI testing and need for early treatment, management and follow up
- Improve GP capability for opportunistic testing for STIs and Viral Hepatitis in priority populations
- Increase the number of GP prescribers for HVB, HIV S100 medications and HCV and PrEP S85 medications
- Consider the integration of the Person-Centred Medical Neighbourhood as a method of addressing systematic sexual health/ Viral Hepatitis screening and management

- Respond to rising rates of STIs and BBVs with a specific focus on priority groups, including Aboriginal, CALD, youth and homeless
- Build capacity in general practices to implement systematic screening and recalls for eligible patients
- Implement clinical auditing activities to enhance the integrity of general practice patient data including rates for data completion (Medical software) relevant to measures of sexual health and using this data to develop improvement plans, monitor and evaluate outcomes periodically
- Support for primary care providers to deliver services to address the incidence of sexually transmitted infections and other blood borne conditions
- Link with activities under the quality improvement program to extract and integrate patient data for the My Health Record
- Working with partner organisations to disseminate resources to increase population awareness of STIs and BBVs
- Strengthen the clinical leaders program to increase GP/clinician confidence and knowledge regarding STI testing
- Promote changes to screening practice, such as new guidelines and testing protocols
- Identify and implement relevant professional development opportunities to support sexual health screening and management, with a focus on addressing barriers experienced by GPs
- Use HealthPathways to support GPs in identifying, managing and appropriately referring patients with STIs.

Child and maternal health

5. Refine pathways for children with developmental delays

Implement strategies to refine pathways and enhance access to paediatric services for children with developmental delays. Options include:

- Commission activities to address developmental delay, particularly for CALD communities
- Enhance access to allied health professionals addressing culturally diversity and non-English speaking communities
- Draw on findings from consultations with LHDs and Networks regarding healthcare for infants and youth
- Use HealthPathways to Implement strategies to support GPs and work with LHD, community health and specialists in identifying, managing and appropriately referring children though increased use of developmental milestone monitoring tools (NSW Health Blue Book)
- Work with practices to expand the role of practice nurses in early childhood interventions, screening and intervention associated with immunisation points
- Improve collaborations, pathways and partnerships with child and family health services.

6. Maintain access to maternal primary care services

Options include:

- Work with partner organisations to improve population awareness and facilitate access to antenatal care for vulnerable populations, prior to 14 weeks gestation, such as CALD and Aboriginal population groups. Target sub-regions would include Canterbury, Botany and Marrickville – Sydenham – Petersham
- Explore community-based options (including commissioned services) to address limited services for perinatal care in the region – specifically access to psychiatrists that bulk bill and psychologists speaking a language other than English
- Address gestational diabetes mellitus risks and undiagnosed Type 2 diabetes within the maternal population, specifically the CALD population
- Improve breastfeeding rates
- Provide support to GPs regarding new guidelines for pre- and post-natal mental assessments and the implementation of MBS items which include screening for perinatal depression, drug and alcohol use, and family and domestic violence
- Continue to promote access to new and existing HealthPathways for GPs including those for antenatal shared care and domestic violence
- Continue to engage relevant agencies and providers to identify and access family and domestic violence services and strategies to educate health professionals to identify, respond and refer in relation to domestic and family violence
- Continue to support the GP ANSC program through the education of primary and secondary health providers
- Work in partnership with local maternity facilities to monitor and adapt the ANSC model of care ensuring high quality, uniform standard of antenatal care
- Link with activities under the quality improvement program to extract and integrate patient data for the My Health Record.

Aged care

7. Increase community-based services for aged care priorities

Identify or commission community-based options for aged care priorities (frailty, dementia, falls and palliative care) to address the demand on services and disease burden. This involves exploring options to establish/commission initiatives to support healthy ageing and reduce variation in care for priority areas and potentially preventable hospitalisations. Options include:

- Rehabilitation programs/physical conditioning for management of patients with osteoarthritis preventing or delaying the need for joint replacement;
- Health promotion strategies to enhance patient health literacy regarding implementing a healthy lifestyle
- Capacity building to prevent after hours care, with services commissioned under the After-Hours Schedule to educate staff from RACFs to reduce hospital transfers

- Innovative programs to reduce potentially preventable hospitalisations such as virtual patient education resources, physical conditioning programs and tailored quality improvement activities in local general practices
- Promote existing and develop new HealthPathways related to dementia, falls, frailty and palliative care
- Practice support and the Person-Centred Medical Neighbourhood
- Screening programs for dementia patients, falls risks and frailty
- Advance care planning including end-of-life conversations and palliation services;
- Continuation of service mapping of aged care services, for example RACFs, GP, AHP, RN, RACF staff educational activities on relevant aged care priorities
- Disseminate resources to support/enhance general practice implementation of screening programs
- Work with general practices to systematically identify patients aged over 75 years (or 55 years for Aboriginal and/or Torres Strait Islander peoples) with CCF, COPD and/or frailty and link into a chronic disease management program.

Mental health

8. Stepped Care

Ensure clear and accessible pathways to care for mental health concerns at all levels of intensity/acuity, in which consumers, referrers and service providers will understand how to navigate, refer to and provide services using a stepped care approach. Options include:

- Explore the development and implementation of a stepped care approach to mental health across the region
- Workforce development to:
    - increase the capacity of the primary care workforce to assess, navigate, refer and provide services within a stepped care approach; and
    - ensure the primary care workforce has access to training to ensure competence in cultural appropriateness, trauma informed practice and other areas of practice as identified.

9. Mental health services for children and young people

Ensure children and young people are receiving care and support within a stepped care approach to support their needs. Options include:

- Commission headspace centres to provide youth mental health services in line with the headspace model framework and within a stepped care approach
- Commission early intervention services for young people with or at risk of severe mental illness in the primary care setting. Severe illnesses can include psychosis, major depression, severe anxiety, eating disorders and personality disorders
- Commission pathways for assessment and treatment of children and young people within a stepped care model, including psychological support services

- Explore ways to increase workforce capacity, in particular increasing the number of child mental health professionals in the region.

10. Psychological therapies for priority populations in the CESPHN region

Ensure mental health needs of priority populations (children, young people, women in the perinatal period, Aboriginal and/or Torres Strait Islander peoples, people from CALD backgrounds, people who have attempted or are at risk of suicide, adults who are, or are at risk of becoming homeless and people who are unable to access other psychological services due to financial or other constraints) are addressed through better targeting of services and within a stepped care approach. It is important that referrers and service providers understand how to navigate, refer to and provide services using a stepped care approach. Options include:

- Provide access to a range of applied psychological therapies for priority groups in the CEPSHN region
- Monitor the effectiveness of commissioned services, including access to psychological therapies for people from under-serviced and/or hard to reach populations aligned to the needs of the CESPHN region
- Promote the expansion of provisional referral pathways across the region to improve utilisation of psychological therapeutic services for underserviced and hard to reach people in the CESPHN region
- Workforce development to provide services to meet the needs of communities
- Increase the capacity of primary care workforce to refer and provide services within a stepped care approach
- Promote and increase in the number of bi-lingual mental health professionals delivering services across the region
- Explore opportunities to commission multi-service hub in partnership with key funders and providers to target health and wellbeing holistically in one-stop shop.

11. Increase awareness and uptake of low intensity mental health

The priorities for CESPHN, based on consultation with providers and clients, is the need for targeted engagement with potential referrers and community members regarding the benefits of and how to access low intensity mental health services and resources, identify the touch points in the community for promotional activities, as well as activities to promote acceptability of newer service models among the mental health sector broadly. Options include:

- Promote e-mental health resources
- Access to low intensity digital mental health services
- Coaching services (non-digital low intensity mental health services)
- Lead Site Activities:
    - implementing a stepped care approach into general practice
    - mindfulness interventions in CALD communities
    - coaching services in Aboriginal and/or Torres Strait Islander communities
    - Mental Health First Aid for underserviced groups

- Group exercise programs to support the treatment of mild mood disorders.

12. Severe and complex mental illness

Ensure improved care coordination for individuals experiencing severe mental illness and increased choice and control of services consumers have access to. Options include:

- Monitor the new service model Primary Integrated Care Supports (PICS) against the program aims and objectives
- Promote inclusion of peer workforce in PICS model to mental health nurses in the CESPHN region though educational activities
- Multidisciplinary teams, including a peer workforce to provide coordinated care across the CESPHN region
- Improve access to free psychiatric services for people experiencing severe mental illness but are unable to pay
- Facilitate access for GPs to the psychiatry support line
- Shared Care arrangements between LHDs and GPs to improve physical health outcomes of mental health consumers along with mental health needs being met
- Include DBT informed groups to support people with lived experience of moderate/severe mental illness including training of clinical workforce to support one-on-one therapy for this client group
- Improve access to mental health services for CALD communities in the region
- Support Primary Care providers, including GPs and Allied Health Professionals, to utilise evidenced-based resources to support people experiencing personality disorder, including their family, friends and carers
- Advocate for increased availability of affordable and accessible psychological therapies for the treatment of Personality Disorders in the CESPHN region
- Support GP knowledge and skills in communicating psychiatric medication risks and benefits to patients and carers
- Expand and support the Peer workforce to work with consumers to address physical health needs.

