Central and Eastern Sydney PHN
2019 Needs Assessment

phn
CENTRAL AND
EASTERN SYDNEY
An Australian Government Initiative

Table of Contents

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
ASR	Age Standardised Rate
CALD	Culturally and linguistically diverse
CESPHN	Central and Eastern Sydney Primary Health Network
CPD	Continuing Professional Development
CTG	Closing the Gap
DVA	Department of Veterans' Affairs
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 Area Level 3
SA2	Statistical Area Level 2
SESLHD	South Eastern Sydney Local Health District
SLHD	Sydney Local Health District
SCHN	Sydney Children's Hospitals Network
SVHN	St Vincent's Health Network

Executive summary

This is the fifth update to the Central and Eastern Sydney Primary Health Network (CESPHN) Needs Assessment. We have 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
- Chapters 2-9 provide the outcomes of the assessment of health and service needs
- Chapter 10 lists the priorities identified through the needs assessment.

Methods

We considered the health and service needs across the lifespan and for population groups who have poorer health outcomes relative to the general population. We also considered areas within the CESPHN region with higher needs, unique challenges or emerging concerns, and the functioning of the primary care system in terms of accessibility, coordination, integration, and workforce.

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. Qualitative data were analysed from a range of purposeful and incidental engagement activities that occurred during 2019 including regular engagements with our 10 advisory groups and seven member networks, surveys of our stakeholders and our annual strategic planning day.

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 new data, emerging literature, policies and plans 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 by population, with a resident population of over 1.6 million. The region is characterised by cultural diversity (with 40% of the community born outside Australia) and high population growth.

Outcomes of the needs assessment

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.

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.

Rates of gestational diabetes have increased substantially over the last ten years. Other measures of child and maternal health (such as low birth weight, childhood development, and antenatal care) point to greater need for support of Aboriginal and/or Torres Strait Islander women and women born overseas in non-English speaking countries.

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. While there has been an upward trend in the uptake of health assessments for Aboriginal and/or Torres Strait Islander peoples in the CESPHN region, the rate (12%) is well below the national target (from 42% to 74%).

The number of people aged 65 years and over is expected to increase by 43% by 2031. Falls, dementia, mental illness and social isolation are all prevalent conditions among older people. Rates of advance care planning completion are poor and stakeholder consultations have noted that patients at end of life stage often want to receive home-based palliative care and general practitioner (GP) services.

The CESPHN region has 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) CALD communities, residents of the remote Lord Howe and Norfolk islands, people living with a disability, people experiencing homelessness, the lesbian, gay, bisexual, transgender, intersex and queer community, people in contact with the criminal justice system, people experiencing family and domestic violence, and high density dwellers.

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.

Alcohol is the most common main drug of concern for clients accessing treatment services in the CESPHN region, followed by methamphetamines. The most significant change reported by stakeholders is the reduction in Oxycontin misuse and the rise in Xanax misuse. Very few GPs in the region are active accredited Opioid Treatment Program (OTP) prescribers and there is low participation of community pharmacies in the program.

Most adults have contact with their GP at least once a year. Bulk billing rates are higher than nationally but cost is still a barrier to seeing a GP for some of the population. The majority of patients incurred out-of-pocket costs for non-hospital specialist services, with the median cost being $81 per specialist attendance compared to $64 nationally. The rate of after hours GP services is increasing, and is most often received by our youngest (0-14 years) and oldest (80+ years) populations. Lower urgency presentations to the emergency department (ED) in the after hours period are decreasing. Again, it is the youngest population group (0-14 years) that are most commonly presenting to the ED. The national helplines are also most often used for young patients (0-4 years) during the after hours period.

Key issues impacting the ability to navigate and coordinate health services in the CESPHN region include service coverage, low patient health literacy, issues with identifying and navigating available and appropriate services, and the inability to reliably communicate patient information between health care providers such as inconsistencies in the availability of electronic referral processes or variable provision of discharge summaries from hospitals.

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 low within the hospital or medical specialist setting and is limited largely to receiving diagnostic results. The sharing

of data for quality improvement activities has increased over time most recently due to the introduction of the Practice Incentive Payment for Quality Improvement (PIP QI).

Sixty-five per cent of the 614 general practices operating within the CESPHN region are accredited. There were 2,053 GPs working in the CESPHN region (1,903.9 FTE) in 2017. The majority (86%) of GPs work in an accredited general practice. Just over half of FTE GPs across the CESPHN region were aged 55 years or older and almost one-quarter of GPs indicated they only intend to work as a GP for up to five years.

There were 562 nurses working as practice nurses (448.8 FTE) and 12,519 Australian Health Practitioner Regulation Agency registered allied health professionals.

Priority areas

We have identified the following priority areas for action:

- Population health
- Aboriginal and Torres Strait Islander health
- Older Australians
- Regional priority populations
- Mental health
- Alcohol and other drugs
- Access, coordination and integration of care (including after hours and digital health)
- Workforce.

Limitations

The amount of data available to the PHN has increased significantly over the last few years. However, some data is still only available at the state/territory or national level or is 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 we commission and clinical data derived from general practices that will address some of the current data limitations.

We are working on improving our methods for capturing and analysing qualitative data to provide context, analytical rigour and translation. We have acquired a new Customer Relationship Management (CRM) system that will allow better service mapping in the future.

1. CESPHN region

Key points

- CESPHN is the second largest of the 31 PHNs across Australia by population, with a resident population of over 1.6 million and a non-resident population of approximately 0.4 million who enter the region every day for work.
- The region includes the remote islands of Norfolk (1,748 persons) and Lord Howe (421 persons).
- 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.
- Fourteen per cent of the resident population are aged 65 years and over, with an estimated 43% increase in this age group by 2031.
- There were 19,579 live births in 2017. The total fertility rate was highest in Canterbury (2 babies per woman) and lowest in Sydney Inner City (1 baby per woman).
- The population is projected to increase by 16% (to 1.9 million) between 2018 and 2031.
- The total average level of advantage is above that of the Australian average. However, there are pockets of disadvantage – almost half of the most disadvantaged areas are in Canterbury.
- 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 7% 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).
- There were 10,872 DVA clients as at June 2019 – comprising of 6,304 veterans and 4,596 dependents.
- The region also has a high concentration of same sex couples – 18% of same sex couples in Australia live in our region.
- Approximately 19% of all people exiting custodial settings in NSW reside in the region.

1.1. Geography and demographics

CESPHN covers an area of 626 square kilometres that includes central and eastern Sydney and the remote Norfolk and Lord Howe islands. The boundaries align with those of the South Eastern Sydney Local Health District (SESLHD) and Sydney Local Health District (SLHD).

CESPHN is the second largest of the 31 PHNs across Australia by population, with an estimated resident population of 1.6 million in 2018. CESPHN also has a large non-resident population with over 0.4 million people entering the region each day to work, and many more to visit or study, inevitably making use of a range of health services.(1)

The highest concentration of the population live in Sydney Inner City (15.1%), followed by Strathfield-Burwood-Ashfield (10.2%).(2) The majority of SA3s have densities above 4,000 people per square kilometre (sq km) which rises to almost 10,000 per sq km in Sydney Inner City. Seven of the ten most densely-populated SA2s in Australia can be found in the CESPHN region surrounding the central business district.(3)

Table 1: Estimated resident population in the CESPHN region by SA3 and SA4, 2018

Statistical Level Area	Total Persons	% of Region	Density (per sq km)
Botany	52,735	3.20%	1,897.09
Marrickville - Sydenham - Petersham	59,201	3.60%	4,672.57
Sydney Inner City	247,366	15.10%	9,869.34
Sydney - City and Inner South	**359,302**	**21.90%**	**5,482.86**
Eastern Suburbs - North	138,797	8.50%	5,300.65
Eastern Suburbs - South	154,255	9.40%	4,889.52
Sydney - Eastern Suburbs	**293,052**	**17.90%**	**5,075.99**
Canterbury	145,581	8.90%	4,858.43
Hurstville	137,245	8.40%	4,041.93
Kogarah - Rockdale	152,467	9.30%	4,863.71
Sydney - Inner South West	**435,293**	**26.60%**	**4,569.15**
Canada Bay	92,270	5.60%	4,672.58
Leichhardt	60,761	3.70%	5,701.14
Strathfield - Burwood - Ashfield	166,144	10.10%	4,866.08
Sydney - Inner West	**319,175**	**19.50%**	**4,944.76**
Cronulla - Miranda - Caringbah	116,758	7.10%	2,099.28
Sutherland - Menai - Heathcote	111,991	6.80%	466.15
Sydney - Sutherland	**228,749**	**14.00%**	**773.15**
Lord Howe Island	421	0.03%	25.84
Norfolk Island[(a)]	1,748	0.10%	45.23
Total	**1,637,740**	**100.00%**	**2,583.64**

(a) The count of persons for Norfolk Island is from the 2016 Census.

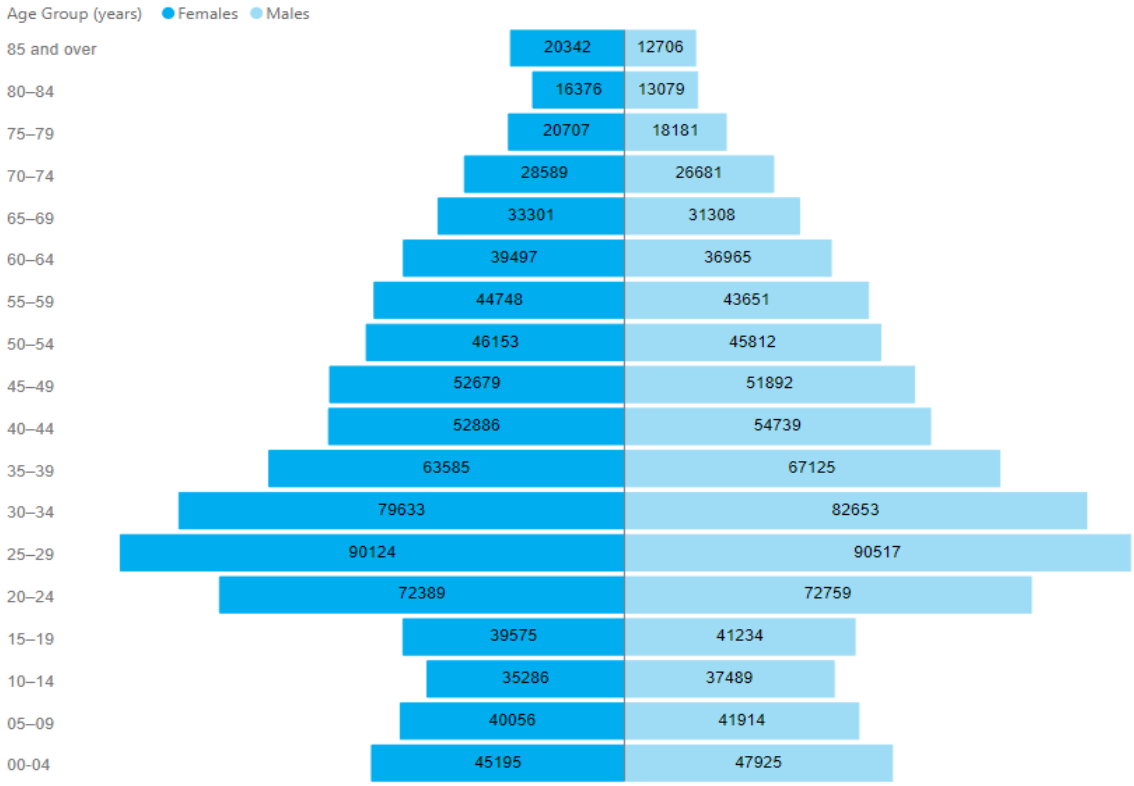
Source: ABS 2019 ERP and ABS 2016 Census.

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 58% of the CESPHN region, while 14% of the region is aged 65 years and over.

There are 821,121 females (50.1%) and 816,630 males (49.9%) in the region, which is consistent with national rates.(2)

Figure 1: Estimated resident population in the CESPHN region by age group and gender, 2018



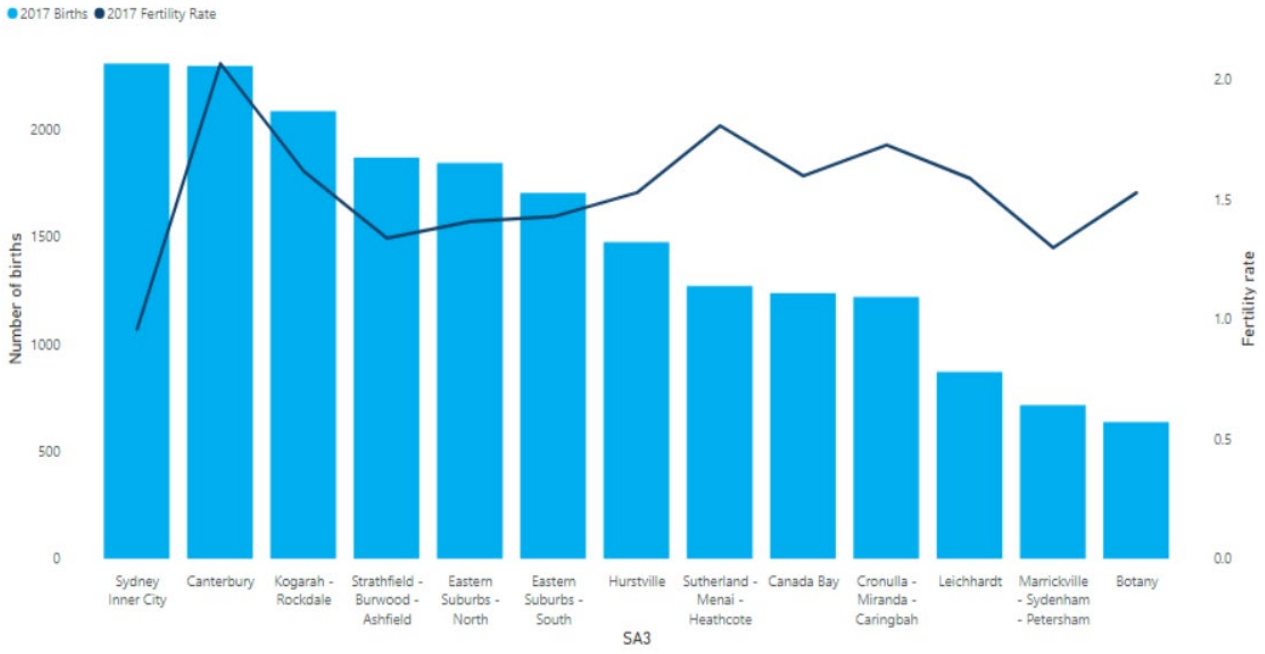
Source: ABS 2019 ERP

Births

In 2017, there were 19,579 live births in the CESPHN region. The highest number of births were Sydney and Inner city (2,312), followed by Canterbury (2,301) and Kogarah- Rockdale (2,090).(4)

The total fertility rate was highest in Canterbury (2 babies per woman) and lowest in Sydney Inner City (1 baby per woman).

Figure 2: Number of live births and total fertility rate in the CESPHN region by SA3, 2017



Source: ABS 2018 Births

Population growth

Between 2018 and 2031, the population in the CESPHN region is expected to increase by 16% to 1,904,720 residents. The greatest population growth is expected in the 65 years and over age group (43% increase).(2) These projections are based on assumptions about future trends in fertility, mortality and migration.

Table 2: Population projections in the CESPHN region by age group and year, 2018

Age group (years)	2018	2031	Growth
0-14	247,860	311,320	25.6%
15-64	1,168,610	1,277,940	9.4%
65+	221,259	315,460	42.6%
Total population	**1,637,740**	**1,904,720**	**16.3%**

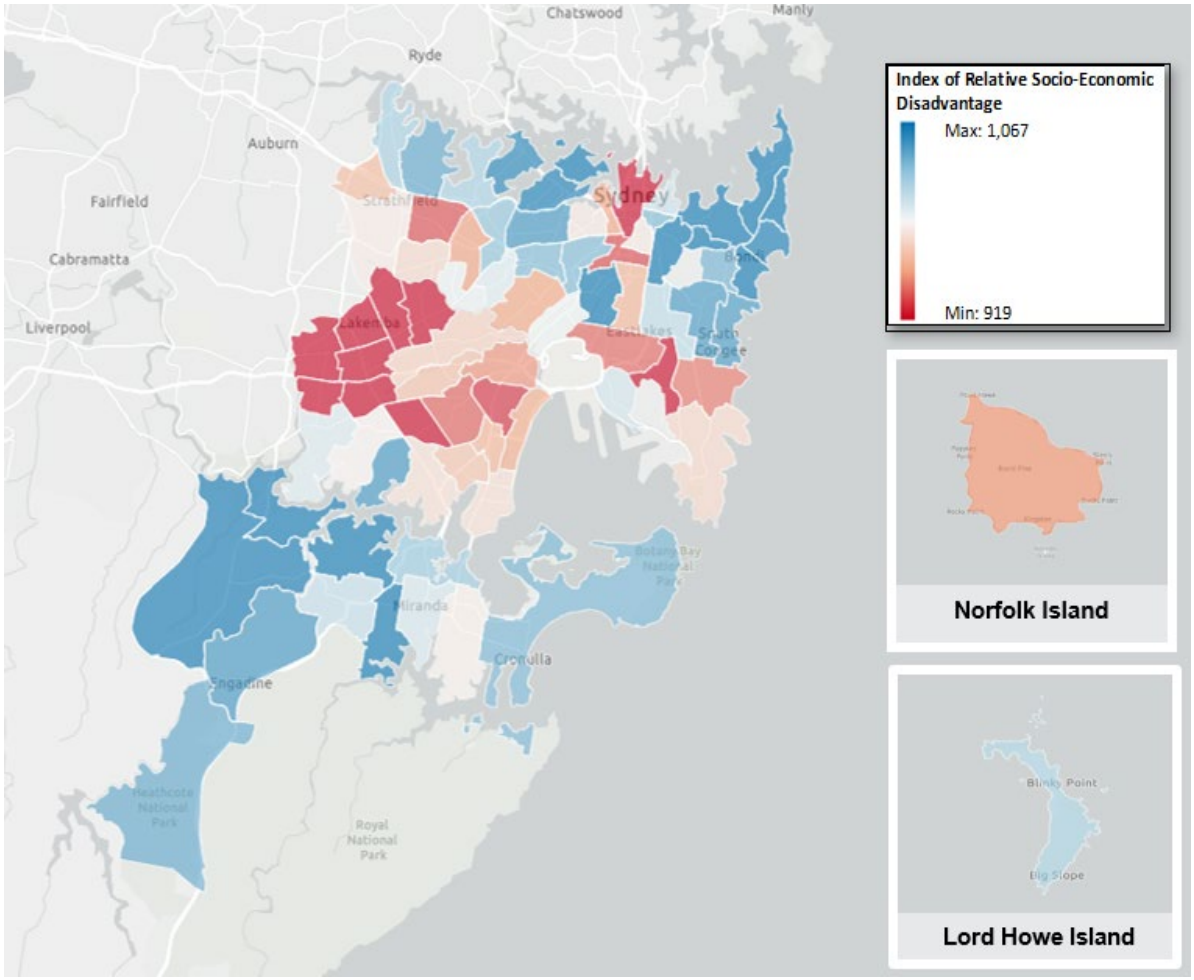
Source: ABS 2019 ERP

CESPHN includes a number of SA2 regions with the largest and fastest growth between 2006 and 2016 – for example, Waterloo-Beaconsfield and Concord West-North Strathfield had a 100% growth rate from 2006 to 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.

Social economic circumstances

The overall level of advantage in CESPHN is above that of the Australian average as measured by the ABS Socioeconomic Indices of Advantage and Disadvantage. Within the CESPHN region 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 as measured by factors such as low income, unemployment, and low English proficiency.(5)

Figure 3: Index of Relative Socio-Economic Disadvantage (IRSD) in the CESPHN region by SA2, 2016



Source: ABS 2018 SEIFA

There are 17 SA2s with an Index of Relative Socioeconomic Disadvantage (IRSD) value below 1,000 indicating socioeconomic disadvantage. Almost half of the most disadvantaged SA2s are in Canterbury. Other pockets of disadvantage are in Sydney Inner City, Eastern Suburbs-South, Hurstville, Botany, Strathfield-Burwood-Ashfield, and Kogarah-Rockdale.

Table 3: Most disadvantaged SA2s in the CESPHN region with an IRSD value below 1,000, 2016

SA2	IRSD
SA3 Botany	
Pagewood - Hillsdale - Daceyville	971
Mascot - Eastlakes	995
SA3 Canterbury	
Lakemba	852
Wiley Park	875
Punchbowl	881
Canterbury (South) - Campsie	930
Belmore - Belfield	939
Narwee - Beverly Hills	974
Roselands	978
SA3 Hurstville	
Riverwood	875
Hurstville	973
SA3 Kogarah - Rockdale	
Rockdale - Banksia	986
Bexley	994
SA3 Strathfield - Burwood - Ashfield	
Burwood - Croydon	991
SA3 Sydney Inner City	
Sydney - Haymarket - The Rocks	977
Redfern - Chippendale	990
SA3 Eastern Suburbs - South	
Maroubra - South	998

Source: ABS 2018 SEIFA

1.2. Population groups

Aboriginal and/or Torres Strait Islander peoples

In 2016, the number of CESPHN residents that identified as Aboriginal and/or Torres Strait Islander was 13,489 (0.8% compared to 3.3% of the total Australian population). The distribution of Aboriginal and/or Torres Strait Islander residents varies by sub-region with the highest proportion residing in Inner Sydney City (2,489 persons), followed by Eastern Suburbs South (2,148 persons) and Sutherland-Menai-Heathcote (1,239 persons).(6)

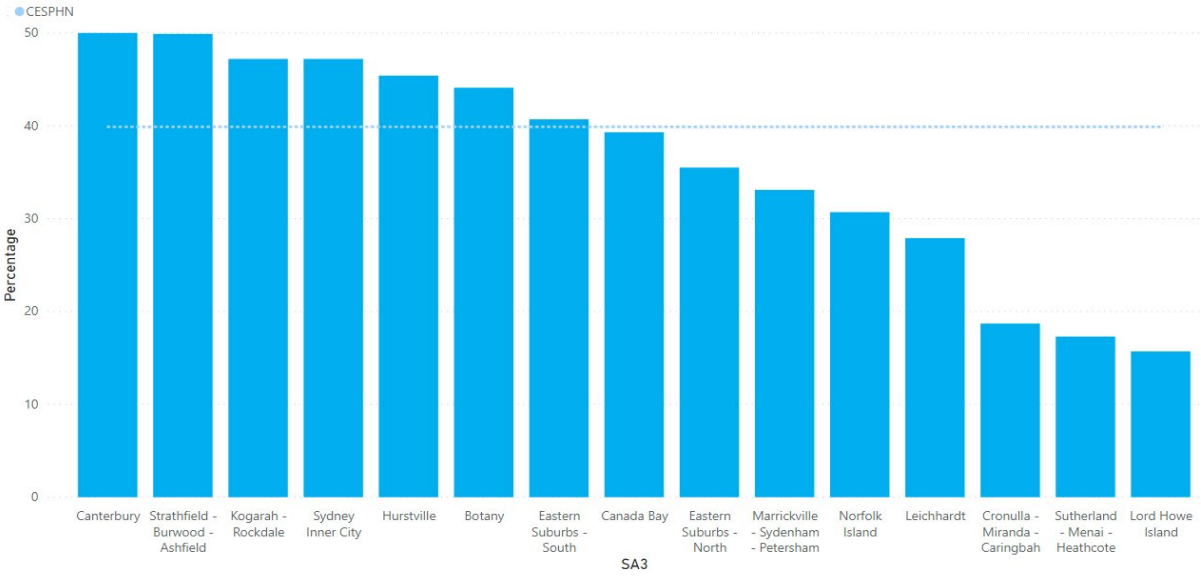
The Aboriginal and/or Torres Strait Islander population has a considerably younger age profile compared to the non-Aboriginal and/or Torres Strait Islander population – 34% of the Aboriginal and/or Torres Strait Islander population residing in the CESPHN region were aged 0-19 years.

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 7% do not speak English well or at all.(7, 8)

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%.

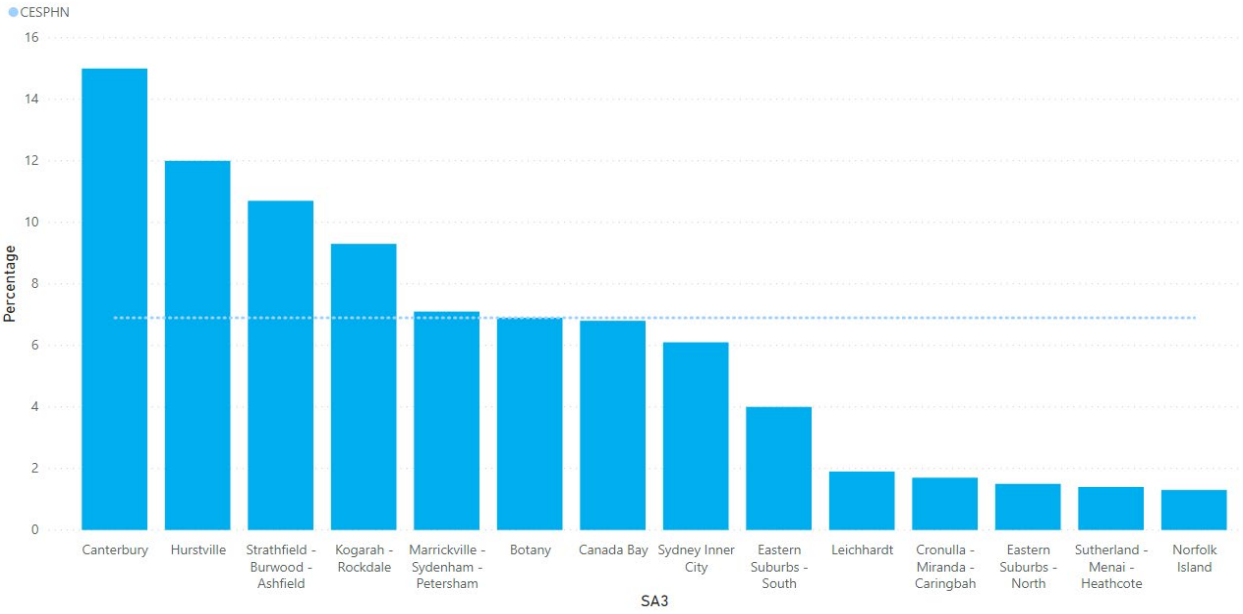
Figure 4: Percentage of people born overseas by SA3, 2011-2017



Source: ABS 2018 Data by Region

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%.

Figure 5: Percentage of people not proficient in English (does not speak English well or at all) by SA3, 2016



Source: Department of Health 2018 Demographic data – Language and Cultural Diversity

Thirty eight percent of the CESPHN population speak a language other than English at home. The top five common spoken languages, other than English, in the CESPHN region are Mandarin (7% of residents), Cantonese (4% of residents), Greek (4% of residents), Arabic (3% of residents) and Italian (2% of residents). Areas with a high concentration of speakers of these languages are (6):

- **Mandarin**: 20% of Mandarin speakers live in Sydney Inner City, 19% live in Hurstville and 17% live in Strathfield-Burwood-Ashfield

- **Cantonese**: 25% of Cantonese speakers live in Hurstville, 16% live in Strathfield-Burwood-Ashfield and 12% live in Kogarah-Rockdale
- **Greek**: 20% of Greek speakers live in Canterbury, 21% live in Kogarah-Rockdale and 11% live in Hurstville
- **Arabic**: 41% of Arabic speakers live in Canterbury, 20% live in Kogarah-Rockdale and 11% live in Hurstville
- **Italian**: 22% of Italian speakers live in Canada Bay, 20% live in Strathfield-Burwood-Ashfield and 10% live in Canterbury.

Asylum seekers and refugees

The CESPHN region also has a significant population of asylum seekers and refugees. In 2018-19, approximately 244 people arrived and settled in the region on a humanitarian visa, fewer than the 414 people in 2016-17. In both periods, over 40% of these people resided in Canterbury.(9, 10) Humanitarian visas encompass both Protection visa types (applied onshore) and Refugee visa types (applied offshore).(11)

As at September 2019, a total of 682 people who came seeking asylum by boat and were granted a Bridging Visa E resided in the CESPHN region. Approximately 90% resided in Canterbury and 10% in Kogarah-Rockdale.(12)

Asylum seekers and refugees can be on Protection or Refugee visa types, a Bridging Visa E (temporary visa), or awaiting a Bridging Visa E while their Protection visa application is being processed. 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.

International students

Between January 2019 to September 2019 there were 272,710 international students enrolled in NSW with over 90% enrolled in institutions in the CESPHN region. The top five countries international students come from are China, Nepal, India, Brazil and Thailand.(13) International students are required to maintain adequate private health insurance throughout the duration of their student visa and cover the cost of their health care in Australia and are not eligible for Medicare subsidised services. However, international students may cancel or allow their private health insurance to lapse, which may leave them out of pocket if they access health services, or delay treatment due to the high expense.(14)

People living with a disability

In 2018, 17.7% (4.4 million) of all Australians had a disability. People aged 65 years and over-represented nearly half (45%) of all people with a disability.(15)

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 Strathfield-Burwood-Ashfield, Canterbury, and Hurstville.(16)

As at June 2019, there was a total of 12,084 National Disability Insurance Scheme (NDIS) participants in the CESPHN region.(17) There was also 34,792 recipients of the carer allowance, 16,620 recipients of the carer payment and 35,688 recipients of the disability support. Canterbury-Bankstown had the highest number of recipients for all three Department of Social Services (DSS) payments.(18)

Table 4: Number of DSS disability and carer payment recipients by LGA, June 2019

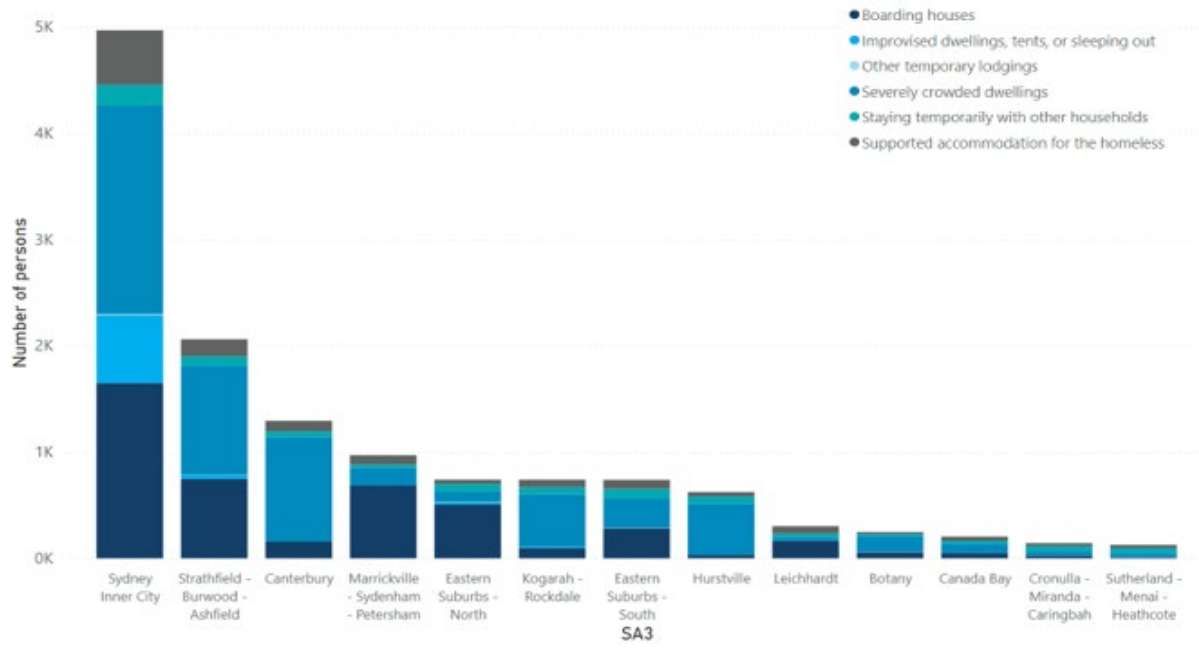
LGA	Carer Allowance	Carer Payment	Disability Support Pension
Bayside	3,942	1,702	3,513
Burwood	655	252	639
Canada Bay	1,357	413	1,084
Canterbury-Bankstown	14,171	8,717	10,797
Georges River	3,197	1,296	2,539
Inner West	2,777	1,120	3,944
Randwick	1,938	709	2,730
Strathfield	647	267	573
Sutherland Shire	3,657	990	3,340
Sydney	1,590	902	5,345
Waverley	551	176	830
Woollahra	**310**	**76**	**354**
Total	**34,792**	**16,620**	**35,688**

Source: Department of Social Services (DSS) 2019

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 were located in Sydney Inner City (4,979 people), followed by Strathfield-Burwood-Ashfield (2,070 people) and Canterbury (1,295 people).(19)

Figure 6: Number of people experiencing homelessness in the CESPHN region by homeless operational group and SA3, 2016



Source: ABS 2018 Homelessness

The CESPHN region also has a higher than average number of people living in boarding houses – a total of 4,476 persons which is 65.3% of the total number of people living in boarding houses in NSW. Within the CESPHN region, the majority of boarding house residents are located in Sydney

Inner City (37%), Strathfield-Burwood-Ashfield (16.8%) and Marrickville-Sydenham-Petersham (15.3%).

In 2017-18, 8,344 people in the CESPHN region received specialist homelessness services that can include short-term advice and information, meals, shower/laundry facilities, financial advice and counselling or legal services.(20) This is an increase of 43.2% from 2014-15 (5,791 people). Sydney Inner City had the highest proportion of clients receiving specialist homelessness services (36.9%), followed by Canterbury (9.6%) and Strathfield-Burwood-Ashfield (8.7%).(21)

Veterans

As at June 2019, there were 10,872 clients of the Department of Veterans' Affairs (DVA) in the CESPHN region. This comprised of 6,304 veterans and 4,596 dependents. The Sutherland Shire LGA had the highest number of veterans (1,275 clients).(22)

Table 5: Number of DVA clients in the CESPHN region by LGA, as at June 2019

LGA	Total Veterans	Total Dependants	Net Total DVA Clients
Bayside	529	385	911
Burwood	79	70	149
Canada Bay	343	210	551
Canterbury-Bankstown	1,156	1,281	2,432
Georges River	423	500	917
Inner West	510	259	768
Randwick	703	320	1,020
Strathfield	106	79	185
Sutherland Shire	1,275	1,029	2,297
Sydney	793	189	982
Waverley	197	118	315
Woollahra	190	156	345
Total	**6,304**	**4,596**	**10,872**

Note: 'Net Total DVA Clients' consists of any person in receipt of a pension/allowance from DVA or who is eligible for treatment or pharamceuticals paid for by DVA. Some clients may be eligible as both a veteran and a dependant hence total clients may not equal the sum of veterans and dependants.

Source: Department of Veterans' Affairs (DVA) 2019

Lesbian, Gay, Bisexual, Transgender and Queer communities

Data from the 2016 Census indicates that the CESPHN region has a high concentration of same sex couples living together in the region – 8,320 representing 18% of same sex couples living together in Australia. Sydney Inner City had the highest number of same sex couples for both male and female, representing 47% of same sex couples in the CESPHN region.(23) There is no formal estimate on the number of people who identify as transgender in the region.

People in contact with the criminal justice system

NSW has the largest prisoner population with 13,553 persons in custody in the June quarter 2019.(24) Prisoners in Australia are predominately male (80%), with an over representation of Aboriginal and/or Torres Strait peoples (28%).

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.(25)

2. Health needs

Key points

- The overall health status of CESPHN residents is better than the national average. 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.
- The three highest causes of premature mortality were from cancer, circulatory system diseases and external causes. Lung cancer had the highest premature mortality among all cancers.
- Incidence of new cancers (all types combined) was approximately the national rate. Prostate cancer was the most common type, lung cancer had the highest proportion of deaths, and liver cancer is one of the most fastest growing in terms of new cases.
- 8% of people living in the CESPHN region have diabetes or high blood glucose. Only about half of these people are registered with the National Diabetes Services Scheme.
- The top chronic conditions resulting in potentially preventable hospitalisations were congestive cardiac failure and chronic obstructive pulmonary disease.
- Fully immunised rates in the CESPHN region for all three age groups (1, 2 and 5 years) were below both the NSW and national rates and the national 95% target.
- Total vaccine-preventable hospitalisations have increased from 121 per 100,000 people in 2013-14 to 355 per 100,000 people in 2017-18. Pneumonia and influenza contribute to the majority (61%) of vaccine-preventable hospitalisations.
- The CESPHN region is currently below NSW and national screening rates for all three national programs: bowel, breast and cervical.
- 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.
- 77.0% of all mothers and 71.6% of Aboriginal and/or Torres Strait Islander mothers had an antenatal visit before 14 weeks, slightly lower than NSW rates.
- Aboriginal and/or Torres Strait Islander mothers (33.5%) have a much higher rate of smoking during pregnancy compared to all mothers (2.9%).
- Prevalence of gestational diabetes in the region has increased substantially between 2007 and 2016.
- The percentage of low birth babies is 6.6% compared to the NSW rate of 6.4%. However, Aboriginal and/or Torres Strait Islander women in the CESPHN region have almost double the rate at 11.5%.
- Breastfeeding rates are slightly higher than the NSW rate. However, it is well documented that exclusive breastfeeding rates decline significantly with time.
- There has been a noticeable increase in language vulnerability in Canterbury over the last three years.

2.1. Health status

Life expectancy

During 2015-2017, life expectancy at birth for those living in the CESPHN region was higher than the national average (84.2 years compared to 82.5 years). Females in the CESPHN region had a higher life expectancy than males (86.4 years compared to 82.2 years).(26)

Table 6: Life expectancy by gender, 2015-2017

Region	Female	Male	Total
CESPHN	86.4	82.2	84.2
National	84.6	80.5	82.5

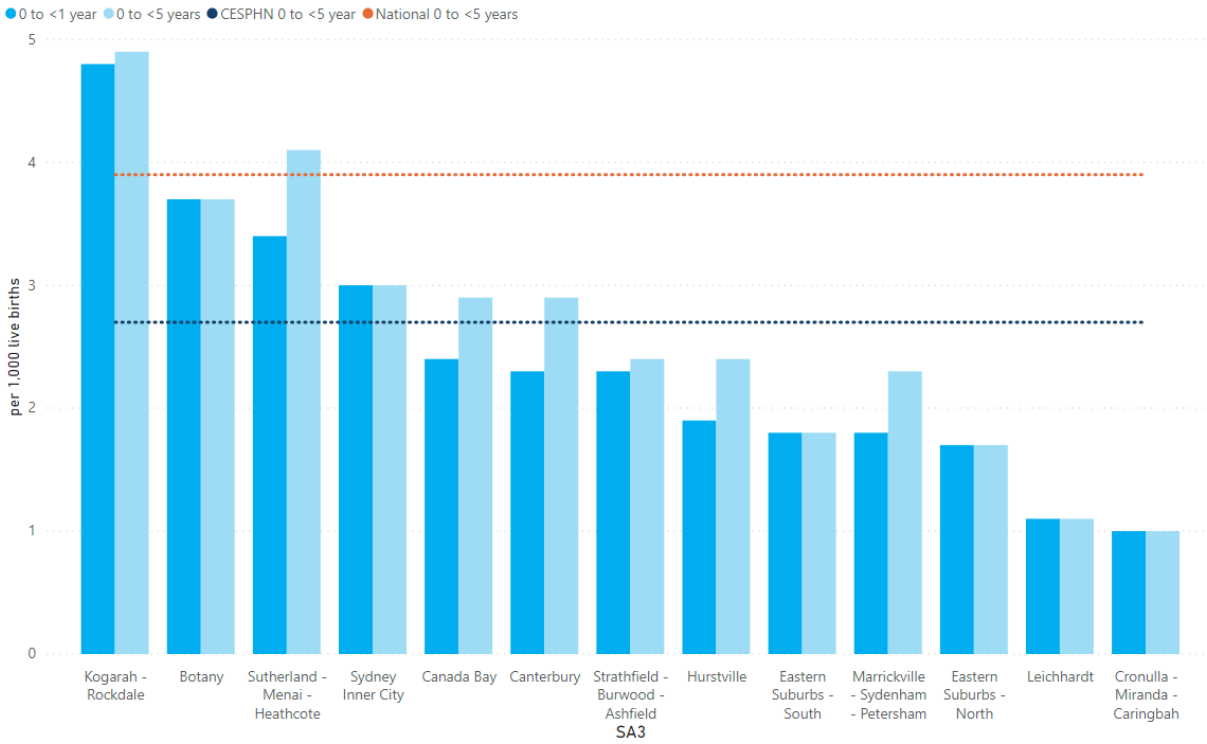
Source: AIHW 2019 Life expectancy

Infant and young child mortality

The mortality rate for infants and young children aged less than 5 years was lower in the CESPHN region (2.7 deaths per 1,000 live births) compared to the national rate (3.9 deaths per 1,000 live births).(27)

Kogarah-Rockdale (4.9 per 1,000 live births) and Sutherland-Menai-Heathcote (4.1 per 1,000 live births) had the highest mortality rates of infant and young children in the region and higher than the national rate of 3.9 deaths per 1,000 live births.

Figure 7: Mortality rate among infants and young children in the CESPHN region by SA3, 2014-2016



Source: AIHW 2018 Child and maternal

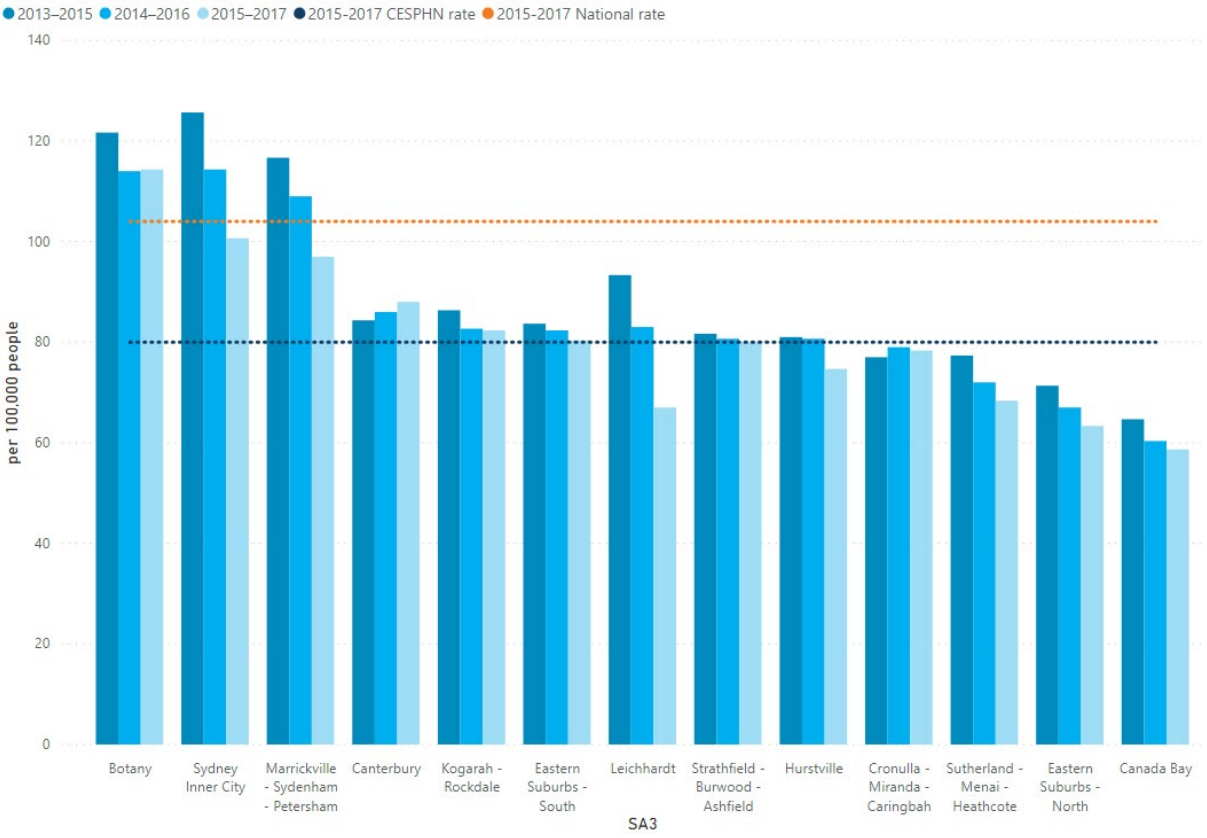
Potentially avoidable deaths

Potentially avoidable deaths are deaths below the age of 75 years from conditions that are potentially preventable through primary or hospital care.

In 2015-2017, the age-standardised rate of potentially avoidable deaths in the CESPHN region (80 per 100,000 people) was lower than the national rate (104 per 100,000 people).(26)

The male rate (106 per 100,000 people) was much higher than the female rate (55 per 100,000 people) in the CESPHN region, and Botany (114.3 per 100,000 people) had the highest rate of all SA3s. Most SA3s have seen the same national downward trend in potentially avoidable deaths, with the exception of Canterbury which has seen an increase over time.