13. Psychosocial support for people not eligible for NDIS

Ensure people with severe mental illness resulting in reduced psychosocial functioning who are not eligible for the NDIS are receiving psychosocial support services. Options include:

- Develop a peer support workforce to provide services on building capacity and stability in psychosocial needs
- Commission services providing psychosocial support services that are recovery-oriented and provide both individual and group support programs
- Focus on cohorts with more complex needs such as people with unstable housing and people with AOD misuse.

14. Suicide prevention

Work to improve access to suicide prevention support through primary health care and ensure services delivered meet needs of the population. Options include:

- Workforce development to increase the capacity of the primary care workforce to assess and respond to those at risk of suicide, including general practice workforce in suicide prevention initiatives
- Focus on young people through headspace centres
- Monitor service model for support after a suicide attempt or crisis – SPconnect, coordinated after care against program aims and objectives
- Explore opportunities to support or develop community-based alternatives to hospital services for people experiencing suicidal ideations or behaviours
- Deliver psychological therapies targeting suicide prevention.

15. Aboriginal and/or Torres Strait Islander mental health

Ensure services address the health and wellbeing needs of Aboriginal communities. Options include:

- Target services to meet the needs of Aboriginal youth
- Assess the effectiveness of Youth Health and Wellbeing Coordinators in the La Perouse area to engage and support young people to access culturally appropriate mainstream services
- Build community capacity to support health and wellbeing
- Assess the effectiveness of Aboriginal outreach worker to engage and support young Aboriginal people to access services at headspace Ashfield
- Ensure that Psychological Therapies are delivered with cultural appropriateness to Aboriginal and/or Torres Strait Islander peoples
- Ensure social and emotional wellbeing and social determinants of health are recognised and that there are plans for support considered as part of effective mental health care
- Improve cultural competency of mainstream services to address mental health and suicide prevention in Aboriginal communities
- Support the development and growth of the Aboriginal Mental Health identified workforce.

16. Older persons mental health

Increase access to mental health services for the older population including those in RACFs. Options include:

- Expand Beyond Blue New Access coaching program to include older people within aged care facilities
- Explore options to provide access to psychological therapies to residents of aged care facilities in a way that complements personal care and accommodation services, dementia support and broader physical health and social support.

Alcohol and other drugs

17. Increase access to AOD treatment service

There are several barriers faced by individuals experiencing substance use dependency when attempting to access AOD treatment. CESPHN continues to commit to enhancing access for individuals to treatment services. This involves the ongoing commissioning of AOD treatment services that are evidence based and accessible to CESPHN priority populations. Options include:

- Increase access to services that operate across the continuum of care, including withdrawal management, rehabilitation, counselling and aftercare and relapse-prevention support
- Reduce waiting times for service access through the provision of supports to encourage continued engagement in treatment seeking, with priority given to community based day programs and continuing care models
- Work with peak bodies and champions in the field to promote approaches for meaningful inclusion of lived experience (including peer workers) in co-design, implementation and evaluation of AOD services.

18. Enhanced access for AOD treatment in the primary care setting

Expected outcomes include increased number of patients supported in primary healthcare setting, increased integration between primary health and specialist treatment services and increased awareness and use of HealthPathways and the Drug and Alcohol Specialist Advisory Service at St Vincent's Hospital. It will also establish referral links with allied health providers, including pain management specialists, and reduce over-prescribing of pharmaceutical opioids. Options include:

- Improve the capacity of GPs to respond to drug and alcohol concerns within the community
- Improve the confidence and competence of primary health to engage in the provision of ambulatory withdrawal service
- Provide support, resources and education for GPs to effectively engage in comprehensive treatment plans, develop motivational interviewing skills and use of appropriate language
- Implement GLAD shared care project with GPs across the region
- Increase the number of GPs prescribing for OST to meet potential increased need for people presenting with codeine dependency and utilise additional capacity from anticipated OST guideline changes
- Educate allied health professionals to engage with general practices in creating alternative care pathways for people experiencing codeine dependency
- Develop, disseminate and pilot an opioid screening tool for early identification of dependency in primary care settings.

19. Person centred, quality service delivery

Expected outcomes include provision of a skilled workforce to meet the needs of CESPHN priority populations, increased access and improved treatment outcomes for priority populations and cross-sectoral response to meeting holistic support needs. It also involves establishment of a peer AOD workforce and meaningful consumer representation roles, and increased wellbeing and inclusion of families with loved ones experiencing substance use dependency. Options include:

- Collaboration with peaks and other training providers to deliver professional development opportunities (training and resources) to the AOD workforce to better respond to the needs of CESPHN priority populations
- Provide continuing professional development which spans to other sectors, including mental health, sexual health, pain management and family and domestic violence
- Working with NUAA to promote approaches for meaningful inclusion of lived experience (including peer workers) in co-design, implementation and evaluation of AOD services
- Promote child and family sensitive practice in service delivery and provide education opportunities to embed best practice within service models
- Promote a trauma informed practice approach in service delivery and provide education opportunities to embed best practice within service models
- Include standardised client experience measures as a commitment to ongoing quality improvement by commissioned services.

20. Integrated service delivery

Expected outcomes include increased responsiveness to changes in the sector and avoid duplication of effort, improved service capacity across the PHN region, seamless pathways of care created for community. It also concerns ensuring accessible support in the right time at the right place and the empowerment of people experiencing substance use dependency to remain engaged during waiting times. Options include:

- Improve regional care coordination by commissioning shared care projects with LHDs and LHNs
- Provide forums for engagement of services across the AOD and primary health sectors, such as education forums and regular newsletters
- Continue consultation with CESPHN region AOD advisory group to facilitate sector integration and promote sector activities
- Engage consumers, carers and community to understand the barriers in navigating the service system
- Commission services across the continuum of care to ensure a person-centred stepped care approach, prioritising community-based day programs and continuing care models
- Promote practices which support integrated service delivery through regular reporting frameworks and deliverables for commissioned services
- Address the waiting times for service access through the provision of supports to encourage continued engagement in treatment seeking
- Continue promotion of HealthPathways programs to capture integrated service delivery.

Digital health and data

21. Empower primary care providers for the digital health journey

Empower primary care providers for the digital health journey to improve experience and uptake of the My Health Record and other digital health solutions through improved experience, readiness, provider satisfaction and data accuracy. Options include:

- Establish and implement a broad communication strategy to generate awareness and introduce digital health concepts to achieve the following
- Improve GP experience and empowerment to use digital health solutions
- Ensure clarity regarding resumption of electronic referrals including timelines for recommencement
- Ensure all commissioned providers are aware of the My Health Record changes and can explain these changes confidently to consumers
- Assign CESPHN resources to implement a systematic approach to support digital health in general practice to capture, appropriately intervene and monitor the following aspects: a register of digital health capability for each practice, and the baselining of each practice's current state of digital health. Then systematically raise the baseline of each practice in line with PHN agreed priorities and targets, constrained only by resource capacity, and link quality improvement initiatives to enhance integrity of general practice patient databases.

22. Strengthen systematic, accurate and reliable discharge summaries between hospitals and GPs

Options include:

- Establish strategic, formal partnerships, service level agreements or memorandum of understanding to facilitate infrastructure requirements for digital heath transmission between LHD/SHNs
- Collaborative approaches: meaningful use is considered the optimal outcome for digital health solutions. To achieve this, it is recommended that CESPHN, LHD/SHNs, Healthscope and Ramsay collaborate on a meaningful use implementation of My Health Record, including the establishment of an overarching governance structure, mutually agreed commitments relating to shared health summaries and My Health Record. To ensure meaningful use of the My Health Record, rather than just registrations, the following actions should be considered:
    - The provision of shared health summaries for all patients from priority cohorts that attend a GP consultation
    - The viewing of the My Health Record system by public and private hospitals when the patient attends public and private hospitals
    - An agreement on the mutual obligations of the parties
    - Data sharing arrangements to support population health planning given the role CESPHN has in commissioning and service design.
- Implementing activities to improve quality and reliability of electronic discharge summaries into the functions of the CESPHN digital health team to achieve the following:
    - That all practices capable of receiving electronic discharge summaries are receiving them

- Quality clinical content appropriate to the referral reason (a requirement of referees)
- Pre-population of the referral content from practice management systems
- Synchronisation with an up-to-date address book (preferably the Centralised Health Care Provider directory (CHSCPD)
- Acknowledgement receipt of the referral within GP practice systems.