Figure 8: Potentially avoidable deaths in the CESPHN region (ASR per 100,000) by SA3, 2013-2017



Source: AIHW 2019 Life expectancy

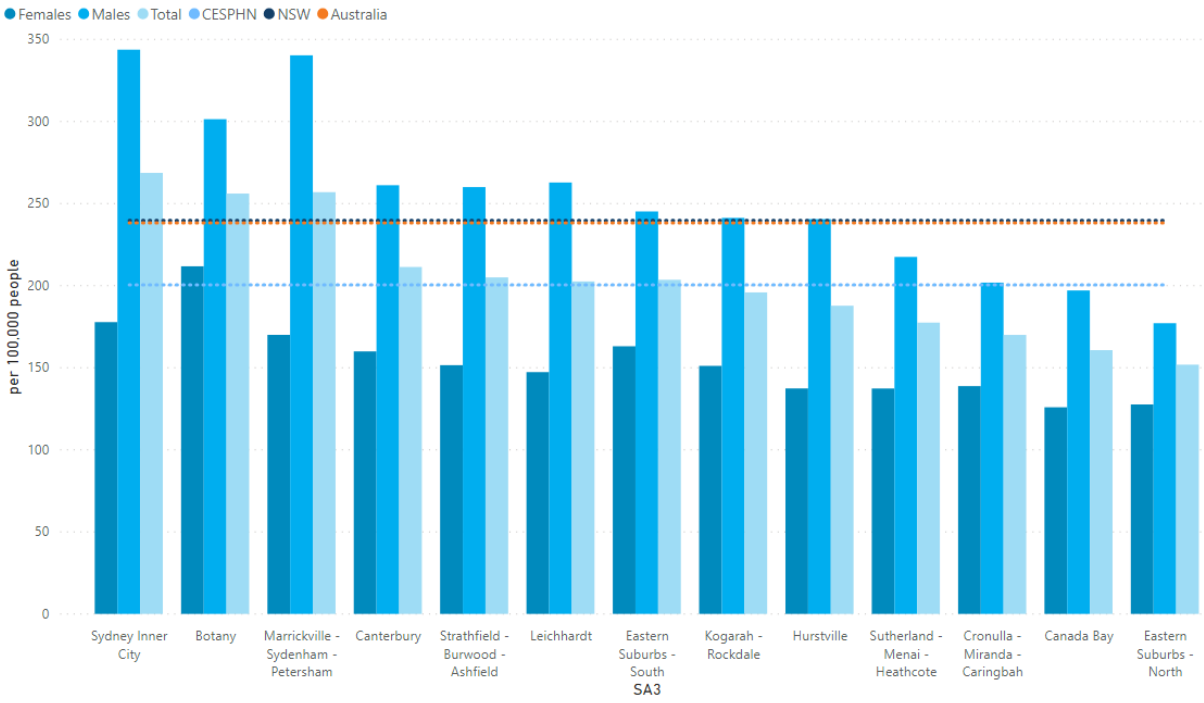
Premature mortality

Premature mortality refers to deaths that occur among people aged under 75 years. In 2011-2015, premature mortality rates in the CESPHN region (200.5 per 100,000 people) were lower than both the NSW (239.8 per 100,000 people) and national rates (238.4 per 100,000 people).(28)

The male rate (250.2 per 100,000 people) was much higher than the female rate (150.6 per 100,000 people) in the CESPHN region, and Sydney Inner City (268.7 per 100,0000 people) had the highest rate of all SA3s.

The three highest causes of premature mortality were from: cancer, circulatory system diseases and external causes.

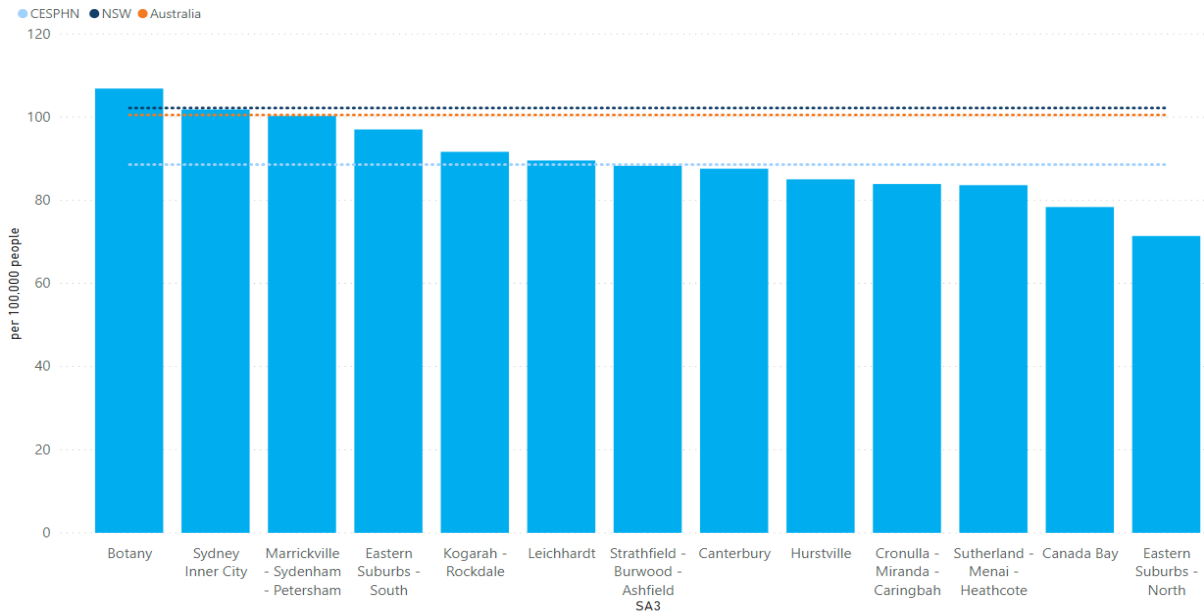
Figure 9: Premature mortality in the CESPHN region (ASR per 100,000), by SA3 and gender, 2011-2015



Source: PHIDU 2019

Premature mortality from cancer in the CESPHN region (88.6 per 100,000 people) was highest in Botany (106.9 per 100,000 people). Lung cancer had the highest mortality at 17.9 deaths per 100,000 people.

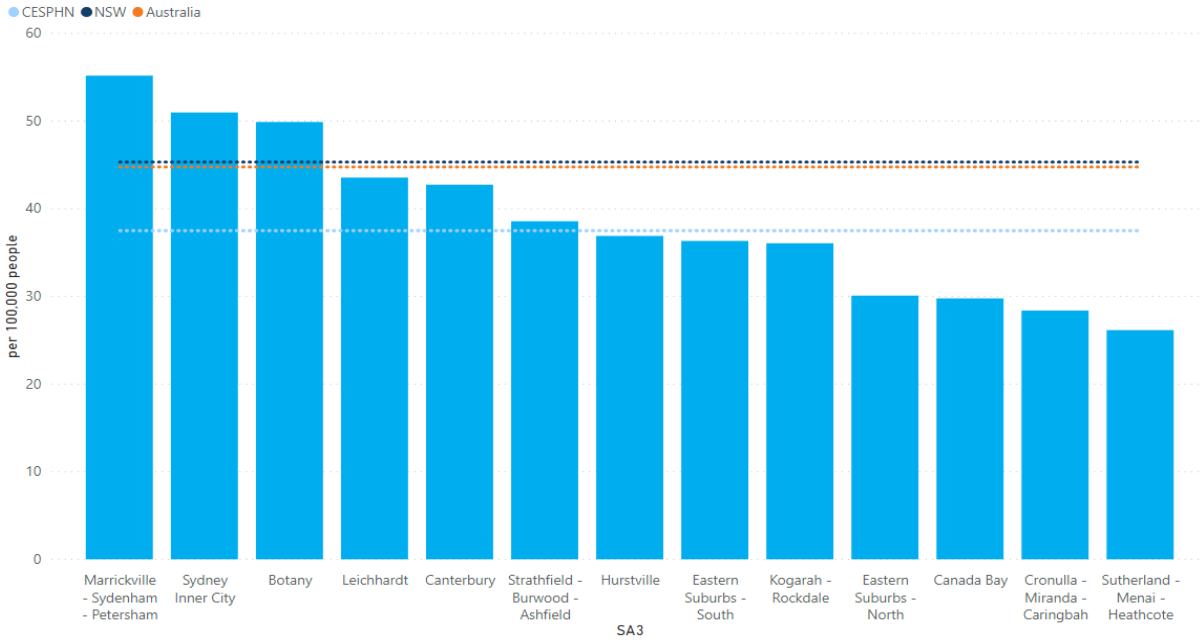
Figure 10: Premature mortality from cancer in the CESPHN region (ASR per 100,000) by SA3, 2011-2015



Source: PHIDU 2019

Premature mortality from circulatory system diseases in the CESPHN region (37.5 per 100,000 people) was highest in Marrickville-Sydenham-Petersham (55.2 per 100,000 people). Ischaemic heart disease had the highest mortality at 19.1 per 100,000.

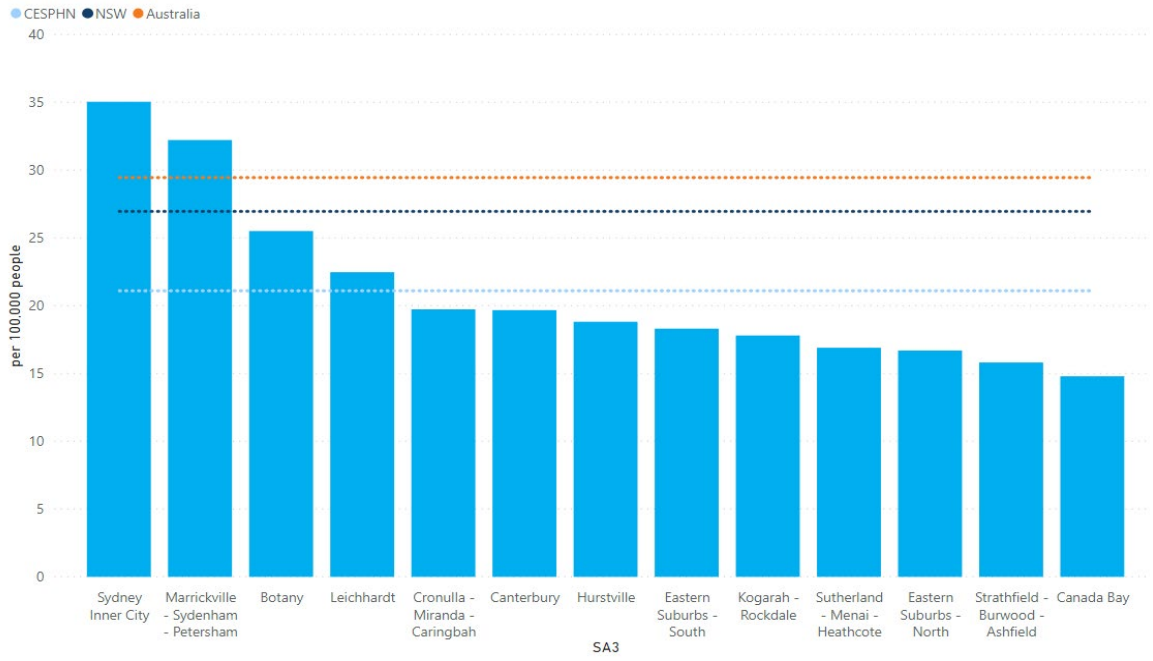
Figure 11: Premature mortality from circulatory system diseases in the CESPHN region (ASR per 100,000) by SA3, 2011-2015



Source: PHIDU 2019

Premature mortality from external causes in the CESPHN region (21.2 per 100,000 people) was highest in Sydney Inner City (35.0 per 100,000 people). External causes of death are both unintentional and intentional and include drowning, falls, transport accidents (largest unintentional cause of death), homicide, and suicide (largest intentional cause of death).(28)

Figure 12: Premature mortality from external causes in the CESPHN region (ASR per 100,000) by SA3, 2011-2015



Source: PHIDU 2019

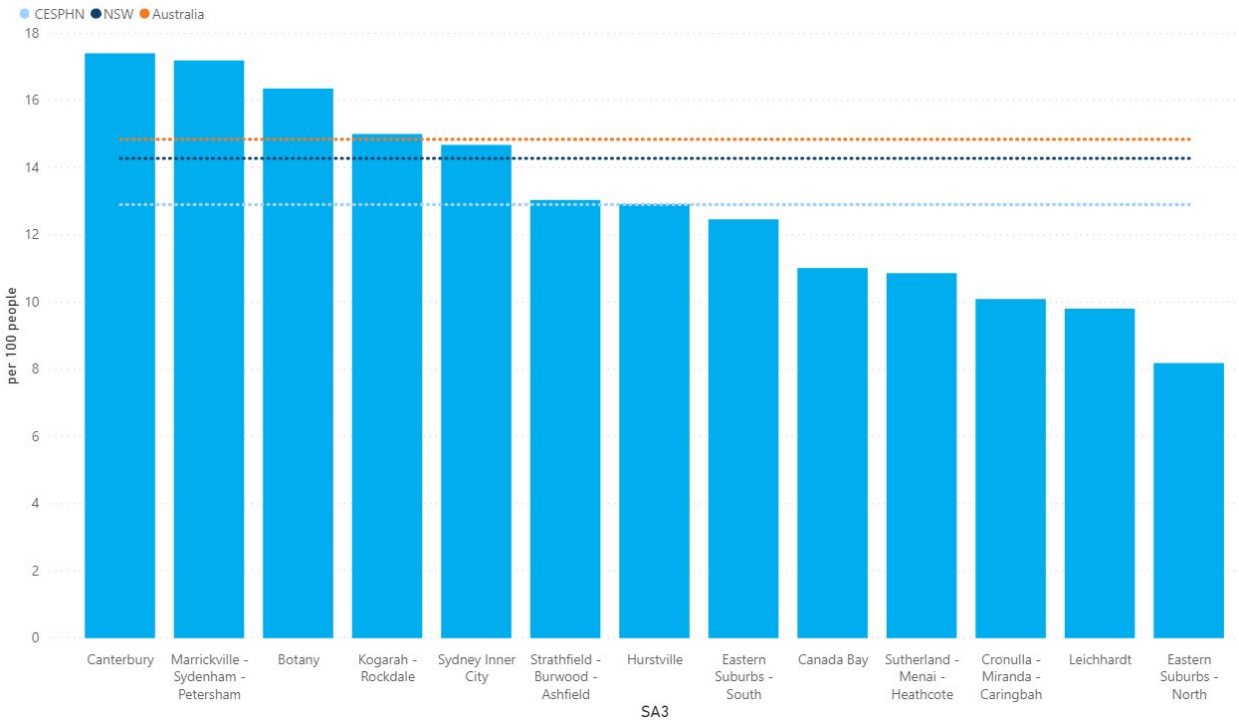
Self-reported health status

In 2016-2017, a higher percentage of people living in the CESPHN region (87.4%) reported excellent, very good or good health compared to the national average (85.3%).(29)

While the CESPHN region as a whole is doing well in measures of health status, this is not uniform across all populations. PHIDU modelled estimates of self-reported health status from 2014-15 show (28):

- Canterbury (17.4 per 100 people) had the highest rate of fair or poor self-assessed health in the region. This was higher than both the estimated NSW rate (14.3 per 100 people) and national rate (14.8 per 100 people).
- Eastern Suburbs-North (8.2 per 100 people) had the lowest rate, which is much lower than both NSW and national rates.

Figure 13: Number of people aged 15 years and over with fair or poor self-assessed health in the CESPHN region (ASR per 100) by SA3, 2014-2015



Source: PHIDU 2019

Psychological distress

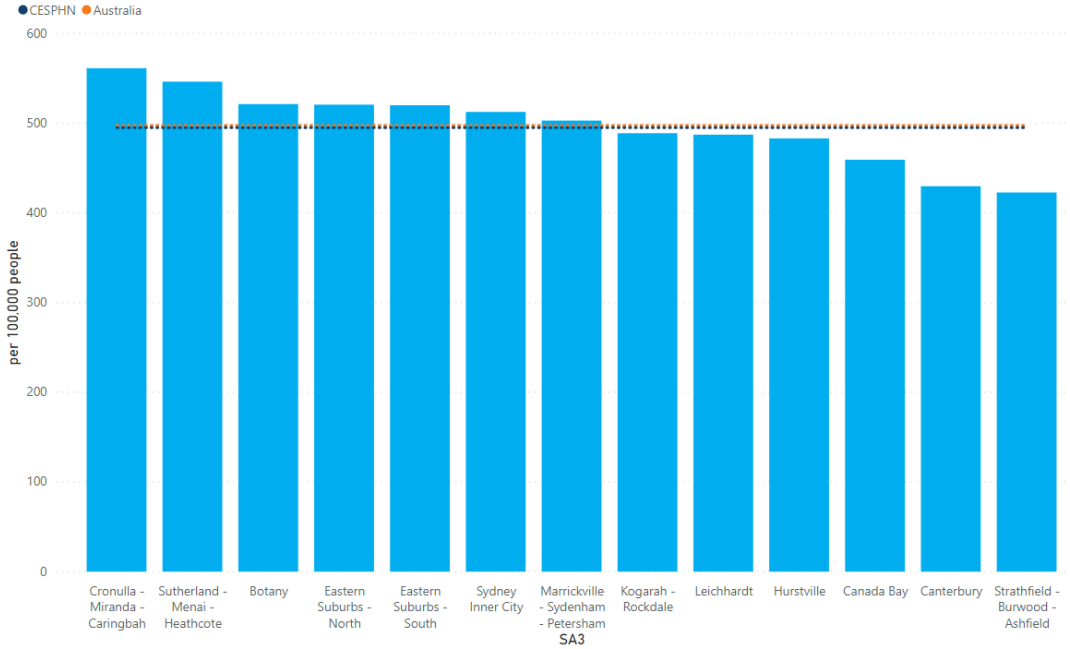
In 2014-15, the rate of people experiencing high or very high psychological distress in the CESPHN region was 9.7 ASR per 100 people, which is below the NSW rate (11.03 ASR per 100) and the national rate (11.72 ASR per 100).(28) Please refer to Prevalence of mental health section for further analysis.

Chronic conditions

Cancer

Incidence of new cancers (all types combined and age-standardised) was 495 per 100,000 people in the CESPHN region between 2009-13, which was just below the national rate of 497 per 100,000 people.(30) Cronulla-Miranda-Caringbah had the highest rate in the region at 561 per 100,000 people.

Figure 14: Incidence of cancer by SA3, 2009-2013



Source: AIHW 2018 Incidence of selected cancers

Prostate cancer was the most common type of cancer within the CESPHN region (17% of all cases), whereas lung cancer attributed to the highest proportion of deaths (19% of cancer deaths) in 2011 to 2015.(31)

Table 7: Most common cancer types in the CESPHN region, 2011-2015

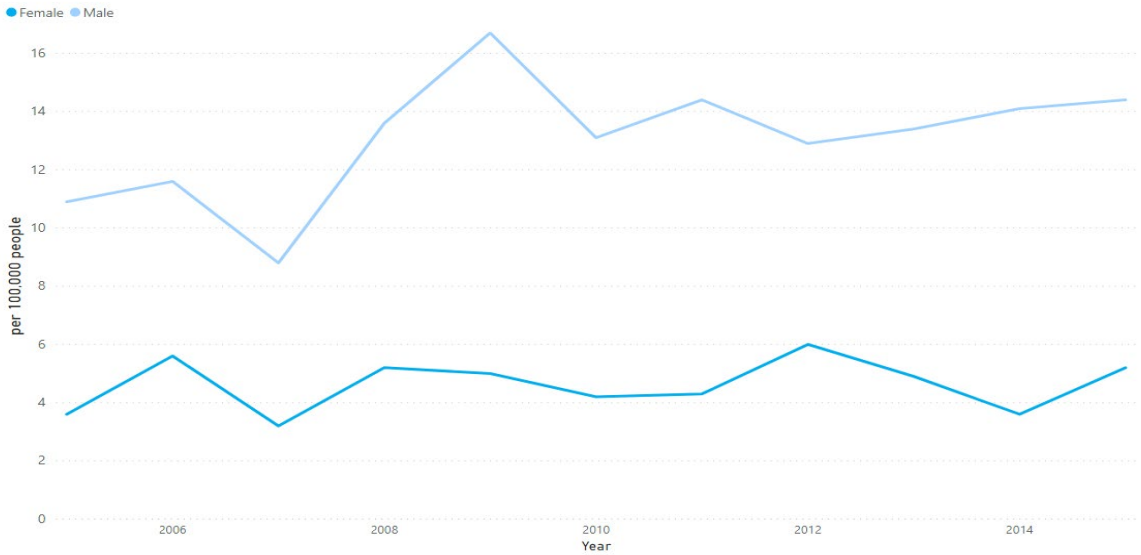
% of cases		% of deaths	
Prostate	16.7%	Lung	19.0%
Breast	13.3%	Colon	7.4%
Melanoma of skin	8.7%	Breast	6.9%
Lung	8.2%	Pancreatic	6.6%
Colon	7.4%	Prostate	6.1%

Source: Cancer Institute NSW 2019

Liver cancer is one of the fastest growing types of cancer in Australia having seen a 378% increase between 1982 to 2019.(32) Within the CESPHN region, males have a higher incidence (14.4 per 100,000 males) of liver cancer compared to females (5.2 per 100,000 females) and have seen a faster increase in new cases.(31)

Liver cancer is linked to lifestyle risk factors such as excessive intake of alcohol. It can also be caused by hepatitis C. Please refer to Sexual health section for more information on hepatitis C.

Figure 15: Incidence rate of liver cancer (ASR per 100,000 people) in the CESPHN region by gender, 2005-2015



Source: Cancer Institute NSW 2019

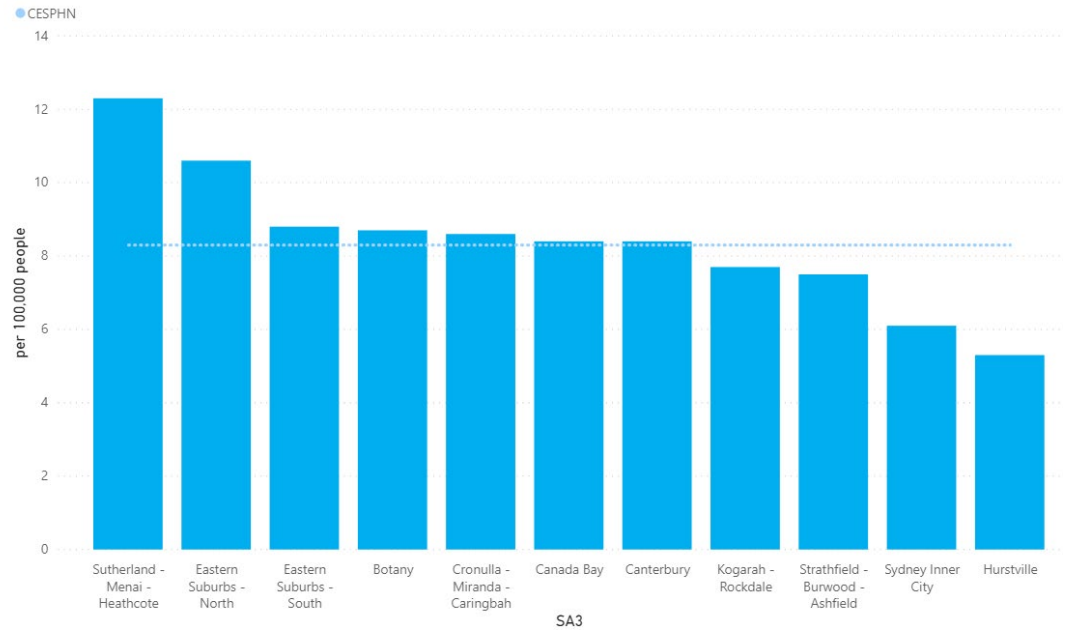
Diabetes

Eight per cent of people aged 16 years and above living in the CESPHN region have diabetes or high blood glucose.(33) The National Diabetes Services Scheme (NDSS) records 65,380 people registered with diabetes who receive support in accessing services and products – 11.5% type 1; 83.5% type 2; 4.1% gestational; 0.9% other.(34)

Based on NDSS registrants in 2017, the incidence of insulin-treated type 1 diabetes was lower in the CESPHN region (8.6 per 100,000 people) compared to NSW (10.8 per 100,000 people) and national (11.8 per 100,000 people).(35)

From 2013-2017, incidence of insulin-treated type 1 diabetes was highest in Sutherland-Menai-Heathcote (12.3 per 100,000 people) and lowest in Hurstville (5.3 per 100,000 people). Figures for Marrickville-Sydenham-Petersham and Leichhardt were not published due to small numbers.

Figure 16: Incidence of insulin-treated type 1 diabetes in the CESPHN region by SA3, 2013-2017

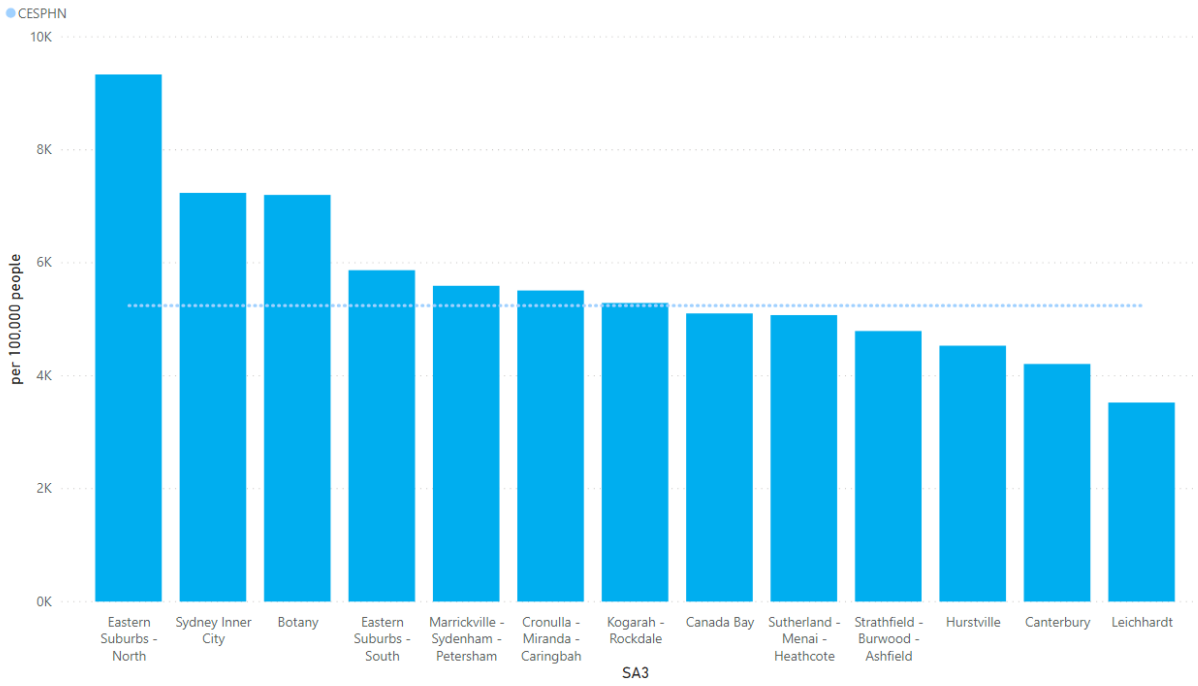


Source: AIHW 2019 Insulin-treated diabetes

Incidence of insulin-treated type 2 diabetes was higher in the CESPHN region (5,293.6 per 100,000 people) compared to NSW (4,379.9 per 100,000 people) and national (4,011.6 per 100,000 people) in 2017.

Data from 2013-2017 shows that Incidence of insulin-treated type 2 diabetes was highest in Eastern Suburbs-North (9,333.9 per 100,000 people) and lowest in Leichhardt (3,524.5 per 100,000 people).

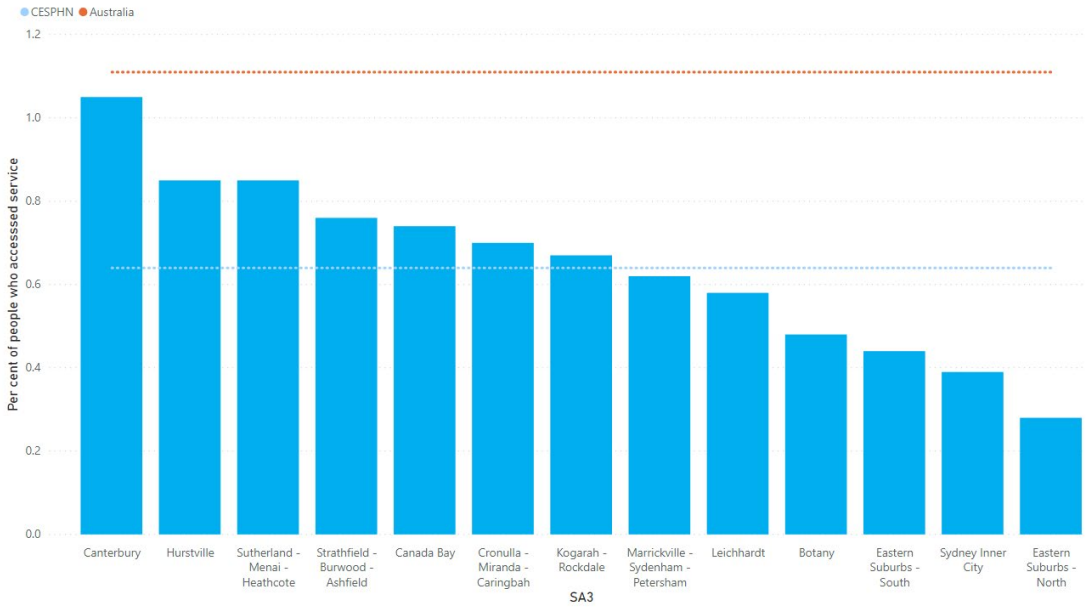
Figure 17: Incidence of insulin-treated type 2 diabetes in the CESPHN region by SA3, 2017



Source: AIHW 2019 Insulin-treated diabetes

The annual diabetes cycle of care is for patients with established diabetes and includes diabetes management and general health checks.(36) In 2017-18, 10,214 patients in the CESPHN region received an annual diabetes cycle of care (0.64 per 100 people compared to 1.1 per 100 people nationally). Canterbury had the highest rate of people receiving this MBS item (1.1 per 100 people).

Figure 18: Diabetes Mellitus Annual Cycle of Care per 100 people in the CESPHN region, 2017-2018



Source: AIHW 2019

In 2017-18, there were 1,886 hospitalisations for diabetes as the principal diagnosis (111.8 per 100,000 people). This is below the NSW rate, but accounts for approximately 15% of all NSW diabetes hospitalisations.(33)

Table 8: Rate of hospitalisations for diabetes as a principal diagnosis (per 100,000 people), 2018

Region	Rate
CESPHN	111.8
NSW	146.2

Source: HealthStats NSW 2019

Chronic kidney disease

In 2011-12, the estimated incidence of chronic kidney disease (CKD) in the CESPHN region was 9.8% (114,124 people), which was just below both the NSW (10.6%) and national rate (10.0%).(37) However, it is important to note that Aboriginal people are twice as likely to have CKD.(38) This can be evidenced in the rate of dialysis hospitalisation during 2016-17, where the rate for Aboriginal people (20,930.5 per 100,000 people) was 4.5 times higher than the non-Aboriginal rate (4,495.7 per 100,000 people).(33)

Other chronic diseases

2014-15 modelled prevalence estimates of other chronic conditions showed that rates in the CESPHN region were below national rates for all conditions, with the exception of the prevalence of chronic obstructive pulmonary disease (COPD) in Canterbury.(28)

Table 9: Rate of people aged 18 years and over with selected chronic diseases, ASR per 100, by SA3, 2014-2015

	Arthritis		Asthma		Circulatory system		COPD	
SA3	SA3	National	SA3	National	SA3	National	SA3	National
Botany	14.8	15.3	8.4	10.8	16.3	18.3	2.5	2.6
Marrickville - Sydenham - Petersham	14.6	15.3	7.5	10.8	15.5	18.3	2.2	2.6
Sydney Inner City	14.6	15.3	6.1	10.8	15.5	18.3	1.9	2.6
Eastern Suburbs – North	14.6	15.3	7.3	10.8	14.9	18.3	1.7	2.6
Eastern Suburbs – South	14.9	15.3	6.8	10.8	15.6	18.3	2.1	2.6
Canterbury	15.2	15.3	8.8	10.8	17.7	18.3	2.8	2.6
Hurstville	15.0	15.3	7.8	10.8	17.9	18.3	2.3	2.6
Kogarah – Rockdale	14.9	15.3	7.9	10.8	16.7	18.3	2.2	2.6
Canada Bay	14.6	15.3	7.0	10.8	15.6	18.3	1.9	2.6
Leichhardt	15.1	15.3	7.1	10.8	15.5	18.3	2.1	2.6
Strathfield - Burwood - Ashfield	14.7	15.3	6.8	10.8	15.1	18.3	1.9	2.6
Cronulla - Miranda - Caringbah	14.5	15.3	9.9	10.8	17.3	18.3	2.3	2.6
Sutherland - Menai - Heathcote	14.9	15.3	10.0	10.8	17.7	18.3	2.5	2.6

Source: PHIDU 2019

Potentially preventable hospitalisations

Potentially preventable hospitalisations (PPHs) are hospital admissions that potentially could have been prevented by timely and adequate health care in the community.

In 2017-18, there were 14,735 PPHs for chronic conditions, equivalent to 872 per 100,000 people.(39) This was lower than the national rate of 1,233 per 100,000 people. The most common PPH was for congestive cardiac failure (179 per 100,000 people), with an average length of stay of 7.2 days.

Table 10: PPHs for chronic conditions in the CESPHN region by condition, 2017-18

PPH condition	PPH per 100,000 people (ASR)	No. of PPH	Average length of stay (days)
Angina	109	1,809	1.8
Asthma	99	1,423	2.5
Bronchiectasis	18	312	6.8
COPD	166	2,835	6.4
Congestive cardiac failure	179	3,352	7.2
Diabetes complications	116	1,922	6.7
Hypertension	33	572	2.4
Iron deficiency anaemia	137	2,273	1.6
Nutritional deficiencies	3	58	n.p
Rheumatic heart disease	11	178	8.8
Total chronic	**872**	**14,735**	**4.9**

Source: AIHW 2019 Potentially preventable hospitalisations

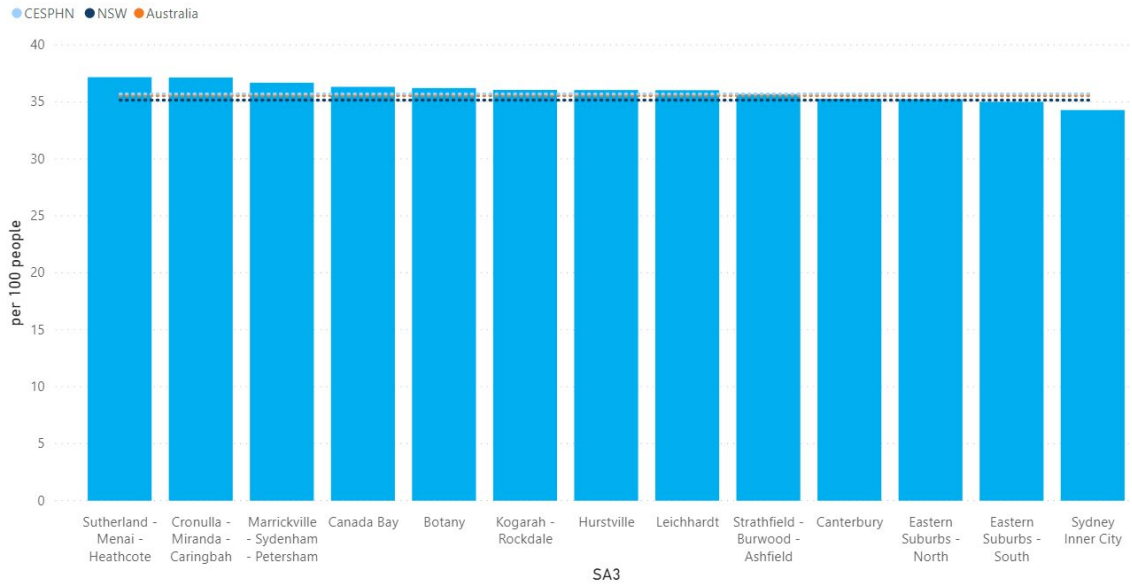
2.2. Lifestyle risk factors

Overweight and obesity

PHIDU modelled estimates demonstrate that the male population was more likely to be overweight (43.8%) compared to the female population (27.7%), while obesity rates were similar in both genders.(28)

Overweight rates were similar across SA3s and ranged from 34.3% in Sydney Inner City to 37.2% in Sutherland-Menai-Heathcote.

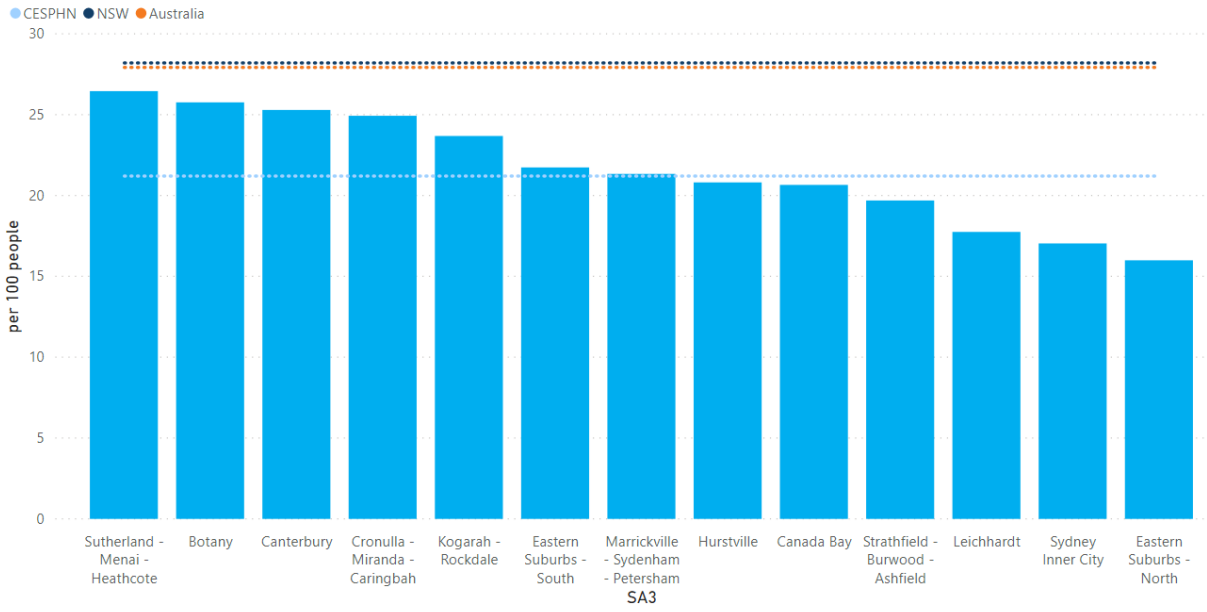
Figure 19: Rate of people aged 18 years and over who were overweight (ASR per 100) by SA3, 2014-2015



Source: PHIDU 2019

Obesity rates in CESPHN SA3s were all below the NSW and national rates. Sutherland-Menai-Heathcote had the highest rate (26.5%).

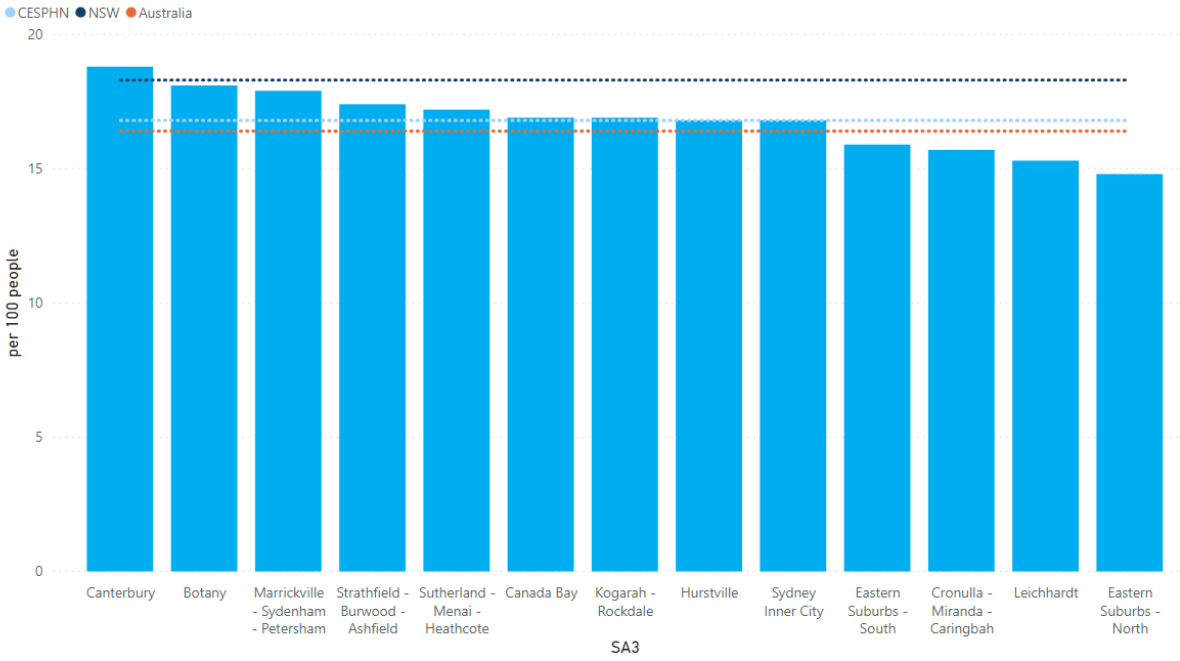
Figure 20: Rate of people aged 18 years and over who were obese (ASR per 100) by SA3, 2014-2015



Source: PHIDU 2019

Between 2014-15, the estimated rate of children (2-17 years) in the CESPHN region considered overweight was 16.8%, with more male children being overweight than female. Canterbury (18.8%) had the highest rate of overweight children and Eastern Suburbs-North had the lowest rate (14.8%).

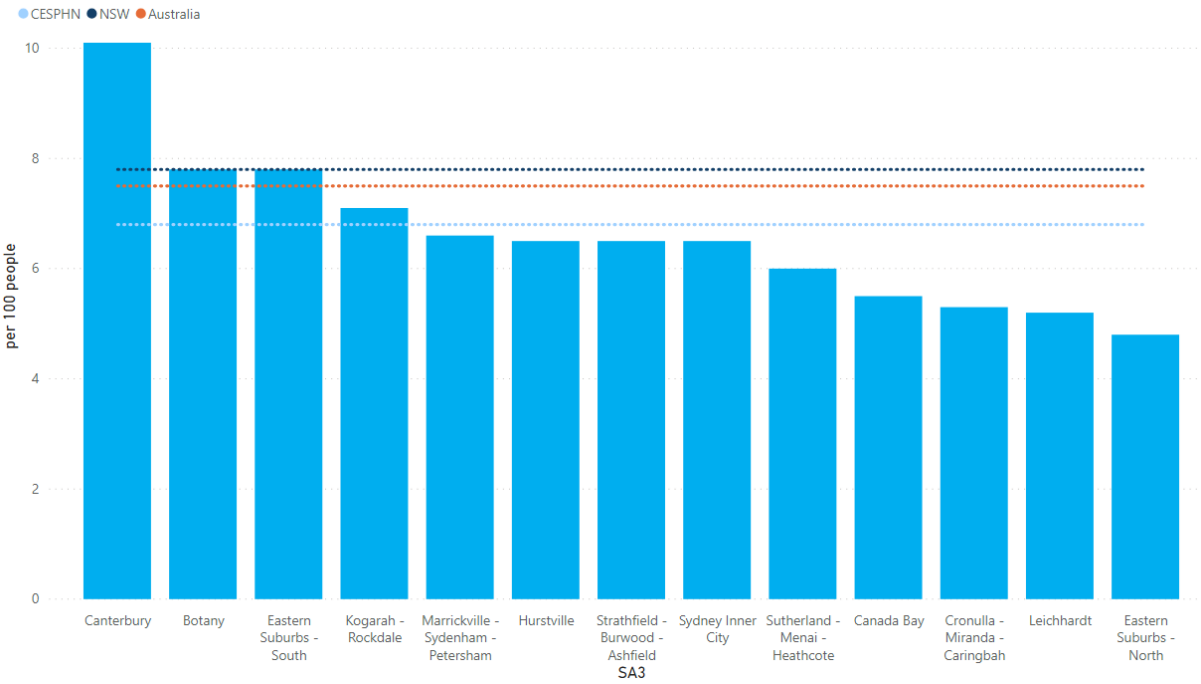
Figure 21: Rate of children aged 2-17 years who were overweight (ASR per 100) by SA3, 2014-2015



Source: PHIDU 2019

Between 2014-15, the estimated rate of children (2-17 years) in the CESPHN region considered obese was 6.7%, with more female children being obese than male. Canterbury (10.1%) had the highest rate of obese children and Eastern Suburbs-North had the lowest rate (4.8%).

Figure 22: Rate of children aged 2-17 years who were obese, ASR per 100, by SA3, 2014-2015

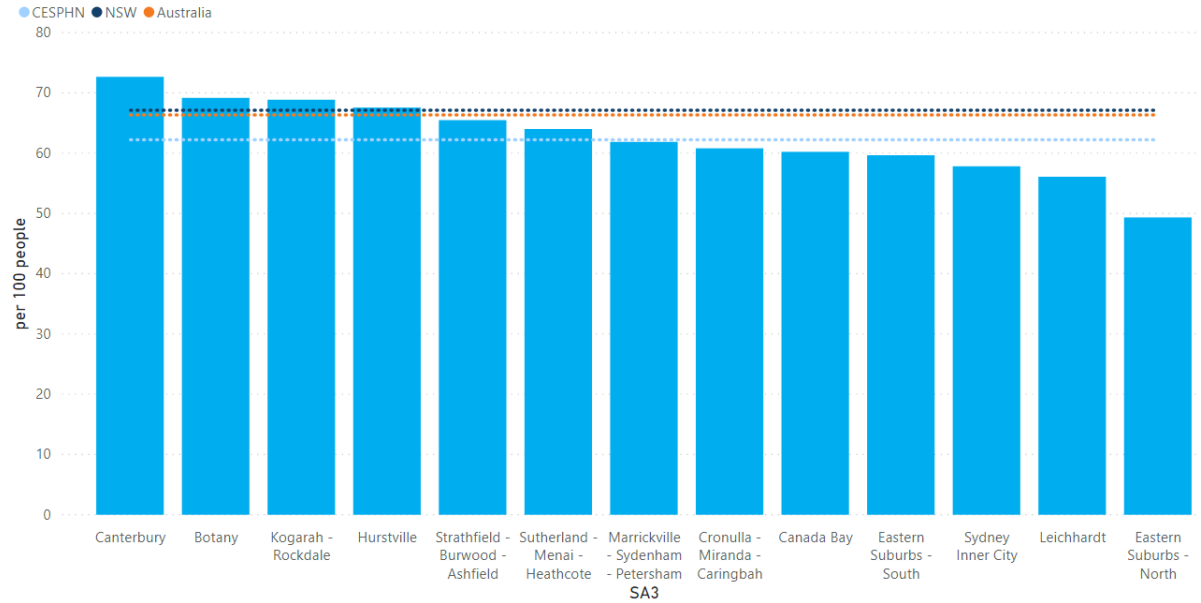


Source: PHIDU 2019

Physical activity

It is estimated that 62.2% of the CESPHN population 18 years and over undertook no or low exercise in the previous week, which is lower than both the NSW and national rates. Canterbury (72.7%), Botany (69.2%), Kogarah-Rockdale (68.9%), and Hurstville (67.6%) had rates above the CESPHN, NSW and national rates.(28)

Figure 23: Rate of people aged 18 years and over who undertook no or low exercise (ASR per 100) by SA3, 2014-2015



Source: PHIDU 2019

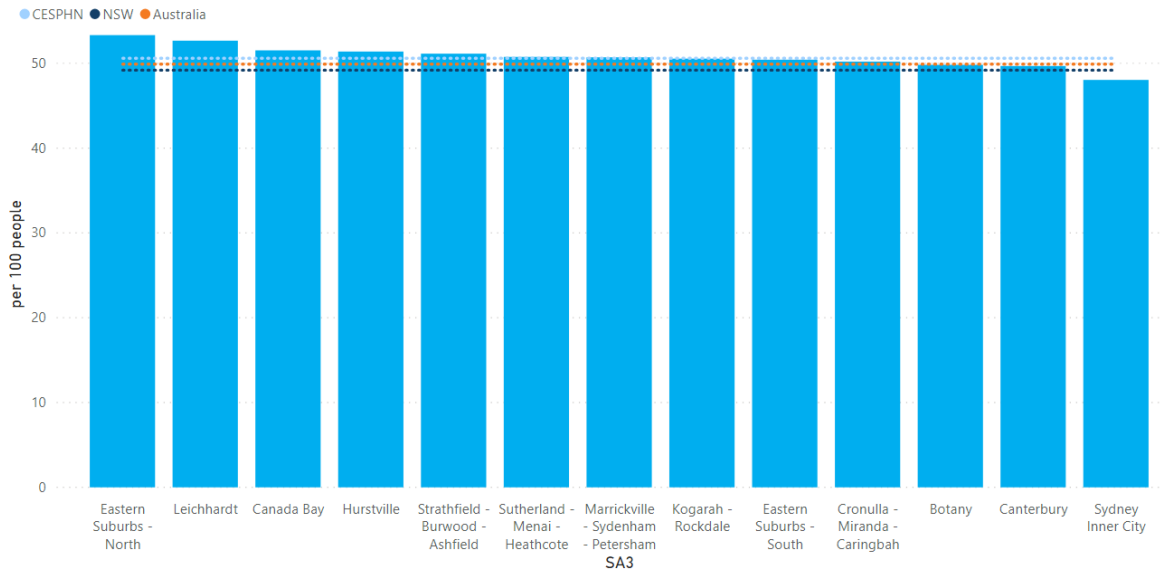
Only 23% of primary school children and 23% of secondary school adolescents met recommended daily physical activity in NSW. Girls were generally less active than boys. Cultural background

appeared to be a factor affecting physical activity level. Primary school children from Middle Eastern or Asian cultural backgrounds and secondary school adolescents from Asian cultural backgrounds were the least active groups.(40)

Nutrition

It is estimated that 50.6% of the CESPHN population 18 years and over consumed adequate fruit, which is above both the NSW and national rates. Eastern Suburbs-North had the highest rate (53%) while Sydney Inner City had the lowest rate (48%).(28)

Figure 24: Rate of people aged 18 years and over who had adequate nutrition (ASR per 100) by SA3, 2014-2015



Source: PHIDU 2019

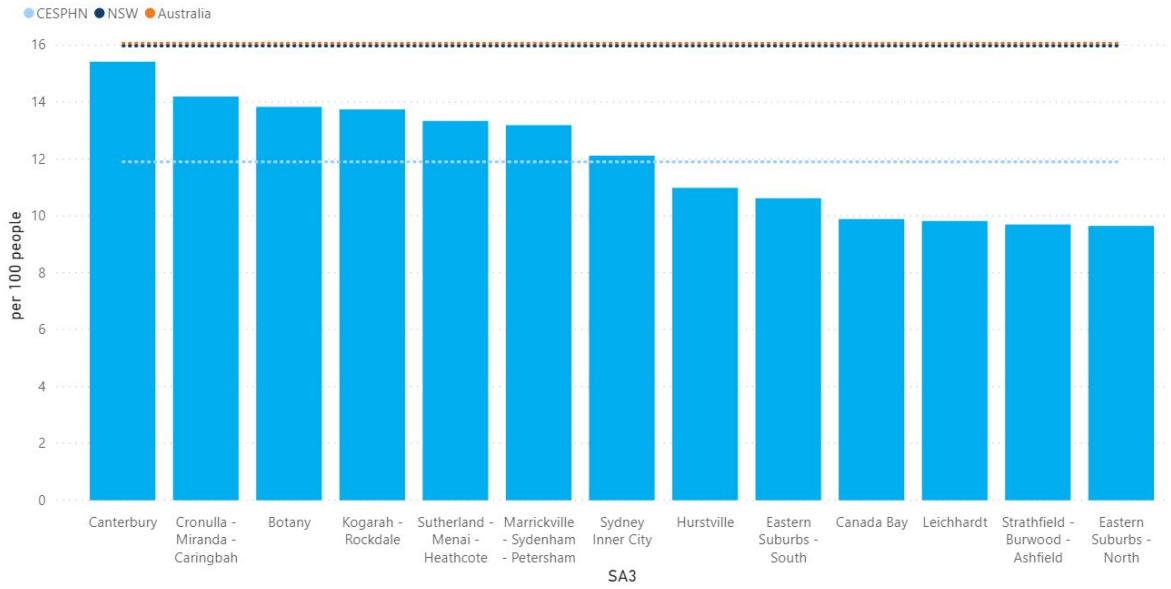
It is estimated that only 67.3% of the child and youth population in the CESPHN region are consuming an adequate fruit intake.

Smoking

An estimated 11.9% of the CESPHN population 18 years and over are current smokers, which is lower than the NSW and national rates. Males were more likely to smoke (14.3%) than females (9.5%).(28)

Canterbury (15.4%) had the highest smoking rate and Eastern suburbs-North (9.7%) had the lowest rate.

Figure 25: Rate of people aged 18 years and over who were current smokers (ASR per 100) by SA3, 2014-2015



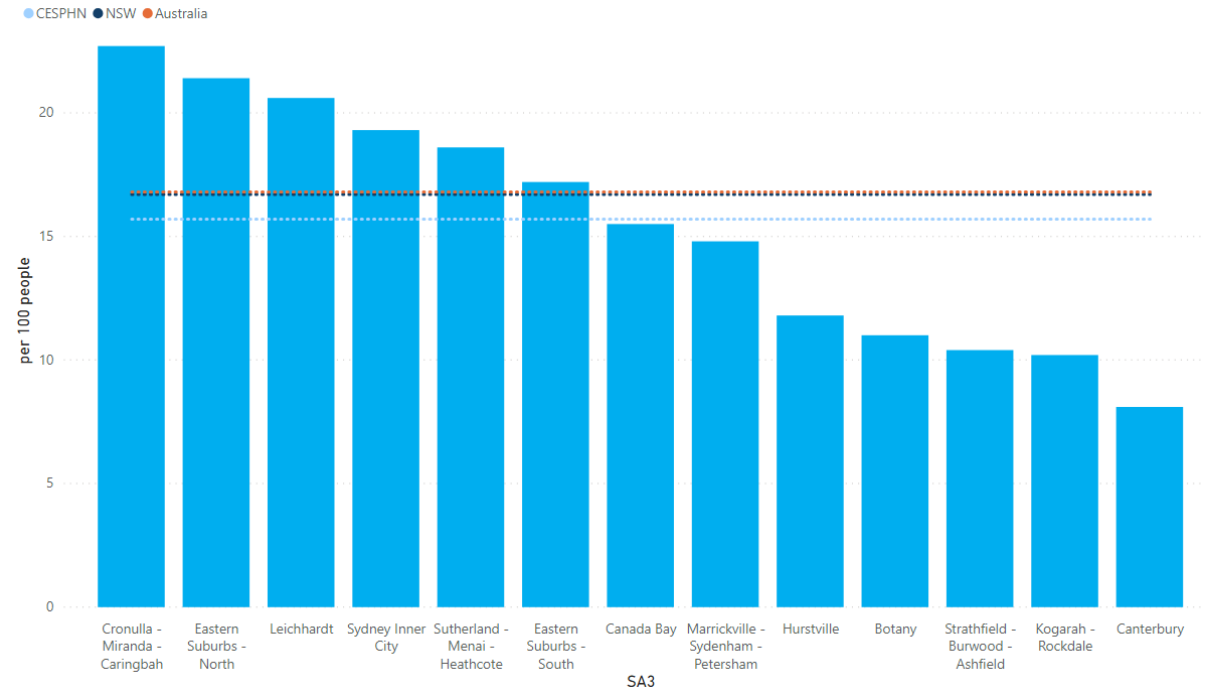
Source: PHIDU 2019

Alcohol

It is estimated that 15.7% of the CESPHN population over 15 years of age consumed more than two standard alcoholic drinks per day on average. This is below both the NSW and national rate.(28)

Six out of 13 SA3s were above the CESPHN, NSW and national rates – Cronulla-Miranda-Caringbah had the highest rate (22.7%) and Canterbury had the lowest rate (8.1%).

Figure 26: Rate of people aged 15 years and over who consumed more than two standard drinks per day on average (ASR per 100) by SA3, 2014-2015



Source: PHIDU 2019

2.3. Preventive health

Immunisation

Childhood coverage

As at June 2019, fully immunised rates in the CESPHN region for all age groups (1, 2 and 5 years) were below both the NSW and national rates and national target of 95%.(41) The 2 year old age group had the lowest fully immunised rates, which is a common trend across the state and nationally due to the number of strains counted to be defined as 'fully immunised'.

The Aboriginal and Torres Strait Islander fully immunised rate for the 5 year age group was above the national 95% target.

Table 11: Fully immunised rates, by region and age group, as at June 2019

	1 year olds			2 year olds			5 year olds		
Children	CESPHN	NSW	National	CESPHN	NSW	National	CESPHN	NSW	National
All	93.7%	94.0%	94.2%	90.0%	90.9%	91.4%	92.6%	94.7%	94.9%
A &/or TSI	92.3%	94.2%	92.4%	92.3%	90.9%	89.1%	97.8%	97.8%	96.8%

Source: Department of Health 2019 Childhood Immunisation

SA3s with fully immunised rates below the average CESPHN rate as of June 2019 were:

- 1-year olds: Botany, Canterbury, Eastern Suburbs-North, Eastern Suburbs-South, Hurstville, Kogarah-Rockdale, Strathfield-Burwood-Ashfield, Sydney Inner City
- 2-year olds: Sydney Inner City, Eastern Suburbs-North, Canterbury, Kogarah-Rockdale, Strathfield-Burwood-Ashfield
- 5-year olds: Sydney Inner City, Eastern Suburbs-North, Eastern Suburbs-South, Canada Bay.

There are a multitude of reasons for lower immunisation rates in these SA3s, including: lack of follow-up with a GP motivated by reduction in welfare payment, transient populations and transmission errors from practice software to the Australian Immunisation Register (AIR).

Table 12: Fully immunised children rates in the CESPHN region by age group and SA3, as at June 2019

SA3	1 year olds	2 year olds	5 year olds
Botany	92.2	90.0	93.7
Marrickville - Sydenham - Petersham	96.0	92.8	93.2
Sydney Inner City	92.1	87.4	87.9
Eastern Suburbs – North	92.3	87.0	88.9
Eastern Suburbs – South	92.6	90.8	90.1
Canterbury	92.4	89.5	94.4
Hurstville	92.2	91.2	93.8
Kogarah – Rockdale	93.1	89.6	93.4
Canada Bay	95.0	91.5	92.4
Leichhardt	95.3	90.3	92.6
Strathfield - Burwood - Ashfield	93.6	89.4	92.9
Cronulla - Miranda - Caringbah	94.9	93.0	95.1
Sutherland - Menai - Heathcote	95.9	94.3	96.2

Source: Department of Health 2019 Childhood Immunisation

Adolescent coverage

NSW Health works in partnership with schools to deliver the NSW School Vaccination Program to offer vaccines recommended for adolescents under the National Immunisation Program (NIP).

Human papillomavirus (HPV) vaccination is recommended for people aged 12 to 13 years to prevent HPV, a common virus spread through sexual contact that can result in genital warts and various cancers. In 2017, the HPV fully immunised rates for females and males in the CESPHN region were higher than the NSW and national rates.(33)

Quadrivalent Meningococcal ACWY (4vMenCV) vaccine protects against four serogroups of Meningococcal: A, C, W and Y. In 2017, the NSW government funded the addition of 4vMenCV to the School Vaccination program for students in years 11 and 12. In 2019, this vaccination was added to the NIP, now given to students in year 10.

Table 13: Percentage of adolescent vaccination coverage rates by school year, 2017

Region	HPV Female (Year 7)	HPV Male (Year 7)	4vMenCV (Year 12)
CESPHN	86%	85%	79%
NSW	82%	79%	76%
National	80%	76%	np

Source: HealthStats NSW 2019

Potentially preventable hospitalisations

Total vaccine-preventable PPHs in the CESPHN region have increased from 121 per 100,000 people in 2013-14 to 355 per 100,000 people in 2017-18. Since 2014-15, the total vaccine-preventable PPH rates in the CESPHN region have been consistently above the national rates.(39)

Pneumonia and influenza contributed to 61% of the total vaccine-preventable PPHs in 2017-18. Since 2016-17, rates in the CESPHN region for pneumonia and influenza have exceeded national rates.

Table 14: Age-standardised rate of vaccine-preventable PPHs per 100,000 people, 2013-14 to 2017-18

Category	Region	2013-14	2014-15	2015-16	2016-17	2017-18
Pneumonia and influenza	CESPHN	35	79	74	116	212
	National	49	81	92	109	207
Other vaccine-preventable conditions	CESPHN	86	107	134	137	145
	National	80	95	107	105	108
Total vaccine-preventable	**CESPHN**	**121**	**185**	**208**	**251**	**355**
	National	**128**	**175**	**199**	**213**	**313**

Source: AIHW 2019 Potentially preventable hospitalisations

Marrickville-Sydenham-Petersham had the highest rate of pneumonia and influenza PPHs (303 per 100,000 people), followed by Canterbury (249 per 100,000 people).

Hurstville had the highest rate of other vaccine-preventable PPHs (265 per 100,000 people), followed by Kogarah-Rockdale (204 per 100,000 people).

Table 15: Age-standardised rate (ASR) of vaccine-preventable PPHs per 100,000 people, by SA3, 2017-18

Region	Pneumonia and influenza		Other vaccine-preventable conditions	
	ASR	No. of PPH	ASR	No. of PPH
Botany	235	121	167	83
Canada Bay	208	229	83	82
Canterbury	249	387	179	261
Cronulla - Miranda - Caringbah	171	287	99	131
Eastern Suburbs - North	198	334	82	123
Eastern Suburbs - South	197	326	125	191
Hurstville	177	305	265	386
Kogarah - Rockdale	230	411	204	330
Leichhardt	217	126	40	26
Marrickville - Sydenham - Petersham	303	171	131	75
Strathfield - Burwood - Ashfield	212	385	152	253
Sutherland - Menai - Heathcote	181	234	66	77
Sydney Inner City	245	401	187	359
CESPHN	**212**	**3,706**	**145**	**2,372**
National	**207**	**57,198**	**108**	**28,329**

Source: AIHW 2019 Potentially preventable hospitalisations

Screening

The CESPHN region is currently below NSW and national screening rates for all three national programs: bowel, breast and cervical.(42) Canterbury had the lowest bowel cancer screening rate (31.5%) and Sydney Inner City had the lowest breast and cervical screening rates (43.4% and 47.8% respectively).

Table 16: Percentage of screening participation by cancer type and SA3, 2015-2016, 2016-2017

SA3	Bowel (%)	Breast (%)	Cervical (%)
Botany	32.7	51.1	50.9
Marrickville - Sydenham - Petersham	35.0	49.1	56.6
Sydney Inner City	33.2	43.4	47.8
Eastern Suburbs - North	31.8	43.8	68.6
Eastern Suburbs - South	34.7	52.7	58.1
Canterbury	31.5	46.4	50.6
Hurstville	37.6	51.7	52.5
Kogarah - Rockdale	33.7	51.1	48.4
Canada Bay	37.3	50.4	57.6
Leichhardt	37.8	53.6	66.8
Strathfield - Burwood - Ashfield	34.4	49.0	51.0
Cronulla - Miranda - Caringbah	38.1	56.2	61.7
Sutherland - Menai - Heathcote	39.9	57.6	63.8
CESPHN	**35.1**	**50.3**	**55.3**
NSW	**38.2**	**53.2**	**55.1**
National	**41.3**	**54.5**	**55.4**

Source: AIHW 2018 Participation in national cancer screening

There is variation in screening rates among Aboriginal and/or Torres Strait Islander peoples and CALD groups. Waverly had the lowest breast screening rates for Aboriginal and Torres Strait Islander peoples (22.8%) and CALD communities (29.1%).(31)

Table 17: Percentage of breast screening participation by population group and LGA, 2017-2018

LGA	A &/or TSI (%)	CALD (%)	All women (%)
Bayside	51.5	41.6	49.5
Burwood	55.8	44.2	47.8
Canada Bay	23.3	41.1	49.9
Canterbury-Bankstown	37.9	47.3	46.8
Georges River	30.7	43.3	51.4
Inner West	43.0	39.5	51.1
Randwick	46.6	38.4	53.4
Strathfield	35.9	40.6	44.4
Sutherland	35.6	41.6	56.2
Sydney	42.2	32.1	42.7
Waverley	22.8	29.1	45.8
Woollahra	33.5	31.4	43.6
CESPHN	**40.8**	**41.1**	**49.9**
NSW	**43.7**	**42.8**	**52.8**

Source: Cancer Institute NSW 2019

2.4. Child and maternal health

Conception and pregnancy

Antenatal care

Routine antenatal care, particularly in the first trimester (before 14 weeks), is known to have better child and maternal health outcomes as it provides opportunities for mothers to receive effective health interventions and address necessary lifestyle modifications (e.g. smoking during pregnancy).(43)

In 2018, the percentage of mothers who had an antenatal visit before 14 weeks was slightly lower in the CESPHN region for all mothers and Aboriginal and/or Torres Strait Islander mothers compared to the respective NSW rates. However, there has been an increase of mothers with antenatal care visits before 14 weeks from 67.2% in 2013 to 77.0% in 2018.(33)

Table 18: Percentage of mothers with first antenatal visits before 14 weeks, 2018

Region	All mothers	A &/or TSI mothers
CESPHN	77.0	71.6
NSW	77.6	73.6

Source: HealthStats NSW 2019

In 2016-2018, the LGAs below the state rate included Botany Bay, Canterbury-Bankstown, Georges River, Randwick, Rockdale and Waverly.

Table 19: Percentage of all mothers with first antenatal visit before 14 weeks by LGA, 2016-2018

LGA	%
Botany Bay	64.6
Burwood	85.1
Canada Bay	84.0
Canterbury Bankstown	69.8
Georges River	65.4
Inner West	83.6
Randwick	68.0
Rockdale	65.2
Strathfield	85.9
Sutherland Shire	76.7
Sydney	74.2
Waverly	72.2
Woollahra	75.4
NSW	**72.8**

Source: HealthStats NSW 2019

The Australian Pregnancy Care Guidelines recommend 10 antenatal care visits for first-time mothers with uncomplicated pregnancies and seven for subsequent uncomplicated pregnancies. In 2017, the CESPHN region had the highest percentage of mothers attending five or more antenatal care visits at 97.7%.(43)

Mothers from lower socioeconomic backgrounds, who identify as Aboriginal and/or Torres Strait Islander or who are born overseas are known to have lower access rates to antenatal visits in the first trimester.

Table 20: Percentage of all mothers who attended 5 or more antenatal care visits, 2017

Region	%
CESPHN	97.7
National	94.4

Source: AIHW Australia's Mothers and Babies 2017

CESPHN's Antenatal Shared Care (ANSC) Program partners with local hospitals and aims to increase the rate of antenatal visits in the region, particularly in areas and demographics of need. As of November 2019, there were 1,068 GPs registered and actively participating in the program. GPs were either registered in a single local hospital or with multiple local hospitals.

Table 21: GP registrations in the CESPHN region by ANSC program, as at November 2019

ANSC program	No. GPs registered	% of total GPs registered
RHW	164	15.4
RHW, RPA and Canterbury	126	11.8
RHW, RPA and Canterbury, SGS	39	3.7
RHW, SGS	13	1.2
RPA and Canterbury	449	42.0
RPA and Canterbury, SGS	65	6.1
SGS	208	19.5
Unstated	4	0.4
Total	**1,068**	**100**

Notes: Royal Hospital for Women (RHW), Royal Prince Alfred Hospital (RPA), St George Sutherland (SGS)
Source: CESPHN database 2019

Smoking during pregnancy

Smoking during pregnancy is associated with poorer perinatal health outcomes, including low birthweight, pre-term birth and perinatal death.(44) While the CESPHN rate is below the NSW rate for all mothers and Aboriginal and/or Torres Strait Islander mothers, it is important to note the disparity between these two rates, with Aboriginal and/or Torres Strait Islander mothers having a much higher rate of smoking during pregnancy.(33)

Table 22: Percentage of mothers smoking during pregnancy, all mothers and Aboriginal and/or Torres Strait Islander mothers, 2017

Region	All mothers	A &/ or TSI mothers
CESPHN	2.9	33.5
NSW	8.8	42.4

Source: HealthStats NSW 2019

Gestational diabetes

Gestational diabetes (GDM) increases risk of adverse perinatal outcomes and obesity and glucose intolerance in children. Mothers with GDM have higher risk of hypertensive disorders during pregnancy and diabetes after birth.(45) From 2007 to 2016, the prevalence of mothers with diabetes (pre-existing and gestational) in the CESPHN region has more than doubled.(33) A number of factors are likely to have affected this trend including the introduction of new diagnostic guidelines and increasing risk factors in the population.

Table 23: Prevalence of maternal diabetes (pre-existing and gestational), 2007 and 2016

Region	2007	2016
CESPHN	6.1	13.6
NSW	4.9	13.5

Source: HealthStats NSW 2019

In 2016, the rate of GDM for Aboriginal and/or Torres Strait Islander mothers (11.9%) was lower than the all mothers rate (13.5%) in NSW. However, it is important to note that this may be due to under-detection and/or under-reporting.(33)

Canterbury and St George Hospital have both reported high rates of GDM and late presentation of pregnant women residing in surrounding areas to health professionals. Both hospitals service areas with high percentages of both culturally and linguistically diverse and socioeconomically disadvantaged persons.

The NDSS has reported higher rates of GDM for registrants in the CESPHN region compared to the national rate in 2018.(34)

Table 24: Prevalence of GDM for those registered with NDSS, 2018

Region	%
CESPHN	4.1
National	3.0

Source: NDSS 2019

Birth and development

Low birth weight

Low birth-weight is an important predictor of new-born well-being and survival and can also be an indicator of poor health in pregnancy.(46) In 2018, the percentage of low-birth weights was slightly

higher in the CESPHN region for all children and Aboriginal and/or Torres Strait Islander children rates compared to NSW.(33)

Table 25: Percentage of low-birth weight, 2018

Region	All children	A &/or TSI children
CESPHN	6.6	11.5
NSW	6.4	9.4

Source: HealthStats NSW 2019

Breastfeeding

Breastfeeding promotes healthy growth and development and protects children against infectious diseases or poor health conditions later in life.(46) Rates of breastfeeding in SLHD and SESLHD are slightly higher than the NSW rate.(44) However, it is well documented that exclusive breastfeeding rates decline significantly with time. Continuing professional development (CPD) programs on breastfeeding continue to be in demand with service providers. Furthermore, stakeholder feedback indicates it as an area of need, particularly in quality improvement activities.

Table 26: Percentage of women fully breastfeeding, 2017

LHD	%
Sydney	74.3
South Eastern Sydney	77.8
NSW	**73.7**

Source: NSW Mothers and Babies 2017

Vulnerable children

Increasing evidence demonstrates that early childhood experiences impact an individual's health and wellbeing throughout their lifespan. Children who are exposed to vulnerability and live with socioeconomic disadvantage are more likely to experience poorer health outcomes. Measures for vulnerability range from mothers smoking during pregnancy to parents interacting with the justice system.

There is a number of vulnerable children within the CESPHN region, with the largest vulnerability group being young children aged 0 to 5 years.(47)

Table 27: Number of vulnerable children by LHD, 2017

Vulnerability group	SLHD	SESLHD
Young children (0 to 5 years)	17,317	14,744
Children aged under 15 and affected by mental illness	12,005	10,780
Children and young people aged 15 to 18 and affected by mental illness	3,121	3,167
Total	**32,443**	**28,691**

Source: TFM 2019

LGAs with the highest percentage of vulnerable children are:

- 0 to 5 years:
    - Canterbury-Bankstown (26%), Rockdale (26%), Georges River (24%), Sutherland Shire (23%), Inner West (22%).
- Children aged under 15 years and affected by mental illness:

- Inner West (12%), Botany Bay (11%), Randwick (11%), Rockdale (10%), Sydney (10%), Burwood (10%).

- Children and young people aged 15 to 18 years and affected by mental illness:
  - Sydney (16%), Botany Bay (15%), Randwick (15%), Inner West (13%), Georges River (11%).

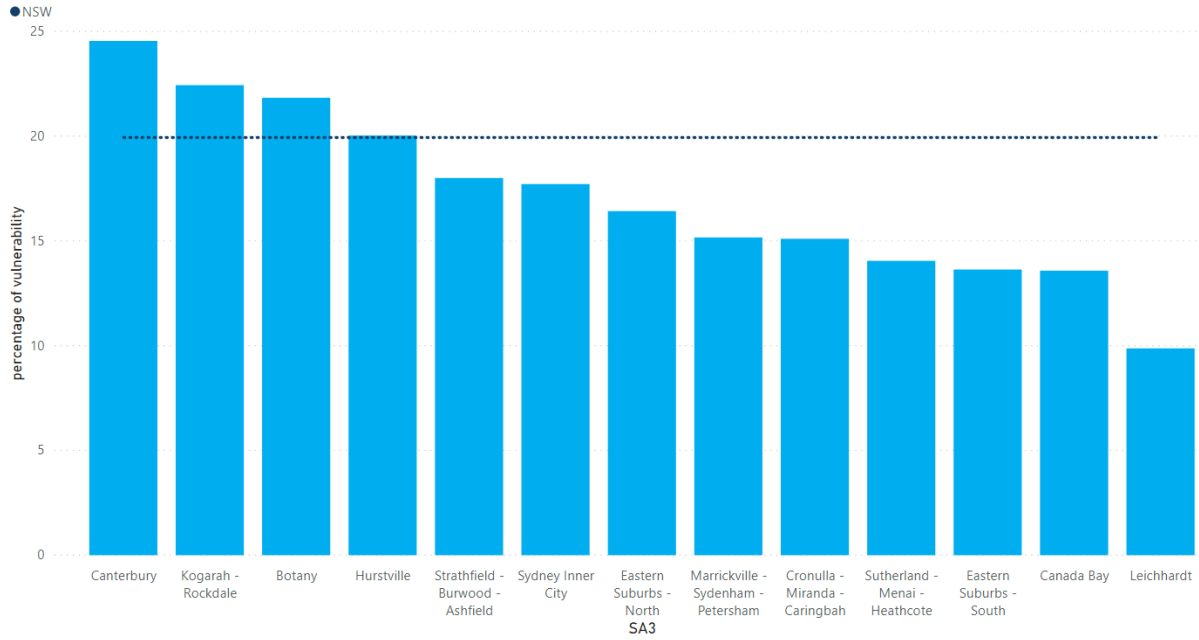
Childhood development

The Australian Early Development Census (AEDC) measures developmental vulnerability through five domains: 1) physical health and wellbeing; 2) social competency; 3) emotional maturity; 4) communication skills and general knowledge; 5) language and cognitive skills.

These domains are important as they measure progress on a child's developmental journey (e.g. on track or at risk) and predict likelihood of good health, education and social outcomes.

The SA3s with the highest developmental vulnerability in one or more domains and that were above the NSW rate (19.9%) were Canterbury (24.5%), Kogarah-Rockdale (22.4%) and Botany (21.8%).(48)

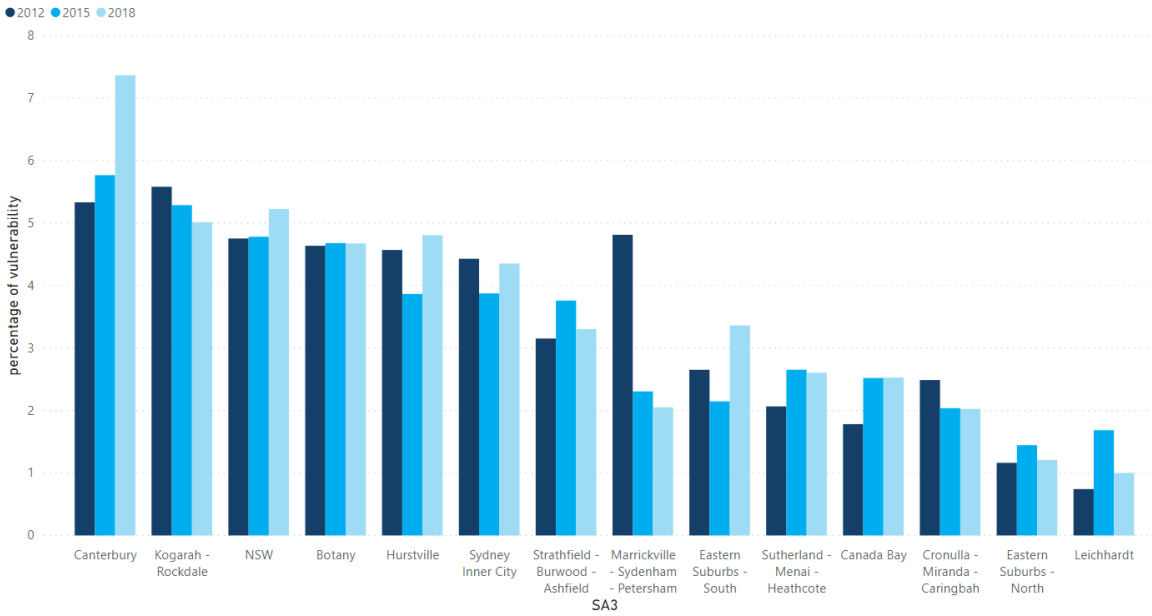
Figure 27: Percentage of children vulnerable in one or more domains of development by SA3, 2018



Source: AEDC 2019

AEDC data shows that some SA3s have seen an increase in language vulnerability, mainly Canterbury, Hurstville, Sydney Inner City, and Eastern Suburbs-South. These SA3s are characterised by diverse cultural backgrounds and Aboriginal and/or Torres Strait Islander identification. Stakeholder feedback has indicated that implementing speech pathology interventions in Canterbury has been difficult due to number of no-shows for follow up appointments, potentially due to communication and cultural barriers and transient populations.

Figure 28: Percentage of children with language vulnerability by SA3, 2018



Source: AEDC 2019

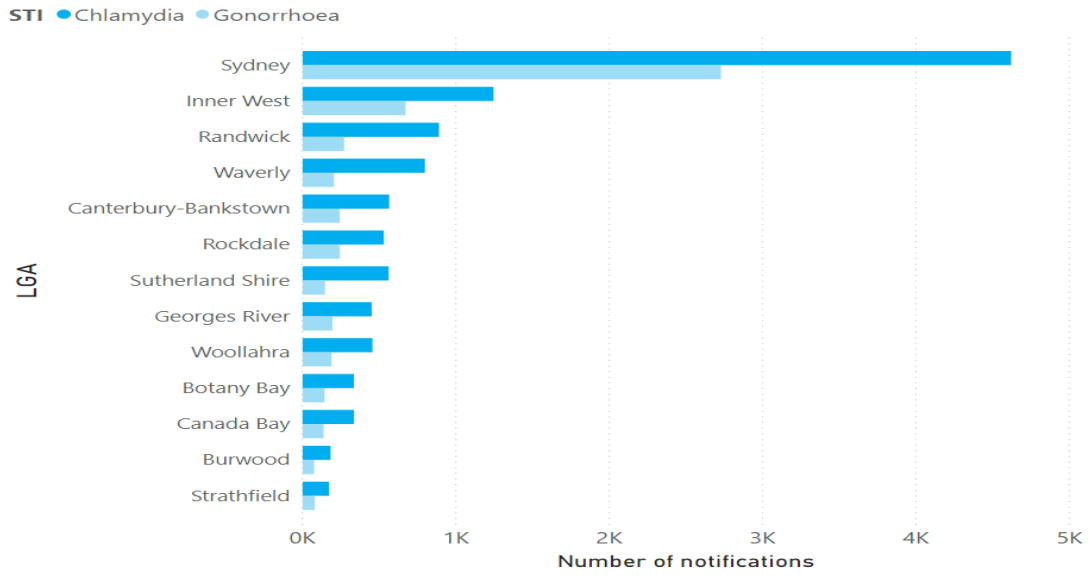
2.5. Sexual Health

Sexually transmissible infections

CESPHN continues to have the highest rates of sexually transmissible infections (STI) in NSW. Gonorrhoea, chlamydia and infectious syphilis is increasing across the region for both males and females but increasing at a faster rate for males.(49)

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.

Figure 29: Number of chlamydia and gonorrhoea notifications by LGA, 2018



Source: NSW Health 2018

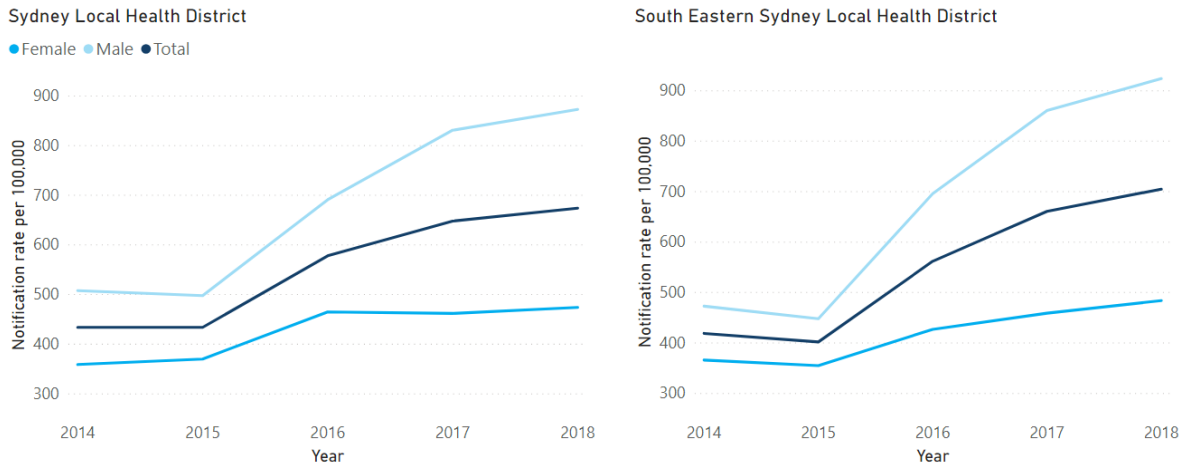
Chlamydia

The CESPHN region continues to have the highest rates of chlamydia notifications in NSW for males and females, continuing the increasing upward trend since 2014. In SLHD and SESLHD, there was a steep increase in notifications rates for males from 2015 to 2018 (75.3% increase in SLHD and 106.3% increase in SESLHD). There was also a 28.1% increase in the rate of chlamydia notifications for females in SLHD and a 36.3% increase in SESLHD from 2015 to 2018.(49)

In SLHD, the 25-34-year age group for both males and females represented over 40% of chlamydia cases in comparison to other age groups. In SESLHD, the 20-29 age group represented 52% of chlamydia notifications.

In 2018, Sydney (4,621), Inner West (1,246), Randwick (891), and Waverley (799) LGAs had the highest numbers of chlamydia notifications for the region.

Figure 30: Chlamydia notification rates per 100,000 people, by LHD, 2014 to 2018



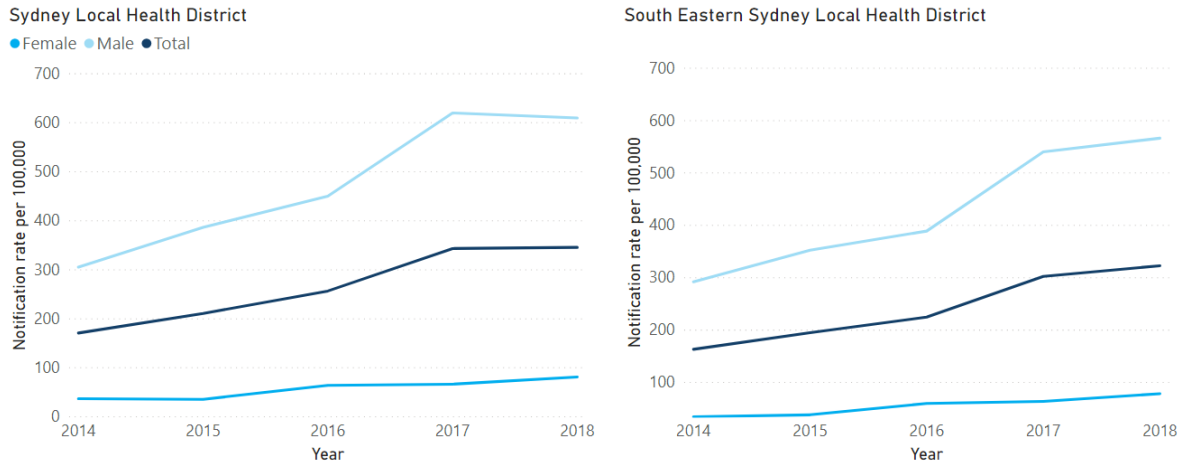
Source: NSW Health 2018

Gonorrhoea

The notification rates of gonorrhoea in the CESPHN region continue to be the highest in NSW for both males and females, continuing the increasing upward trend since 2012. In SLHD and SESLHD, there has been a steep increase in notification rates in males from 2014 to 2018 (99.6% in SLHD and 93.8% increase in SESLHD). There was also a 119.7% increase in the female notification rate in SLHD from 2014 to 2018 and a 127.8% increase in SESLHD.(49)

In 2018, Sydney, Inner West, and Randwick LGAs had the highest numbers of notifications for the CES region.

Figure 31: Gonorrhoea notification rate per 100,000 people, by LHD, 2014-2018



Source: NSW Health 2019

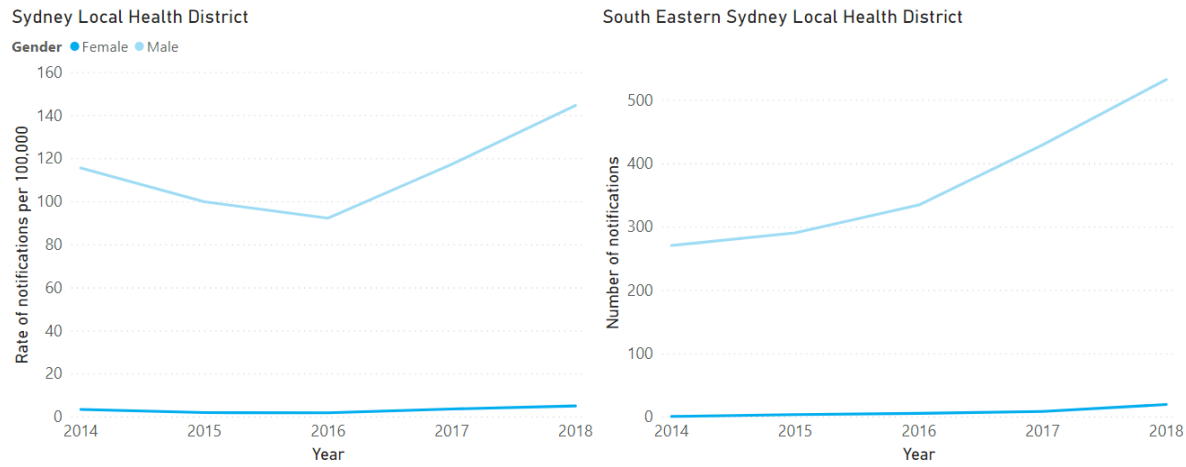
Syphilis

In 2018, rates for infectious syphilis in the CESPHN region were the highest in NSW. In 2018, there were 533 notifications of syphilis in males in SESLHD, equivalent to 144.7 syphilis notifications per 100,000 males. High notification rates of syphilis among males reflects the region's larger population of men who have sex with men (MSM) as enhanced surveillance found that 81% of infectious syphilis notifications were in this population.(50)

Although notifications in females are lower than males (5.2 notifications per 100,000 in SLHD and 20 notification in SESLHD in 2018) (51), there was a 60% increase in syphilis notifications in women under 46 years in NSW from 2017 to 2018 and have remained elevated in 2019.(49)

In the Aboriginal and Torres Strait Islander population in Northern Territory, Queensland, South Australia and Western Australia, there was a syphilis outbreak that is ongoing and may spread to NSW.(52)

Figure 32: Infectious syphilis notification rate per 100,000 people, by LHD, 2014-2018



Source: SLHD 2019, SESLHD 2019

Hepatitis B

The prevalence of hepatitis B in the CESPHN region is the third highest in Australia. Nine SA3s had a chronic hepatitis B (CHB) prevalence rate above the national average (0.95%). The burden of CHB is highest in Hurstville (2.15%), Strathfield Burwood-Ashfield (1.96%), Canterbury (1.90%), Sydney Inner City (1.78%), Kogarah-Rockdale (1.62%), and Botany (1.62%).(53)

The highest absolute numbers of people living with CHB are in Sydney Inner City (4,704), then Strathfield Burwood-Ashfield (3,179) followed by Hurstville (2,940). Of these, Eastern Suburbs-South has the lowest care uptake at 11.8%.(53)

Table 28: Prevalence of CHB and percentage receiving care and treatment by SA3, 2017

SA3	CHB prevalence (%)	CHB care (%)	CHB treatment (%)
Hurstville	2.15	36.00	20.00
Strathfield - Burwood - Ashfield	1.96	28.20	12.70
Canterbury	1.90	38.70	16.00
Sydney Inner City	1.78	16.50	7.20
Kogarah - Rockdale	1.62	25.00	13.50
Botany	1.62	17.20	8.60
Canada Bay	1.56	22.50	10.80
Eastern Suburbs - South	1.35	11.80	6.30
Marrickville - Sydenham - Petersham	1.17	30.10	15.50
Eastern Suburbs - North	0.77	14.30	7.60
Leichhardt	0.73	18.70	7.80
Cronulla - Miranda - Caringbah	0.66	18.00	10.60
Sutherland - Menai - Heathcote	0.60	15.90	9.00

Source: National Viral Hepatitis Mapping Project 2019

Cohorts more likely to have hepatitis B are people from CALD 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, MSM, sex workers, and people in or recently released from custodial settings.