- Invest CESPHN resources in quality improvement activities to support and/or enhance data integrity in local general practices. Outcomes should aim to achieve the following:
  - Quality communication (via digital health solutions) with other healthcare providers
  - Accreditation
  - Practice incentive program payments
  - Healthcare Homes (the detail to be determined)
  - Continuous quality improvement initiatives
  - The My Health record system
  - Collaborative population health, including targeted interventions in keeping people out of hospital
  - PHN data analytics.

23. Explore innovative approaches to the use of digital health solutions

In order to enhance capability and capacity across the sector, options include:

- Integrate with triage and appointment booking by public hospitals with this information sent electronically to GPs
- Build capability of GPs to update the referral (for example, with new information since the original referral)
- Link referral creation to HealthPathways
- Support referrals independently of HealthPathways
- Increase use of technologies to support digital health initiatives including use of clinical audit tools such as PenCAT, POLAR and Granhite
- Improve sharing of patient health information across health care providers.

24. Develop robust methods for capturing, monitoring and evaluating data

Options include:

- Establish and implement an organisation-wide monitoring and evaluation framework to capture valuable data to inform patient outcomes, patient and provider experience, commissioning outcomes, translation of evidence and scalable options. Outcomes should focus on enhancing access to local, real time data for planning, commissioning, co-design and monitoring functions.
- Allocate resources to create a comprehensive data asset and governance strategy to capitalise on the introduction of the QI PIP, scheduled for release in 2019, the digital health strategy and monitoring/evaluation and planning under the commissioning framework to develop comprehensive, real-time data sets

- Develop a plan of engagement opportunities to inform planning activities and ensure a contemporary understanding of stakeholder and market needs is captured, rather than single point in time and integrate methods of capturing stakeholder feedback and experience with CESPHN
- Allocate resources for the development and maintenance of a strategic approach to stakeholder engagement, directly aligned to activities to address health needs and service gaps.
- Build capability of staff for comprehensive and sustained monitoring and evaluation.

Workforce

25. Develop a workforce and primary care service plan

Establish a comprehensive workforce strategy to sustain and/or increase access to primary care services across the region. Options include:

- Support for practices to implement the new QI PIP
- Work with training providers to support GP registrars
- Conduct individual, practice-based business modelling to promote employment of practice nurses
- Identify GPs nearing retirement and create transitional or succession plans to ensure population coverage
- Support newly opened practices – including both general practices and allied health practices
- Undertake a regional strategic workforce plan to determine the state of primary care in the region
- Provide opportunities for professional development to GPs, practice nurses, practice staff and allied health professionals
- Provide opportunities for cultural awareness training
- Continue to work with LHDs in providing bilingual community educators
- Continue to lay the foundations of the person-centred medical neighbourhood model by supporting practices through targeted quality improvement initiatives and practice support visiting program (accreditation, practice management and workforce support)
- Ensure the CESPHN region has a workforce who understand how to navigate, refer to and provide services using a mental health stepped care approach in a culturally appropriate way
- Promote the model of team-based care in practices
- Support practices to improve linkages and communications with other health care providers to manage patients with complex and chronic conditions
- Build capacity of staff to systematically manage and refer patients with chronic disease QI activities and QI PIP incentives
- Continue to work with organisations involved in local urban planning to ensure the equitable and appropriate supply of primary health care providers in areas of new developments.

Access, coordinated and integrated care

26. Ensure appropriate use, mix and distribution of after hours services for the CESPHN population

Implement a range of approaches to ensure the after hours service needs of the region are appropriately met. Options include:

- Continue to commission services to target frequent users of after hours services, such as people aged 65 years and older in the community and in RACFs, and priority populations such as and people experiencing homelessness
- Implement health promotion strategies to improve awareness of after hours services and communicate appropriate use of emergency departments and options for after hours services. There should be a focus on emerging community groups and those from non-English speaking background
- Implement a communication campaign to inform patients about the purpose of emergency department services and alternatives for seeking repeat prescriptions
- Support general practices to upload relevant patient data to the My Health Record for patients meeting criteria for frequent after hours use (including indicators such as over 65 years, CALD, or chronic and complex medical conditions)
- Implement clinical auditing activities to enhance the integrity of general practice patient data including rates for data completion. Use data to develop improvement plans, monitor and evaluate outcomes periodically
- Provide professional development opportunities to the primary care workforce to reduce after hours presentations including GPs and Pharmacists.

27. Service integration with a focus on high priority groups and local disease prevalence

Continue to implement initiatives to generate system-wide service coordination and integration across the region, particularly for diseases with high prevalence. Options include:

- Registration, uptake and meaningful use of My Health Record
- Development and use of HealthPathways with aims to assist healthcare providers to navigate local services (pathways developed, pathways reviewed, sessions of use, unique page views, different users)
- Explore opportunities for service/provider networking through Clinical and Community Council Governance structures, region-wide Partnership Committee, forums, CPD and advisory groups
- Undertake or commissioning collaborative/joint research
- Joint planning with stakeholders including consumers, LHD/SHNs, NGOs, universities and member organisations.

Priority groups

28. Improve access to culturally appropriate adult chronic disease, mental health and drug and alcohol services for Aboriginal and/or Torres Strait Islander peoples

Options include:

- Continue to support and promote the Integrated Team Care (ITC) program. SESLHD, SLHD and SCHN have been funded to provide Care Coordination and Outreach Services to Aboriginal and/or Torres Strait Islander peoples through better access to co-ordinated and multidisciplinary care, as well as improving access to culturally appropriate mainstream primary care services. Care coordinators provide support to local Aboriginal and/or Torres Strait Islander peoples with respiratory disease, renal disease, cardiovascular disease, diabetes, cancer and other chronic diseases. The Outreach staff offer support and assistance to Aboriginal and/or Torres Strait Islander peoples to access local primary health services including GP's, specialists and allied health providers
- Fund suitable 'coaches' to provide one on one support to Aboriginal and/or Torres Strait Islander peoples experiencing mild anxiety or depression via phone, video conferencing, or face to face supports
- Fund services to deliver culturally appropriate psychological therapies and support to Aboriginal and/or Torres Strait Islander communities in the region
- Continue to work with the Community Restorative Centre Transitions Project to provide outreach, community-based rehabilitation and psychological counselling for people with problematic substance use and complex support needs who are exiting prison, including Aboriginal and/or Torres Strait Islander peoples
- Improve access to culturally appropriate adult mental health services
- Develop a suicide prevention model of care to meet the specific needs of Aboriginal and/or Torres Strait Islander communities
- Fund psychosocial education to Aboriginal and/or Torres Strait Islander communities through programs such as yarning circles
- Develop a framework to measure the cultural capability of CESPHN commissioned services
- Fund Weave Youth and Community Services to provide drug and alcohol care coordination, counselling, information and referral support and group activities for young people including Aboriginal and/or Torres Strait Islander peoples
- Fund the AMS Redfern to deliver Drug and Alcohol counselling, referrals, pharmacotherapy and community education
- Collaborate with Justice Health to improve the transition of health care for incarcerated patients on release from custodial sentences.

29. Improve access to culturally appropriate youth mental health services for Aboriginal and/or Torres Strait Islander peoples

Continue to work with Aboriginal youth service providers to deliver education/training and resources to support self-help strategies, and mental health services. Options include:

- Dialectical Behaviour Therapy (DBT): interventions to address incidence of personality, mood disorders, those at risk of or currently self-harming, suicidal ideation, and substance abuse. These disorders were identified as health needs by the CESPHN Aboriginal community
- Youth Health and Wellbeing program: facilitate access to mainstream health services in the absence of specific/community owned services, for Aboriginal youth. Facilitate this priority by appointing health and wellbeing coordinators to engage with and support young people to access culturally appropriate, mainstream services to support their health and wellbeing needs
- Youth Outreach program: deliver outreach services to Aboriginal communities facilitating affiliation between youth, services, and adult community leaders.