The average proportion of people living with CHB receiving recommended monitoring and care in CESPHN is 24.2%, which is lower than other Sydney metro PHNs. Appropriate monitoring and care of people with CHB is crucial in the prevention liver cancer and decompensated cirrhosis. 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 GP HBV prescribers—this includes effective patient education, follow-up, and contact tracing.

Hepatitis C

CESPHN is one of only two metropolitan PHNs with a prevalence of chronic hepatitis C (CHC) above the national average (0.94%).(53)

The burden of CHC is highest in Sydney Inner City (2.89%), Marrickville-Sydenham-Petersham (1.57%), Leichhardt (1.41%) and Eastern Suburbs-South (1.2%). The highest absolute numbers of people living with CHC are in Sydney Inner City (6,341), then Eastern Suburbs-South (2,008) followed by Strathfield-Burwood-Ashfield (1,275). Of these areas, Sydney Inner City has the lowest treatment rate at 19.0%. (53)%.(53)

While people with a history of injecting drug use continue to be a priority population, migrants from countries and regions with a high prevalence of CHC (Egypt, Pakistan, the Mediterranean and

Eastern Europe, Africa and Southern Asia) represent a priority population with low uptake of CHC treatment.(54)

Treatment of hepatitis C is crucial for the prevention of liver cancer. GPs can play a role in reducing the incidence of liver cancer caused by hepatitis C through initiating treatment with or without specialist support.

Table 29: Prevalence of CHC and percentage receiving treatment by SA3, 2017

SA3	CHC prevalence (%)	CHC treatment (%)
Sydney Inner City	2.89	19.00
Marrickville - Sydenham - Petersham	1.57	25.50
Leichhardt	1.41	24.20
Eastern Suburbs - South	1.27	20.60
Canterbury	0.92	21.90
Strathfield - Burwood - Ashfield	0.80	22.40
Botany	0.78	32.40
Eastern Suburbs - North	0.74	26.90
Kogarah - Rockdale	0.67	21.90
Hurstville	0.58	23.10
Canada Bay	0.48	27.30
Cronulla - Miranda - Caringbah	0.47	34.10
Sutherland - Menai - Heathcote	0.37	31.90

Source: National Viral Hepatitis Mapping Project 2019

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.(55) 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.(56)

Hepatitis A

From August to December 2017, there was an outbreak of hepatitis A in NSW. Of the 37 hepatitis A notifications in NSW, 95% were males and 54% identified as MSM. In addition, 84% of the notifications were from metropolitan Sydney. Other states and territories and Europe have similarly reported outbreaks of hepatitis A in MSM. MSM, including those that travel, continue to be identified as an at-risk population for hepatitis A.(57)

HIV

In 2018, rates for newly diagnosed human immunodeficiency virus (HIV) notification in the CESPHN region were the highest in NSW, making up 53% of all the notifications in the state. The number of new diagnoses among overseas born MSM was 33% lower in 2018 compared to the 2013-17 average.(58)

Fifty-two people were diagnosed with HIV in 2018 following heterosexual exposure, which is 6% lower than the average number of heterosexual notifications for 2013-2017. 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. This is in part due to the uptake of PrEP, which the 2018 Sydney GAY

Community Survey found was the most commonly reported risk reduction strategy used by HIV negative MSM who have condomless anal sex with casual partners. (56) However, the decline in HIV diagnosis has not been seen in overseas born MSM, Aboriginal and/or Torres Strait Islanders, or heterosexual people.(56)

S100 prescribing for HIV, HBV

CESPHN currently has 46 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 patient 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". This indicates a continuing need for ongoing education to improve GP confidence in the management of HIV, thereby ensuring HIV patients feel comfortable and supported by their GPs.

International students

As the number of international students increase in CESPHN, stakeholders and providers have observed an increase in sexual health and reproductive health issues in this cohort, particularly STI and HIV notifications and unplanned pregnancies. There is anecdotal evidence in the rise of STI and HIV notifications in young men who have sex with men from south-east Asian and Asian backgrounds. Young female international students are identified as a vulnerable demographic due to a lack of reporting of sexual assault, and lack of knowledge on contraception.(59)

Access to sexual and reproductive health services may be limited by lack of knowledge of the Australian health care system and their private health care cover, and limited understanding and knowledge of sexual health. These may also be exacerbated by a lack of social support, language barriers and cultural stigma.

3. Aboriginal and/ or Torres Strait Islander peoples

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.
- Aboriginal and/or Torres Strait Islander mothers have higher rates of smoking during pregnancy and low birth weight babies and lower rates of access to antenatal care visits prior to 14 weeks of pregnancy.
- There are significantly higher rates of infant and child mortality and child hospitalisations in the Aboriginal population of NSW. Aboriginal children consistently score more poorly across all five domains of childhood development. Immunisation rates are only above the national target of 95% among children aged 5 years.
- Risk factors such as overweight and obesity, lack of physical activity, smoking and sexual health are disproportionally higher among Aboriginal people.
- The main conditions contributing to the total burden are disease among older Aboriginal peoples are coronary heart disease, COPD, dementia, lung cancer and stroke.
- CKD is twice as high among Aboriginal peoples and dialysis is the most common reason for hospital attendances.
- Mental health and substance use disorders cause the most burden in the Aboriginal and/or Torres Strait Islander population.
- In 2017, 127 practices in the CESPHN region received an Indigenous Health Incentive payment. The uptake of new practices signing up to the program was zero at the beginning of 2018.
- The uptake of health assessments in the CESPHN region was 12% in 2017-18. This rate is well below the targets that have been set in the Implementation Plan for the National Aboriginal and Torres Strait Islander Health Plan 2013–2023.
- 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.

3.1. Health status

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 (63%) of Aboriginal and/or Torres Strait Islander people aged 10-24 years assessed their health as either 'excellent' or 'very good'; however this declined rapidly with age from 79% of those aged 10-14 years to 48% of those aged 20-24 years.(60)

Overall in NSW, Aboriginal people are overrepresented in the rates of chronic conditions and the risk factors contributing to these diseases, behavioural and mental disorders, disability rates, and hospitalisations due to potentially preventable conditions, and premature death from endocrine, cardiovascular and respiratory diseases.(61)

Maternal health

There is variation between Aboriginal and non-Aboriginal maternal health outcomes. This includes higher rate of smoking during pregnancy and low birth weight babies in Aboriginal and Torres Strait Islander mothers, as well as lower rate of access to antenatal care visits prior to 14 weeks of pregnancy. Please refer to the child and maternal health section for further analysis.

Youth and child health

There are significantly higher rates of infant and child 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 with almost 40% of children having a score that identifies them as "developmentally vulnerable".(62) The proportion of Aboriginal children achieving standard benchmarks in reading, writing and numeracy are lower than non-Aboriginal children, as are school retention rates.

Child immunisation rates for Aboriginal and/or Torres Strait Islander children in the region were above the national rate for 2 year olds (92.3%), and 5 year olds (97.8%), but were just below (92.3%) the national rate (92.4%) for 1 year olds.(41)

Chronic conditions

At the state and national level, Aboriginal and/or Torres Strait Islander peoples experience higher rates of chronic disease such as 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.(28)

The estimated incidence of chronic kidney disease (CKD) 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).(38) This holds true in CESPHN, where in 2016-17, dialysis hospitalisation rates were highest for Aboriginal people (20,930.5 per 100,000 people) compared to non-Aboriginal people (4,495.7 per 100,000). This rate has continued to climb over the last eight years.(33)

Acute respiratory disease rates (including asthma) across NSW are higher in Aboriginal residents than non-Aboriginal residents across all age groups.(33)

Disability

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.(63) Please refer to People living with disability section for further analysis.

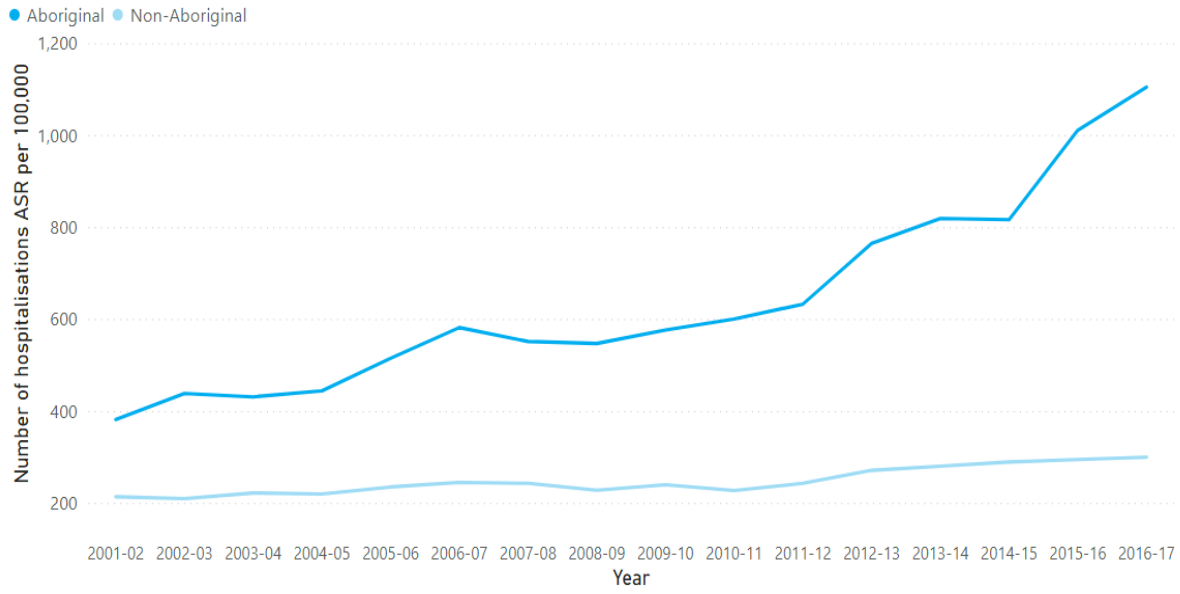
Ageing

Aboriginal people aged 50 years and over comprised 0.7% of the CESPHN population.(64) The NSW Aboriginal population aged 65 years and over represents 3% of the population yet contributes to 13% of the total burden of disease. The main conditions contributing to this burden are coronary heart disease, COPD, dementia, lung cancer and stroke.(61, 62)

Mental health

In 2010, Aboriginal and/or Torres Strait Islander peoples in NSW were 2.2 times more likely to report high or very high distress.(62) Between 2001-02 and 2016-17, there were much higher rates of self-harm hospitalisations in the Aboriginal and/or Torres Strait Islander population than then non-Aboriginal population, and the rate has been increasing at a higher rate.(33)

Figure 33: Self-harm hospitalisations (ASR per 100,000) in NSW, by Aboriginal and/or Torres Strait Islander status, 2001-02 to 2016-17



Source: HealthStats NSW

In 2013-17, the rate of deaths caused by intentional self-harm were also higher in Aboriginal and/or Torres Strait Islander peoples in NSW for both young people and for all ages.(65)

Table 30: Rate of deaths caused by intentional self-harm by Aboriginal and/or Torres Strait Islander status (ASDR per 100,000 people), NSW, 2013-17

Age group	Aboriginal and/or Torres Strait Islander	Non- Aboriginal and/or Torres Strait Islander
Children 5-17 years	5.2	1.8
All (age-standardised)	18	10.2

Source: Australian Bureau of Statistics

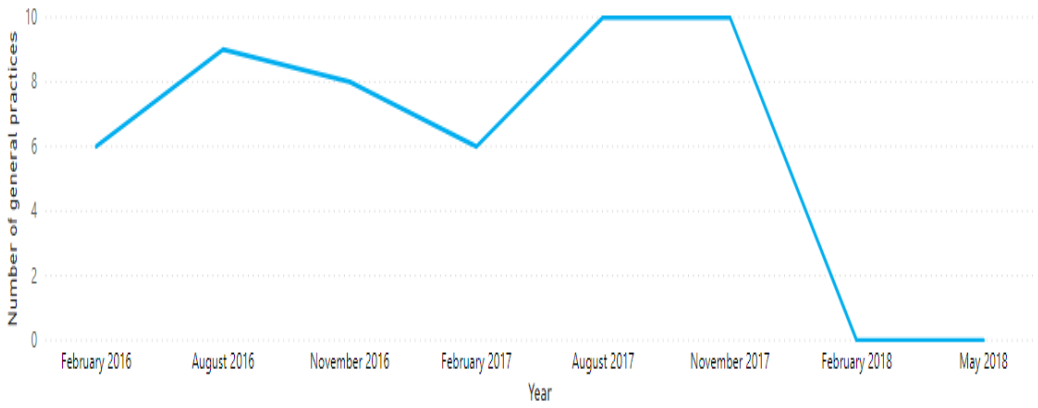
The disease group causing the most burden in the Aboriginal and/or Torres Strait Islander population was mental health and substance use disorders, which includes anxiety and depression, and alcohol and drug use disorder. In major cities, mental health and substance use disorder contributed to 24.9% of the total health burden, and 41.4% of the non-fatal burden. Further, the gap in the burden of mental health and substance use disorders is 21% higher in Aboriginal and/or Torres Strait Islander peoples than non-Aboriginal people in major cities.(66)

Consultation with the CESPHN Mental Health and Suicide Prevention Advisory Committee found the following service gaps: a lack of Aboriginal and/or Torres Strait Islander staff and cultural competency, poor service alignment to where the community needs services resulting in a 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.

3.2. Primary health services

The Indigenous Health Incentive supports general practices and Indigenous health services to provide better health care for Aboriginal and Torres Strait Islander patients with chronic disease. In 2017, 127 practices in the CESPHN region received an Indigenous Health Incentive payment. This has increased from 104 practices in 2015. The uptake of new practices signing up to the program was zero at the beginning of 2018 (latest available data).(67)

Figure 34: Number of general practices receiving an Indigenous Health Incentive sign on payment for the quarter, 2016-2018



Source: Department of Health 2018 Practice Incentive Payments

In 2017-18, the rate of health assessments (MBS item 715) in the CESPHN region was 12.2% compared to 29.8% nationally. While the rate has been increasing, it is well below the targets that have been set in the Implementation Plan for the National Aboriginal and Torres Strait Islander Health Plan 2013–2023:

- 0-4 years: 69%
- 5-14 years: 46%
- 15-24 years: 42%
- 25-54 years: 63%
- 55 years and over: 74%.

The lowest rate of health assessments for Aboriginal and/or Torres Strait Islander peoples was in Eastern Suburbs North (5.0%), followed by Canada Bay (6.9%) and Cronulla-Miranda-Caringbah (6.9%).(68)

Table 31: Rate of health assessments for Aboriginal and/or Torres Strait Islander peoples by SA3, 2017-18

SA3	Rate (per 100 people)
Botany	8.6
Canada Bay	6.9
Canterbury	12.2
Cronulla - Miranda - Caringbah	6.9
Eastern Suburbs - North	5.0
Eastern Suburbs - South	10.8
Hurstville	10.0
Kogarah - Rockdale	8.0
Leichhardt	13.2
Marrickville - Sydenham - Petersham	16.0
Strathfield - Burwood - Ashfield	11.2
Sutherland - Menai - Heathcote	8.0
Sydney Inner City	21.0
CESPHN	**12.2**
National	**29.8**

Source: AIHW 2019 Indigenous health checks

3.3. Hospitalisations

National data indicates that the most common reason for the hospitalisation of Aboriginal and/or Torres Strait Islander peoples was for 'Factors influencing health status and contact with health services' (mostly for care involving dialysis), which accounted 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.

Potentially preventable hospitalisations tell the same story. In 2014-15, the national rate for potentially preventable hospitalisations was around three times higher for Aboriginal and Torres Strait Islander people than for non-Aboriginal people. The highest hospital utilisation was emergency departments, with the majority of these, same day separations.(69)

3.4. 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)(70) 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.

Lack of knowledge about the Aboriginal health assessments 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.

4. Older Australians

Key points

- 14% of the region are aged 65 years and over. The SA3 with the highest proportion of people aged 65 years and over are – Norfolk Island (24%), Cronulla-Miranda-Caringbah (18%) and Lord Howe Island (18%).
- The rate of fall related hospitalisations has increased by 18% since 2007-08 (from 2,585.6 per 100,000 to 3,041.7 per 100,000) while the rate of dementia hospitalisations has decreased by 42% over the same period (from 3,198.3 to 1,855.5 per 100,000).
- There are 164 RACFs across the CESPHN region, 130 services providing home care packages and six services providing transition care. In addition there are 195 services providing home support services.
- Over one third (37%) of all residential and transition care places and 59% of home care places were filled by people born in non-English speaking countries. Aged care strategies must keep in mind the region's cultural diversity to ensure appropriate service delivery.
- In 2018, there were 11,133 residential care places filled by people aged 65 years and over – 10,650 permanent admissions and 483 respite places – and 11,246 exits.
- Two-thirds of the residential care population were female and 50% were aged 85 to 94 years.
- In 2016-17, there were 14.15 GP consultation services and 2.46 GP after hours care services per RACF place. The after hours rate has decreased from 2.72 services per RACF place in 2014-15.
- A medication management review was completed for 33% of the population living in RACFs.
- As at June 2018, there were 4,459 older people aged 65 years and over using home care packages within the CESPHN region – 56% of these older people were receiving Level 2 packages, 68% were female and half were aged 80 to 89 years.
- As at June 2018, there were 232 people aged 65 years and over who used transition care within the CESPHN region.
- There is a low rate of advance care planning completion in Australia despite evidence indicating the benefits to end of life care.
- There is limited access to psychological support services for mental health conditions for residents of RACFs.
- 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 limited.

4.1. Population

In 2018, 14% of the CESPHN population were aged 65 years and over, and 6.2% were aged 75 years and over. The number of people aged 65 years and over is expected to increase by 43% by 2031.

The following SA3 had the highest proportion of people aged 65 years and over in 2018 – Norfolk Island (24%), Cronulla-Miranda-Caringbah (18%) and Lord Howe Island (18%).(2)

Table 32: CESPHN estimated resident population aged 65 years and over by SA, 2018

	Age group (years)						
SA3	65-69	70-74	75-79	80-84	85+	Total	% Total SA3 population
Botany	1,862	1670	1232	911	819	6,494	12.3%
Canada Bay	4,051	3,459	2,418	1,841	2,220	13,989	15.2%
Canterbury	5,377	4,680	3,719	2,801	2,896	19,473	13.4%
Cronulla - Miranda - Caringbah	5,748	5,143	3,679	3,010	3,751	21,331	18.3%
Eastern Suburbs - North	5,814	5,589	3,658	2,638	3,403	21,102	15.2%
Eastern Suburbs - South	5,696	5,074	3,668	2,731	3,133	20,302	13.2%
Hurstville	6,015	5,063	3,763	2,945	3,519	21,305	15.5%
Kogarah - Rockdale	6,349	5,303	3,936	3,251	3,515	22,354	14.7%
Leichhardt	2,717	2,169	1,222	791	791	7,690	12.7%
Lord Howe Island	16	14	28	6	11	75	17.8%
Marrickville - Sydenham - Petersham	2,139	1,783	1,253	999	942	7,116	12.0%
Norfolk Island	141	114	75	45	50	425	24.2%
Strathfield - Burwood - Ashfield	6,065	5,021	3,762	3,219	3,512	21,579	13.0%
Sutherland - Menai - Heathcote	5,532	4,659	3,001	1,967	2,305	17,464	15.6%
Sydney Inner City	7,087	5,529	3,474	2,300	2,181	20,571	8.3%
Total	**64,609**	**55,270**	**38,888**	**29,455**	**33,048**	**221,259**	**13.5%**

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 2018 ERP

As at March 2019, 53% of those aged 65 years and over in the CESPHN region were receiving the Age Pension.(18) Canterbury had the highest number of people receiving the Age Pension followed by Kogarah-Rockdale.

Table 33: Number of DSS recipients by SA3, 2019

SA3	Age Pension	Commonwealth Seniors Health Card	Pensioner Concession Card	Wife Pension (Partner on Age Pension)
Botany	4,571	474	7,130	7
Canada Bay	6,471	1,936	8,926	6
Canterbury	14,025	1,389	24,353	60
Cronulla - Miranda - Caringbah	10,669	3,692	14,696	0
Eastern Suburbs - North	5,563	2,469	7,948	0
Eastern Suburbs - South	9,794	2,768	15,026	0
Hurstville	12,339	2,707	19,185	0
Kogarah - Rockdale	13,894	2,236	20,740	5
Leichhardt	3,155	889	5,084	0
Lord Howe Island	30	13	38	0
Marrickville - Sydenham - Petersham	4,485	513	7,544	13
Norfolk Island	238	49	304	0
Strathfield - Burwood - Ashfield	12,501	2,279	18,491	5
Sutherland - Menai - Heathcote	10,093	2,658	14,018	0
Sydney Inner City	8,875	1,548	18,358	5
Total	**116,703**	**25,620**	**181,841**	**101**

Note: Individuals are eligible to receive both the Age Pension and the Pensioner Concession Card.

Source: Department of Social Services 2019

4.2. Health status

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. 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.(71)

Social isolation

Social isolation and loneliness have significant health repercussions. In CESPHN, about one in four older people live alone(64) studies suggest that social isolation in older people is significantly more common in urban areas.(72) One adverse effect of social isolation is loneliness, which is experienced by one third of people aged over 75 years.(73) Older people in NSW indicated that loneliness, social isolation and stigma associated with ageing can also contribute to poor mental health and well-being.(71) Current evidence demonstrates that social isolation can lead to cognitive decline and dementia.

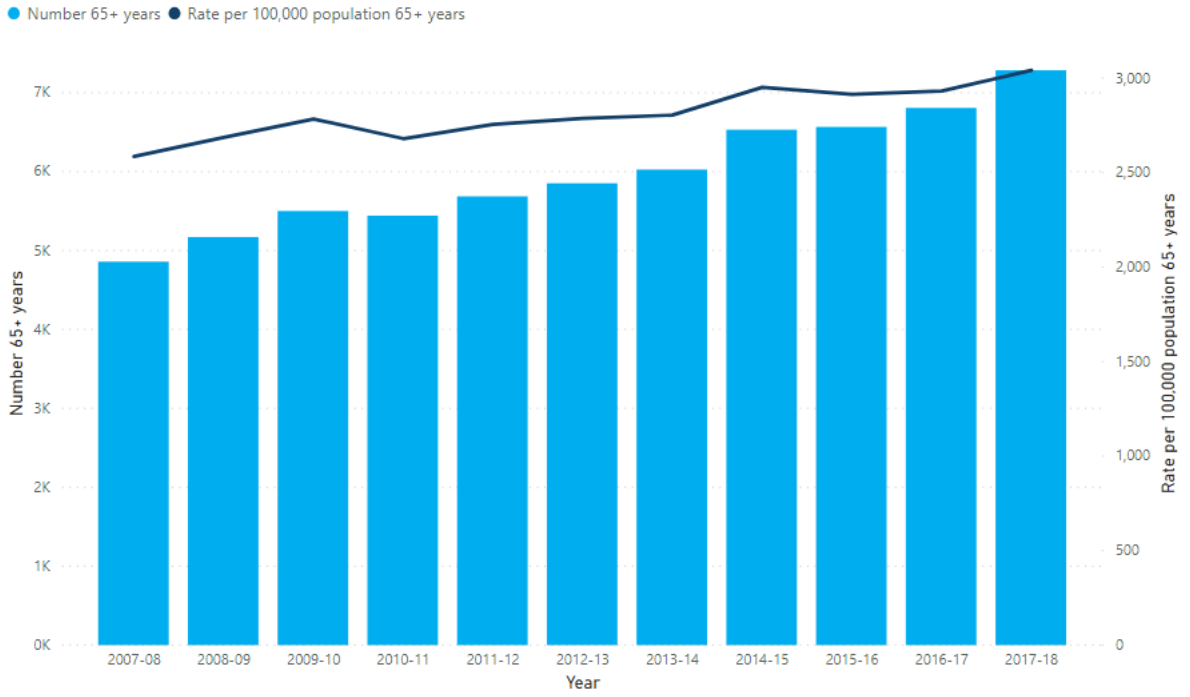
Falls

Falls are more common amongst people aged 65 years and over, with one in four people in this cohort experiencing at least one fall per year.

In 2017-18, there were 7,284 fall related hospitalisations for people aged 65 years and older in the CESPHN region.(33) The rate of fall related hospitalisations has increased by 18% since 2007-08

(from 2,585.6 per 100,000 to 3,041.7 per 100,000). Females aged 65 years and over were more likely to be hospitalised for falls (3,479.6 per 100,000 population) than males (2,491.9 per 100,000 population) in 2017-18.

Figure 35: Number and rate of fall related hospitalisations per 100,000 population, aged 65 years and over, 2007-08 to 2017-18



Source: HealthStats NSW 2019

Dementia

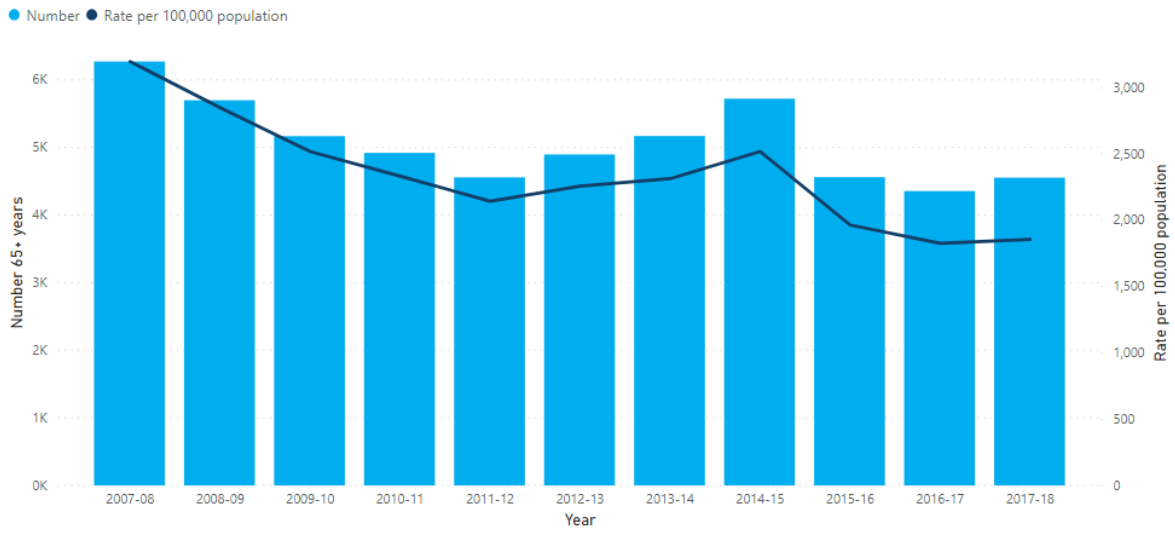
There were an estimated 354,000 people with dementia in Australia in 2016, which equates to approximately 2,200 CESPHN residents.(74) The number of people with dementia is projected to reach around 900,000 by 2050.(75)

People with dementia often have mental health problems, with a reported 40% of aged care residents suffering from dementia also experiencing a comorbid mental health problem.(76)

A recent CESPHN survey found that 54% of residential aged care facilities (RACFs) have a specific unit which provides care for residents with dementia, and 32% are specifically able to accommodate younger (aged under 65 years) people with dementia.

In 2017-18, there were 4,553 dementia hospitalisations for people aged 65 years and over in the CESPHN region. The rate of dementia hospitalisations has decreased by 42% since 2007-08 (from 3,198.3 to 1,855.5 per 100,000).(33)

Figure 36: Number and rate of dementia hospitalisations per 100,000 population, aged 65 years and over, 2007-08 to 2017-18



Source: HealthStats NSW 2019

GP health assessment

In 2016-17, 20.8% of the population aged 75 years and over had received a GP health assessment. This is a 4.2% decrease from 21.7% in 2014-15.(77)

4.3. Aged care

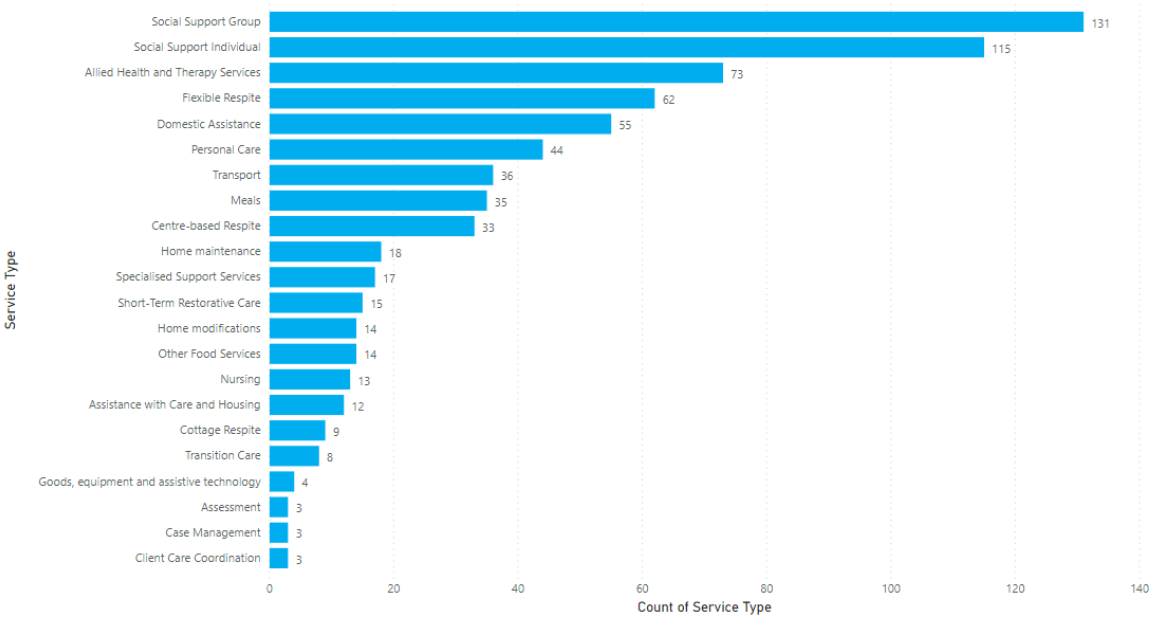
The aged care target population is defined as all people aged 65 years and over and Aboriginal and Torres Strait Islander Australians aged 50–64 years. Aged care is delivered through a variety of programs:

- Commonwealth Home Support Programme (CHSP)—provides entry-level home support services (such as personal care, transport, and assistance with food preparation and meals) to help people stay independent and in their homes and communities for longer.
- Residential aged care—provides a range of care options and accommodation on a permanent or respite basis for people who are unable to continue living independently in their own homes.
- Home Care Packages Programme (Home Care)—offers packages of services at four levels of care to enable people to live at home for as long as possible.
- Flexible care—Transition Care is the largest of the flexible care programs, providing support for people to return home after a hospitalisation.

Home support services

As at June 2018, there were 195 organisations providing home support services across the CESPHN region.(64) Social support services, both group and individual, were the most common types of home support services.

Figure 37: Number of services by service type, CESPHN suburbs, 2018



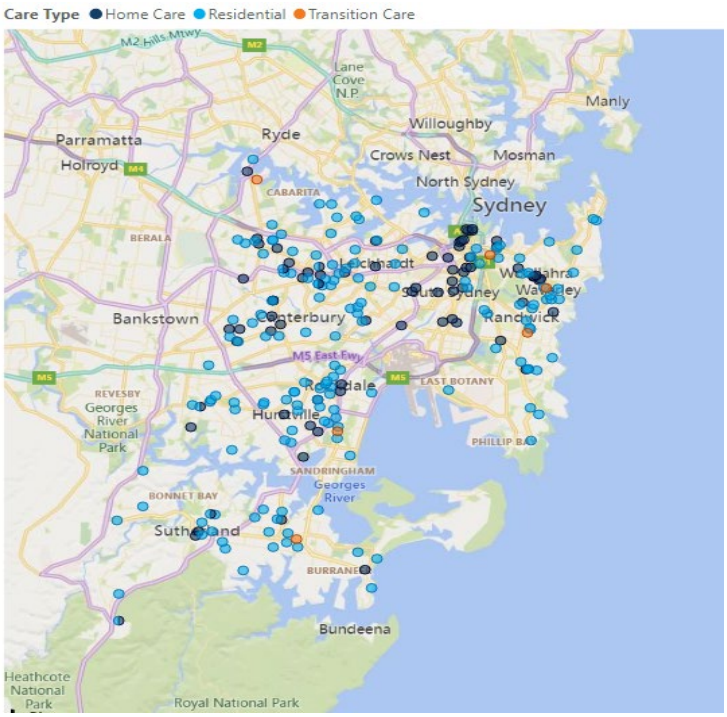
Source: AIHW GEN 2018

Residential care, home care and transition care

In the CESPHN region there are:

- 164 RACFs offering 13,281 places (11,133 places filled by those aged 65 years and over)
- 130 services providing home care packages (4,459 people as at 30 June 2018), and
- 6 services providing transition care linked to six public hospitals.(64)

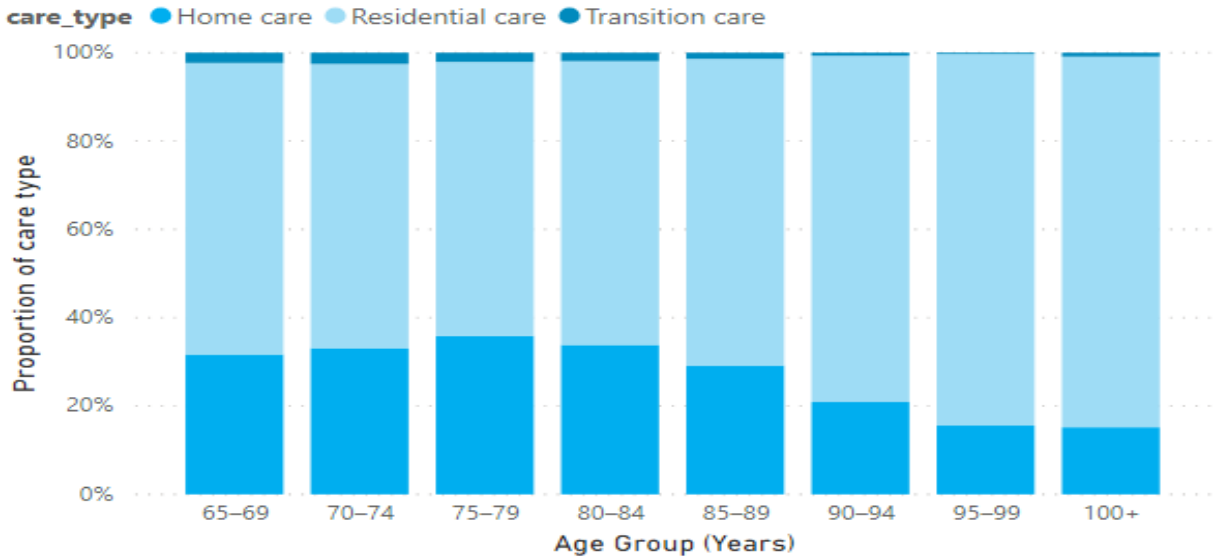
Figure 38: Number and location of services by service type, 2018



Source: AIHW GEN 2018

CESPHN is relatively well supplied with residential aged care places (90.6 places per 1,000 people aged 70 and over) compared to the state (77.5 places per 1,000 people) and national averages (75.9 places).(64)

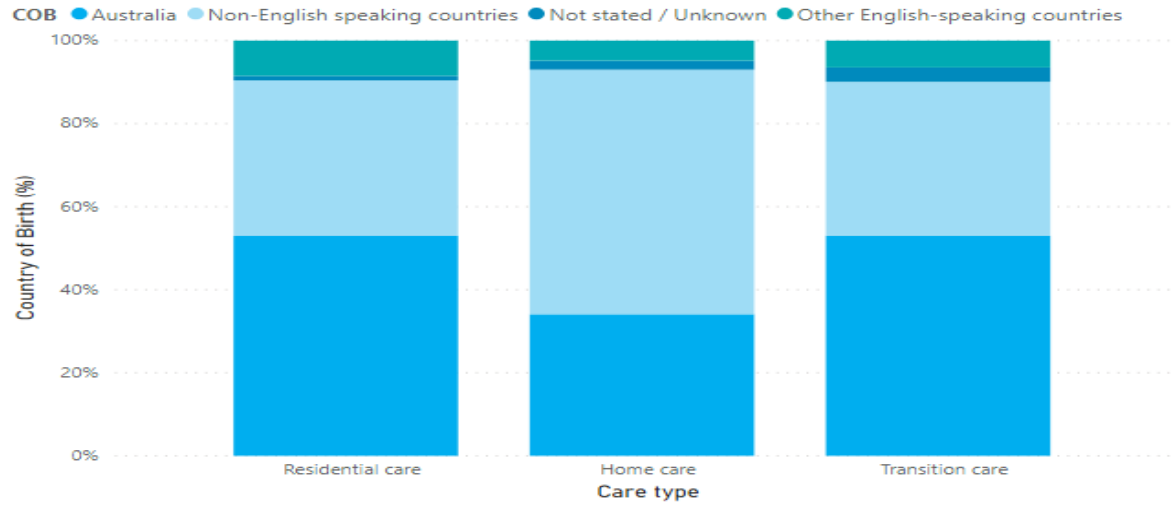
Figure 39: Proportion of home care, residential care and transition care for consumers aged 65 years and over by age group, 2018



Source: AIHW GEN 2018

Over one third (37%) of all residential and transition care places and 59% of home care places were filled by people born in non-English speaking countries.

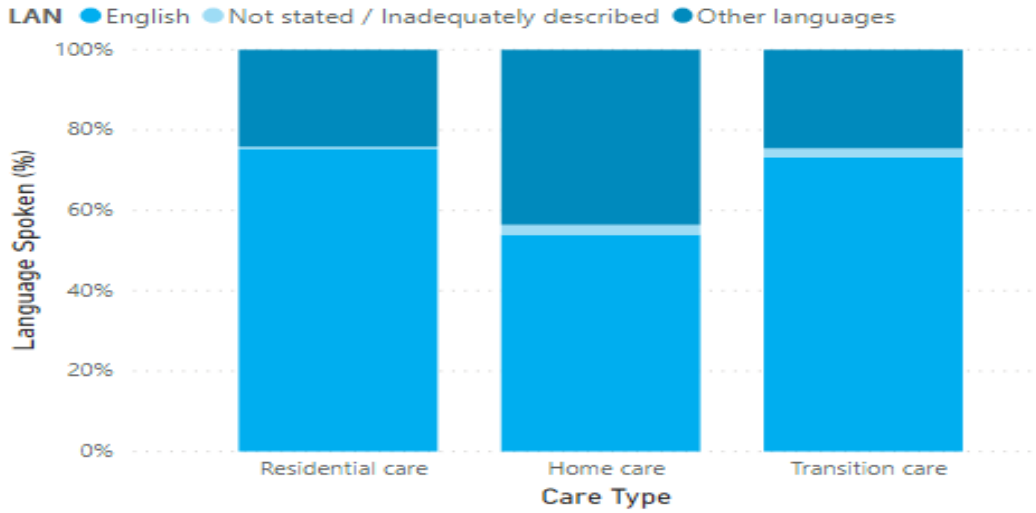
Figure 40: Proportion of country of birth by care type, consumers aged 65 years and over, 2018



Source: AIHW GEN 2018

This region has a much higher proportion of older people with a preferred language other than English (40%) compared to NSW (21%).(6) Home care packages are more frequently used by this group with 46% of people using these services reporting a preferred language other than English.(64)

Figure 41: Language spoken by care type, consumers aged 65 years and over, 2018

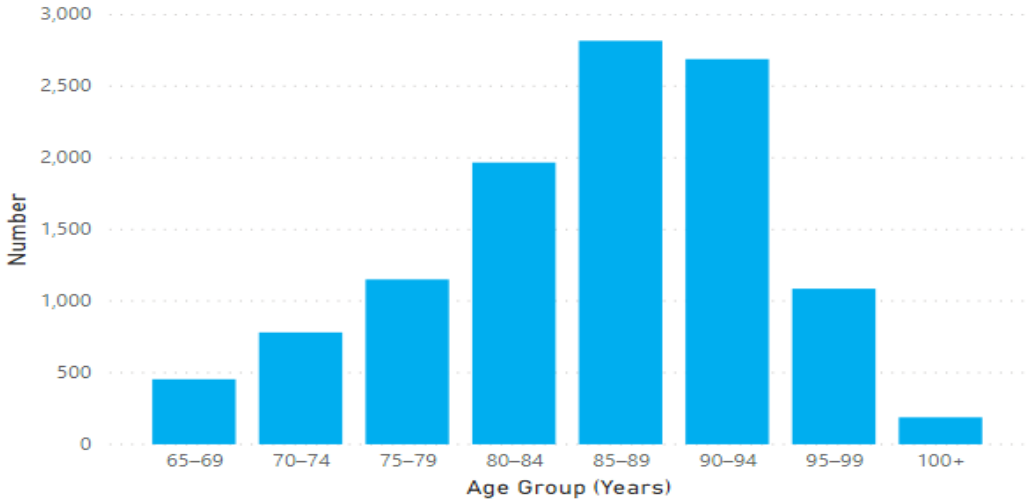


Source: AIHW GEN 2018

Residential care

In 2018, there was 11,133 places filled by individuals aged 65 years and over – 10,650 of these places were identified as permanent admissions and 483 respite places.(64) Two-thirds of the 65 years and over residential care population were female and 50% were aged 85 to 94 years.

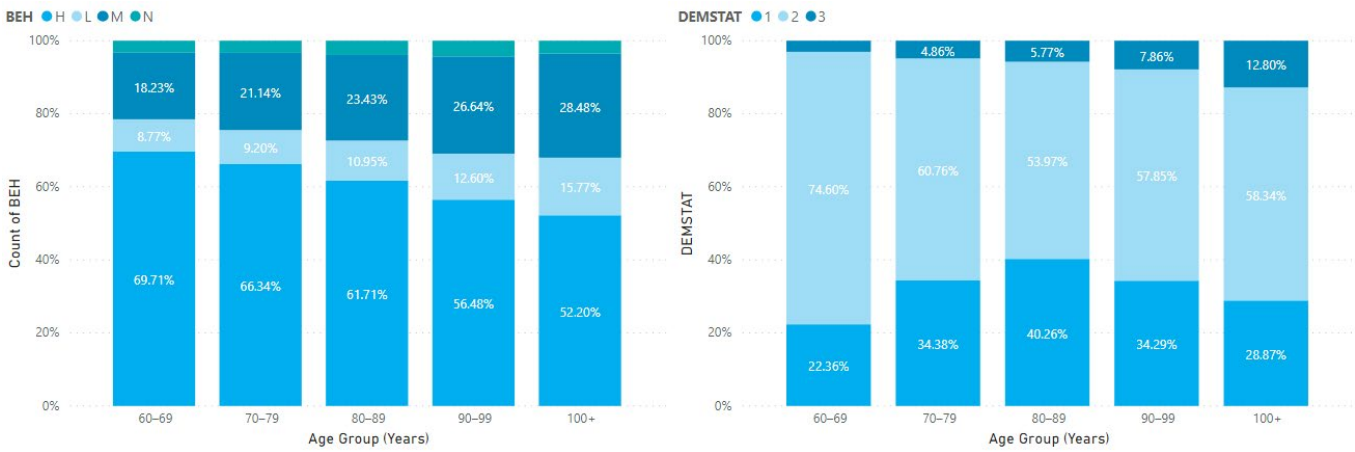
Figure 42: Residential care places by age group, 2018



Source: AIHW GEN 2018

Across all age groups in NSW, dementia rates peaked in the 80-89 year age group with 40% of those in residential care being diagnosed with dementia. The proportion of residents requiring high care needs due to behavioural issues was highest in the 60-69 age group and declined with age. This is important to know considering the Royal Commission findings and interim report which highlights the use of restrictive practices for management of challenging/changed behaviours and dementia.(78)

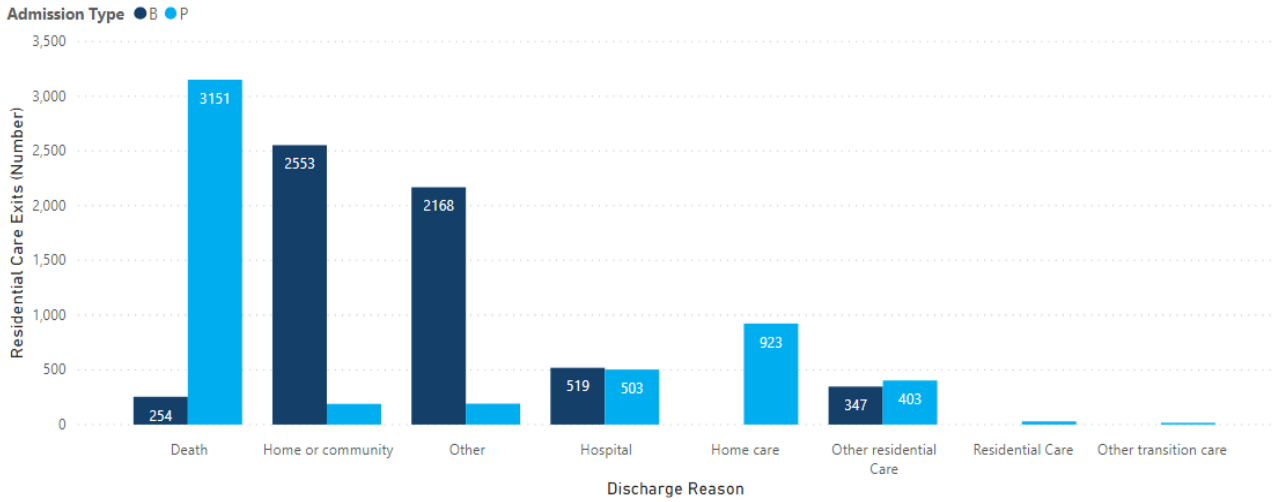
Figure 43: Proportion of care needs for behaviour and dementia status, NSW, 2018



Source: AIHW GEN, 2018

In 2018, there were 11,246 exits from residential care for people aged 65 years and over in the CESPHN region. Almost one third (30%) of all exits were due to death. When considering permanent places only, this proportion rose to 58%.(64)

Figure 44: Residential care exits by discharge reason and admission type, 2018



Note: B = Respite; P = Permanent

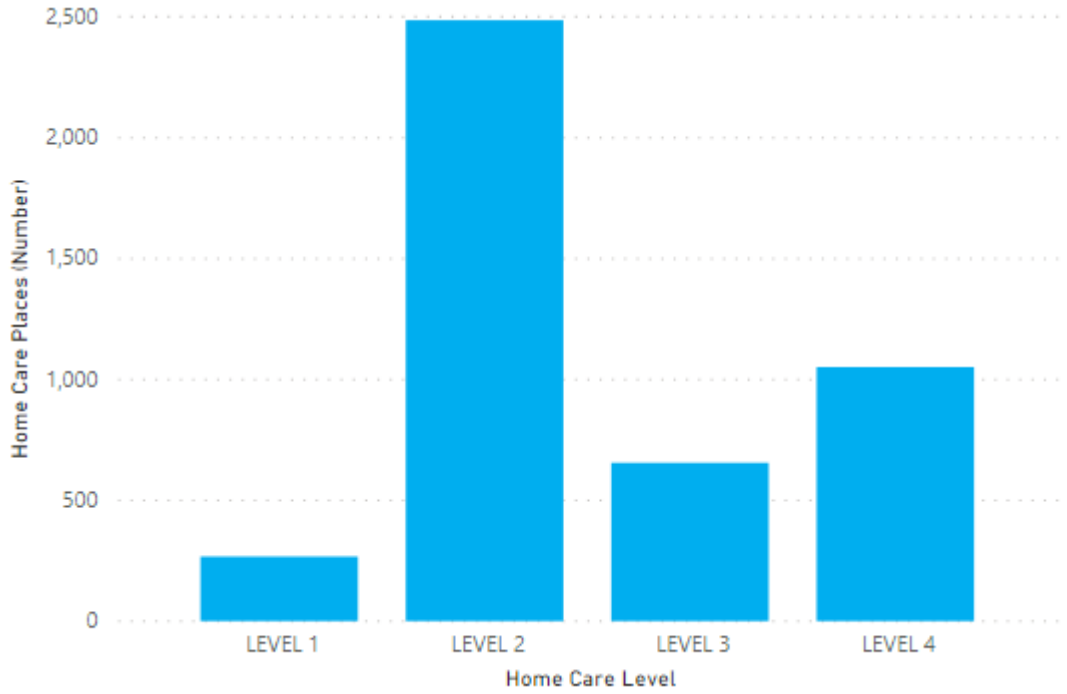
Source: AIHW GEN 2018

Home care packages

As at June 2018, there were 4,459 people aged 65 years and over accessing home care packages within the CESPHN region.(64)

Over half (56%) of these people were receiving Level 2 packages which are aimed at supporting people who have low level care needs.