30. Develop a culturally appropriate workforce for Aboriginal and/or Torres Strait Islander health

Increase cultural awareness training participation rates. Options include:

- Support for primary care providers and practices to deliver safe, high quality services to consumers, and assist both general practice and allied health practices by focusing on practice management, accreditation and workforce support, offered on Aboriginal health program initiatives
- Deliver cultural awareness training to local primary care service providers across the region, provided by Aboriginal trainers
- Support Aboriginal and/or Torres Strait Islander workers in the region by the formation of an Aboriginal and Torres Strait Islanders workers network
- Develop and disseminate resources to support cultural awareness training, including those detailing the Aboriginal Health Incentive, promoting care co-ordination and outreach programs, as well as the redevelopment of the Aboriginal Health Toolkit
- Develop an internal framework to measure the cultural capability of CESPHN commissioned services
- Implement CESPHN's Reconciliation Action Plan (RAP) to ensure meaningful connections, and including Aboriginal peoples in areas of organisational policy, planning and decision making.

31. Disability service integration and coordination

Support primary care providers to improve their awareness, ability to navigate, and integration and coordination of NDIS and primary care services. Options include:

- Identify and implement relevant professional development opportunities to support working with the NDIS, with a focus on addressing barriers experienced by GPs and allied health professionals
- Provide support to GPs and allied health professionals regarding clinical pathways, assessment protocols and points of entry into NDIS
- Establish HealthPathways to support general practice navigation and clinical practice

- Establish and maintain links with key initiatives to support healthcare and disability service coordination of care and management of chronic and complex medical conditions, associated with incidence of disability
- Stakeholder engagement through working with people with disabilities, NDIS agencies, service providers and primary care providers to ensure an integrated approach between NDIS and health within the region
- Provide support to health care providers on how to be inclusive and accessible for people with lived experience of disability, as per the Council of Australian Government agreement – Applied Principles and Tables of Support, UN Convention on the Rights of Persons with Disabilities, National Disability Strategy, Disability Inclusion Act and the Disability Discrimination Act and other relevant legislation
- Provide support to primary health care professionals to provide assistance for people deemed ineligible for the NDIS
- Improve capability in software programs relevant to disability/health/mental health and using this data to inform future activity.

32. Meeting the primary healthcare needs of people experiencing homelessness

Continue to support existing activities to explore the primary care needs of people experiencing homelessness living in the CESPHN region. Options include:

- Develop a comprehensive understanding of services for people experiencing homelessness across the region with a focus on aspects influencing homelessness, including mental health and substance misuse
- Work collaboratively with related stakeholders to develop integrated and coordinated approaches with the aim of securing permanent housing arrangements for residents
- Integrate digital health solutions, where feasible, as a mechanism for communicating healthcare status
- Address after hours primary care needs of people experiencing homelessness (particularly unplanned hospitalisations for falls and injuries) through innovative approaches, including outreach.

33. Rural and remote - Lord Howe and Norfolk Islands

Options include:

Lord Howe

- Continue to support SESLHD in:
    - The delivery of health care services and advise on primary care related activities such as accreditation and MBS utilisation
    - Integrate digital health solutions for relevant aspects of care to enhance connectivity and access to specialty care and improve meaningful use.

Norfolk

- Build capacity and capability for the general practice and primary care providers using the person-centred medical neighbourhood model

- Commit to quality improvement and population health management, including use of health information technology to support quality improvement activities through person centred medical neighbourhood model
- Support ongoing learning for the general practice team
- Provide ongoing digital health support due to continuing changes, including:
    - upcoming QI PIP changes
    - adoption of secure messaging to enhance communication with the mainland
    - telehealth still needing to be addressed on island, and
    - opportunities for use of virtual health apps on island.
- For health and wellbeing services and supports, continue to commission:
    - Health and Wellbeing Coordinator role for another 3 years to implement health promotion activities to meet the needs of the community including, mental health, suicide prevention, chronic disease management and drug and alcohol use
    - Staying Healthy Living Well (SHLW) supporting seniors 70 years+ to manage chronic conditions
    - Child, Youth and Family Clinical role for another three years to assess the effectiveness of this strategy.
- Support where possible, strategies to benefit primary care needs of patient care.

Appendix A: Checklist

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

Appendix B: Supplementary data

Data limitations

Over the last three years the amount of data – both qualitative and quantitative – available to the PHN has increased and will continue to do so, particularly as key external agencies (such as the AIHW) increase the use of PHNs as a geographic unit for the presentation of data.

There are several sub-regional possibilities when disaggregating to levels below that of the PHN. Where possible, CESPHN prefers to use the ABS ASGS, in which the PHN can be sub-sectioned into seven SA4s, 15 SA3s and over 90 SA2s. Very granular data (i.e. SA1) is largely restricted to comprehensive collections such as the Census.

Data is also often presented at the LGA level. While useful, recent changes to LGA boundaries and structures have lessened its effectiveness in terms of longitudinal analysis. In the CESPHN region, there have been the following amalgamations:

- Leichhardt, Ashfield and Marrickville into the new Inner West Council
- Kogarah and Hurstville into the new Georges River Council
- Botany Bay and Rockdale into the new Bayside Council
- Canterbury and Bankstown into the new Canterbury-Bankstown Council now covered by both CESPHN and South Western Sydney PHN.

Data can also be available at the postcode level, though this can be problematic due to the use of postcodes as identifiers of centralised locations rather than geographical points. For example, Post Office (PO) boxes in the Sydney GPO use the postcode of 2001 as distinct from the geographical region postcode of 2000 and in many cases the PO box user may not be resident in the geographic region.

Data that involves the provision of a service to a patient – such as the MBS collection – can be geographically configured in two ways: on the basis of the location of either patient or provider. At present MBS data is only available to CESPHN on the basis of the provider location. For a region such as CESPHN, with a very high non-resident working population, extreme caution needs to be used in any consideration of linking MBS with population data measures.

Small sample sizes and smaller population cohorts can also limit the ability to capture a detailed understanding, particularly in the following areas:

- Homeless populations
- Aboriginal and/or Torres Strait Island community members
- Residents of Norfolk and Lord Howe Islands
- CALD communities, particularly emerging groups.

This report draws data from a range of administrative and survey data sets, all of which are subject to change such as data sets reporting ‘real time’ notifiable diseases or where there have been errors or anomalies in earlier data sets – for example, the ABS revises cause-of-death data using information pertaining to coroners' cases that were not available at the time of the initial collection.

Some of these administrative and survey data sets are dated and therefore may not reflect recent changes to health status. There have also been changes to definitions over time that inhibits the ability to compare trends over time.

Qualitative data has been drawn from a range of purposeful and incidental engagement activities with participants under CESPHN's governance groups. It is recognised that this sample describes stakeholders who may be more interested in the role of CESPHN, than the general population.

CESPHN appreciates data made available on the PHN website and looks forward to the establishment and population of the AIHW PHN data hub. In the meantime, CESPHN will continue to develop approaches in areas including, but not limited to:

- Increased use of GIS mapping and analysis applications
- Integration of data between agencies, collections and data linkages
- Approaches to benchmarking within the PHN and other comparable PHNs
- Quality and consistency in primary health care through use of practice-level data such as POLAR and PenCAT
- Data presentation and visualisation through tools such as Qlik
- Output and outcome data from commissioned services
- Continued consideration of input from stakeholders across a range of consumer, community and provider mechanisms.

Data tables and figures

Table 9: CESPHN Estimated Resident Population by Age, SA3, Males – 30 June 2017

SA3 name	Age group (years) 0-4	5–9	10–14	15–19	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65–69	70–74	75–79	80–84	85+	Total Males
Botany	1,650	1,472	1,293	1,505	2,200	2,752	2,475	2,092	1,787	1,689	1,433	1,342	1,058	893	693	586	402	271	25,593
Canada Bay	2,992	2,512	2,156	2,103	3,237	4,096	4,214	3,617	3,084	2,943	2,606	2,444	2,065	1,951	1,513	1,104	768	827	44,232
Canterbury	5,467	4,987	4,302	4,308	5,688	6,744	6,515	5,789	4,782	4,446	4,305	3,806	3,187	2,597	2,296	1,710	1,280	1,160	73,369
Cronulla - Miranda - Caringbah	3,616	3,685	3,607	3,290	3,466	3,777	3,807	3,664	3,895	3,927	3,719	3,744	3,195	2,708	2,331	1,694	1,287	1,330	56,742
Eastern Suburbs - North	4,005	3,686	3,201	2,869	3,759	6,528	7,194	5,998	4,842	4,499	3,878	3,384	2,929	2,909	2,450	1,620	1,089	1,261	66,101
Eastern Suburbs - South	4,189	3,910	3,301	4,401	8,781	8,390	6,835	5,967	5,092	4,559	4,111	3,742	3,158	2,749	2,322	1,653	1,170	1,149	75,479
Hurstville	4,017	3,852	3,589	4,280	5,807	6,195	5,400	4,388	3,981	3,964	4,131	3,959	3,484	2,895	2,315	1,648	1,327	1,295	66,527
Kogarah - Rockdale	4,725	4,048	3,530	3,788	5,949	8,042	7,798	5,999	4,829	4,472	4,114	3,816	3,374	3,157	2,410	1,742	1,473	1,411	74,677
Leichhardt	2,157	1,965	1,494	1,015	1,574	2,116	2,470	2,769	2,679	2,402	1,871	1,656	1,389	1,252	944	498	337	281	28,869
Lord Howe Island	15	7	12	4	4	17	5	23	11	8	11	24	12	11	5	16	3	3	191
Marrickville - Sydenham - Petersham	1,605	1,468	1,149	1,060	2,216	3,450	3,345	2,659	2,299	2,144	1,761	1,503	1,231	1,028	809	619	434	357	29,137
Norfolk Island[(a)]	44	54	55	36	20	23	22	50	55	59	64	74	71	59	54	36	20	19	819
Strathfield - Burwood - Ashfield	4,382	3,907	3,537	4,186	8,166	10,332	8,545	6,229	4,949	4,671	4,677	4,296	3,486	2,851	2,241	1,743	1,378	1,286	80,862
Sutherland - Menai - Heathcote	3,678	4,049	3,808	3,714	3,664	3,361	3,159	3,500	4,001	3,877	3,565	3,530	3,186	2,721	2,158	1,349	846	881	55,047
Sydney Inner City	4,348	2,518	1,744	3,957	16,117	22,179	18,857	12,406	8,767	7,424	6,193	5,458	4,342	3,673	2,683	1,607	1,046	854	124,173
CESPHN Total	**46,890**	**42,120**	**36,778**	**40,516**	**70,648**	**88,002**	**80,641**	**65,150**	**55,053**	**51,084**	**46,439**	**42,778**	**36,167**	**31,454**	**25,224**	**17,625**	**12,860**	**12,385**	**801,818**

(a) The count of persons for Norfolk Island is from the 2016 Census. There are small random adjustments made to all cell values to protect the confidentiality of data. These adjustments may cause the sum of rows or columns to differ by small amounts from the table totals.

Source: ABS 2017 ERP and ABS 2016 Census.

Table 10: CESPHN Estimated Resident Population by Age, SA3, Females – 30 June 2017

SA3 name	Age group (years) 0-4	5–9	10–14	15–19	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65–69	70–74	75–79	80–84	85+	Total Females
Botany	1,492	1,423	1,192	1,375	2,134	2,496	2,385	2,033	1,782	1,651	1,383	1,242	1,159	960	878	636	479	507	25,207
Canada Bay	2,758	2,437	2,097	2,050	3,301	4,283	4,281	3,555	3,389	3,211	2,934	2,787	2,424	2,124	1,707	1,287	1,015	1,335	46,975
Canterbury	5,100	4,717	3,831	4,011	5,097	6,216	5,953	4,949	4,519	4,681	4,191	3,884	3,401	2,755	2,213	1,904	1,499	1,604	70,525
Cronulla - Miranda - Caringbah	3,397	3,346	3,231	3,249	3,353	3,937	3,905	3,718	4,020	4,208	3,760	3,776	3,329	2,948	2,602	1,921	1,706	2,317	58,723
Eastern Suburbs - North	3,841	3,555	3,162	2,837	4,322	8,004	7,886	5,948	4,941	4,736	3,922	3,640	3,247	3,140	2,740	1,971	1,432	2,072	71,396
Eastern Suburbs - South	4,004	3,716	3,184	4,230	8,395	8,032	6,908	5,997	4,930	4,798	4,218	3,840	3,337	2,972	2,525	1,931	1,482	2,008	76,507
Hurstville	3,682	3,771	3,374	3,953	5,125	6,149	5,334	4,567	4,301	4,479	4,394	4,243	3,817	3,051	2,531	1,996	1,603	2,208	68,578
Kogarah - Rockdale	4,482	3,855	3,249	3,512	5,689	7,977	7,336	5,427	4,856	4,696	4,369	4,131	3,653	3,203	2,600	2,161	1,729	2,039	74,964
Leichhardt	2,096	1,867	1,322	1,023	1,605	2,330	2,881	3,028	2,716	2,493	2,150	1,815	1,660	1,394	1,073	631	403	492	30,979
Lord Howe	14	17	9	0	7	20	19	26	11	11	10	24	22	13	4	14	1	3	225
Marrickville - Sydenham - Petersham	1,464	1,284	1,063	966	2,533	3,741	3,196	2,589	2,262	2,081	1,646	1,487	1,288	1,072	824	651	525	533	29,205
Norfolk Island[(a)]	42	52	52	41	17	29	41	58	62	69	79	82	83	82	60	39	25	31	930
Strathfield - Burwood - Ashfield	4,190	3,875	3,400	3,975	7,682	9,720	8,043	5,843	5,231	5,289	4,859	4,569	3,791	3,161	2,418	2,012	1,789	2,163	82,010
Sutherland - Menai - Heathcote	3,468	3,835	3,699	3,404	3,388	3,265	3,470	3,834	4,086	4,122	3,761	3,844	3,268	2,699	2,302	1,516	1,041	1,481	56,483
Sydney Inner City	4,167	2,399	1,808	4,738	18,213	21,796	16,517	10,051	6,598	5,532	4,838	4,610	4,182	3,447	2,409	1,674	1,178	1,223	115,380
CESPHN Total	**44,197**	**40,149**	**34,673**	**39,364**	**70,861**	**87,995**	**78,155**	**61,623**	**53,704**	**52,057**	**46,514**	**43,974**	**38,661**	**33,021**	**26,886**	**20,344**	**15,907**	**20,016**	**808,087**

(a) The count of persons for Norfolk Island is from the 2016 Census. There are small random adjustments made to all cell values to protect the confidentiality of data. These adjustments may cause the sum of rows or columns to differ by small amounts from the table totals.

Source: ABS 2017 ERP and ABS 2016 Census.

Table 11: CESPHN Estimated Resident Population by Age, SA3, Persons – 30 June 2017

SA3 name	Age group (years)																		Total Persons
	0-4	5–9	10–14	15–19	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65–69	70–74	75–79	80–84	85+	
Botany	3,142	2,895	2,485	2,880	4,334	5,248	4,860	4,125	3,569	3,340	2,816	2,584	2,217	1,853	1,571	1,222	881	778	50,800
Canada Bay	5,750	4,949	4,253	4,153	6,538	8,379	8,495	7,172	6,473	6,154	5,540	5,231	4,489	4,075	3,220	2,391	1,783	2,162	91,207
Canterbury	10,567	9,704	8,133	8,319	10,785	12,960	12,468	10,738	9,301	9,127	8,496	7,690	6,588	5,352	4,509	3,614	2,779	2,764	143,894
Cronulla - Miranda - Caringbah	7,013	7,031	6,838	6,539	6,819	7,714	7,712	7,382	7,915	8,135	7,479	7,520	6,524	5,656	4,933	3,615	2,993	3,647	115,465
Eastern Suburbs - North	7,846	7,241	6,363	5,706	8,081	14,532	15,080	11,946	9,783	9,235	7,800	7,024	6,176	6,049	5,190	3,591	2,521	3,333	137,497
Eastern Suburbs - South	8,193	7,626	6,485	8,631	17,176	16,422	13,743	11,964	10,022	9,357	8,329	7,582	6,495	5,721	4,847	3,584	2,652	3,157	151,986
Hurstville	7,699	7,623	6,963	8,233	10,932	12,344	10,734	8,955	8,282	8,443	8,525	8,202	7,301	5,946	4,846	3,644	2,930	3,503	135,105
Kogarah - Rockdale	9,207	7,903	6,779	7,300	11,638	16,019	15,134	11,426	9,685	9,168	8,483	7,947	7,027	6,360	5,010	3,903	3,202	3,450	149,641
Leichhardt	4,253	3,832	2,816	2,038	3,179	4,446	5,351	5,797	5,395	4,895	4,021	3,471	3,049	2,646	2,017	1,129	740	773	59,848
Lord Howe Island	29	24	21	4	11	37	24	49	22	19	21	48	34	24	9	30	4	6	416
Marrickville - Sydenham - Petersham	3,069	2,752	2,212	2,026	4,749	7,191	6,541	5,248	4,561	4,225	3,407	2,990	2,519	2,100	1,633	1,270	959	890	58,342
Norfolk Island[(a)]	84	104	106	76	31	53	68	106	116	128	143	157	151	142	107	77	43	45	1,748
Strathfield - Burwood - Ashfield	8,572	7,782	6,937	8,161	15,848	20,052	16,588	12,072	10,180	9,960	9,536	8,865	7,277	6,012	4,659	3,755	3,167	3,449	162,872
Sutherland - Menai - Heathcote	7,146	7,884	7,507	7,118	7,052	6,626	6,629	7,334	8,087	7,999	7,326	7,374	6,454	5,420	4,460	2,865	1,887	2,362	111,530
Sydney Inner City	8,515	4,917	3,552	8,695	34,330	43,975	35,374	22,457	15,365	12,956	11,031	10,068	8,524	7,120	5,092	3,281	2,224	2,077	239,553
CESPHN total	**91,001**	**82,163**	**71,344**	**79,803**	**141,472**	**175,945**	**158,733**	**126,665**	**108,640**	**103,013**	**92,810**	**86,596**	**74,674**	**64,334**	**51,996**	**37,894**	**28,722**	**32,351**	**1,609,904**

(a) The count of persons for Norfolk Island is from the 2016 Census. There are small random adjustments made to all cell values to protect the confidentiality of data. These adjustments may cause the sum of rows or columns to differ by small amounts from the table totals.