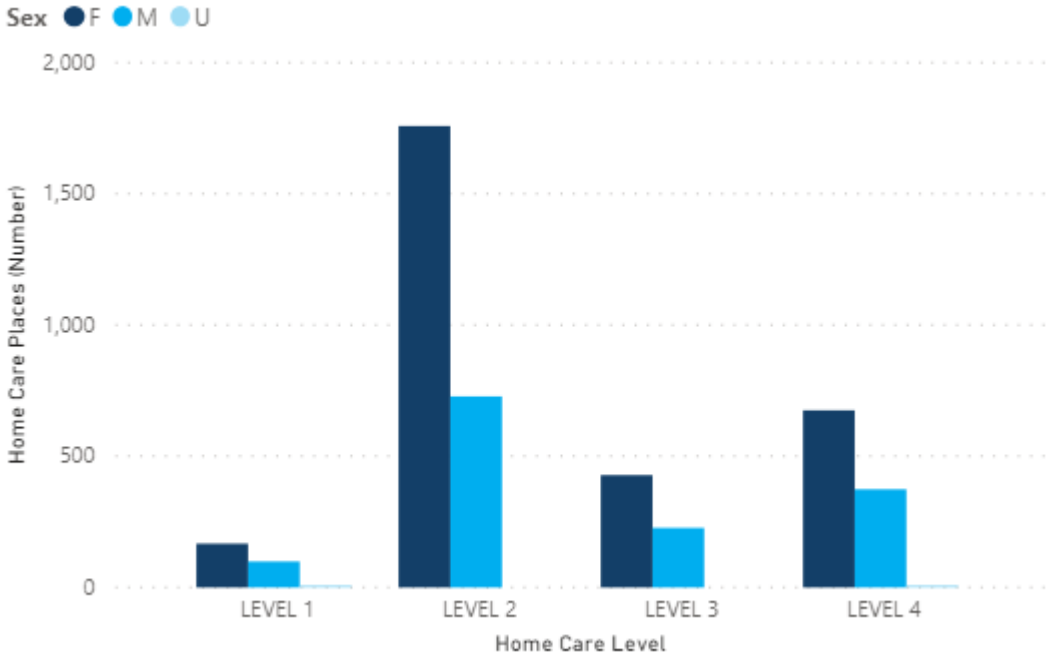
Figure 45: Home care places by home care level, 2018



Source: AIHW GEN 2018

Over two-thirds (68%) of people with home care packages were female.

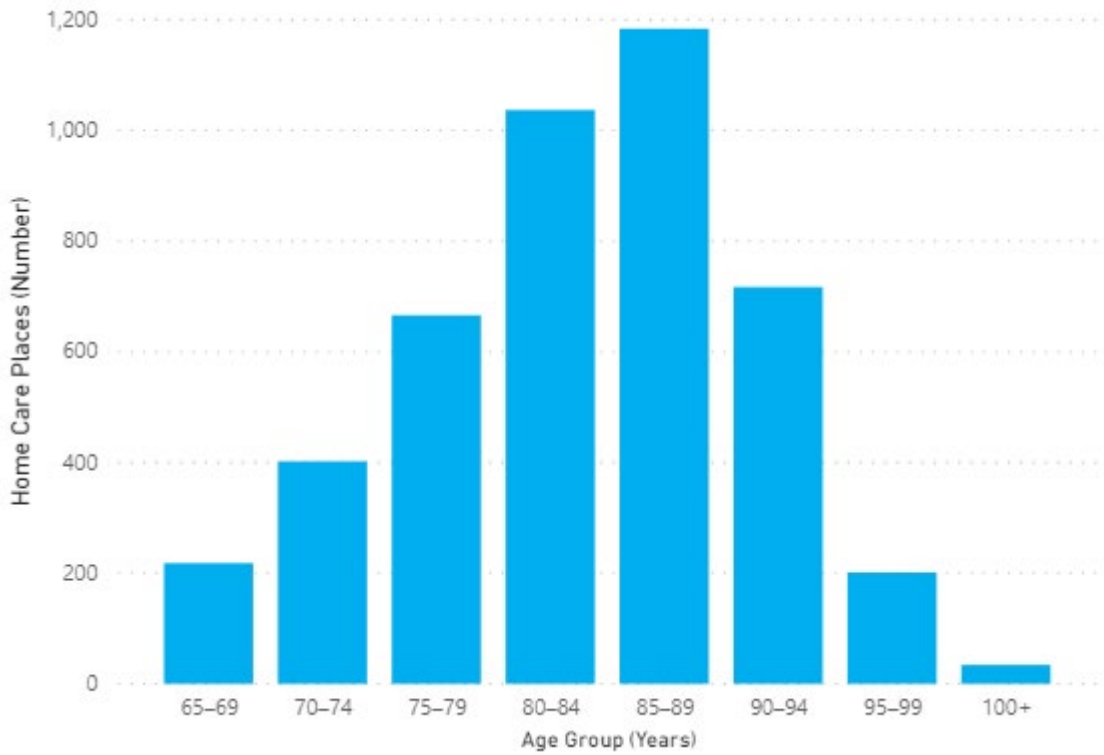
Figure 46: Home care places by gender, 2018



Source: AIHW GEN 2018

Half (50%) of all home care recipients were aged 80-89 years, 16% were aged 90-94 years and a further 15% were aged 75-79 years.

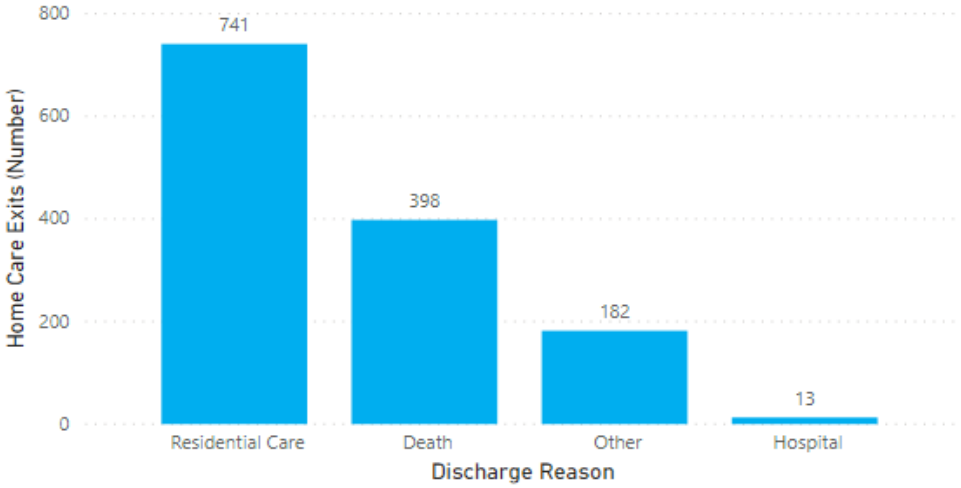
Figure 47: Home care places by age group, 2018



Source: AIHW GEN 2018

During 2017-18, 1,334 people were discharged from home care services. Just over half (56%) of discharges were for people entering residential care. More than two-thirds (68%) of those people who exited home care for residential care were female.

Figure 48: Home care exits by discharge reason, 2018



Source: AIHW GEN 2018

As at 30 September 2018, there were 3,408 people awaiting their approved level of home care package within the CESPHN region. A higher proportion of people were awaiting Level 3 home care packages in the CESPHN region compared to NSW and nationally (43%, 40% and 38% respectively).(79)

Table 34: Number of people awaiting their approved level of home care package, 2018

Region	Level 1	Level 2	Level 3	Level 4	Total
CESPHN	78	1,191	1,459	680	3,408
NSW	690	7,873	8,549	4,153	21,265
National	1,465	25,147	26,304	16,170	69,086

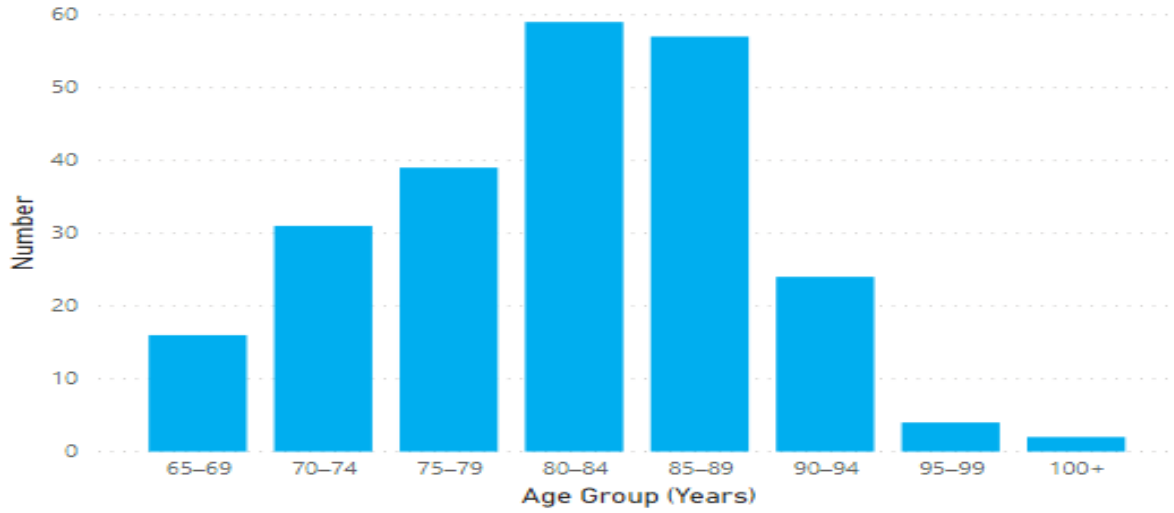
Source: Department of Health, 2018

Transition Care

As at June 2018, there were 232 people aged 65 years and older who used transition care within the CESPHN region.(64)

Almost two thirds were female (64%). Half (50%) were aged 80-89 years, 17% were aged 75-79 years and a further 13% were aged 70-74 years.

Figure 49: Transition care by age group, 2018



Source: AIHW GEN 2018

GPs in RACFs

GP consultations

In 2016-17, 182,451 GP consultations were provided in RACFs in the CESPHN region for 27,020 patients, equivalent to 14.15 services per RACF place. This rate has remained relatively constant since 2014-15 and is lower than the national rate of 16.86 services per RACF place.(77).

Over the same time period there were 31,667 GP after hours care services for 8,571 patients, equivalent to 2.46 services per RACF place. This rate has decreased from 2.72 services per RACF place in 2014-15 and is lower than the national rate of 3.24 services per RACF place.

Medication review

Residential Medication Management Review (RMMR) is a MBS item for permanent residents of a RACF.(80) It involves collaboration between a GP and a pharmacist to review the medication management needs of a resident. In 2017-18, 33% of the population living in RACFs within the CESPHN region had a medication management review completed.(36)

As outlined in the Royal Commission into Aged Care's interim report, pharmacological restrictive practices to manage "Challenging behaviours" is an area in aged care requiring further education; it

is also acknowledged that the distinction between use of medication to treat illness and the use of medication for restraint is not clear cut.(78)

4.4. End of Life Care

Advance Care Planning

Despite evidence indicating the benefits to end of life care, there is an indication for low rate of advance care planning completion in Australia.(81) This could be due to poor patient experience and psychological distress associated with this phase. Other barriers for uptake of advance care plans may be due to lack of infrastructure and time for discussions to be had and limited workforce capacity in addressing difficult end of life conversations.(82) 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 within 9 months.(71)

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'.(83)

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%.(83)

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.(84)

5. Regional priority populations

Key points

- CALD communities tend to be more vulnerable to poor health outcomes and access issues as a consequence of English language skills, general lack of awareness of services available, limited support networks and cultural barriers.
- 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.
- The CESPHN region commenced its NDIS roll-out 1 July 2017 and as of 30 June 2019 had a total of 12,084 participants.
- 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 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 over 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. The demand for health services across the sector will increase as the population in the region increases and changes.

5.1. 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.(85) 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 and cultural barriers. Furthermore, refugees and asylum seekers may have conditions attached to their visa that restrict their access to Medicare and the Pharmaceutical Benefits Scheme.

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, and percentage of people reporting fair or poor health.

5.2. 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 an estimated population of 421 people in 2018. There is a slightly higher proportion of female residents (53%) than males (47%). The median age of residents is 44 years, higher than the NSW median age (38 years).(6)

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.

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 (0.1% 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.(6)

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.

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.

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.

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.

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 – 13% of Norfolk Island residents” compared with 22% for NSW.(86)

Chronic disease

A survey of Norfolk Island residents reported 63% of the Norfolk Island population were overweight or obese which is higher than the NSW rate (53%), but like other regional and remote areas of NSW (65%). In addition, 78% of the male population reported being overweight or obese.

Rates of diagnosed hypertension amongst the Norfolk Island population are up to 17% of the total population and are indicative of a range of risk factors in addition to genetic predisposition. It has also been noted that there is a degree of undiagnosed hypertension, as well as diabetes.

However, with the introduction of Medicare, community members are accessing GP services more regularly and there has been an increased diagnosis of chronic health conditions such as 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, limiting 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 school counsellor. 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.(86) Recent consultations indicated that stress and anxiety may have increased in some people due to uncertainty about the future around 2015-16 governance changes.(87)

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.(88)

Health services

SESLHD facilitates a number of specialists and allied health professionals visiting the island on a regular or as needed basis to support community access to services. Specialist telehealth sessions have also been implemented

Census 2016 data shows that 16.1% of the Norfolk Island households do not have access to the internet or readily available within their place of residence. 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. However, the Australian Government has committed to having the NBN implemented in Norfolk Island, which may increase the number of households with access to the internet and improve quality of connection.

Primary services to be targeted for telehealth service provision should include those related to urgent medical care and life limiting 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. Plans to upgrade the infrastructure of the NIHRACS will include upgrading the infrastructure that supports internet connection, which will improve telehealth connectivity and timely access to care. 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 particularly

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.

5.3. 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 and as of 30 June 2019 had a total of 12,084 participants.(17)

Table 35: Number of NDIS participants, June 2019

LHD	No. of participants
Sydney	6,584
South Eastern Sydney	5,500
Total	**12,084**

Source: NDIS 2019

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. 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
- are 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 the NDIS.

Stakeholder feedback has identified gaps in the NDIS in 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: Aboriginal and Torres Strait Islander people, CALD people, refugees and/or asylum seekers, people at risk of homelessness or experiencing homelessness, LGBTIQ persons, families and carers.

CESPHN's Disability Network helps address these gaps by assisting in the development of effective strategies to facilitate the implementation of the NDIS roll-out, sharing current and planned activities underway across the region and strengthening its role in advocacy.

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 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.(89) Reasons for provider dissatisfaction included but weren't limited to lack of pathways for Aboriginal and Torres Strait Islander people and those from culturally and linguistically diverse communities; issues around function versus diagnosis, and issues around the plan regarding approval, delays, eligibility, adequacy and funding allocation.

Table 36: Percent dissatisfied of access to NDIS by disability type, 2018

Disability type	% dissatisfied
Psychosocial	77%
Intellectual	62%
Sensory	65%
Physical	58%

Source: CESPHN NDIS Survey on Patient/ Client Satisfaction, 2018

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.(92)

Intellectual disability

Approximately 10,483 persons in the CESPHN region have been identified with intellectual disability (ID), which is more than any other type of disability.(90) Persons with 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, and respiratory. Persons with ID have different challenges compared to those with other types of disabilities. 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.(91)

CESPHN is working in partnership with Sydney and South Eastern Sydney Local Health District regarding the new Specialised Intellectual Disability Health Teams. This partnership aims to implement best practice strategies in providing advice and support to GPs in delivering quality experiences of care for people with intellectual disability, their families and carers in their specific communities.

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. For further information, please refer to Section 7.5 Stepped care and service navigation – Psychosocial support.

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.(63)

Further to that, Aboriginal and Torres Strait Islander people are overrepresented in the criminal justice system where many of those living with disability are often not evaluated and cared for appropriately. A 2015 health survey of young people in custody demonstrated that:

- 24% of Aboriginal and Torres Strait Islander young people had a diagnosed intellectual disability, compared to the 8% of Non-Aboriginal young people.
- 40% of Aboriginal and Torres Strait Islander young people were in the borderline range for intellectual disability.
- 57% of Aboriginal and Torres Strait Islander young people had severe difficulties in core language skills, while 84% had difficulty in reading comprehension.(92)

Disability workforce capacity and development

A CESPHN survey was completed in late 2018 by health providers and community organisations to identify strategies to assist health professionals better support people with disability as the NDIS is rolled out. 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 the NDIS. Furthermore, only 64% have participated in NDIS education activities, while 74- 83% of respondents expressed high interest in attending educational events.(89)

Four key implications identified from the Survey report include the need for:

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.

5.4. 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 numbers of people experiencing homelessness were in Sydney Inner City (4,979), followed by Strathfield-Burwood-Ashfield (2,070) and Canterbury (1,295).(19)

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.(93)

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.

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.(93)

There are 4,581 people living in boarding houses within the CESPHN region, equating to 67% of the NSW boarding house population. The total number for NSW is 6,853 people.(19) Most boarding house residents are male (82%). Many have chronic conditions with comorbidities, including high rates of mental health conditions (59%) and 12% identify as Aboriginal and/or Torres Strait Islander.

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 organisations 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.

CESPHN is currently working on an intersectoral homelessness health strategy with the South Eastern Sydney Local Health District, St Vincent's Health Network, Department of Communities and Justice and City of Sydney. This strategy identifies shared strategic priorities for improving health outcomes among people experiencing homelessness.

5.5. Lesbian, Gay, Bisexual, Transgender, Intersex and Queer communities

People who identify as LGBTIQ experience a significant amount of stigma and discrimination which can have an impact on their health outcomes and health service encounters, particularly in relation to mental health. It is important to note that there is considerable diversity within the LGBTIQ community with specific health needs and health service needs.

Mental health

Although many people who identify as LGBTIQ live healthy and happy lives, data and literature show that LGBTIQ people experience higher rates of distress, higher rates of diagnosed mental health disorders, and are at a higher risk of death by suicide in comparison to the general population, and is directly the result of experiences of stigma and discrimination. Trans and gender diverse people have higher rates of psychological distress, diagnosed mental health disorders, and suicide attempts in comparison to LGB people. This cohort may also experience stigma and discrimination from non-trans LGB people. People with an intersex variation can experience poor mental health outcomes as a result of medical interventions.(94)

Trans and gender diverse people

The location of sexual health clinics and GPs offering gender affirming hormonal care and specialist services such as the Gender Centre and ACON, create a central point in the CESPHN region where trans and gender diverse (TGD) individuals across NSW may come to access services and supports.

In 2019, there was a sudden loss of access to specialist care for hormone therapy from a Sydney-based endocrinologist. GPs in the CESPHN region have noted an increase in the number of TGD patients seeking hormone therapy in the primary health care setting and have expressed willingness to prescribe and monitor hormone therapy for TGD patients but have raised the need for training and guidelines.

LGBTIQ access to general practice

LGBTIQ people can experience barriers to health care services as a result of discrimination and a lack of understanding of the specific health needs, which may prevent this cohort from receiving appropriate care and achieving good health outcomes.

To improve access for people identifying as LGBTIQ, CESPHN works 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.

5.6. People in contact with the criminal justice system

NSW has the largest prisoner population with 13,553 persons in custody in the June quarter 2019.(24) Prisoners in Australia are predominately male (80%), with an over representation of Aboriginal and/or Torres Strait peoples (28%). 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.(25)

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
- 86% were smokers
- 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%)
- 60% of prisoners have been diagnosed with a mental illness; of these, 55% were diagnosed between the ages of 18-24, and almost half reported 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 suffered from schizophrenia (29%) compared to 1% of the general population, and approximately 23% of the prison population were on psychotropic medications

- 18% had made at least one suicide attempt at some stage throughout their lifetime.(95)

Upon release many ex-prisoners face barriers accessing basic services. A vast number of prisoners are released into society without identification or Medicare cards, and with little support or planning, especially those who are released without parole.(96) 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. Other vulnerable groups include people who have a cognitive impairment, people who have a mental illness, Aboriginal and/or Torres Strait Islander people, 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.

5.7. People experiencing family and domestic violence

In 2018-19, there were 5,270 domestic violence related assault incidents recorded in the CESPHN region.(97) Sydney LGA ranked highest in the CESPHN region with 472.7 recorded incidents per 100,000 population and ranked 52 out of 120 LGAs in NSW.

Table 37: Recorded domestic violence assault incidents in CESPHN region by LGA, July 2018 to June 2019

LGA	No. of incidents	Rate per 100,000 population	CESPHN Rank	NSW Rank
Sydney	1,101	472.7	1	52
Bayside	605	355.7	2	70
Canterbury-Bankstown	1,187	322.5	3	77
Strathfield	133	303.6	4	79
Georges River	469	300.1	5	81
Randwick	406	267.1	6	91
Sutherland Shire	562	247	7	93
Waverley	165	225.1	8	96
Inner West	398	204.6	9	99
Burwood	60	152.6	10	108
Woollahra	83	142	12	112
Canada Bay	101	107.3	12	118

Source: NSW Bureau of Crime Statistics and Research 2019

GPs and other primary health care providers play a key role in identifying, intervening and treating people who are at risk of or affected by domestic violence.(98) In a qualitative study conducted in Australia, women were two times more likely to disclose domestic violence to their GP if asked.(99) Despite this, few women in the study were asked by their GPs if they were affected by domestic violence.

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.

5.8. 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. 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%).(3)

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.(100)

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.(1) These factors also drive the changing demographics of apartment dwellers in the CESPHN region, with implications for health and service needs. The biggest demographic trend in apartment living is an increase in children residing in apartments.

Analysis of the latest Census data show that families with children under the age of 15 comprise 25% of Sydney's apartment population. This shift in demographics has implications for child health needs and child health services.(1)

There are child health and development issues that could plausibly be impacted by high-rise apartment living. A review of 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. 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 hinder the sort of play crucial to a child's cognitive and language development.(101)

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. Some parents in attendance suggested a need for more professional development for local GPs in early child health. 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.(102)

Planning for health services

Local health districts 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.

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.

6. Mental health

Key points

- The rate of people experiencing high or very high psychological distress in the CESPHN region was lower than NSW (9.7 compared to 11.03 ASR per 100). However, areas such as Canterbury had much higher rates (12.62 ASR per 100).
- Females had a higher prevalence of self-reported mental illness. Leichhardt had the highest rate of self-reported mental illness. Canterbury had the highest rates of self-reported comorbid mental health and chronic illness.
- 151 people died by suicide in 2017. Males were more likely to die by suicide than females.
- 1,281 hospitalisations were due to self-harm in 2017-18, with an over-representation of females and young adults aged 15-24 years.
- 234,054 people accessed Medicare-subsidised mental health services in 2017-18, increasing by 27.5% from 2013-14. Females access these services more than males.
- Leichhardt had the highest rate of Medicare-subsidised mental health services across all service types (73.21 services per 100 people), and Canterbury had the lowest (33.09 services per 100 people.
- In 2017-18 there were 15,906 separations and 243,850 patient days for mental health hospitalisations.
- There is a paucity of psychologists and psychiatrists working in private practice in the lower socioeconomic areas in our region.
- 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 are a range of low intensity services available to the CESPHN community, including in person, online and phone services.
- The rates of access to psychological therapies were low for Canterbury for both Medicare-subsidised and CESPHN-commissioned therapies despite having the highest levels of psychological distress.
- People living with mental illness have poorer physical health compared to the general population and are more likely to die prematurely from causes relating to physical illnesses.
- There is currently a waiting list for a CESPHN commissioned program for people experiencing severe mental illness who require care coordination. This suggests a need for more care coordination support services for people experiencing severe mental illness in the community.
- There is low access to free or low cost psychiatric care in the region.
- There is a service gap for people with psychosocial disability who are eligible for the NDIS but require additional support and assistance. Another service gap is for people who are eligible for the NDIS but require care coordination that was previously provided by programs such as Partners in Recovery.

6.1. Prevalence of mental health issues

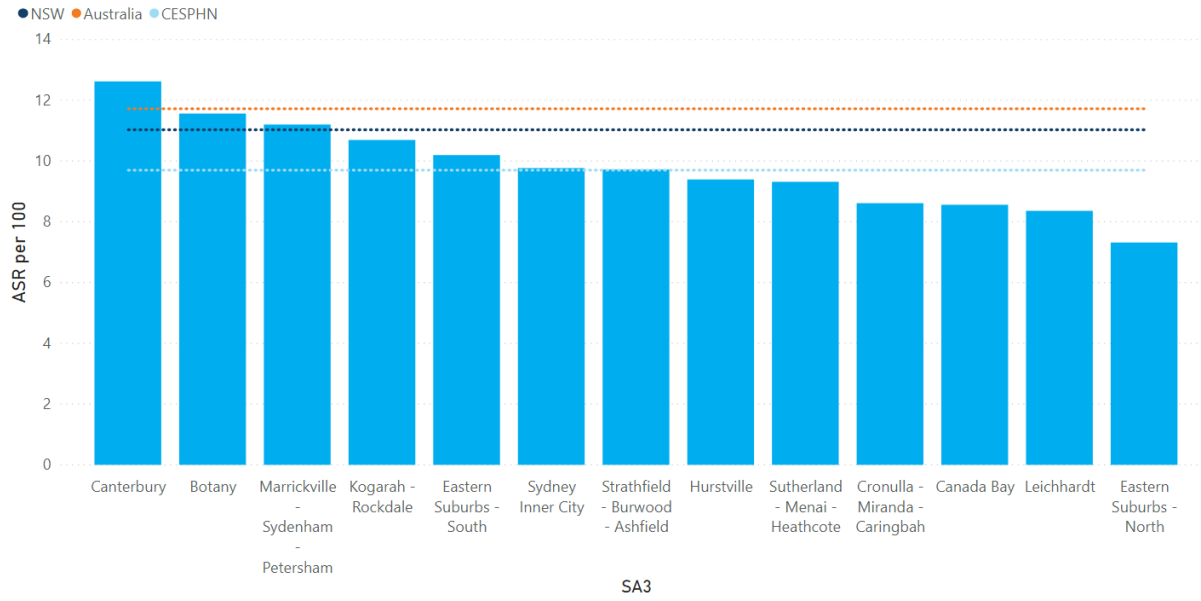
Psychological distress

Psychological distress is an indication of mental health and wellbeing based on self-reported levels of fatigue, depression, nervousness and anxiety. Whilst a person with high levels of psychological distress may not necessarily be diagnosed with a mental illness, it may have a negative impact on a person's wellbeing.

In 2014-15, the rate of people experiencing high or very high psychological distress in the CESPHN region was 9.7 ASR per 100 people, which is below the NSW rate (11.03 ASR per 100) and the national rate (11.72 ASR per 100).(28)

Canterbury (12.62 ASR per 100), Botany (11.56 ASR per 100), and Marrickville-Sydenham-Petersham (11.2 ASR per 100) all had rates of psychological distress higher than the NSW rate.

Figure 50: Persons 18 years and over with high or very high psychological distress (ASR per 100) by SA3, 2014-15



Source: PHIDU 2019

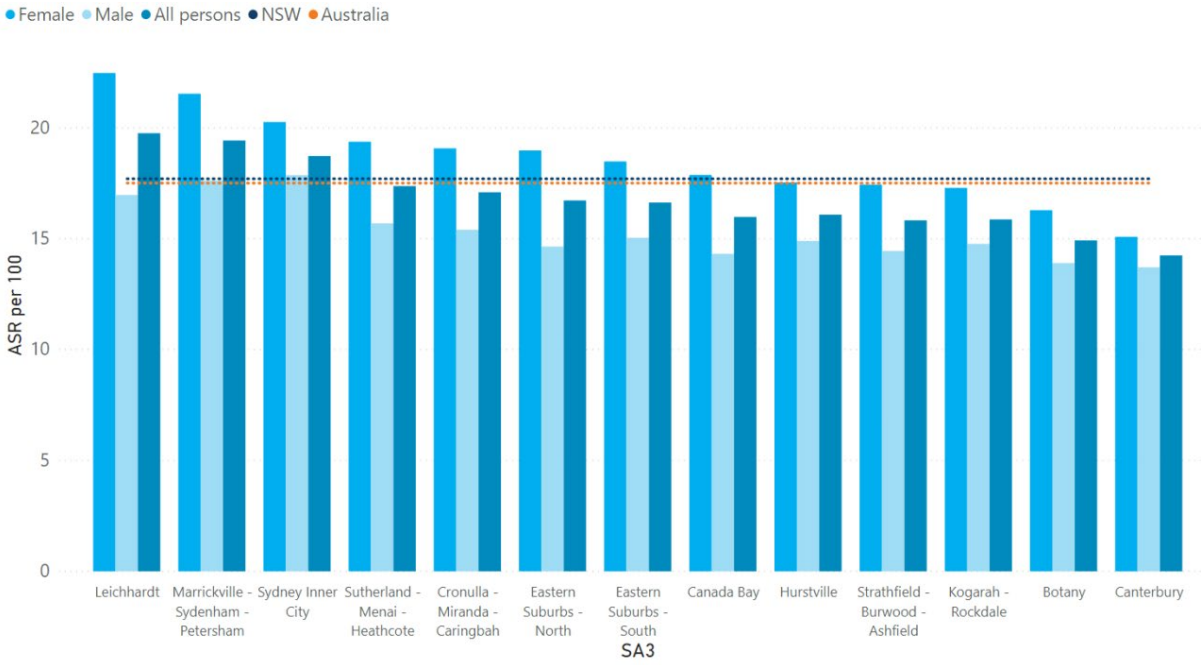
Mental health in adults

In 2014-15, the estimated prevalence of mental health and behavioural problems in the CESPHN region was 16.8 ASR per 100, which is lower than the NSW (17.7 ASR per 100) and national (17.51 ASR per 100) rates.(28)

The SA3s with the highest prevalence of mental health and behavioural problems is Leichhardt (19.76 ASR per 100), Marrickville-Sydenham-Petersham (19.43 ASR per 100), and Sydney Inner City (18.73 ASR per 100). Females had higher prevalence rates of mental and behavioural problems in comparison to males across all SA3s in the CESPHN region.

This indicator is based on a person self-reporting that they were told by a doctor or nurse that they had mental health and behavioural problems that were current and long term. It therefore does not capture persons who have not sought help for their mental health.

Figure 51: Persons 18 years and over with mental and behavioural problems (ASR per 100) by SA3 and gender, 2014-15

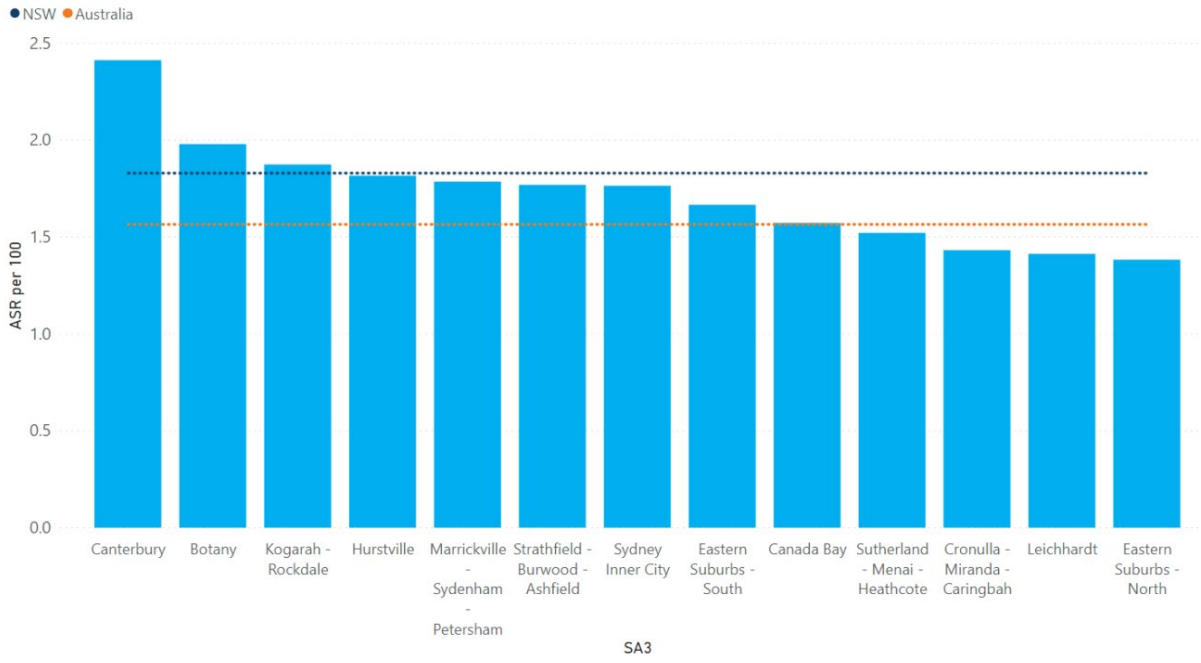


Source: PHIDU 2019

Comorbid mental health and chronic illness

In 2014-15, the estimated prevalence rates of persons with type 2 diabetes and comorbid mental health and behavioural problems varied considerably across SA3s. Canterbury (2.41 ASR per 100), Botany (1.98 ASR per 100) and Kogarah-Rockdale (1.88 ASR per 100) had prevalence rates higher than both the NSW (1.83 ASR per 100) and national (1.57 ASR per 100) rates.(28)

Figure 52: Persons aged 18 years and over with mental and behavioural problems and type 2 Diabetes Mellitus (ASR per 100) by SA3, 2014-15

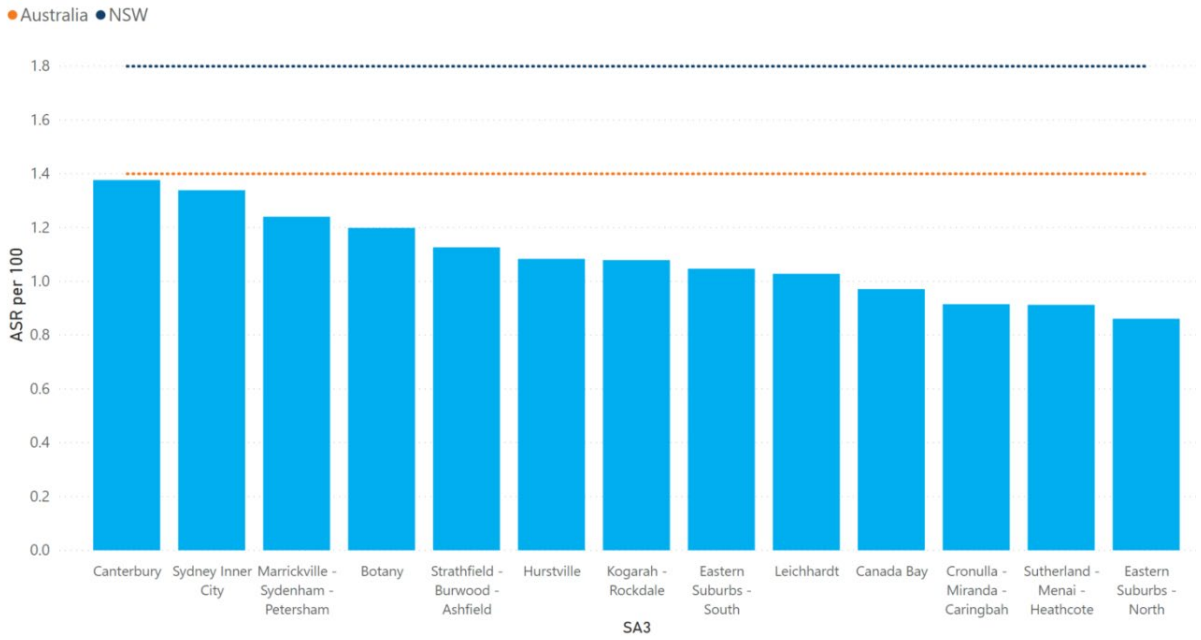


Source: PHIDU 2019

The estimated prevalence rates of heart, stroke, and vascular disease and comorbid mental and behavioural problems also varied across SA3s. In 2014-15, Canterbury (1.38 ASR per 100), Sydney Inner City (1.34 ASR per 100) and Marrickville-Sydenham-Petersham (1.24 ASR per 100) had the highest prevalence rates in the CESPHN region.(28)

Despite having the lowest prevalence rates of mental and behavioural illness, Canterbury had the highest estimated prevalence of comorbid mental and behavioural problems and chronic illness.

Figure 53: Persons aged 18 years and over with mental and behavioural problems and heart, stroke, and vascular disease, ASR per 100 by SA3, 2014-15



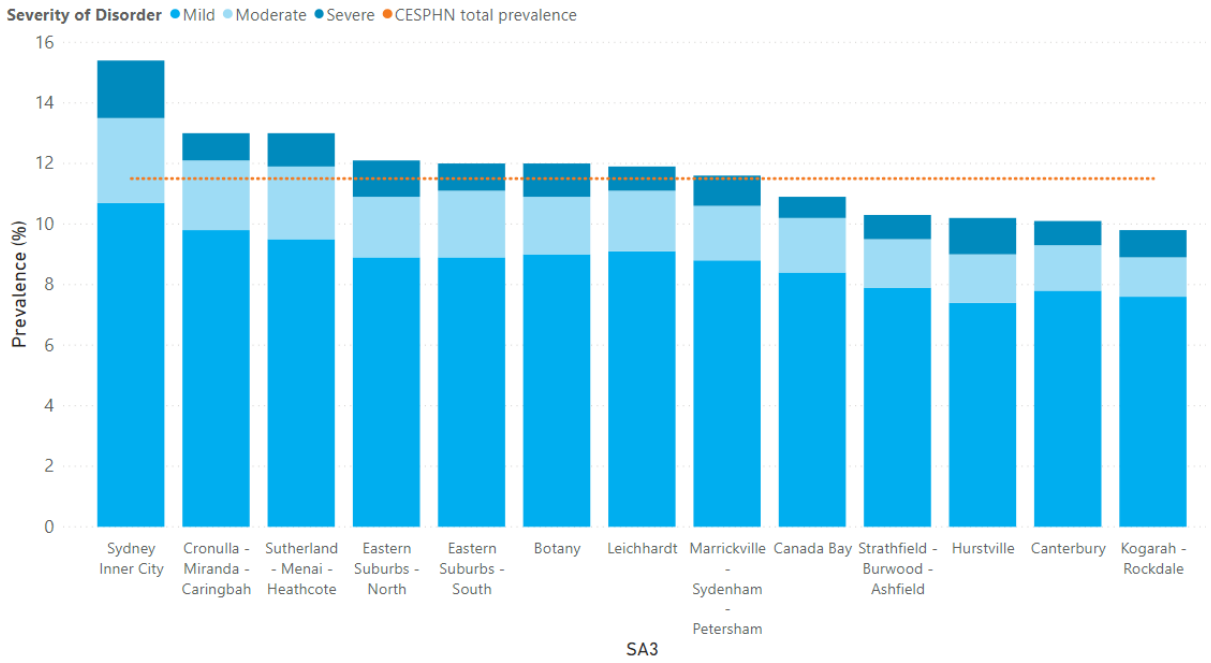
Source: PHIDU 2019

Mental health in children and young people

The synthetic prevalence estimates of mental health issues among 4-17 year-olds in the CESPHN region is 11.8%, which is lower than the national rate (14.1%) across all severity levels.(103) . However, there are SA3 areas where the prevalence estimates are higher:

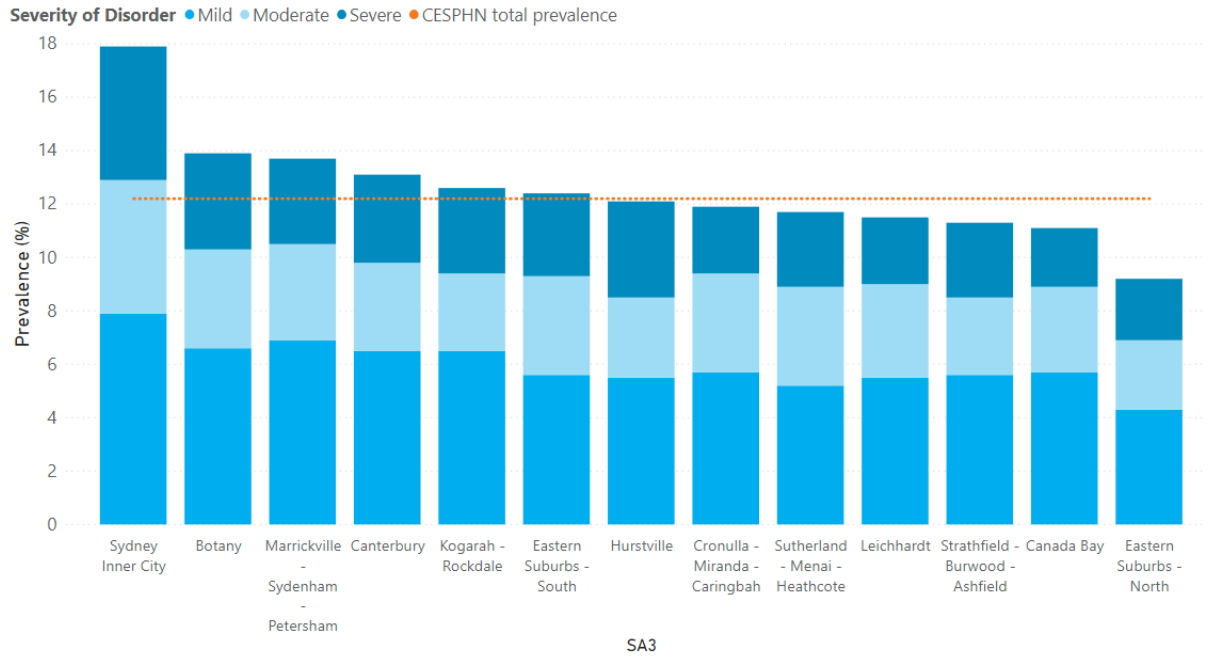
- For children aged 4-11 years old:
    - Sydney Inner City (15.4%), Cronulla-Miranda-Caringbah (13.0%) and Sutherland-Menai-Heathcote (12.9%) had higher prevalence estimates than the CESPHN rate (11.5%).
- For young people 12-17 years old:
    - Sydney Inner City (18.0%), Botany (14.0%), and Marrickville-Sydenham-Petersham (13.7%) had higher prevalence estimates than the CESPHN rate (12.2%).
- Children and young people aged 4-17 years old with moderate mental health issues:
    - Sydney Inner City (3.7%), Cronulla-Miranda-Caringbah (2.9%) and Sutherland-Menai-Heathcote (2.9%) had higher prevalence estimates than the CESPHN rate (2.5%).
- Children and young people aged 4-17 years old with severe mental health issues:
    - Sydney Inner City (3.1%), Hurstville (2.3%) and Botany (2.1%) had higher prevalence estimates than the CESPHN rate (1.8%).