Source: ABS 2017 ERP and ABS 2016 Census.

Table 12: CESPHN Estimated Aboriginal and/or Torres Strait Islander Population by Age, SA3, Males – 2016

SA3 name	Age group (years)														Total Males
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	
Botany	33	36	38	40	45	34	26	17	17	23	30	18	10	25	387
Canada Bay	21	15	26	12	16	11	15	12	15	15	13	11	8	13	200
Canterbury	33	51	32	30	38	23	17	15	16	25	12	18	11	19	338
Cronulla - Miranda - Caringbah	68	59	48	52	44	53	39	38	33	32	30	30	19	44	597
Eastern Suburbs - North	17	25	14	15	29	23	20	14	27	20	17	10	5	12	250
Eastern Suburbs - South	102	93	94	100	142	99	97	75	81	65	55	55	27	61	1,142
Hurstville	24	24	32	32	38	30	14	16	16	11	34	19	8	23	317
Kogarah - Rockdale	40	45	37	33	48	48	32	28	38	23	27	20	14	21	446
Leichhardt	32	22	14	13	28	28	18	18	16	19	18	7	9	20	262
Lord Howe Island	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Marrickville -Sydenham - Petersham	30	28	27	30	46	52	39	24	24	29	29	16	15	25	398
Norfolk Island	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
Strathfield - Burwood - Ashfield	36	38	42	32	59	44	25	20	25	28	24	21	13	24	434
Sutherland - Menai - Heathcote	68	62	91	64	42	34	39	28	30	43	29	32	15	35	628
Sydney Inner City	84	90	72	88	113	152	112	108	114	91	73	84	36	64	1,264
CESPHN Total	**588**	**588**	**570**	**541**	**688**	**631**	**493**	**413**	**452**	**424**	**391**	**341**	**190**	**386**	**6,669**

Note: Age has small random adjustments made to cell values to protect the confidentiality of data. These adjustments have caused differences by small amounts from the total.

Source: ABS 2016 Census: Aboriginal and Torres Strait Islander Peoples Profile

Table 13: CESPHN Estimated Aboriginal and/or Torres Strait Islander Population by Age, SA3, Females – 2016

SA3 name	Age group (years)														Total Females
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	
Botany	36	39	30	43	42	37	34	17	36	31	28	20	15	34	431
Canada Bay	15	21	20	22	14	15	12	17	19	11	11	12	3	16	211
Canterbury	48	37	48	28	38	27	24	25	36	26	26	20	10	28	422
Cronulla - Miranda - Caringbah	56	47	50	61	58	45	36	36	31	36	26	31	25	53	585
Eastern Suburbs - North	17	16	21	24	18	13	28	10	12	10	8	5	7	7	210
Eastern Suburbs - South	88	81	82	93	115	78	72	56	65	65	45	38	39	79	1,002
Hurstville	30	47	35	37	42	33	30	22	29	26	24	16	14	24	409
Kogarah - Rockdale	44	30	27	37	47	45	35	23	36	40	21	25	17	27	447
Leichhardt	24	29	14	15	26	39	30	19	18	21	23	25	10	18	311
Lord Howe Island	0	3	0	0	0	0	0	0	0	0	0	0	0	0	5
Marrickville - Sydenham - Petersham	43	28	22	27	42	35	36	20	30	34	31	30	19	23	425
Norfolk Island	0	0	0	0	0	0	0	0	0	3	0	0	0	3	9
Strathfield - Burwood - Ashfield	49	50	49	42	49	46	36	30	30	35	29	14	21	35	512
Sutherland - Menai - Heathcote	71	70	73	49	38	48	42	42	46	27	31	28	21	24	616
Sydney Inner City	66	88	95	104	128	127	103	86	67	109	66	55	56	84	1,229
CESPHN Total	**587**	**586**	**566**	**582**	**657**	**488**	**518**	**403**	**455**	**474**	**369**	**319**	**257**	**455**	**6,824**

Note: Age has small random adjustments made to cell values to protect the confidentiality of data. These adjustments have caused differences by small amounts from the total.
Source: ABS 2016 Census: Aboriginal and Torres Strait Islander Peoples Profile

Table 14: CESPHN Estimated Aboriginal and/or Torres Strait Islander Population by Age, SA3, Persons – 2016

	Age group (years)														Total
SA3 name	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40-44**	**45-49**	**50-54**	**55-59**	**60-64**	**65+**	**Persons**
Botany	67	77	64	87	86	72	63	33	47	54	54	43	21	56	815
Canada Bay	33	38	42	29	31	30	27	28	30	26	28	23	15	22	410
Canterbury	83	82	81	59	74	53	40	38	48	55	36	35	23	50	768
Cronulla - Miranda - Caringbah	123	112	103	114	96	94	77	70	66	76	57	58	44	93	1,180
Eastern Suburbs - North	31	38	38	40	48	33	48	28	38	29	29	19	14	19	457
Eastern Suburbs - South	188	178	173	191	252	180	169	135	142	127	101	98	67	141	2,148
Hurstville	57	80	63	74	77	56	41	36	43	37	59	40	22	42	721
Kogarah - Rockdale	86	77	70	71	98	87	65	56	75	58	46	41	30	44	902
Leichhardt	52	51	31	25	54	62	45	35	41	35	43	35	21	42	575
Lord Howe Island	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
Marrickville - Sydenham - Petersham	70	58	56	56	83	93	70	48	56	62	54	43	34	49	825
Norfolk Island	0	0	3	0	0	0	0	0	0	3	0	0	0	3	9
Strathfield - Burwood - Ashfield	79	90	91	72	113	94	65	54	56	61	55	37	37	54	948
Sutherland - Menai - Heathcote	145	132	168	114	83	84	75	68	76	63	66	57	42	57	1,239
Sydney Inner City	151	174	160	189	238	280	207	187	183	196	142	141	88	147	2,489
CESPHN Total	**1,165**	**1,190**	**1,140**	**1,121**	**1,333**	**1,218**	**992**	**816**	**901**	**882**	**770**	**670**	**458**	**819**	**13,489**

Note: Age has small random adjustments made to cell values to protect the confidentiality of data. These adjustments have caused differences by small amounts from the total.

Source: ABS 2016 Census: Aboriginal and Torres Strait Islander Peoples Profile

Table 15: People from multicultural backgrounds in CESPHN region – 2016

	Born overseas[a]		Speaks language other than English at home[a]		Proficiency in English (does not speak English well or at all)[b]	
SA3 name	No.	%	No.	%	No.	%
Botany	20,610	44.1%	20,796	44.5%	3,244	6.9%
Canada Bay	33,545	39.3%	33,857	39.7%	5,833	6.8%
Canterbury	67,553	50.0%	90,233	66.8%	20,247	15.0%
Cronulla - Miranda - Caringbah	20,538	18.7%	15,252	13.9%	1,826	1.7%
Eastern Suburbs - North	44,924	35.5%	23,246	18.4%	1,936	1.5%
Eastern Suburbs - South	57,257	40.7%	45,110	32.1%	5,695	4.0%
Hurstville	57,721	45.4%	67,664	53.2%	15,268	12.0%
Kogarah - Rockdale	64,969	47.2%	78,099	56.7%	12,805	9.3%
Leichhardt	15,653	27.9%	8,590	15.3%	1,063	1.9%
Lord Howe Island	60	15.7%	22	5.8%	0	0%
Marrickville - Sydenham - Petersham	18,081	33.1%	16,432	30.1%	3,882	7.1%
Norfolk Island	537	30.7%	851	48.7%	22	1.3%
Strathfield - Burwood - Ashfield	79,399	49.9%	80,861	53.2%	16,278	10.7%
Sutherland - Menai - Heathcote	18,681	17.3%	13,097	12.1%	1,533	1.4%
Sydney Inner City	101,031	47.2%	76,469	35.7%	13,143	6.1%
CESPHN total	**600,559**	**40.0%**	**570,579**	**38.1%**	**102,775**	**6.9%**