Figure 54: Prevalence of mental health illness in children aged 4-11 years, by severity of disorder and SA3, June 2013 to April 2014



Source: Young Minds Matter 2016

Figure 55: Prevalence of mental health illness in young people aged 12-17 years, by severity of disorder and SA3, June 2013 to April 2014

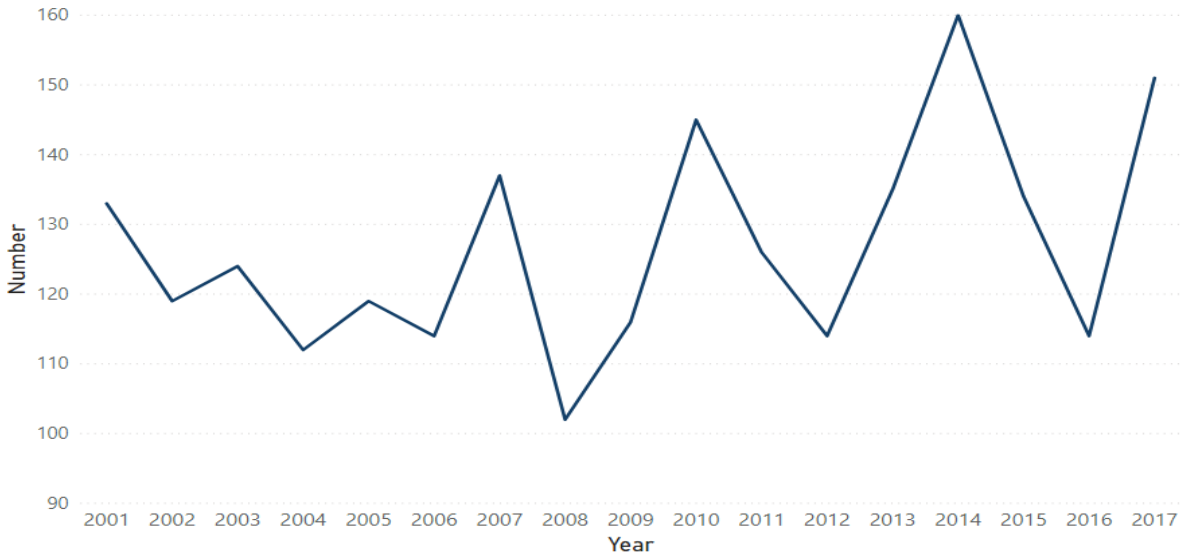


Source: Young Minds Matter 2016

Suicide

In 2017, there were 151 deaths by suicide in the CESPHN region, which is a 32% increase from the previous year.(33) Suicide rates in the CESPHN region have fluctuated over the last ten years, with the lowest recorded number of deaths by suicide in 2008 (102 deaths) and the highest recorded in 2014 (160 deaths).

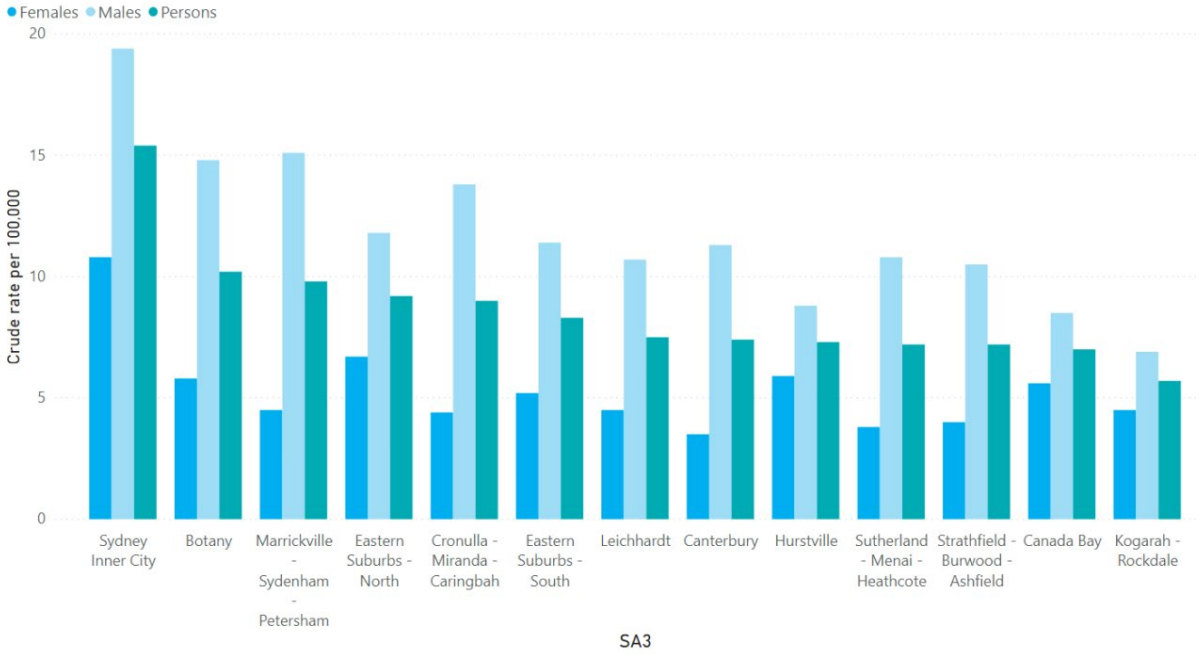
Figure 56: Number of people who died by suicide in the CESPHN region, 2001 to 2017



Source: HealthStats NSW 2019

Between 2008 and 2016, the SA3s with the highest rate of suicide were Sydney Inner City (15.4 per 100,000), Botany (10.2 per 100,000) and Marrickville-Sydenham-Petersham (9.8 per 100,000). Across all SA3s, there was a higher rate of males who died by suicide.(104)

Figure 57: Suicides per 100,000 population, by gender and SA3, 2008-2016 (pooled)



Source: NSW Mental Health Commission 2018

Within Sydney Inner City, the 65-74 year age group had the highest suicide rate (32.6 per 100,000 people). Other notable cohorts were the 75+ age group in Canterbury (24.1 suicides per 100,000 people) and Eastern Suburbs-North (23.6 suicides per 100,000 people).(104)

Table 38: Rate of suicides per 100,000 population, by age group and SA3, 2008-2016 (pooled)

	Age group (years)						
SA3	15-24	25-34	35-44	45-54	55-64	65-74	75+
Botany	19.7	12.6	15.3	N/A	N/A	N/A	N/A
Canada Bay	N/A	6.3	7.7	10.5	13	N/A	14.2
Canterbury	4.9	9.9	8.7	9.1	6.9	8.4	24.1
Cronulla - Miranda - Caringbah	5	10.4	8.5	14.8	18.4	9.5	9.1
Eastern Suburbs - North	N/A	5.3	9	17.8	16.5	11.6	23.6
Eastern Suburbs - South	5.9	8.2	10.9	13.3	10.2	6	17.2
Hurstville	6.4	7	10.6	7.8	8	15.4	10.3
Kogarah - Rockdale	4	7.4	6.8	8	6.4	5.7	9.1
Leichhardt	N/A	7.4	10.4	13	N/A	15.6	N/A
Marrickville - Sydenham - Petersham	10.5	10.4	13.2	12.6	15.2	N/A	N/A
Strathfield - Burwood - Ashfield	7.8	5.2	11	11.6	3.9	9.5	13.5
Sutherland - Menai - Heathcote	6.6	12.4	11.1	5.6	8.2	6.7	16.8
Sydney Inner City	7.2	9.2	25.4	25.2	22.3	32.6	27.8

Notes: N/A – not applicable, or not available, or nil/rounded to zero.

Source: NSW Mental Health Commission 2018

There is limited data on specific cohorts within CESPHN that more likely to die by suicide, however the following are cohorts known to be more vulnerable to suicidal ideation:

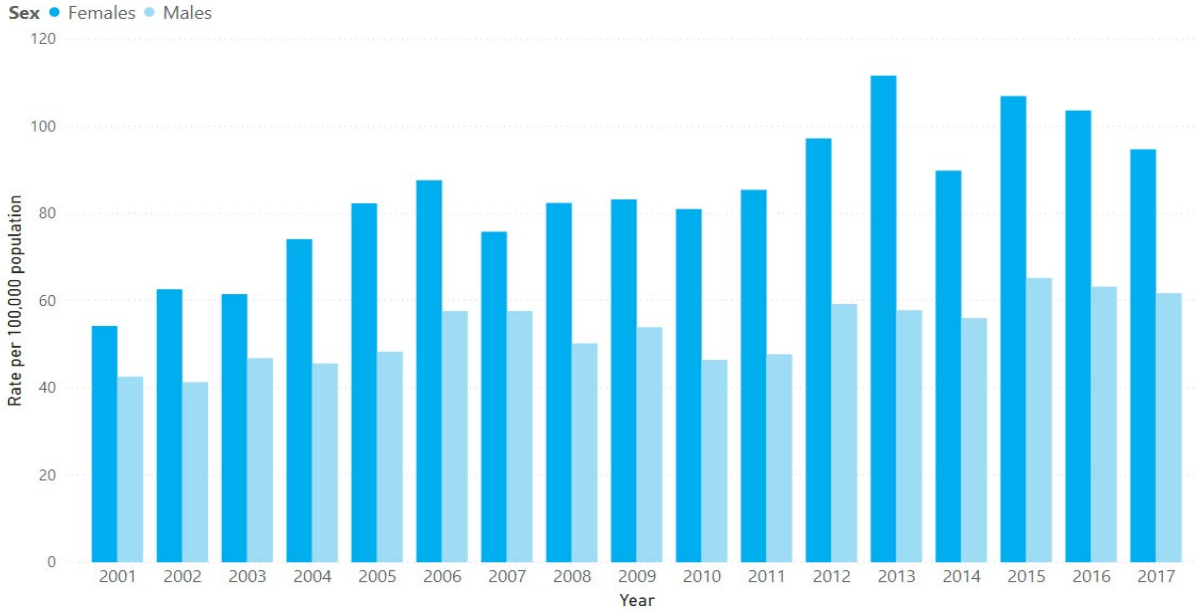
- Aboriginal and/or Torres Strait Islander peoples (see Aboriginal and/or Torres Strait Islander peoples section).
- LGBTIQ: LBG people aged 16 and over are six times more likely to have thoughts of suicide, and trans people aged 18 year and over are 18 times more likely to have thoughts of suicide in comparison to the general population.(94)

Self-harm hospitalisations

In 2017-18, there were 1,281 hospitalisations due to self-harm in the CESPHN region at a rate of 78.1 hospitalisations per 100,000 population. Females were more likely to be hospitalised than males.(33)

There has been an upward trend in hospitalisation rates for young adults, particularly young females, between 2010 and 2017.

Figure 58: Rate of self-harm hospitalisations per 100,000 population in the CESPHN region, by sex, 2001 to 2017



Source: HealthStats NSW 2019

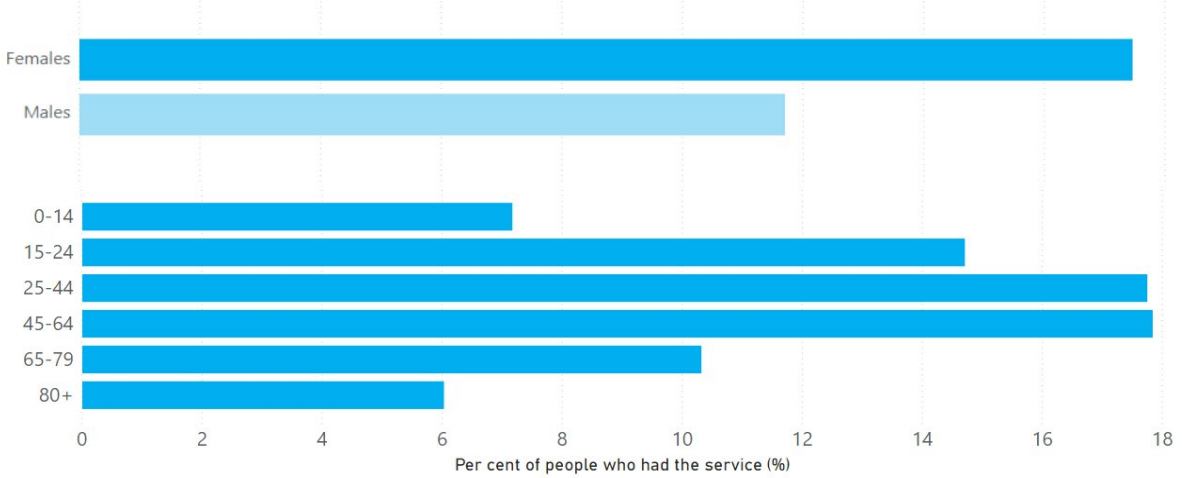
6.2. Mental health service utilisation

Primary care encounters for mental health

In 2017-18, there were 234,054 people (14.2% of the population) who accessed Medicare-subsidised mental health services in the CESPHN region. This is an increase of 50,454 people (27.5%) from 2013-14.(36)

These services were accessed by females more than males – 188,231 compared to 123,172 – and those aged 45-64 years.

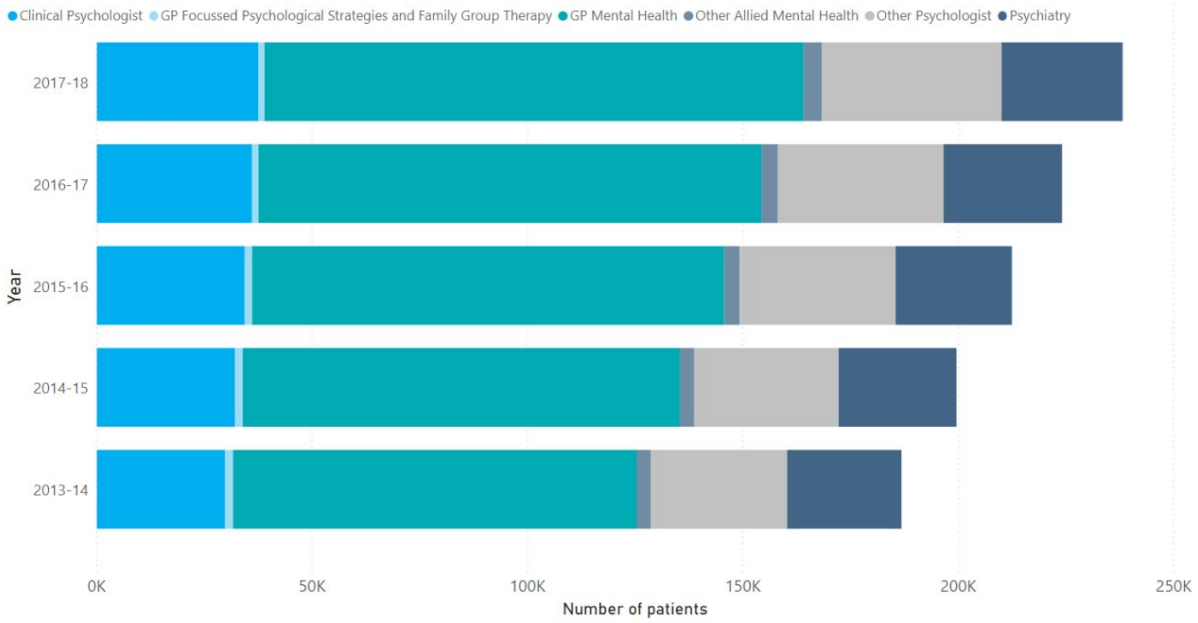
Figure 59: Percentage of people accessing Medicare-subsidised mental health services by patient demographics, 2017-18



Source: AIHW 2019

The biggest increase has been related to the number of people receiving GP Mental Health Treatment, from 93,704 people in 2013-14 to 125,095 people in 2017-18 (33.5% increase).(36) This is also reflected in the survey results from the 2019 RACGP Health of the Nation report which found that for the third year in a row, psychological issues was the most common health presentation to general practice.(105)

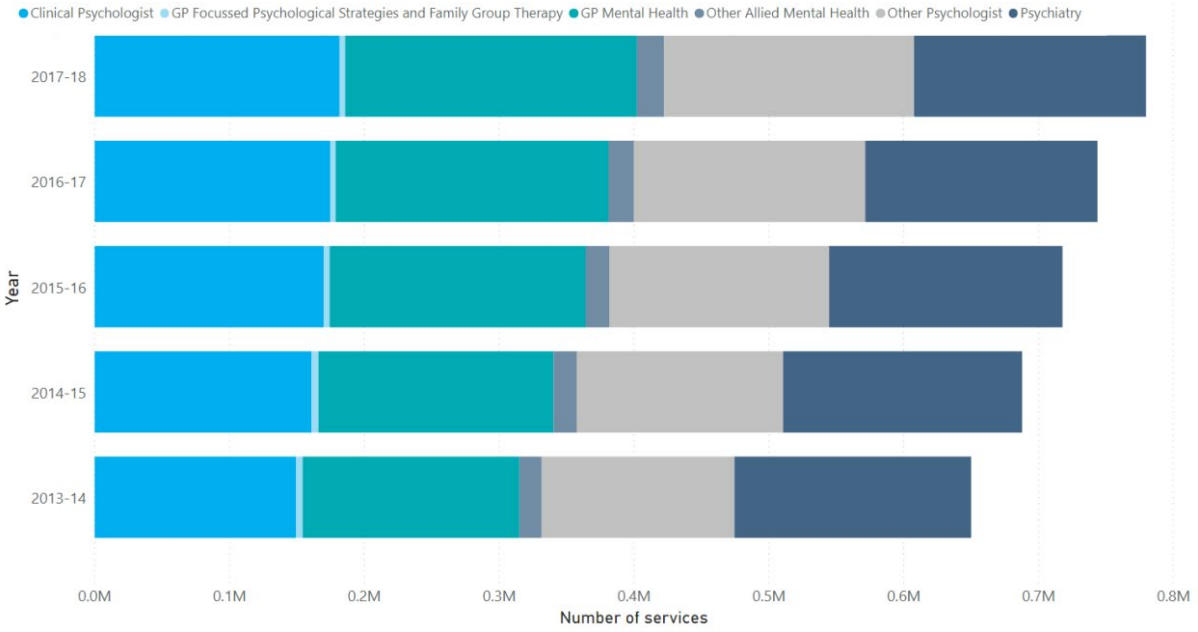
Figure 60: Number of people accessing Medicare-subsidised mental health services by service type, 2013-14 to 2017-18



Source: AIHW 2019

There was also a corresponding increase in the number of Medicare-subsidised mental health services, increasing from 650,066 services in 2013-14 to 779,728 services in 2017-18 (19.9% increase).(36)

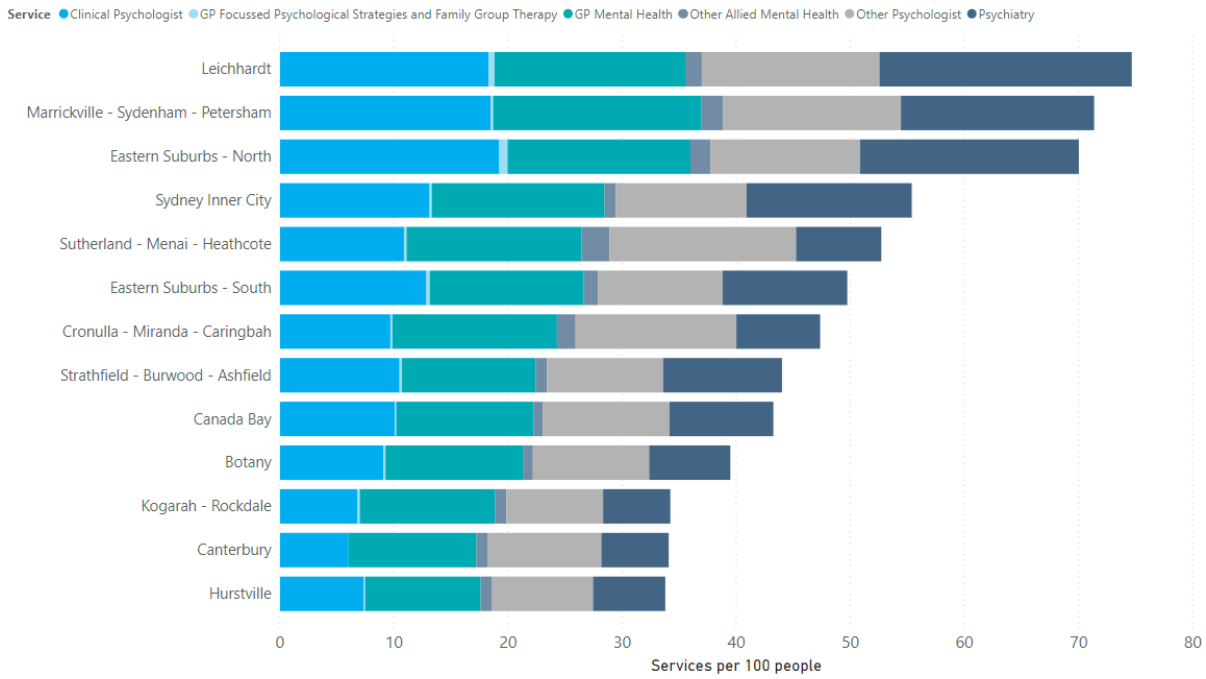
Figure 61: Number of Medicare-subsidised mental health services by service type, 2013-14 to 2017-18



Source: AIHW 2019

There are considerable variations in the number of Medicare-subsidised mental health services per 100 persons between SA3s. Leichhardt (74.66 services per 100 people), Marrickville-Sydenham-Petersham (71.36 services per 100 people), and Eastern Suburbs-North (70.02 services per 100 people) received the highest number of services across all service types. Canterbury (34.08 services per 100 people), Hurstville (33.78 services per 100 people) and Kogarah-Rockdale (34.22 services per 100 people) received the lowest number of services.(36)

Figure 62: Medicare-subsidised mental health services per 100 people by SA3, 2017-18

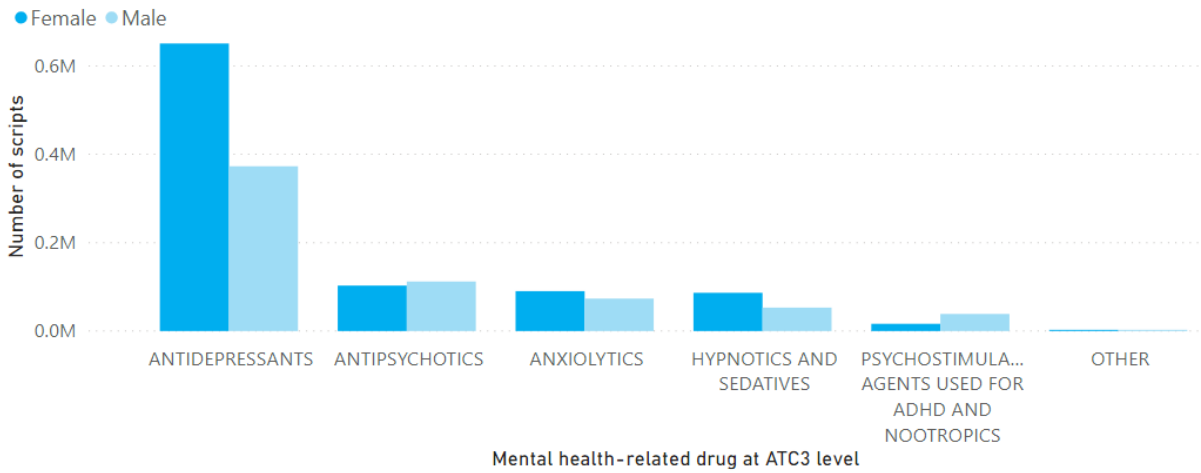


Source: AIHW 2019

Mental health related prescriptions

In 2015-16, antidepressants were the most prescribed mental health-related medication in the CESPHN region (1,023,720 scripts in total). Females received 650,787 scripts for antidepressants, which is 75.5% more than the number of antidepressant scripts for males (372,933 script). For all other mental health-related drugs there were no large differences between the genders.(106)

Figure 63: Number of scripts for selected mental health-related drugs at ATC3 level by gender, 2015-16

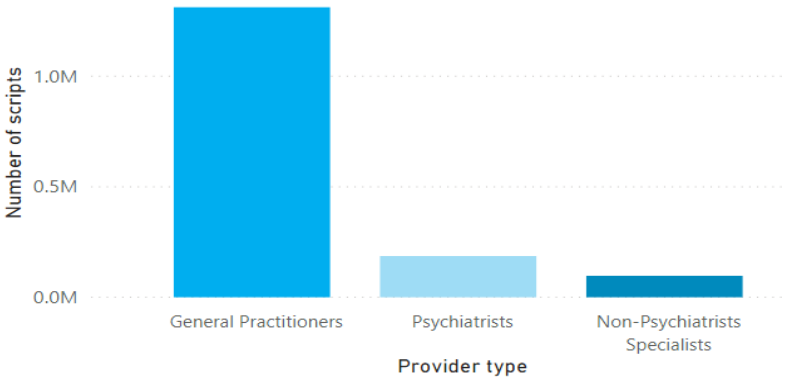


Source: PBS 2017

In 2015-16, general practitioners were the biggest prescribers of mental health related medications (1,312,390 scripts) in the CESPHN region, followed by psychiatrists (186,646 scripts). This reflects the number of mental health services provided by those professions respectively.

These data relate to prescription medicines through the Pharmaceutical Benefits Scheme (PBS) and the Repatriation Pharmaceutical Benefits Scheme (RPBS). It does not include private prescriptions, over the counter medicines or medicines supplied to public hospital inpatients.

Figure 64: Number of mental-health related scripts by provider, 2015-16

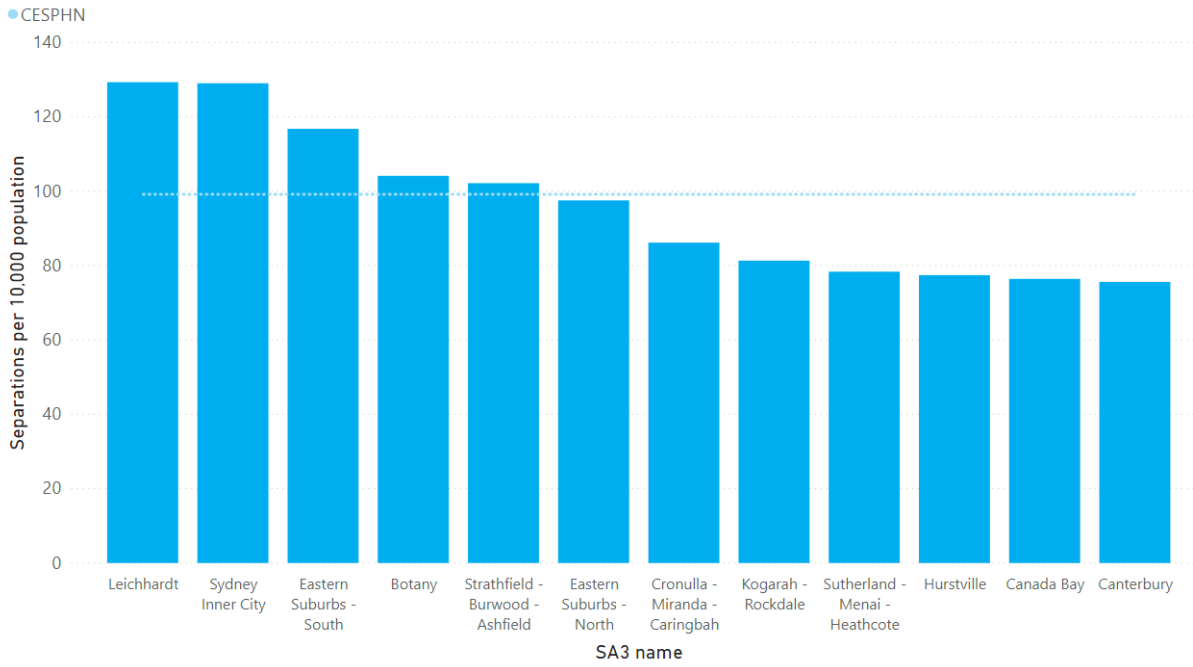


Source: PBS 2017

Hospitalisations for mental health conditions

In 2017-18, there was 15,906 separations and 243,850 patient days for mental health conditions in the CESPHN region (99.2 separations per 10,000 population). Leichhardt, Sydney Inner City and Eastern Suburbs-South had the highest number of separations per 10,000 population.(107)

Figure 65: Mental health condition hospital separations per 10,000 population by SA3, 2017-18

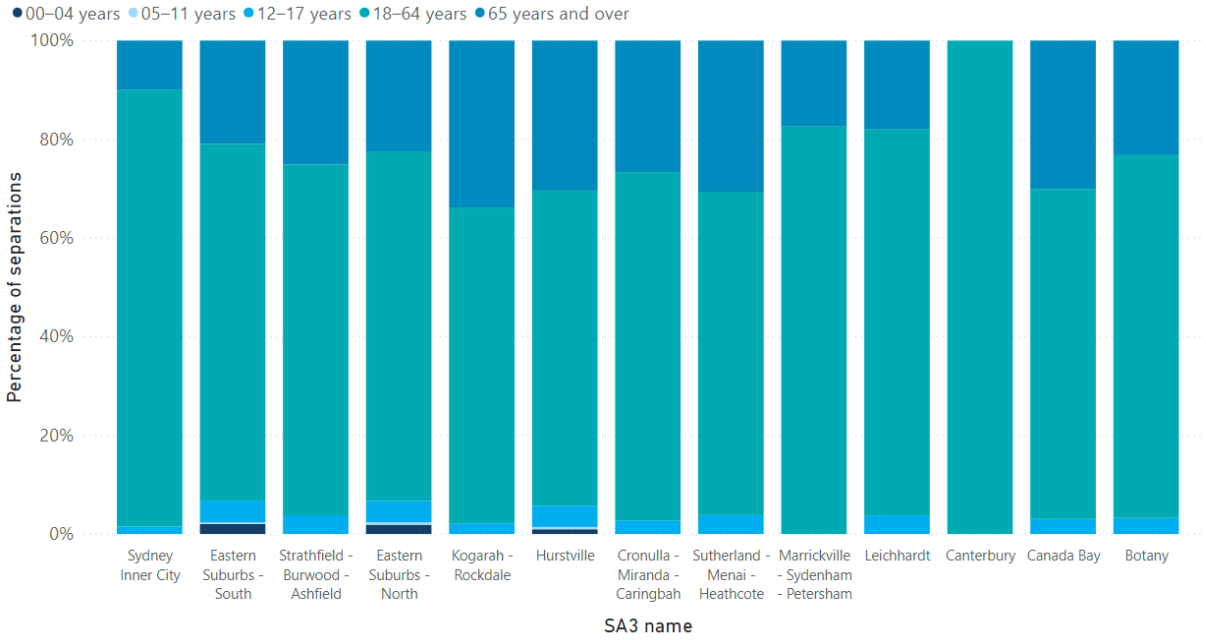


Source: AIHW 2019 Mental health services

In 2017-18, there were some variation across SA3s in the proportion of age groups that were admitted overnight for a mental health separation. Eastern Suburbs-South and Eastern Suburbs-

North had the highest proportion of separations for children and young people aged 0-17 years in comparison to other SA3s (6.8% and 6.71% respectively). Kogarah- Rockdale had the highest proportion of separations for the 65 years and over age group (33.8%). For Canterbury there were no young people or people aged 65 years and over admitted overnight for mental health.

Figure 66: Mental health hospital separations by SA3 and age group, 2017-18



Source: AIHW 2019 Mental health services

6.3. Mental health workforce

In 2017, the mental health workforce in the CESPHN region included 1,460 mental health nurses working clinically across multiple job settings, 1,187 psychologists working in private practice and general practice, and 202 psychiatrists working in private practice.(108)

Table 39: Number of nurses in mental health across all job settings, 2017

Job Setting	No. of nurses in mental health	Clinical FTE	Clinical FTE per 100,000
Hospital	1,101	1,032	64.1
Community health care service	207	182	11.3
Correctional service	37	36	2.2
Residential health care facility	25	23	1.4
Outpatient service	26	21	1.3
Other government department or agency	14	12	0.7
Other	19	12	0.7
Independent private practice	15	9.1	0.6
Other private practice	9	6.8	0.4
GP practice	3	3	0.2
CESPHN	**1,460**	**1,336.9**	**91.1**

Source: Health Workforce Data 2017

Sydney Inner City and Eastern Suburbs-North had the highest number of psychologists and psychiatrists in the CESPHN region.(108)

The concentration of psychologists and psychiatrists in Sydney Inner City is likely due to its central location for work and study, while the concentration of psychologists and psychiatrists in Eastern Suburbs-North in comparison to other SA3s, particularly Canterbury, may reflect access issues associated with cost. Sutherland-Menai-Heathcote and Botany have no psychiatrists working clinically in private practice, indicating poor local access to psychiatric services in those regions.

Table 40: Number of psychologists working in private practices and general practices by SA3, 2017

SA3	No. of psychologists	Clinical FTE	Clinical FTE per 100,000
Sydney Inner City	433	249.8	104.3
Eastern Suburbs - North	209	120.7	87.8
Leichhardt	88	47.5	79.4
Cronulla - Miranda - Caringbah	70	42.6	36.9
Marrickville - Sydenham - Petersham	37	19.2	32.9
Eastern Suburbs - South	90	47.4	31.2
Canada Bay	36	24.5	26.9
Sutherland - Menai - Heathcote	49	27.1	24.3
Strathfield - Burwood - Ashfield	63	35.3	21.7
Hurstville	39	23.9	17.7
Kogarah - Rockdale	35	22.7	15.2
Botany	13	7.1	14.0
Canterbury	25	14.7	10.2
CESPHN	**1,187**	**682.5**	**42.4**

Source: Health Workforce Data 2017

Table 41: Number of psychiatrists working in private practice by SA3, 2017

SA3	No. of psychiatrists	Clinical FTE	Clinical FTE per 100,000
Leichhardt	22	15.4	25.7
Eastern Suburbs - North	38	32.7	23.8
Sydney Inner City	71	54.7	22.8
Strathfield - Burwood - Ashfield	28	27.9	17.1
Marrickville - Sydenham - Petersham	4	3.5	6.0
Eastern Suburbs - South	13	7.1	4.7
Cronulla - Miranda - Caringbah	6	4.8	4.2
Kogarah - Rockdale	7	6.2	4.1
Canada Bay	4	3	3.3
Hurstville	3	3	2.2
Canterbury	3	3	2.1
Sutherland - Menai - Heathcote	3	0	0.0
Botany	0	0	0.0
CESPHN	**202**	**161.3**	**10.0**

Source: Health Workforce Data 2017

6.4. Stepped care and service navigation

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.

Low intensity mental health services for early intervention

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.

There are a range of low intensity mental health services available across the CESPHN region. A 2017 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.

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 commissions the following low intensity 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.

Access to low intensity services

CESPHN commissioned Beyondblue's low intensity NewAccess Coaching in August 2017 and despite the estimated prevalence of low intensity mental health needs 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

Identification of 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. 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, Aboriginal and/or Torres Strait Islander peoples and CALD populations.

Service utilisation analysis of CESPHN's commissioned NewAccess coaching service, indicate that 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 remain 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 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.

Psychological therapies for underserviced groups

Priority groups within the CESPHN region identified as having barriers to accessing Medicare based psychological intervention are: women in the perinatal period, 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, older persons including residents of aged care facilities, and children and young people.

People on low incomes

Socioeconomic disadvantage is directly related to psychological distress and increases the risk of developing mental illness. Financial hardship has also been shown to be related to depression, suicide, alcohol and/or drug dependence, and psychotic disorders.(109) Prioritising delivery of psychological therapies to people on low incomes could assist with countering the psychological distress and further disadvantage. The SA2s with the highest proportion of low income households in CESPHN were Lakemba (30%), Wiley Park (27%), and Punchbowl (25%) (110), mapping directly to SA3 Canterbury which has the highest levels of psychological distress in the CESPHN region and also one of the lowest rates of Medicare-subsidised mental health service utilisation. In addition, analysis of CESPHN-commissioned psychological therapy utilisation rates indicates lower utilisation rates for people living in more disadvantaged areas of the region.

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, Strathfield – Ashfield – Burwood, and Kogarah-Rockdale. Canterbury, Hurstville and Kogarah – Rockdale also had the lowest Medicare-subsidised mental health service utilisation, indicating barriers to accessing psychological services.

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.(111) 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.(76) This is likely underestimated due to limited prevalence data. A recent CESPHN survey found that 31% of RACFs had the capacity to provide mental health care for residents with psychotic illness.(112)

Low socioeconomic status is also a potential risk for poor mental health. In the CESPHN region, the SA2s with the highest poverty rates in older persons were Waterloo – Beaconsfield (33.5%), Kensington (31.6%), Redfern – Chippendale (30.3%), Surry Hills (25.6%) and Wiley Park (24.4%) (110).

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 for psychologists to provide visits to RACFs
- Issues with the provision of training for RACF staff such as high turnover.

The following are other mental health needs and issues identified in a 2019 co-design workshop for addressing the mental health needs of people living in RACFs:

- A focus on emotional wellbeing to reduce stigma and increase likelihood of identification of issues
- Environmental factors can limit opportunities to form relationships within RACFs, which can contribute to feelings of loneliness and depression
- Challenges with differentiating between depression, dementia, behavioural and psychological symptoms of dementia, and psychosis
- Challenges with identifying mental health needs in older people from CALD backgrounds, and their willingness to engage with services, particularly if services are not culturally appropriate

Women around the perinatal period

Data on 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.(113)

These risk factors are important considerations as the region has higher (6.9%) than the national (3.5%) percentage of persons that do not speak English well or at all.(6) The top four SA3s that had the largest percentages were: Canterbury, Hurstville, Strathfield-Burwood-Ashfield, and Kogarah-Rockdale. The CESPHN region also has several areas of socioeconomic disadvantage. The top four SA3s in CESPHN that had the most socioeconomic disadvantage are Canterbury, Kogarah-Rockdale, Hurstville and Botany. Canterbury, Kogarah – Rockdale and Hurstville notably had both high levels of CALD groups and socioeconomic disadvantage, suggesting a need for place-based targeting of perinatal mental health services.

People with intellectual disability

People with cooccurring intellectual disability and mental ill health are likely to experience barriers to accessing mental health care. This is due to multiple reasons: people with intellectual disability may have different mental health presentations in comparison to people who do not have an intellectual disability, difficulties with appropriately attributing the person's current state with intellectual disability or ill health, minimally trained and supported workforce to meet the mental health needs of people with intellectual disability, and communication barriers between mental health professionals and people with intellectual disability.(114) In CESPHN there are approximately

10,483 persons with intellectual disability, and although there are no estimates of comorbid mental illness in this cohort, it is likely many in the region have comorbid mental illness.

Primary mental health care for people experiencing severe mental illness

Care coordination

The aim of care coordination is to improve the wellbeing of people experiencing mental illness, particularly for those with severe and complex mental and physical 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.(115) 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.(116)

CESPHN currently commissions a service for people experiencing severe mental illness that provides mental health and psychosocial services in a coordinated way by mental health nurses and peer workers. As at November 2019, there is a waiting list for this program, indicating a continuing need for supports for people experiencing severe mental illness in the region.

Physical health of people experiencing 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. People living with psychosis were more likely to have metabolic syndrome, identify as smokers, and use alcohol heavily in comparison to the general population, and are less likely to in physical activity the general population. In addition, more than 80% of people treated with antipsychotic medication gained gain associated with use of antipsychotic medication.(117) SA3s in the CESPHN region that have higher estimated prevalence of comorbid mental health problems and chronic illness are Canterbury, Sydney Inner City, and Botany.

There is some evidence that people experiencing 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.(118)

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.(118) Given the higher rates of accessing primary care services for this cohort, GPs are well placed to provide care but may require additional training and support to screen and better manage chronic illnesses in people experiencing severe mental illness.

Community consultations have 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 where more support is 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 SVHN. 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. The SVHN 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.

Eating disorders

Eating disorders are serious mental health conditions that are common in young people, particularly young females. A 2019 Mission Australia Youth Survey Report found that 55.2% % of survey respondents with psychological distress were very or extremely concerned about body image.(119) There was also a higher proportion of female respondents who were very or extremely concerned about body image in comparison to male respondents (63.4% versus 33.8%). While 12-29 years is the peak period for onset, eating disorders can affect people throughout the lifespan.(120) It is estimated that eating disorders affect 4% of Australians.(121)

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.(122)

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 diagnoses 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.(122)

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.(123, 124)

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.

With the recent introduction of new MBS items for eating disorders, which includes up to 40 psychological treatment services, and up to 20 dietetics consultations, general practitioners may require support and training to confidently identify people who would benefit from these services.

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. 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.(125)

People with personality disorders typically require longer term treatments than what is available to manage their symptoms and improve everyday 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 (125): 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 (126), 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 2017-18 show that there is inequitable access to psychiatrists in the CESPHN region. The SA3s with the lowest utilisation rates were Kogarah-Rockdale (5.89 services per 100 people), Canterbury (5.90 services per 100 people), and Hurstville (6.33 services per 100 people). These SA3 rates are lower than CESPHN's rate of use (10.73 services per 100 people), and considerably lower than SA3s with the highest rates (Eastern Suburbs – North, 19.16 services per 100 people, and Leichhardt, 22.11 services per 100 people).(36) The SA3s with the highest psychiatrist utilisation rates were high SES SA3s and the SA3s with the lowest psychiatrist utilisation rates were those with relatively more disadvantage.

Furthermore, there are few psychiatrists working in outpatient services in CESPHN for GPs to refer their patients to. In 2017, Health Workforce data shows that there were 6.5 clinical FTE psychiatrists working in outpatient services.(108) This adds to the financial barriers people experiencing severe mental illness encounter when in need of psychiatric services.

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.

Child and Youth Mental Health Services

headspace

From 1 July 2018 to 30 June 2019, there were 21,705 occasions of service provided to 4,600 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 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.(127)

With an increasing number of young people attending headspaces in CESPHN, there has also been a corresponding increase in the number of young people reporting high and very high psychological distress on their first visit. This observation is supported by the Mission Australia seven year youth mental health report 2012-2018 which found a persistent rise in the proportion of young people experiencing psychological distress, rising from 18.7% in 2012 to 24.2% in 2018.(119)

Age and gender

Across the region, females continue to be more likely to access headspace compared to males (60.6% compared to 37.0%, respectively).(127) The rate of young people identifying their gender as 'other' is higher than the national rate, particularly at the Camperdown (3.8%) and Ashfield (3.7%) 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 LGBTIQ (27.4%) compared to the national rate (23.7%) particularly in the Camperdown site (37.9%). 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 (22.4%) than the national rate (10.4%). Rates are highest in Hurstville (37.5%), Ashfield (28.1%) and Bondi Junction (22.0%). This reflects the CALD distribution across the CESPHN region.

headspace centres in the CESPHN region have observed an increase in international students accessing services who tend not to present to headspace centres until they have very high needs. In addition, other health providers in the CESPHN region have raised concerns about higher rates of suicide attempts and deaths by suicide amongst international students. International students experience a range of stressors, such as financial and academic stress, that may impact on their mental health(14), however this cohort tend to have lower rates of mental health service utilisation in comparison to Australian-born students.(128) This may be due to low knowledge of available services, cost, and cultural stigma and shame associated with mental health. Another barrier noted by providers is the misconception that access to mental health services will be included in academic transcript.

Youth homelessness

Across the CESPHN region, 0.8% of young people attending headspace in the past year were at risk of homelessness, which is lower than the national rate of 1.2%. This is likely to be lower than the actual rate of homelessness in young people 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 young people 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 young people 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).(129)

Regional approach to suicide prevention

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.

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
- 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.(130) Research conducted by the Black Dog Institute found that assertive aftercare has the potential to reduce the number of suicide attempts by 19.8%.(130) CESPHN commissions suicide prevention service SP Connect, which is delivered in partnership with Neami National, SVHN, SESLHD and SLHD. Since commencing operation in April 2018 to end September 2019 it has provided services to 368 people.

Research shows that for every suicide, 10-135 people are affected. 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.(131) 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.(131) 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% contacted 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. (132)

Psychosocial support

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's Partners in Recovery data indicates that the top five unmet psychosocial needs across the region 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 lack of culturally appropriate services.