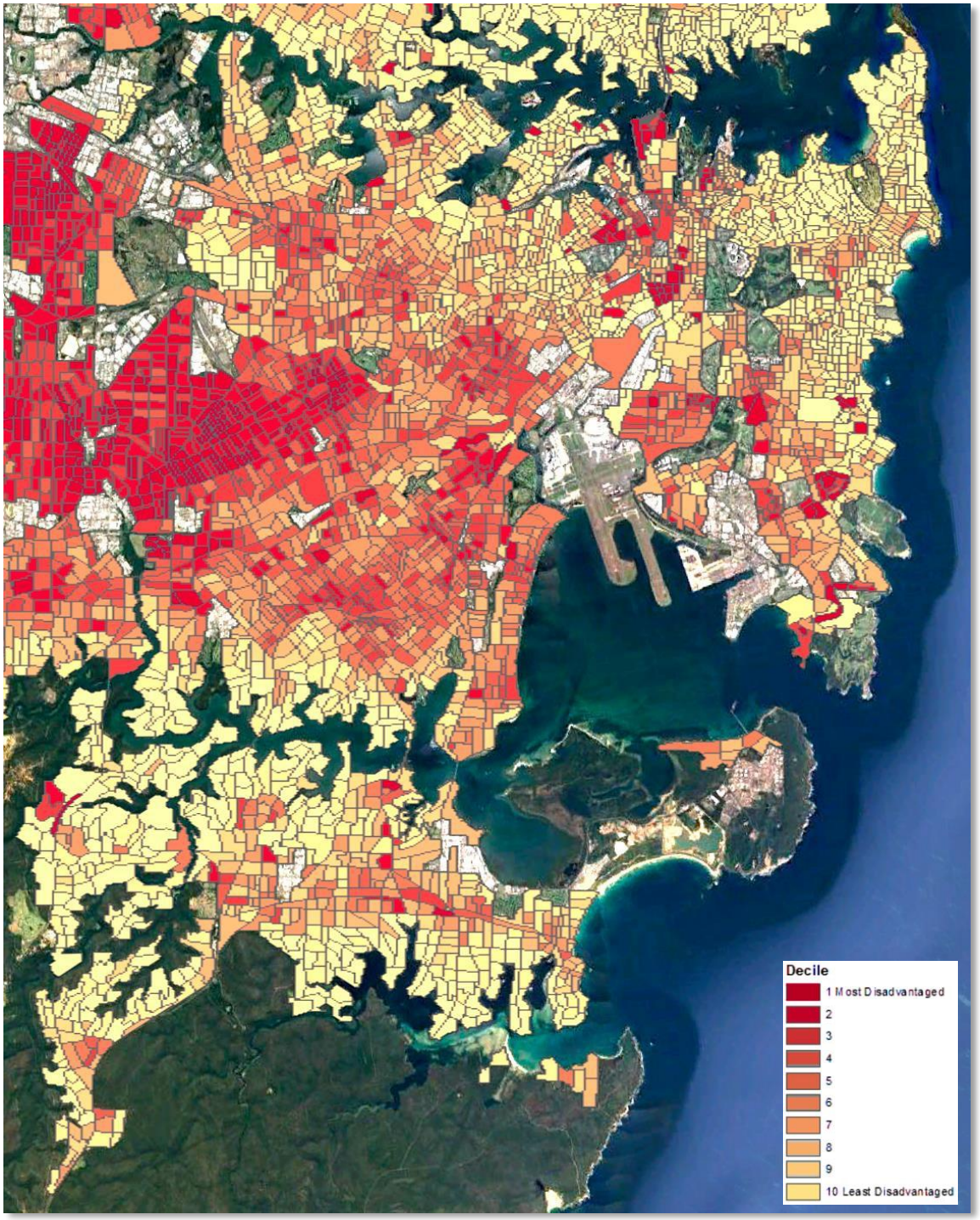
(a) Source: ABS Cat. No. 1410.0 and General Community Profiles

(b) Source: Department of Health, PHN Demographic Data, Language and Cultural Diversity 2016

Relative disadvantage

SEIFA Index of Relative Socioeconomic Disadvantage by SA1: CESPHN region

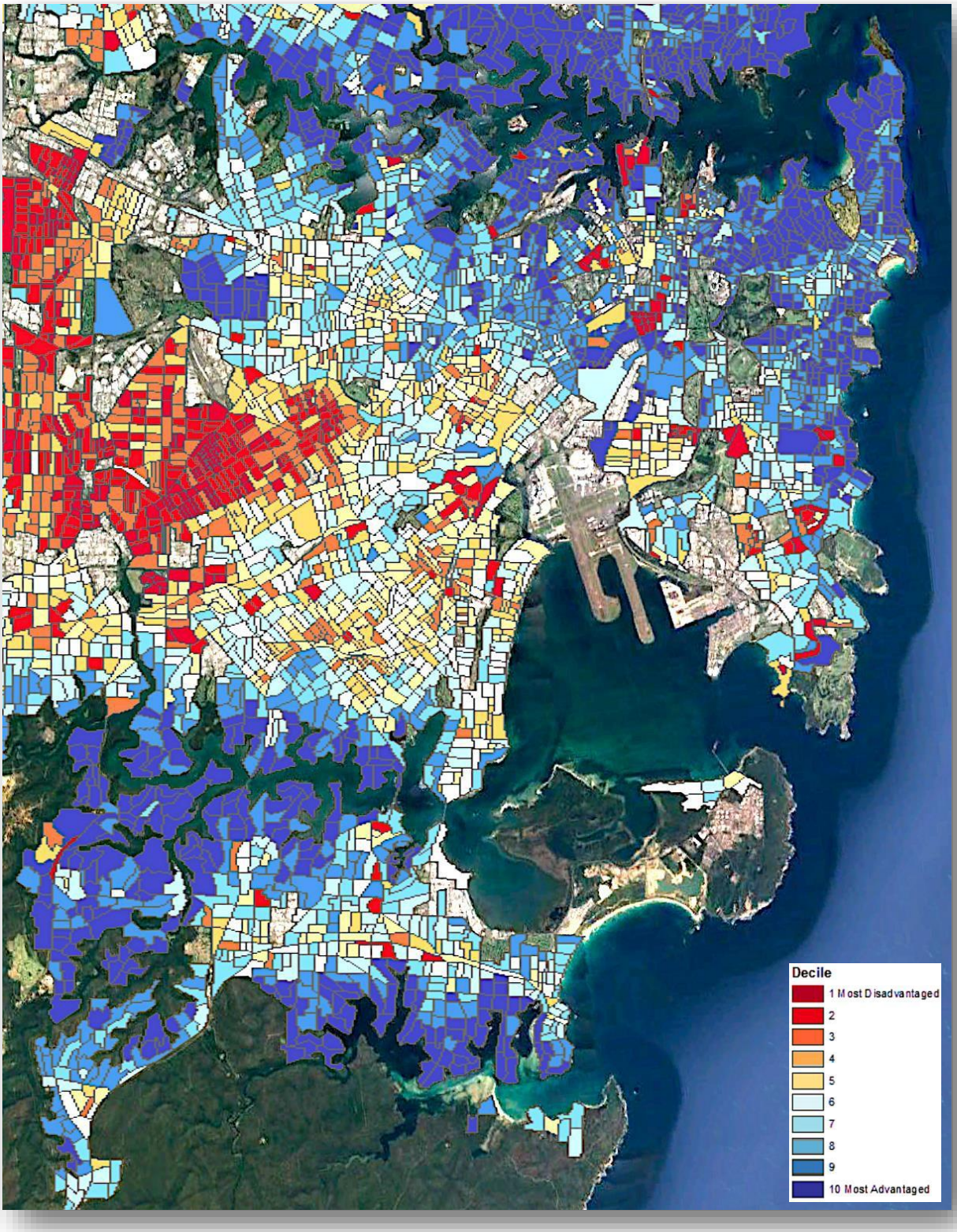
The Index of Relative Socio-economic Disadvantage (IRSD) is a general socio-economic index that summarises a range of information about the economic and social conditions of people and households within an area. Unlike the other indexes, this index includes only measures of relative disadvantage. High and low scores are based on a range of variables relating to income, home ownership, occupation, employment, family status and English proficiency.