NDIS transition

The NDIS provides support to people experiencing severe and persistent mental health with significant functional impairment who require ongoing psychosocial support services. Clients of Commonwealth funded programs Partners in Recovery, Day to Day Living, and Personal Helpers and Mentors, which ceased mid-2019, are currently being transitioned into the NDIS. The expectation is that clients will be transitioned to either NDIS or a suitable alternative by June 2020. However, there are concerns regarding the low rates of successful transitions. National data on transition rates show that 50% of people using these Commonwealth funded programs had not yet applied for NDIS. Of the other 50% that have applied, half of that cohort had been assessed as eligible for the NDIS, 25% as ineligible and 25% were waiting on the outcome of their application. This means that 75% of clients are not currently being supported by the NDIS.(133) These rates are similarly observed in CESPHN.

The barriers clients faced when applying for the NDIS identified by program staff include lack of GP understanding of the NDIS and/or the client's psychosocial disability, limited evidence to demonstrate psychosocial disability due to limited service engagement by clients, and client's fluctuating mental health impacting their engagement with the NDIS application process. Program staff also cited lack of NDIA staff understanding of psychosocial disability and mental illness as an issue impacting the eligibility outcomes of clients.

About 20% of the clients of the Commonwealth funded programs have either decided not to apply or have not started gathering evidence to apply; reasons cited for not applying include lack of trust in the system, clients feeling overwhelmed by the process of gathering evidence, and being too mentally unwell.

CESPHN program staff have also identified the need for NDIS application support and advocacy for people who are not engaged in the Commonwealth funded programs. Clients currently in these programs are aided by program staff to apply for the NDIS but continue to experience barriers described above. It is likely that those with psychosocial disabilities but not engaged in the Commonwealth funded programs will experience significant barriers when starting and managing an NDIS application for psychosocial supports. In addition, people with psychosocial disabilities who may gain benefit from the NDIS or other psychosocial service, may not apply due to lack of trust in the system, they are too mentally unwell, and/or they are overwhelmed by the process. This cohort may benefit from outreach services that could provide the necessary assistance to overcome trust issues and mental health barriers to accessing psychosocial supports.

Care coordination gap

Partners in Recovery ceased its services in mid-2019 as part of the NDIS transition program. This has created a service gap for people with severe mental illness with complex needs who require care coordination to assist their recovery but are not eligible for NDIS. CESPHN program staff have observed high rates of clients who are accessing psychosocial supports but also requiring care coordination.

7. Alcohol and other drugs

Key points

- In 2018, the estimated prevalence of drug disorders in the CESPHN region was 213,499. Alcohol use disorders accounted for 68% of the total prevalence estimate.
- In a 12 month period, it is estimated that 239,280 people in the CESPHN region need screening and brief intervention for alcohol use, 14,660 for amphetamines, and 151,750 for cannabis.
- In 2017-18, there were 7,005 closed treatment episodes for alcohol and other drugs. Alcohol was the most common principal drug of concern (38%) followed by amphetamines (25%), cannabis (12%) and heroin (12%).
- The most significant change reported by stakeholders is the reduction in Oxycontin misuse and the rise in benzodiazepine misuse.
- In 2017-18, counselling was the most common main treatment type provided to clients. The CESPHN region had a much higher percentage of episodes where the main treatment type was withdrawal management and rehabilitation compared to nationally.
- Very few GPs in the region are active accredited OTP prescribers and there is low participation of community pharmacies in the program.
- Service gaps identified through stakeholder consultations include: geographical distortions in service delivery, holistic service models, alcohol and other drug (AOD) specialists in EDs, complex care navigation, interpreters for those who prefer a language other than English, pharmacy engagement, services for people released from prison, access to residential rehabilitation facilities and culturally appropriate services for Aboriginal people.

7.1. Prevalence and treatment rates

The national Drug and Alcohol Services Planning (DASP) model predicts that for every 100,000 people in a broadly representative population:

- 8,838 will have an alcohol use disorder
- 646 will have a methamphetamine disorder
- 465 will have a benzodiazepine misuse disorder
- 2,300 will have a cannabis misuse disorder
- 793 will have a non-medical opiate (including heroin) misuse disorder.

The tables below translate these rates to the current and future populations of the CESPHN region and provides an age breakdown of likely presentations to assess the need for particular configurations or modalities of service delivery. Higher prevalence rates are expected in areas that have higher than average numbers of people experiencing homelessness, people recently released from prison or people who identify as LGBTIQ.

Table 42: Estimated prevalence of drug disorders in the CESPHN region at 2018 and 2031

Drug disorder type	Standard rate (per 100,000 people)	2018 prevalence	2031 prevalence
Alcohol	8,838	144,680	167,922
Methamphetamine	646	10,575	12,274
Benzodiazepine	465	7,612	8,835
Cannabis	2,300	37,651	43,700
Non-medical opiate	793	12,981	15,067
Total	13,042	213,499	247,798

Source: CESPHN 2020 (unpublished)

Table 43: Estimated prevalence of all drug disorders in the CESPHN region by age group at 2018 and 2031

Age cohort	Standard rate (per 100,000 people)	2018 prevalence	2031 prevalence
12-17 Years	1,716	28,091	32,604
18-64 Years	9,662	158,168	183,578
65+ Years	1,664	27,240	31,616

Source: CESPHN 2020 (unpublished)

The DASP model anticipates that the majority of those with only mild disorders will not seek treatment and will resolve the disorder without specialist intervention, that around 50% of those with a moderate disorder will require treatment and 100% of those with a severe disorder will require treatment.

Table 44: Estimated drug and alcohol resourcing needs in the CESPHN region

Service Type	Quantum needed 2018	Quantum needed 2031
Community Support Services		
Harm Reduction and Personal Support (hours per annum)	126,600	147,900
Post residential rehabilitation support (hours per annum)	32,740	38,000
Community based bed services		
Low medical withdrawal (beds)	31	36
Residential Rehabilitation (beds)	457	531
Community based treatment services		
Non-residential treatment (hours per annum)	1,220,100	1,416,270
Hospital based services		
Complex medical withdrawal (beds)	69	80
Consultation liaison for both MH and D&A (hours per annum)	183,350	212,600
Diversion Services		
Community Diversion Programs (hours per annum)	102,600	119,130

Source: CESPHN 2019 (unpublished)

The DASP modelling also attempts to estimate population level requirements for screening of at-risk patients in the primary care setting. It does this through estimates of risk by drug type and age group. It is estimated for the CESPHN population there are 239,280 people who need screening and brief intervention for alcohol use in a given year, 14,660 who need screening and brief intervention for amphetamines and 151,750 who need screening and brief interventions for cannabis use.

Table 45: Estimated number of screening interventions required in the primary care setting in the CESPHN region by drug type

Drug Type	Standard rate (per 100,000 people)	No. of screening interventions 2018	No. of screening interventions 2031
Alcohol	14,617	239,280	277,720
Amphetamine	896	14,660	17,020
Cannabis	9,270	151,750	176,130

Source: CESPHN 2020 (unpublished)

AOD services

There are two LHD run specialist alcohol and other drug programs in the CESPHN region, along with government services provided by the St Vincent's Local Health Network. There are also non-government organisations (NGOs) who have both widely applicable models of care and specifically targeted models of care. In addition, there are alcohol and other drug interventions provided by general practice and community pharmacy, and some residents can access private treatment programs although these are mainly located outside the CEPHN region.

Finally, there are Community Drug Action Teams (CDAT's) and Local Drug Action Teams (LDAT), organised by interested members of the community, who undertake population style interventions. There is little difference in intent between CDATs and LDATs, however LDATs are supported by Commonwealth funding and policy frameworks and CDATs are supported by the NSW Government.

In 2017-18, publicly funded AOD treatment services provided 7,005 closed treatment episodes in the CESPHN region. This equates to 489.5 episodes or 304.6 clients per 100,000 population, which is lower than the national rate of 967 episodes or 601 clients per 100,000 population.(134)

Client demographics

Consistent with national trends, just under two-thirds (64.4%) of all clients receiving treatment in 2017-18 were male. Of clients seeking treatment for another person's drug use, most (56.0%) were female.(134) Consistent with national trends, just under two-thirds (64.4%) of all clients receiving treatment in 2017-18 were male. Of clients seeking treatment for another person's drug use, most (56.0%) were female.(134)

Almost half (49.7%) of clients were aged 20-39 years, 43.7% were aged 40 years and over and 6.6% were aged 10-19 years.

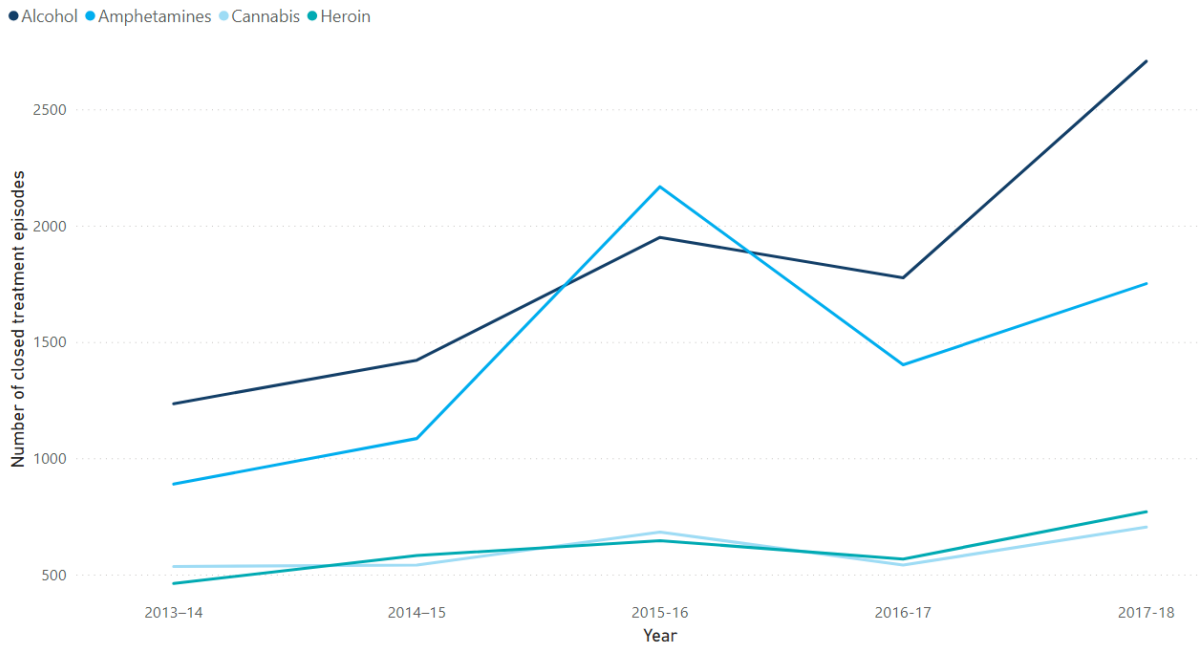
The proportion of Aboriginal and/or Torres Strait Islander clients was over 10%, which is above the proportion of the Aboriginal and/or Torres Strait Islander population in the CESPHN region (0.8%). Over 3% of clients did not state their Aboriginal and/or Torres Strait Islander status. Nationally, 16% of clients identified as an Aboriginal and/or Torres Strait Islander.

Principal drug of concern

In 2017-18, the four most common principal drugs of concern for which clients sought treatment for were alcohol (37.5% of all clients), amphetamine (24.5%), cannabis (12.0%), and heroin (11.7%). These were also the top four principal drugs of concern nationally.(134)

Between 2013-14 and 2017-18, the number of closed treatment episodes with alcohol as a principal drug of concern increased by 119% (from 1,237 to 2,709 episodes). Across this time period, alcohol was the most common principal drug of concern except in 2015-16 where it was amphetamines.

Figure 67: Number of closed treatment episodes for most common principal drugs of concern in the CESPHN region, 2013-14 to 2017-18



Source: AIHW 2019 Alcohol and other drug treatment services

Recent consultations with various stakeholders found relatively uniform agreement that methamphetamines and alcohol were the two most commonly occurring sources of substance

related problems within the CESPHN region. Most commissioned service providers however stressed that alcohol was still the drug of primary concern and the source of greatest harm to their clients.

The most relevant changes in drugs of choice since 2016 has been the increase in benzodiazepine use and decrease in oxycontin use. Aboriginal participants commented on an increase use amongst adolescents particularly of 'Yarndi' and benzodiazepines. It was also noted that co-morbidities associated with drug use are becoming more concentrated in treatment populations.

Treatment type

In 2017-18, counselling was the most common main treatment type provided to clients (37% of all clients), followed by withdrawal management (17.5%), and support and case management (16.4%).

Compared to national figures, the CESPHN region had a much higher percentage of episodes where the main treatment type was withdrawal management (17.5% compared to 8.9%) and rehabilitation (9.3% compared to 4.7%).(134)

The most common main treatment types have changed between 2013-14 and 2017-18. Counselling and withdrawal management have increased (from 13% to 33% and 13% to 21% of closed treatment episodes, respectively), while assessment only and rehabilitation have decreased (36% to 15% and 17% to 11% of closed treatment episodes, respectively).

Table 46: Percentage of closed treatment episodes by main treatment type, 2013–14 to 2017–18

Main treatment type	2013–14	2014–15	2015–16	2016–17	2017–18
Counselling	16%	15%	19%	31%	33%
Withdrawal management	13%	22%	20%	18%	21%
Assessment only	36%	32%	25%	14%	15%
Support and case management only	13%	9%	13%	20%	16%
Rehabilitation	17%	18%	11%	9%	11%
Pharmacotherapy	0%	0%	2%	2%	1%
Information and education only	1%	1%	1%	1%	1%
Other	3%	4%	10%	5%	2%
Total	**100%**	**100%**	**100%**	**100%**	**100%**

Source: AIHW 2019 Alcohol and other drug treatment services

Treatment setting

In 2017-18, the majority of closed treatment episodes were provided in non-residential treatment facilities (64%), followed by non-residential facilities (34%). There were very low numbers of treatment episodes provided in outreach settings (61 episodes) and in the client's home (23 episodes).

Primary care

There remain few pharmacies dosing OTP in the CESPHN region. The 2018 NOPSAD report indicates that there were no dosing points in 35 out of 89 SA2s within the CESPHN region. There were a further 18 SA2s with only one dosing point.(135) No update is available from NSW Health on the total active pharmacies across CESPHN with the number being 38 in 2016.

In 2016-17, there were 118 active accredited OTP prescribers in the CESPHN region which equates to 6% of all GPs in the region.(25) This indicates a low percentage of GPs in the region who are confident, capable, and willing to engage in prescribing of pharmacotherapy options for opioid dependency.

While the number of GPs that are formally involved in specialist AOD treatment is likely to be low, the majority would have to address alcohol and other drug problems in some form in their day to day practice, and as generalist practitioners should be expected to screen and brief assess for concerns.

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. The barriers identified for involvement include:

- 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.

Priority populations

Aboriginal and/or Torres Strait Islander peoples

Illicit drugs have been estimated to cause 3.4% of the burden of disease and 2.8% of deaths among Aboriginal and/or Torres Strait Islander peoples compared to 2.0% and 1.3% among the non-Indigenous population. Approximately 22% of Aboriginal and/or Torres Strait Islander peoples indicated they had used an illicit drug in the last twelve months, compared to 15% in the non-Indigenous population. Recent interest in methamphetamine prevalence has identified that Aboriginal people are 2.2 times more likely to use methamphetamines than non-Aboriginal people, are around five times more likely than non-Aboriginal people to be hospitalised for conditions related to methamphetamine use, and account for 10% of all patients with methamphetamine-related hospitalisations.

Aboriginal and/or Torres Strait Islander peoples are 1.5 times more likely to be abstainers from alcohol but are twice as likely to engage in short term binge drinking than non-Indigenous people. Deaths from various alcohol-related causes are 5 to 19 times greater than among non-Indigenous people.(136)

Suicide is strongly associated with harmful use of alcohol and other drugs. Rates of suicide are substantially higher in Aboriginal and/or Torres Strait Islander peoples, accounting for 4.2% of all deaths compared to the 1.6% national suicide rate. In Queensland, from 1998 to 2006, two-thirds of Aboriginal and Torres Strait Islander peoples who died by suicide had consumed alcohol, and more than one-third had used drugs such as cannabis, amphetamines, inhalants or opiates at the time of their deaths.(136)

CALD communities

It is difficult to identify rates of alcohol and other drug use in CALD communities as national surveys tend to be administered in English and there are limitations in the way data is collected. The National Drug Strategy Household Survey (NDSHS) suggests that overall AOD rates amongst CALD respondents are lower than non CALD communities.

Data from the 2018-19 Drug and Alcohol Multicultural Education Centre (DAMEC) suggests that 'Ice' is the highest ranking illicit primary substance of concern for their CALD clients seeking treatment. DAMEC estimates that about 6% of all AOD specialist service presentations relate to CALD clients.(137)

Under-representation of CALD communities in AOD treatment is continuing with little improvement in recent years and there remains no existing cultural assessment framework within the drug and alcohol sector that considers the specific needs of CALD communities.

Young people

In 2017-18, there were 884 instances of methamphetamine related hospital admissions in NSW for people aged 16-24 years.(33) In NSW in the same financial year rates of emergency department visits for drug overdose were highest among young people aged 15-24 years. While drug use is declining, across CESPHN in 2017–18, the proportion of clients under the age of 30 accessing publicly funded AOD treatment was 27.9%.(134)

According to the 2016 NDSHS the proportion of those aged 14–19 years old consuming five or more drinks at least monthly significantly declined between 2013 and 2016 (from 25% to 18%) and has more than halved since 2001 (39%). There was no significant decline between 2013 and 2016 in illicit drug use in the same age group. For those in their twenties the only illicit drug to decline was amphetamines.

The 2018 Australian Secondary School Students Survey of Alcohol and Drug Use (ASSAD) found fewer students are drinking alcohol since 2011 (down from 74% to 66%), with 15% drinking in the last week. Use of illicit drugs remains low in this group with 2% having used opiates, 2% cocaine and 3% ecstasy.

LGBTIQ communities

The 2016 NDSHS found that, compared with heterosexual people in the previous 12 months, homosexual/bisexual people were:

- 5.8 times as likely to use ecstasy (11.0% compared to 1.9%)
- 5.8 times as likely to use meth/amphetamines (6.9% compared to 1.2%)
- 3.7 times as likely to use cocaine (8.9% compared to 2.4%)
- 3.2 times as likely to use cannabis (31.4% compared to 9.7%)
- 2.8 times as likely to misuse pharmaceuticals (12.0% compared to 4.3%).

After adjusting for differences in age, people who were homosexual or bisexual were still far more likely than others to use illicit drugs and misuse pharmaceuticals.(138)

The 2014 First Australian National Trans Mental Health Study found that survey participants who identified as trans and gender diverse were more than twice as likely to have used illicit drugs in the previous 12 months in comparison to the Australian population (28.5% compared to 17.4%).(139)

Stakeholder consultations with ACON found there are consistent programs with methamphetamine use and GHB use among LGBTIQ communities, particularly within the context of sexualised settings. The CESPHN Clinical Council indicated similar experiences of increased GHB use along with increased LSD use in trans and gender diverse populations.

People experiencing homelessness

People experiencing homelessness have higher prevalence rates of drug and alcohol dependence disorders than the general population. A meta-analysis of studies from western countries assessed the pooled prevalence estimate of alcohol dependence at 37.9% of the homeless population. Similarly, the pooled prevalence estimate of drug dependence was 24.4% of the homeless population. Both of these rates are many magnitudes higher than for the general population.(25)

The AIHW collects data annually from specialist homelessness services (SHSs) with data from the 2017-18 survey indicating that 7.5% of those seeking assistance from SHSs did so for problematic drug or substance misuse.(140) Data presented in the Inner City Sydney Registry Week Report, published in 2016, was obtained from surveying 516 people experiencing homelessness, who were either rough sleeping or in crisis accommodation, boarding houses or temporary accommodation. The report notes that 36% of the sample reported using intravenous drugs, 37% reported using alcohol daily for 30 days straight and 72% reported substance abuse.(140)

People in contact with the criminal justice system

In 2015, two-thirds of the prison population were using crystal methamphetamine before entering custody and 41% were using methamphetamines daily prior to their incarceration. In the 12 months ending June 2019, 19,394 people entered into custody and 19,664 people were discharged. That means around 8,000 people entered into custody with an active methamphetamine use, the majority of which will leave custody within the same year.(141)

The relevance of this to CESPHN becomes clear when an analysis of the place of residence for prisoners on release is considered as detailed in the NSW inmate survey. The survey mapped released prisoners against the configuration of Area Health Services (AHS) at that time. The NSW inmate survey identified that 37% of all released prisoners were released to South Eastern Sydney Illawarra AHS and the Sydney South West AHS. Based on the assumption that CESPHN covers half of this prior AHS population then approximately 19% of all prisoners in NSW could possibly be released to the remit of CESPHN. This is a very complex population and one that is growing at a rate much faster than the general population.

7.2. Service gaps

Service availability and navigation

Service accessibility and the matching of services to localised need were commonly referenced, with the southern part of the eastern peninsula and the Sutherland Shire raised as areas with poor access. Alongside this was a general reference to the lack of outreach services targeting difficult to reach cohorts.

The majority of participants in the consultation process expressed support for increased access to support services that addressed the multitude of problems generally associated with a significant substance misuse problem. The concept of holistic support, with wraparound service provision for employment and education needs along with day to day living support were all acknowledged as positive aims.

Improvements in care co-ordination and team-based service provision were also raised as models of care that should be pursued. Access to psychology, nutrition, medical and social work were all necessary to provide holistic care. A role for pharmacists as potential treatment co-ordinators was also raised.

There was interest amongst participants in assistance with better pathway navigation through the service system as extensive amounts of staff time were being utilised in trying to match clients to service eligibility criteria. It was felt by some that service connection initiatives and the building of inter-service relationships may assist in addressing this.

Methamphetamine use and interventions

Surveys have found that the prevalence of methamphetamine use, including crystal methamphetamine, has remained the same but the harm has increased significantly.(142) Submissions to the NSW Inquiry into the Drug 'Ice' from research centres and medical bodies speculates that this may be due to a decrease in new users and an increase in harm arising from purer forms of crystal methamphetamines and different methods of use.

The effective treatment of problematic methamphetamine use involves the treatment of both the physical and psychological effects of its use, and the underlying causes of its use, which can include comorbid mental health issues, trauma history, homelessness, unemployment.(143) However, most current services are constructed to deal with alcohol and heroin which have very different psychological and physical withdrawal profiles than stimulants. The lack of any substitution therapy for stimulant drugs was also noted.

Residential rehabilitation beds

The general lack of availability of residential rehabilitation beds across the state was a strong theme from the consultation. The length of waiting periods to access a bed and the poor service continuity with withdrawal services was frequently raised. Transitions between services could be improved between most service modalities however the withdrawal/rehabilitation link was the primary focus of most commentary.

Co-morbidities associated with drug use

Dealing with mental health co-morbidities in the context of AOD use was a central theme in almost every consultation. While suicide risk was frequently highlighted the relationship between AOD use and mood and anxiety disorders were also frequently noted. For stimulant and cannabis use the limited skills in addressing psychotic symptoms within the AOD workforce was referenced. Some participants suggested funding psychiatric in-reach services to AOD services to improve mental health outcomes.

Services for Aboriginal and/or Torres Strait Islander peoples

Aboriginal service providers raised access issues in specific locales including La Perouse and the southern part of the eastern peninsula. Difficulty accessing rehabilitation, and particularly accessing culturally appropriate rehabilitation was referenced by all Aboriginal participants. There was a general preference for medically supervised inpatient withdrawal services instead of withdrawal managed in the home, particularly greater access to detoxification services staffed by Aboriginal people.

Aboriginal service providers also highlighted the relationship between suicide and drug misuse and the need for specific service responses to this. This link was similarly emphasised by other stakeholders, with a reference to those aged 18-24 years in the context of the 'come down' from binge stimulant use.

Services for priority populations

The lack of specific services for women and lack of utilisation of services from those from a CALD background were noted by consultation participants.

Numerous participants noted the low proportion of CALD clients within AOD services, compared to the CALD population living within the CESPHN region. Poor access to interpreter services was raised as a barrier to participation for these clients and some participants questioned whether specialist transcultural counselling services could be used to bridge this gap.

The link between drug and alcohol use and violence was a common theme in the consultation. This was in relation to both domestic violence and other forms of violence. The impact of polydrug use on decision-making in this regard was referenced. Early intervention and population wide culture change programs were both discussed as important service gaps to respond to the significant harms associated with violence in the community.

Stakeholders made reference to the dearth of available services for those recently released from the prison system, and the impact this has on relapse. Case management of this cohort was described as short term, inadequate and ineffective. The interface between unavailability of accommodation and subsequent AOD relapse was noted. Potential partnerships with boarding house providers was seen as a possible service response to this gap.

Physical co-morbidities were also noted. Addressing hepatitis C in AOD populations and within the correctional system was considered a high priority. The impact of extensive stimulant use on general physical welfare, including dental hygiene, was also raised. Lack of access to pain management services and the potential impact on opioid misuse was raised by clinicians participating in the consultation.

It was considered beneficial to engage the community regarding AOD issues. Workshops and forums where CESPHN could lead discussion, and potentially address stigma, were considered a valuable opportunity.

Workforce development

Support was also expressed for workforce development initiatives that improve the capacity of the existing AOD workforce to address the complexity of substance misuse. This could include awareness and screening for blood borne viruses, dealing with the issues associated with post prison release, having basic skills in mental health assessment and interventions and addressing the specific cultural needs of communities within the CESPHN region including Aboriginal people and those who identify as LGBTQI. Improvements by mainstream services in providing services with cultural competence and inclusiveness were desired by many participants.

There was substantial commentary on the benefits of better information dissemination and education for general practice on responding to drug disorders. The greater availability of specialist advice for GPs was also referenced, and access to training regarding trauma informed care.

8. Access, coordination and integration

Key points

Access to primary care

- In 2017-18, there were 9.3 million general attendances or 5.8 services per person. Most (88.6%) GP attendances were bulk billed.
- 80.9% of adults in the CESPHN region reported seeing a GP in the previous 12 months. Almost one-quarter (23.4%) felt they waited longer than acceptable to get an appointment with a GP, and 2.7% did not see or delayed seeing a GP due to cost.

After Hours

- 58% of general practices were receiving a PIP for After Hours services as at May 2018. Most practices (67%) have level 1 status.
- 23% of the population received an after hours GP service in 2017-18. People aged 80 years and over were most likely to receive this type of service (34%), followed by people aged 0-14 years (30%).
- Since 2013-14 there has been a 9% increase in the rate of after hours GP services.
- In 2017-18, there were 75,370 lower urgency ED presentations in the after hours period, equivalent to 47.0 per 1,000 people. The rate has reduced by 9% since 2015-16.
- The 0-14 year age group had the highest rate of after hours lower urgency ED presentations per 1,000 population across the CESPHN region at 97.5 per 1,000 people.
- In 2017-18, 57,921 calls were made to the HealthDirect helplines. Calls to the helpline were predominantly for patients aged 0-4 years (29.4%).

Service navigation and coordination

- Key issues impacting the ability to navigate and coordinate health services include service coverage, patient health literacy, service identification, and communicating patient information between health care providers.

Digital health and data

- As at October 2019, approximately 87% of general practices in the CESPHN region were computerised, of which 83% were registered to access the My Health Record System.
- 95% of computerised general practices use secure messaging software, although most practices almost exclusively use it to receive diagnostic results.
- Limited uptake of electronic referrals (11,767 in 2018-19) 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.
- 75% of accredited general practices shared data with CESPHN as part of quality improvement initiatives.

8.1. Access to primary care

In 2017-18, there were 9.3 million GP attendances in the CESPHN region. This equates to an age standardised rate of 582.0 services per 100 people (or 5.8 services per person), slightly lower than the national average of 601.8 per 100 people.(36)

There were more specialist attendances in the CESPHN region (120.3 per 100 people) compared to the national average (89.0 per 100 people), reflecting the large number of specialists located within the region. Still, stakeholder feedback has indicated barriers in accessing outpatient clinics and/or specialist services for patients particularly from lower socioeconomic backgrounds.

Rates for other Medicare-subsidised service rates (allied health and diagnostic imaging) in the CESPHN region were similar to national rates.

Table 47: Medicare-subsidised GP, allied health, specialist and diagnostic imaging services per 100 people (age-standardised) in the CESPHN region, 2017-18

Service	CESPHN (ASR per 100)	National (ASR per 100)
Allied Health attendances (total)	87.6	88.0
Diagnostic Imaging (total)	96.8	96.2
GP attendances (total)	582.0	601.8
Specialist attendances (total)	120.3	89.0

Source: AIHW 2019

In 2016-17, 88.6% of GP attendances were bulk billed in the CESPHN region compared to 85.7% nationally. Canterbury had the highest number of GP attendances (7.4 per person) and bulk billing rates (97.9%) in the CESPHN region.(144)

Table 48: GP attendances in the CESPHN region by SA3, 2016-17

SA3	GP attendances (ASR per person)	Bulk billed GP attendances (%)
Botany	6.0	93.1
Canada Bay	5.6	90.6
Canterbury	7.4	97.9
Cronulla - Miranda - Caringbah	5.7	87.3
Eastern Suburbs - North	5.1	70.4
Eastern Suburbs - South	5.2	86.7
Hurstville	5.9	92.3
Kogarah - Rockdale	6.2	94.4
Leichhardt	5.2	78.4
Marrickville - Sydenham - Petersham	5.8	88.6
Strathfield - Burwood - Ashfield	6.0	94.3
Sutherland - Menai - Heathcote	6.3	86.6
Sydney Inner City	5.4	83.1
CESPHN	**5.8**	**88.6**
National	**5.9**	**85.7**

Source: AIHW 2018 Medicare Benefits

In 2016-17, 73.6% of patients incurred out-of-pocket costs for non-hospital specialist services in the CESPHN region compared to 71.9% nationally. For those patients with costs, the median amount spent was $81 per specialist attendance compared to $64 nationally.

Sutherland-Menai-Heathcote had the highest percentage of patients with specialist out-of-pocket costs (83.1%) whereas Leichhardt had the highest median cost per specialist attendance ($96).

Table 49: Out-of-pocket cost per specialist attendance by SA3, 2016-17

SA3	Per cent of patients with specialist costs (%)	Median cost per specialist attendance
Botany	67.7	$74
Canada Bay	76.3	$86
Canterbury	62.1	$64
Cronulla - Miranda - Caringbah	82.6	$75
Eastern Suburbs - North	81.0	$96
Eastern Suburbs - South	71.7	$81
Hurstville	70.9	$72
Kogarah - Rockdale	70.7	$73
Leichhardt	78.0	$97
Marrickville - Sydenham - Petersham	68.7	$84
Strathfield - Burwood - Ashfield	67.6	$76
Sutherland - Menai - Heathcote	83.1	$76
Sydney Inner City	71.8	$96
CESPHN	**73.6**	**$81**
National	**71.9**	**$64**

Source: AIHW 2018 Patients' out-of-pocket spending

According to the 2016-17 ABS Patient Experience Survey, 80.9% of respondents in the CESPHN region reported seeing a GP in the previous 12 months. The majority of survey respondents (80.5%) had a preferred GP. Regarding GP access(29):

- 20.6% reported not being able to access their preferred GP
- 23.4% felt they waited longer than acceptable to get an appointment with a GP
- 12.9% needed to see a GP but did not
- 2.7% did not see or delayed seeing a GP due to cost
- 7.7% saw a GP after hours.

More than half (54.4%) of respondents had seen a dentist, hygienist or dental specialist in the previous 12 months. Cost was a barrier to accessing these services for 15.3% of survey respondents. The Sydney Dental Hospital is located within the region and provides prioritised access to public dental services for people with dental emergencies, those who need access to dental treatment in order to undergo medical treatment and those in very acute pain. There are waiting times of more than one year for dentures.

8.2. After hours

Practice incentive payment

As at May 2018, 58% of general practices in the CESPHN area were receiving a Practice Incentive Payment (PIP) for After Hours services. Of the practices receiving the After Hours PIP, 67% were accessing Level 1.(145)

For the purposes of the After Hours PIP, the complete after-hours period is outside of 8am to 6pm weeknights; outside of 8am to 12pm Saturdays; and all day Sunday and public holidays. The complete after-hours period is further broken into:

- Sociable after-hours period:
    - 6pm to 11pm weeknights
- Unsociable after-hours period:
    - weeknights between 11pm and 8am
    - outside 8am and 12pm Saturdays, and
    - all day Sunday and public holidays.

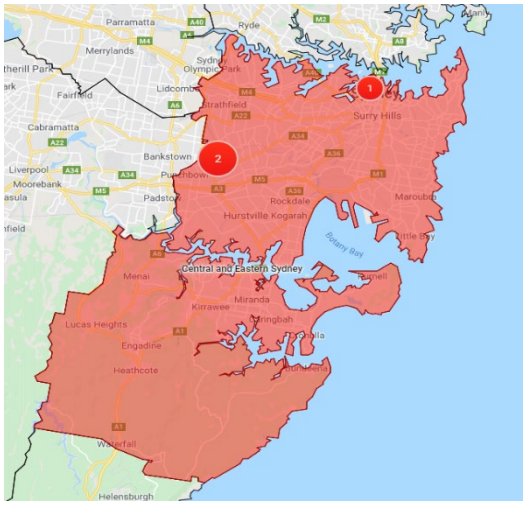
Table 50: After Hours PIP practices in the CESPHN region, May 2018

After Hours PIP level	No. practices	% After Hours PIP practices
1 - Formal arrangements in place to ensure practice patients have access to care in the complete after hours period	241	67%
2 - Cooperative arrangement with other general practices that provides after hours care to practice patients in the sociable after hours period, and formal arrangements to cover the unsociable after hours period	34	9%
3 - Provide after hours care to practice patients directly through the practice in the sociable after hours period and formal arrangements to cover the unsociable after hours period	26	7%
4 - Cooperative arrangement with other general practices that provides after hours care to practice patients for the complete after hours period	12	3%
5 - Provide after hours care to practice patients in the complete after hours period	46	13%
Total	**359**	**100%**

Source: Department of Health PHN Practice Incentives Program Data 2018

There are three deputising services in the CESPHN region that are utilised by practices under Levels 1 and 2 of the After Hours PIP – Doctor Doctor, SMS Medical Services 2020 in Lakemba, ISRA Medical Services Lakemba After Hours.(146) Despite their existence, Waterfall, Bundeena and Maianbar continue to have service shortages in the after hours period due to their location.

Figure 68: Deputising services within the CESPHN region, 2019



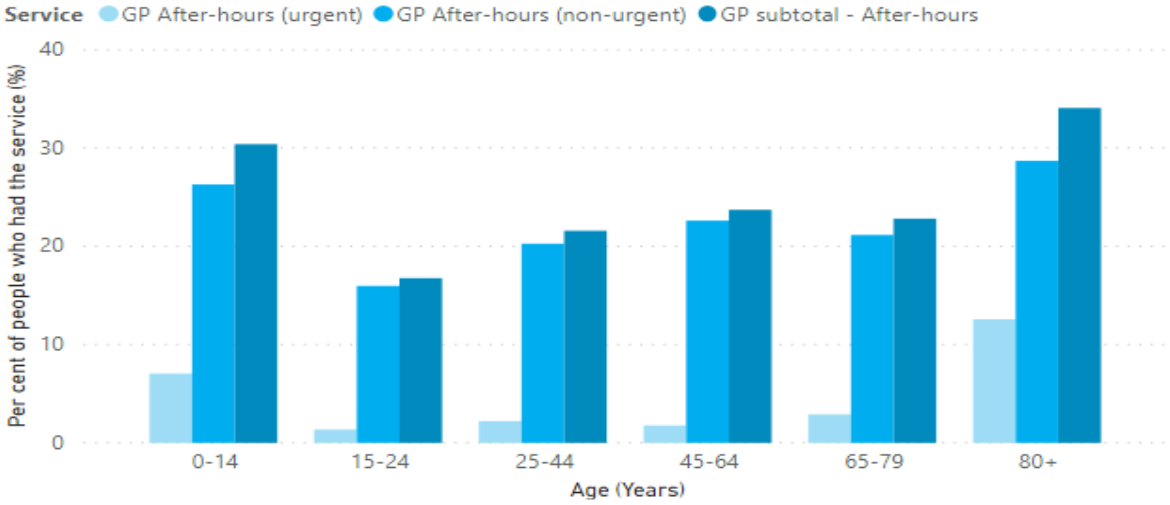
Source: Healthdirect Australia HealthMap 2019

Medicare-subsidised services

In 2017-18, 373,977 people (or 23% of the population) in the CESPHN region received an after hours GP service.(36) There has been an 8% increase in the percentage of the population receiving an after hours GP service since 2013-14.

People were more likely to receive an after hours GP service for non-urgent than urgent assessment and treatment (22% versus 3%). A higher proportion of females received an after hours GP service than males (25% versus 22%). People aged 80 years and over were most likely to receive an after hours GP service (34%), followed by people aged 0-14 years (30%).

Figure 69: Percentage of the population who received an after hours GP service by age group, 2017-18

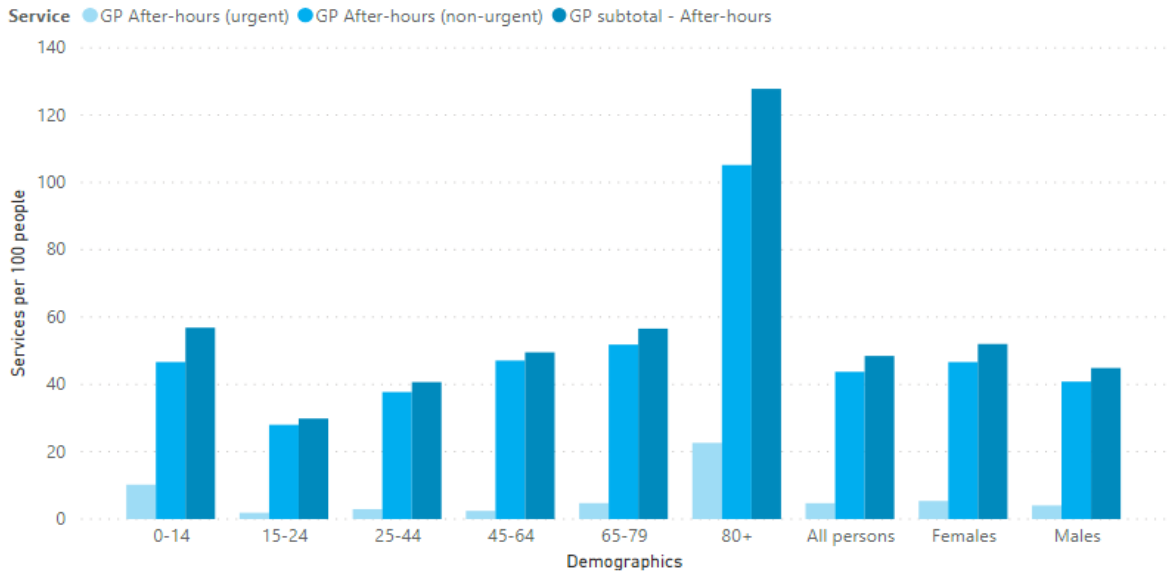


Source: AIHW 2019

In 2017-18, there were 0.8 million after hours GP services provided in the CESPHN region, equivalent to 48.5 services per 100 people.(36) There has been a 9% increase in the rate of after hours GP services since 2013-14.

People aged 80 years and over received the highest number of services (127.8 per 100 people), followed by those aged 0-14 years (56.9 per 100 people).

Figure 70: After hours GP services per 100 people by age group and gender, 2017-18



Source: AIHW 2019

Lower urgency ED presentations

Lower urgency ED presentations are presentations to a public hospital ED with a triage category of 4 (semi-urgent) or 5 (non-urgent), where the patient did not arrive by ambulance, or police or correctional vehicle and was not admitted to the hospital, not referred to another hospital, or did not die.

In 2017-18, there were 150,734 lower urgency ED presentations in the CESPHN region, equivalent to 94.0 per 1,000 people which is lower than the national rate of 117.0 per 1,000 people.(147) Fifty per cent (75,370 or 47.0 per 1,000 people) of these presentations were in the after hours period.

After hours lower urgency presentations have fallen by 9% (from 51.7 to 47.0 per 1,000 people) since 2015-16. There has also been a decrease in all lower urgency ED presentations over the same time period.

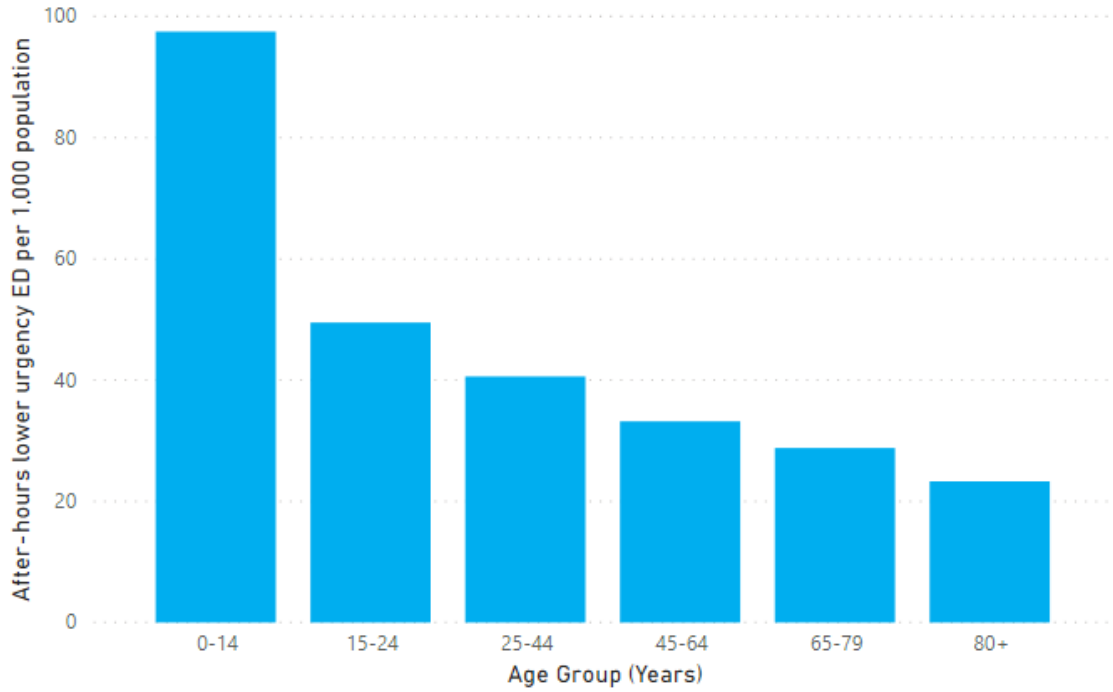
Table 51: Lower urgency ED presentations in the CESPHN region, 2015-16 to 2017-18

Year	No. lower urgency ED	Lower urgency ED per 1,000 population	No. after-hours lower urgency ED	After-hours lower urgency ED per 1,000 population
2015-16	155,978	101.4	79,535	51.7
2016-17	150,639	96.0	76,258	48.6
2017-18	150,734	94.0	75,370	47.0

Source: AIHW 2019

In 2017-18, males had a higher rate of lower urgency care presentations in the after hours period (50.8 per 1,000 people) than females (43.5 per 1,000 people). The 0-14 year age group had the highest rate of after hours lower urgency ED presentations per 1,000 population across the CESPHN region at 97.5 per 1,000 people.(147)

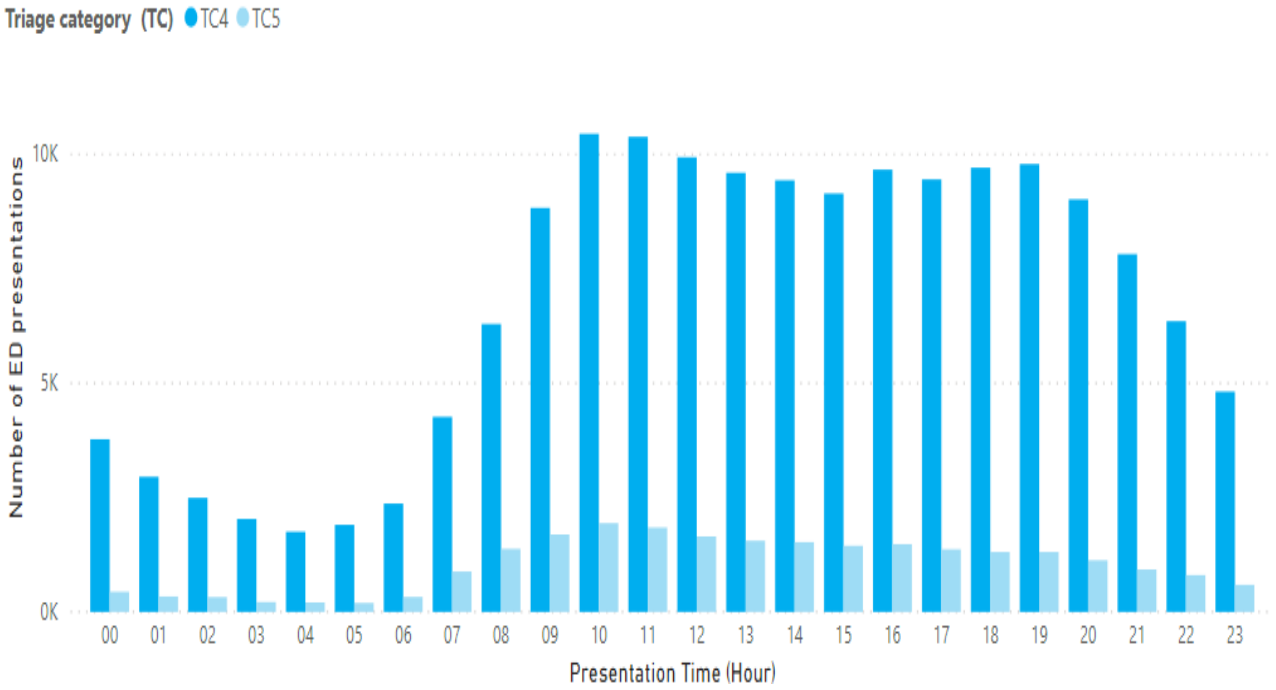
Figure 71: After hours lower urgency ED presentations per 1,000 population by age group, 2017-18



Source: AIHW 2019

For all triage category 4 and 5 presentations, the peak time of presentation was 10am. In the after hours period the peak time was 7pm.(147)

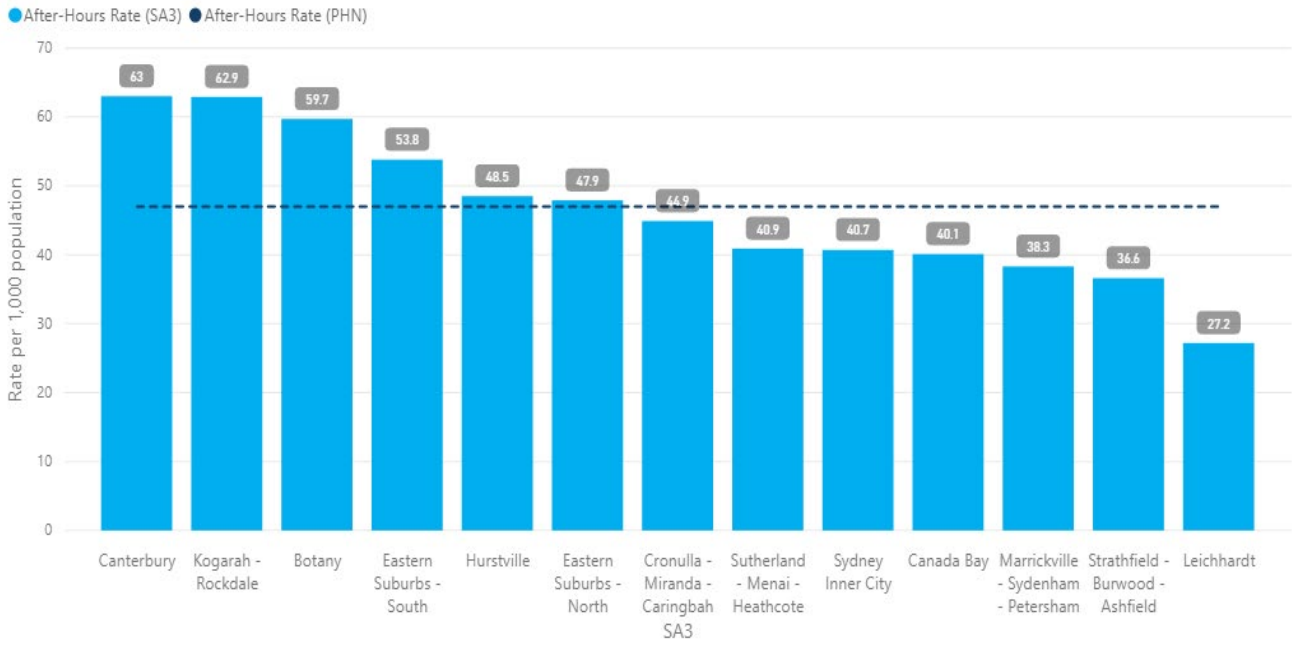
Figure 72: Number of triage category 4 and 5 ED presentations by time, 2017-18



Source: AIHW 2019

In 2017-18, Canterbury, Kogarah-Rockdale, Botany, Eastern Suburbs-South, Hurstville and Eastern Suburbs-North all had higher rates per 1,000 population of after hours ED presentations than the CESPHN rate.(147) These areas are generally more socioeconomically disadvantaged and culturally diverse with poorer English proficiency.