Relative advantage and disadvantage

SEIFA Index of Relative Socioeconomic Advantage and Disadvantage by SA1: CESPHN region

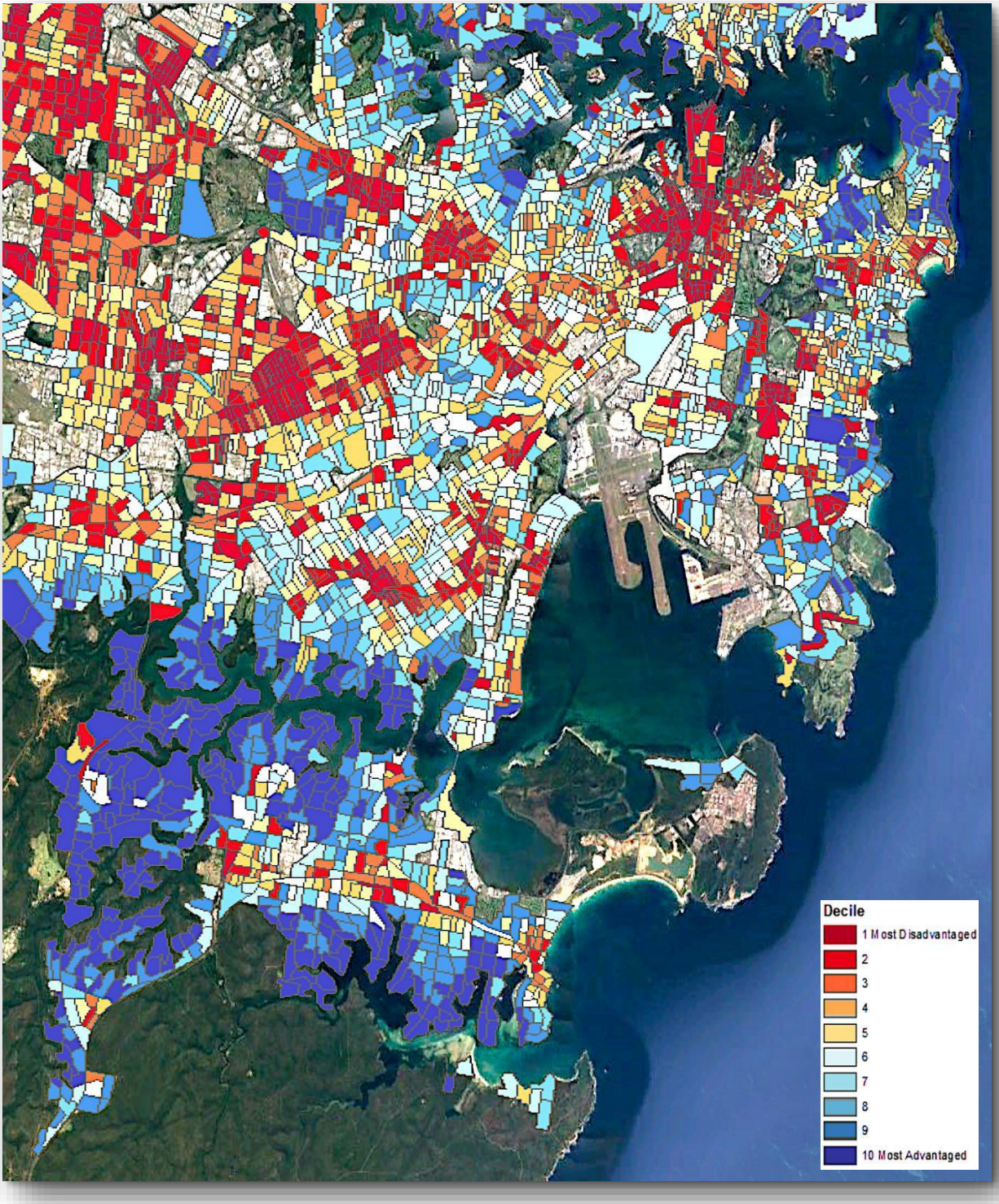
The Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) summarises information about the economic and social conditions of people and households within an area, including both relative advantage and disadvantage measures. Scores are indicative of income and occupation. This index is useful when believes the issue is one likely to be affected by both advantage and disadvantage.



Economic resources

SEIFA Index of Economic Resources by SA1: CESPHN region

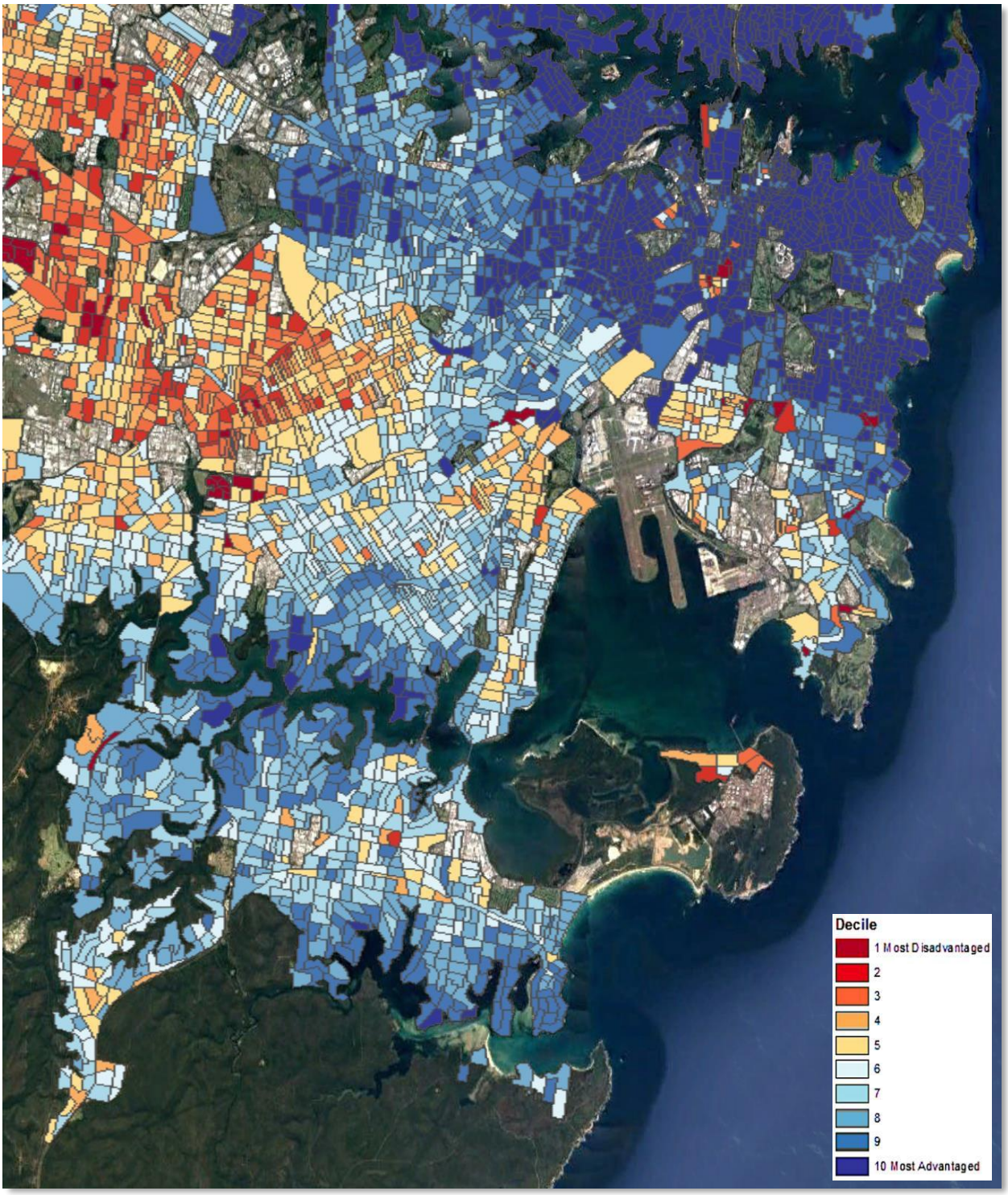
The Index of Economic Resources (IER) focuses on the financial aspects of relative socio-economic advantage and disadvantage, by summarising variables related to income and wealth. This index excludes education and occupation variables because they are not direct measures of economic resources. It also misses some assets such as savings or equities which, although relevant, could not be included because this information was not collected in the 2016 Census. Scores are indicative of relative access to economic resources in general including household income and levels of rent.



Economic opportunity

SEIFA Index of Economic Opportunity by SA1: CESPHN region

The Index of Education and Occupation (IEO) is designed to reflect the educational and occupational level of communities. The education variables in this index show either the level of qualification achieved or whether further education is being undertaken. This index does not include any income variables. Scores are indicative of relative levels of qualification, skilled or unskilled occupations and levels of unemployment.



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