Figure 73: Rate per 1,000 population after hours lower urgency ED presentations by SA3, 2017-18



Source: AIHW 2019

Helpline

HealthDirect Australia provides a nurse triaged helpline and after hours GP helpline for the after hours period. In 2017-18, 57,921 calls were made to the HealthDirect helplines from CESPHN residents.(148) Approximately one third of all calls to the helpline occurred in the T1 period (32.0%), followed by T4 (28.7%), T2 (20.7%) and T3 (18.7%).

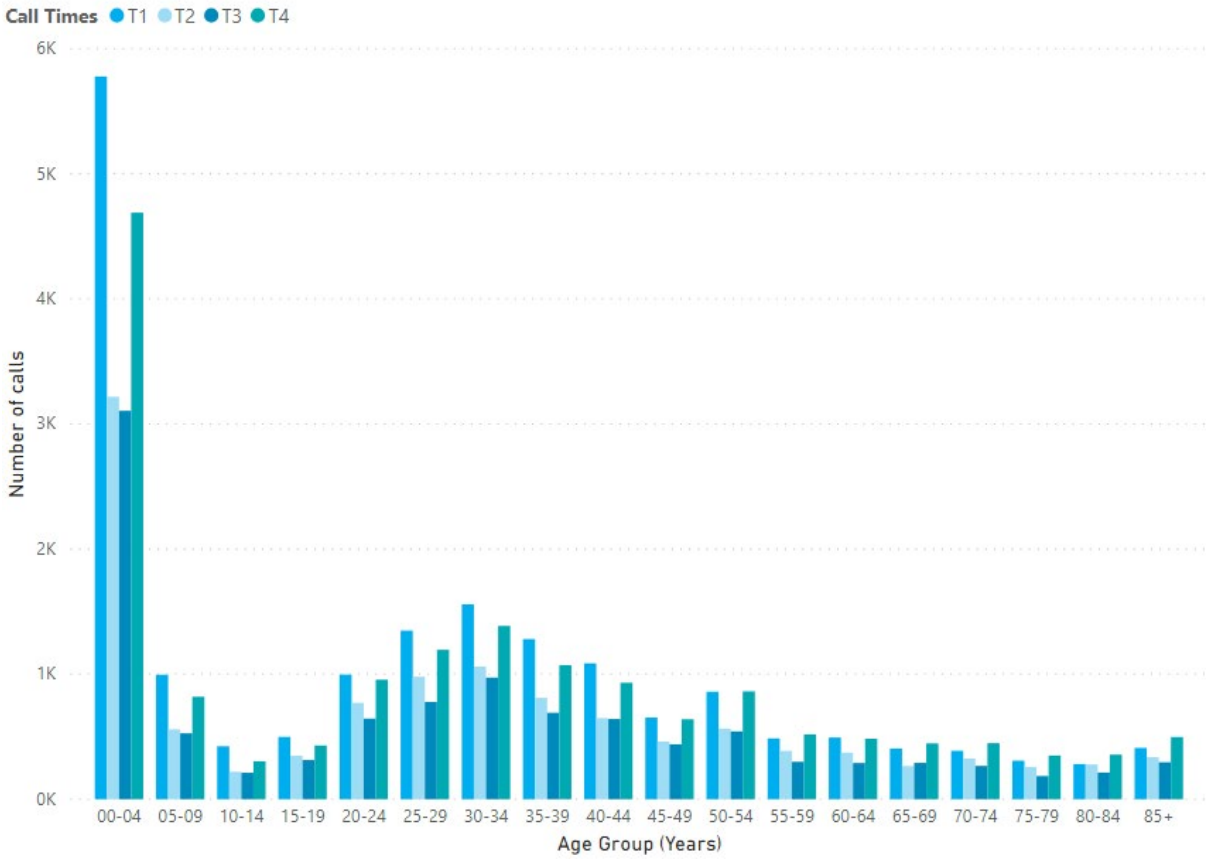
Table 52: Proportion of HealthDirect helpline calls by time, 2017-18

Year and Quarter	T1 6pm to 11pm weeknights	T2 11pm to 8am weekdays	T3 Outside 8am to 12pm on Saturday	T4 Sunday & public holidays	Total
2017 Q3	32.2%	20.9%	20.5%	26.4%	100.0%
2017 Q4	32.0%	20.7%	17.9%	29.4%	100.0%
2018 Q1	32.0%	21.3%	17.1%	29.6%	100.0%
2018 Q2	31.6%	19.7%	18.9%	29.8%	100.0%
Total	**32.0%**	**20.7%**	**18.7%**	**28.7%**	**100.0%**

Source: Healthdirect Australia HealthMap 2019

Calls to the helpline were predominantly for patients aged 0-4 years (29.4%). This pattern was consistent across all time periods.(148)

Figure 74: Number of calls by patient age, 2017-18

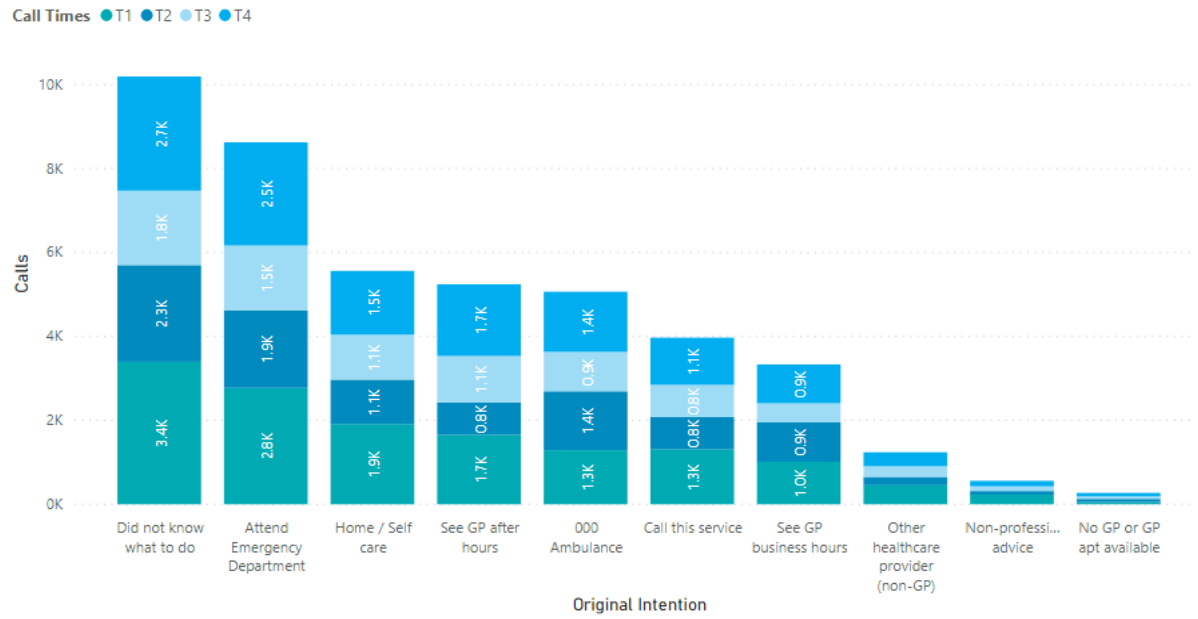


Source: Healthdirect Australia HealthMap 2019

The original intention of callers identifies the level of care the caller was considering prior to calling the helpline. Original intention was recorded for 44,066 calls.(148) Almost one-quarter (23%) of

callers did not know what to do, 20% would have attended their local ED and 13% would have used home/self care.

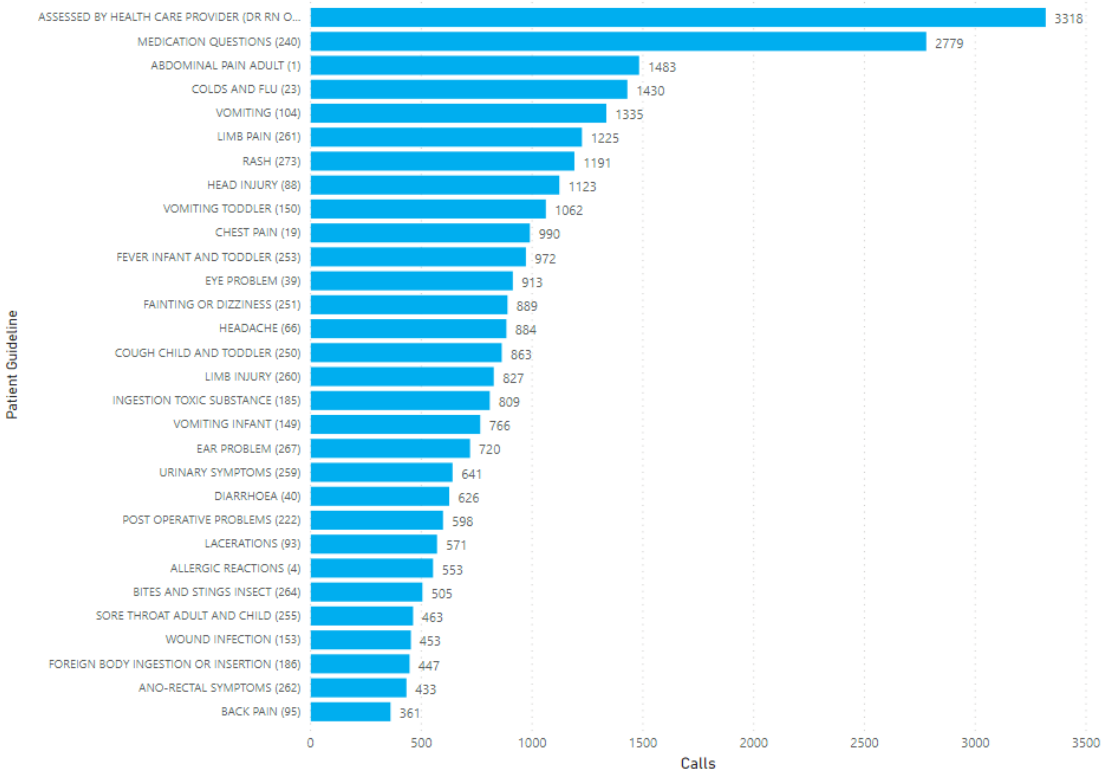
Figure 75: Proportion of calls by timeframe and original intention, 2017-18



Source: Healthdirect Australia HealthMap 2019

In 2017-18, the reason for calling the helpline (the patient guideline) was recorded for 29,230 calls. The graph below shows the two major reasons for calling the helpline were for assessment by a health care provider (11%) and medication questions (9.4%).

Figure 76: Number of calls by Patient Guideline, 2017-18

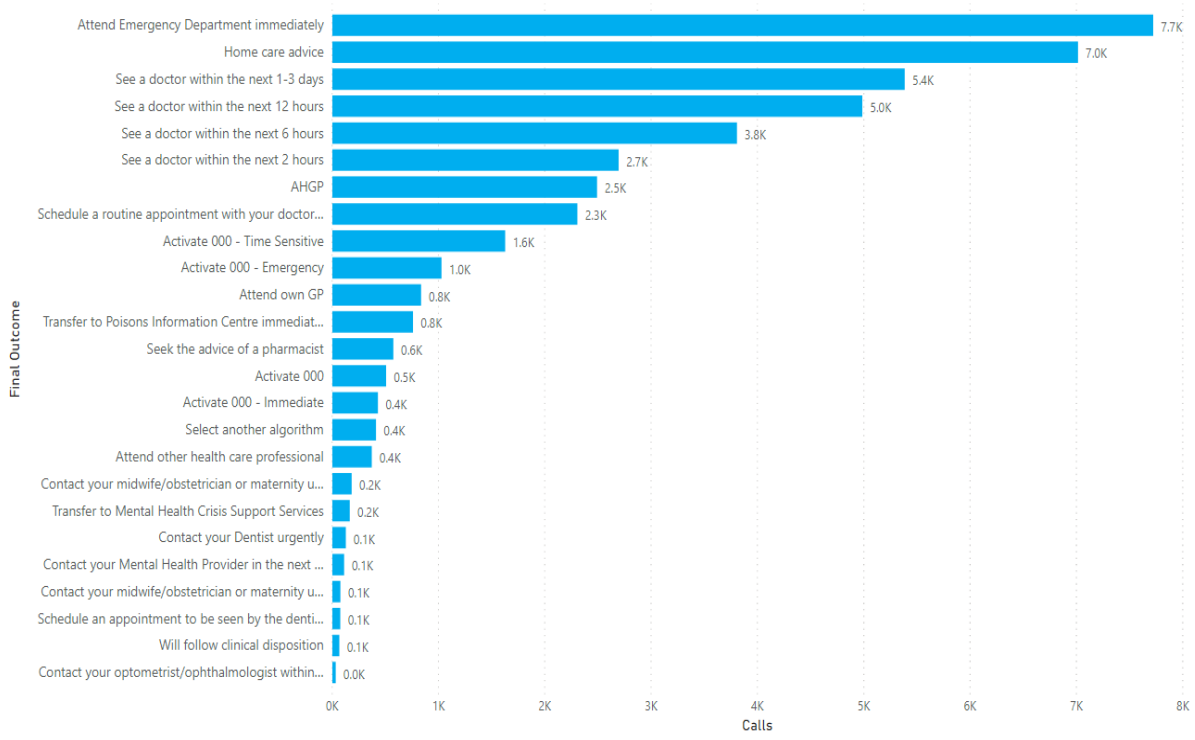


Source: Healthdirect Australia HealthMap 2019

The final outcome takes into account the context of the patient including willingness of services and availability of services. Of the 43,794 final outcomes recorded for calls(148):

- 7,722 (18%) were advised to attend ED immediately
- 7,015 (16%) were given home care advice
- 5,385 (12%) were advised to see a doctor within the next 1-3 days
- 4,986 (11%) were advised to see a doctor within the next 12 hours
- 3,807 (9%) were advised to see a doctor within the next 6 hours.

Figure 77: Number of calls by final outcome, 2017-18



Source: Healthdirect Australia HealthMap 2019

8.3. Service navigation and coordination

Community and stakeholder consultations have identified the following key issues impacting the ability to navigate and coordinate health services in the CESPHN region:

- Service coverage
- Low patient health literacy
- Provider issues with identifying and navigating services most appropriate to an individual's disease profile and individual characteristics
- Inability to systematically and reliably communicate patient information between health care providers (see digital health and data section below).

Service coverage

The CESPHN region has a high population density with a significant number of services available. These services are funded by all levels of government – federal, state and local – as well as privately. Joint planning and co-commissioning among the different funding bodies can help identify and reduce service gaps and duplication to improve care coordination. The co-design of these services with consumers and peer workers will also ensure that patient experience and needs are considered.

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.(121) The survey also indicated that health literacy was lower in those who speak English as a second language (21%). (121) 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 services provided by SLHD, SESLHD, SVHN and SCHN 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.

8.4. Digital health and data

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 that digital health needs were related to the level of digital health use maturity, as well as the interoperability between digital health systems across service providers.

As at 30 October 2019, approximately 87% of general practices in the CESPHN region were computerised, of which 83% were registered to access the My Health Record (MyHR) system.

Table 53: Digital health initiatives in the CESPHN region, as at October 2019

Digital health initiatives	No. of general practices
Computerised practices (clinical software)	534
Registered to access MyHR	444
Use secure messaging solution	509
Use e-referrals	228

Source: CESPHN CRM database 2019

My Health Record

Meaningful use of MyHR can improve health outcomes by supporting the sharing of patient information between providers across the health system, which can reduce duplication of services, reduce medication errors, and increase patient participation in their care.

MyHR statistics generally demonstrate increases in uploads by various health care services in the CESPHN region.(149) However, it is important to note that 13% of practices in the region are non-computerised and therefore cannot upload to MyHR.

Table 54: Number of providers regularly uploading to MyHR, by document type, May 2018 to May 2019

Upload type	May 2018	May 2019
Share health summaries	239	277
Event summaries	13	35
Discharge summaries	20	22
Specialist letters	2	2
Pathology reports	1	1
Diagnostic imaging reports	0	12
Dispense records	12	170

Source: Department of Health 2019 Digital health data

From an allied health perspective technology integration with MyHR is a major issue of national significance. The platforms used for allied health are not able to integrate with MyHR. This has resulted in only 110 allied health practices that are registered in our region.

A range of improvements to MyHR would ensure its meaningful use. These include:

- capability to link with the NDIS
- allow uploading of shared care plans
- the development of a MyHR app that people could use on their phones.

CESPHN's remit also includes Norfolk Island and Lord Howe Island. The primary health care facility in Norfolk Island has registered with MyHR and compliance with MyHR is being implemented in Lord Howe Island.

Secure messaging

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, 95% of computerised general practices use secure messaging software. However, most practices almost exclusively use it to receive diagnostic results.

eReferrals

In 2018-19, an estimated 228 general practices sent 11,767 eReferrals and 5 allied health and specialist practices sent 104 eReferrals.(150) 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.

Discharge summaries

GPs have expressed the need to receive high quality discharge summaries, which can 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. Since the implementation of the opt out function of MyHR, the number of patients with electronic records in CESPHN have increased from 20% to 91%.(151) This has contributed to the increased number of hospitals sending discharge summaries electronically. CESPHN supports GP representation on hospital clinical councils as one way to improve communication between primary and acute care.

Telehealth capability

Telehealth capability is still in development within the CESPHN region, with a limited number of providers offering this service according to healthdirect data.(152)

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.

Table 55: Telehealth capable practices in the CESPHN region, October 2019

Type	No. of practices
General practice	5
Allied health	22
Pharmacy	1

Source: Healthdirect 2019 Telehealth

Data for quality improvement and planning

As at 30 October 2019, 299 out of 401 accredited general practices shared data with CESPHN as part of quality improvement practices initiative. The introduction of the new Quality Improvement Practice Incentive Program (QI PIP) has increased the total number of practices that submit data to CESPHN. So far 314 practices have registered for the QI PIP, which benefits population health planning capabilities and the PHN commissioning process.

Over time the health and service 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.

9. Primary care workforce

Key points

- As at November 2019, there were 614 general practices operating within the CESPHN region. Of these practices, a total of 408 are accredited.
- The highest concentration of general practices are in the LGAs of City of Sydney (113 practices), Inner West (92 practices) and Bayside (73 practices).
- In 2017, there were 2,053 GPs (1,903.9 FTE) giving a rate of 118.4 per 100,000 population. The lowest rates of GPs per 100,000 population were in Botany (79.5), Marrickville-Sydenham-Petersham (86.9), Kogarah-Rockdale (89.1) and Hurstville (91.1).
- Just over half (52.1%) of FTE GPs across the CESPHN region were aged 55 years and over, significantly higher than the NSW and national averages (45% and 40% respectively).
- There were 562 nurses working as practice nurses (448.8 FTE), giving a rate of 27.9 FTE per 100,000 population. The lowest rates of practice nurses per 100,000 population were in Strathfield-Burwood-Ashfield (14.1), Marrickville-Sydenham-Petersham (14.9) and Botany (15.6).
- Just over one-quarter (26.1%) of FTE practice nurses across the CESPHN region were aged 55 years and over.
- There were 12,519 AHPRA registered allied health professionals. There is a higher FTE rate per 100,000 population in the CESPHN region compared to NSW for all AHPRA registered allied health professionals (705.1 and 531.4 respectively).

9.1. General practice

As at November 2019, there were 614 general practices operating within the CESPHN region. This includes one Aboriginal Medical Service in Redfern.

The size of the 614 general practices were as follows: 35% were solo practices, 36% had 2-5 GPs and 29% had 6 or more GPs.

The LGAs with the highest number of general practices are City of Sydney (113), Inner West (92) and Bayside.

Accreditation status

Of the 614 general practices in the CESPHN region, 401 are accredited (65%). One of the key reasons for general practices choosing not to be accredited is the high cost and work involved in achieving accreditation, particularly for small general practices and solo GPs.

The majority (86%) of GPs working in the CESPHN region work in an accredited general practice.

9.2. GPs

In 2017 there were 2,053 GPs working in the CESPHN region (1,903.9 FTE) giving a rate of 118.4 per 100,000 population which is slightly higher than the state rate of 112.4 per 100,000 population. (108)

The lowest rates of GPs per 100,000 population were in Botany (79.5), Marrickville-Sydenham-Petersham (86.9), Kogarah-Rockdale (89.1) and Hurstville (91.1). Four SA3s were higher than the state rate – Norfolk Island (211.7), Sydney Inner City (182.7), Leichhardt (140.4) and Eastern Suburbs-North (139.5).

Table 56: GPs by SA3, 2017

SA3	No. of GPs	Total FTE	FTE rate per 100,000 population
Botany	43	40.4	79.5
Canada Bay	115	97.7	107.1
Canterbury	144	153.1	106.4
Cronulla - Miranda - Caringbah	130	125.4	108.6
Eastern Suburbs - North	227	191.8	139.5
Eastern Suburbs - South	182	168.6	110.9
Hurstville	123	123.1	91.1
Kogarah - Rockdale	134	133.3	89.1
Leichhardt	96	84.0	140.4
Lord Howe Island	np	np	-
Marrickville - Sydenham - Petersham	49	50.7	86.9
Norfolk Island	4	3.7	211.7
Strathfield - Burwood - Ashfield	189	176.7	108.5
Sutherland - Menai - Heathcote	123	116.6	104.5
Sydney Inner City	493	437.7	182.7
CESPHN	**2,053**	**1,903.9**	**118.4**
NSW	**9,160**	**8,838.3**	**112.4**

Note: Number of GPs on Lord Howe Island was not published due to small numbers.

Source: Health Workforce Data 2017

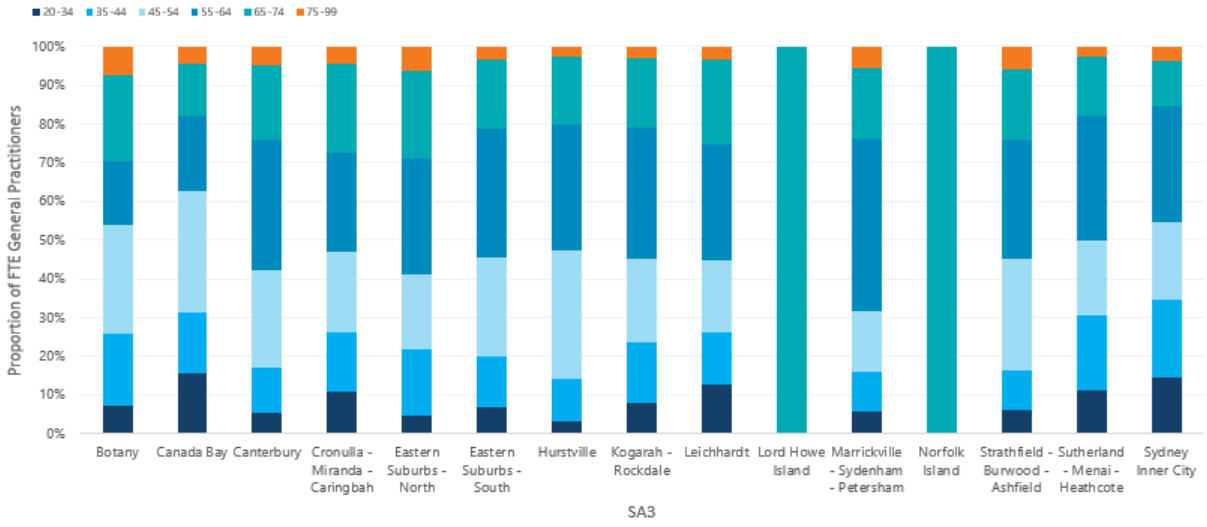
Gender

The majority of GPs working across the CESPHN catchment in 2017 were male (59%). In 2017, Norfolk Island was the only SA3 within our region to have no female GPs. Marrickville-Sydenham-Petersham had the highest proportion of male GPs with 74% of the FTE workforce, followed by Botany (69%) and Canterbury (66%).(109)

Age

In 2017, 52% of FTE GPs across the CESPHN region were aged 55 years or older, this is higher than both the state and national rates of 45% and 40% respectively. Marrickville-Sydenham-Petersham (68%), Eastern Suburbs-North (59%) and Canterbury (58%) have the highest rates of GPs aged 55 years and over. On Lord Howe and Norfolk Islands, 100% of GPs were aged 65-74 years in 2017.

Figure 78: Proportion of FTE GPs by age group and SA3, 2017

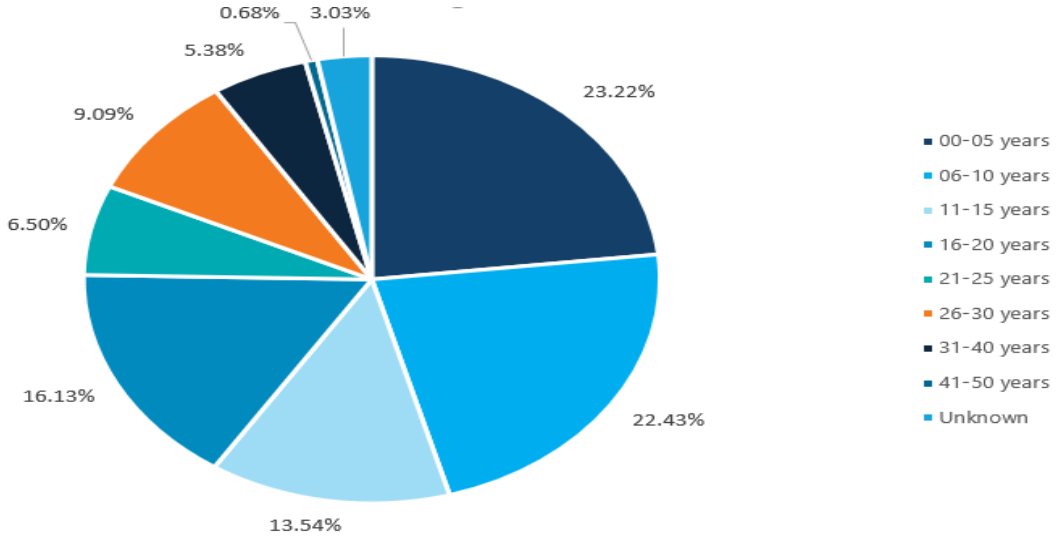


Source: Health Workforce Data 2017

Years intended to work

Almost one-quarter (23%) of GPs indicated they only intend to work as a GP for up to five years, this is consistent with the national rate of 22%.(109)

Figure 79: Number of years GPs intend to work, 2017



Source: Health Workforce Data 2017

9.3. Practice nurses

In 2017, there were 562 practice nurses in the CESPHN region (448.8 FTE), giving a rate of 27.9 FTE per 100,000 population which was lower than the state rate of 36.6 per 100,000 population.

Norfolk Island (171.6) and Sydney Inner City (49.9) had the highest rate of FTE practice nurses per 100,000 population. Data for Lord Howe Island indicates no practice nurses worked on the Island in 2017. Strathfield-Burwood-Ashfield, Marrickville-Sydenham-Petersham and Botany had the lowest rates of 14.1, 14.9 and 15.6 FTE per 100,000 population respectively.

Table 57: Practice nurses by SA3, 2017

SA3	No. of practice nurses	Total FTE	FTE rate per 100,000 population
Botany	9	7.9	15.6
Canada Bay	32	26.7	29.3
Canterbury	38	32.5	22.6
Cronulla - Miranda - Caringbah	39	29.9	25.9
Eastern Suburbs - North	45	36.2	26.3
Eastern Suburbs - South	47	40.2	26.4
Hurstville	42	29.0	21.5
Kogarah - Rockdale	48	33.3	22.3
Leichhardt	17	15.6	26.1
Lord Howe Island	0	0.0	0.0
Marrickville - Sydenham - Petersham	10	8.7	14.9
Norfolk Island	3	3.0	171.6
Strathfield - Burwood - Ashfield	30	22.9	14.1
Sutherland - Menai - Heathcote	33	21.0	18.8
Sydney Inner City	143	119.6	49.9
CESPHN	**562**	**448.8**	**27.9**
NSW	**3,742**	**2,876.2**	**36.6**

Source: Health Workforce Data 2017

Gender

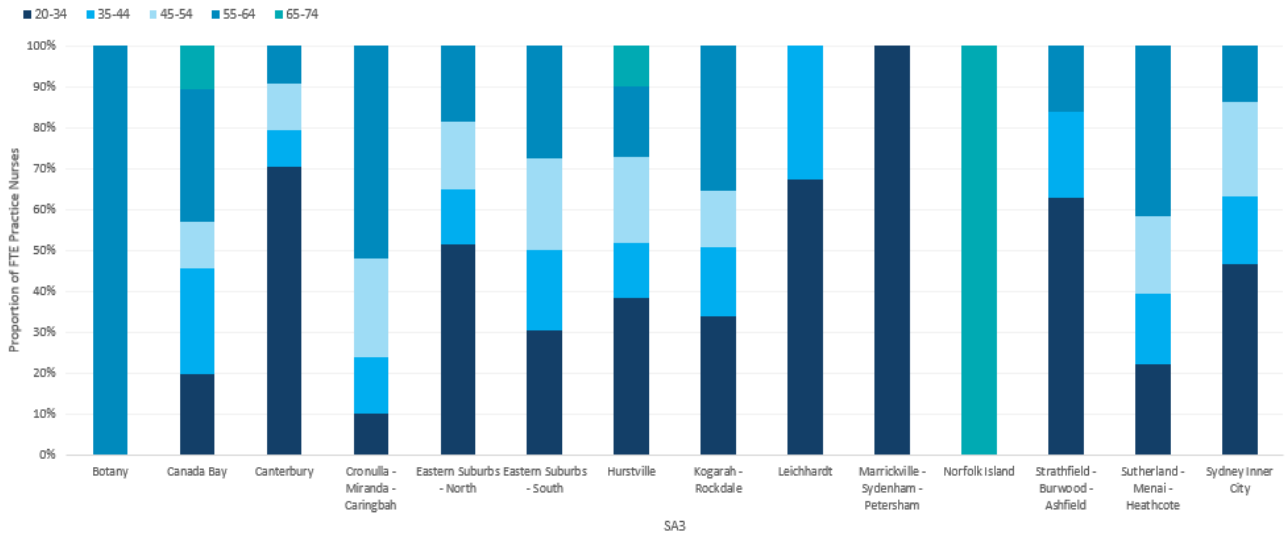
Most practice nurses working across the CESPHN region were female (93.6%), which is consistent with the state and national proportions (96%). Seven SA3s only had female practice nurses – Botany, Canada Bay, Cronulla-Miranda-Caringbah, Eastern Suburbs-North, Eastern Suburbs-South, Hurstville, Sutherland-Menai-Heathcote. Marrickville-Sydenham-Petersham had the highest proportion of male practice nurses (28.3%), followed by Leichhardt (17.1%) and Sydney Inner City (12.1%).

Age

Just over one-quarter (26.1%) of FTE practice nurses across the CESPHN region were aged 55 years and over, this is slightly lower than the state and national rates of 30.7% and 28.4% respectively. Potential areas of workforce shortage in coming years include the SA3 regions of Norfolk Island, where 100% of FTE practice nurses were aged 65-74 years of age and Botany SA3 where 100% of practice nurses were aged 55-64 years of age.

There was a higher proportion of practice nurses aged 20-34 years in the CESPHN region (40%) compared to NSW (24.6%) and Australia (25.3%) highlighting a younger workforce in our region. Marrickville-Sydenham-Petersham had 100% of their practice nurses aged 20-34 years in 2017.

Figure 80: FTE practice nurses by SA3, 2017

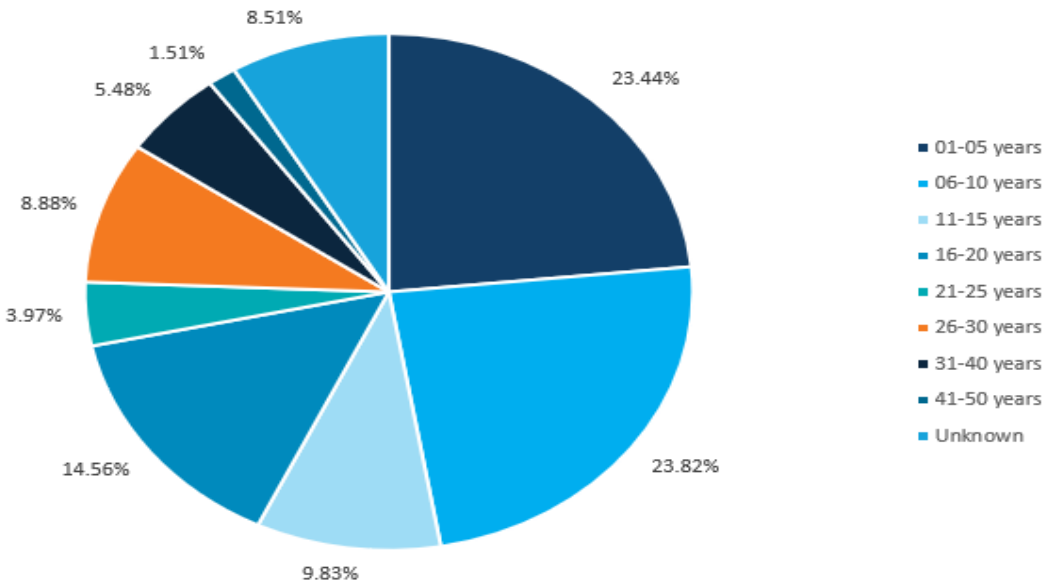


Source: Health Workforce Data 2017

Years intended to work

Almost half (47%) of responding practice nurses working the CESPHN catchment indicated that they intended to work up to 10 years. This was highest in Botany (66%), Canada Bay (65%) and Cronulla-Miranda-Caringbah (65%).

Figure 81: Number of years practice nurses intend to work, 2017



Source: Health Workforce Data 2017

9.4. Allied health professionals

In 2017, there were 12,518 Australian Health Practitioner Regulation Agency (AHPRA) registered allied health professionals working in the CESPHN region. Across all AHPRA registered allied health professionals there is a higher FTE rate per 100,000 population in the CESPHN region compared to NSW (705.1 and 531.4 respectively).(109)

Table 58: AHPRA registered allied health professions in CESPHN region, 2017

Health professional group	No. (CESPHN)	FTE (CESPHN)	FTE per 100,000 population (CESPHN)	No. (NSW)	FTE (NSW)	FTE per 100,000 population (NSW)
Aboriginal Health Practitioners	3.0	0.0	0.0	102.0	100.2	1.3
Chiropractors	433.0	398.0	24.7	1,599.0	1,439.4	18.3
Chinese Medicine Practitioners	652.0	539.0	33.5	1,679.0	1,326.4	16.9
Dental Practitioners	1,708.0	1,609.0	100.1	6,172.0	5,840.1	74.3
Medical Radiation Practitioners	987.0	904.0	56.2	4,493.0	4,018.8	51.1
Occupational Therapists	1,042.0	940.0	58.5	4,993.0	4,393.6	55.9
Optometrists	512.0	476.0	29.6	1,659.0	1,532.9	19.5
Osteopaths	132.0	123.0	7.6	515.0	441.2	5.6
Pharmacists	2,005.0	1,875.0	116.6	7,484.0	7,037.1	89.5
Physiotherapists	2,028.0	1,902.0	118.3	7,723.0	7,095.4	90.3
Podiatrists	281.0	274.0	17.0	1,277.0	1,223.5	15.6
Psychologists	2,738.0	2,300.0	143.0	8,684.0	7,325.3	93.2
Total	**12,519.0**	**11,339.7**	**705.1**	**46,374.0**	**41,773.9**	**531.4**

Source: Health Workforce Data 2017

Interpreter and translating services

Translating and Interpreting Services (TIS) National provides free interpreting services to medical practitioners and pharmacies but does 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. CESPHN has established the Access to Interpreting Services for Allied Health Professionals Program to address this gap.

9.5. Continuing professional development

Continuing professional development (CPD) is increasingly important for health professionals to stay abreast of new knowledge, new technology, new treatment approaches and to manage increasingly complex patients.

The CESPHN CPD program delivered 460 events between January 2017 to August 2019, which attracted 12,000 attendances. The proportion of clinicians working in the PHN that were engaged in this period was approximately 23% of GPs, 29% of nurses and 2% of allied health professionals.

10. Priorities

We based our prioritisation on the following criteria: scale and impact of the issue, benchmarking against national/state data and other similar regions, degree of health inequities, alignment with priorities and targets, unmet need and feasibility. We also considered 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.

We have identified eight priority areas for action:

- Population health
- Aboriginal and Torres Strait Islander health
- Older Australians
- Regional priority populations
- Mental health
- Alcohol and other drugs
- Access, coordination and integration of care (including after hours and digital health)
- Workforce.

Priorities		Expected outcome
1. Population health	**1.1 Chronic diseases and associated risk factors** • Work with general practice and allied health to ensure appropriate screening and management of patients with chronic diseases and associated risk factors • Commission specific services that seek to reduce risk factors among priority populations and encourage self-management of chronic conditions • Implement health promotion activities that increase population awareness on healthy behaviours, screening programs and health literacy	• Increase cancer screening rates • Reduce prevalence of risk factors • Increase number of patients with chronic diseases managed under GP Management Plan and/or Team Care Arrangements • Reduce potentially preventable hospitalisations for chronic conditions
	1.2 Immunisation • Develop strategies to increase immunisation coverage rates across the region with a focus on priority populations and populations with low childhood immunisation coverage rates	• Increase immunisation rates • Reduce vaccine potentially preventable hospitalisations
	1.3 Sexual health • Support primary care providers to address STIs and other blood borne (HIV and Viral Hepatitis) conditions	• Increase number of GP prescribers for HVB, HIV S100 medications, HCV and PrEP S85 medications
	1.4 Child and maternal health • Commission activities to address developmental delay, particularly for CALD communities • Enhance access to allied health professionals addressing culturally diversity and non-English speaking communities • Improve collaborations, pathways and partnerships with child and family health services • Maintain access to maternal primary care services, including the GP antenatal shared care program	• Reduce percentage of children with childhood developmental delays • Increase percentage of women attending antenatal visits
2. Aboriginal and Torres Strait Islander health	• Address access issues to culturally appropriate child and maternal health, health promotion, chronic disease, mental health and drug and alcohol services for Aboriginal and/or Torres Strait Islander peoples • Develop a culturally appropriate workforce for Aboriginal and/or Torres Strait Islander health	• Increase rate of Aboriginal and Torres Strait Islander population receiving health assessments • Increase proportion of PHN-commissioned mental health services delivered to the regional indigenous population where the services are culturally appropriate • Increase cultural awareness training participation rates • Increase support for the Aboriginal and Torres Strait Islander identified health workforce

3. Older Australians	• Commission community-based options for aged care priorities (frailty, dementia, falls, palliative care and carers stress) to address demand on services and disease burden • Support primary care providers to undertake advance care planning including end-of-life conversations and palliation services	• Increase MBS services provided by primary care providers in residential aged care facilities • Increase rate of people aged 75 and over with a GP health assessment
4. Regional priority populations	• Address the primary healthcare needs of regional priority populations, including socioeconomically disadvantaged areas, CALD communities and newly arrived migrants, people living with a disability, people experiencing homelessness, LGBTIQ people, high density dwellers, people in contact with the criminal system, rural and remote populations (Lord Howe and Norfolk Islands)	• Increase access to services by priority populations
5. Mental health	**5.1 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. **5.2 Low intensity mental health services** • Promote and provide access to low intensity mental health services and resources **5.3 Child and youth mental health services** • Ensure children and young people are receiving care and support within a stepped care approach to support their needs **5.4 Psychological therapies for priority populations** • Provide access to a range of applied psychological therapies for priority groups including residents of RACFs in the CEPSHN region **5.5 Severe and complex mental illness** • Provide access to care coordination for individuals experiencing severe mental illness and increased choice and control of services consumers have access to • Support people to test for the NDIS and ensure people with severe mental illness resulting in reduced psychosocial functioning who are not eligible for the NDIS are receiving psychosocial support services • Support the peer workforce **5.6 Suicide prevention** • Work to improve access to suicide prevention support through primary health care and ensure services delivered meet needs of the population. **5.7 Aboriginal and/or Torres Strait Islander mental health services** • Ensure services address the health and wellbeing needs of Aboriginal communities	• Increase proportion of population receiving PHN-commissioned mental health services – low intensity services, psychological therapies, clinical care coordination, youth specific • Increase proportion of population receiving PHN-commissioned mental health services (low intensity and psychological therapies) with clinical outcome measures • Increase number of people who are followed up by PHN-commissioned services following a recent suicide attempt • Effective transition of clients experiencing severe and complex mental illness to NDIS or psychosocial support services

6. Alcohol and other drugs	• Enhance access to drug and alcohol treatment services • Enhance access to drug and alcohol treatment in the primary care setting • Enhance capacity to address high need populations and clinical complexity	• Increased engagement of GPs in responding to AOD problems and shared care arrangements between specialist AOD services and GPs • Increased engagement of pharmacies in OTP • Increased access to rehabilitation and withdrawal services • Effective service models available to meet the needs of CALD communities, gender and sexuality diverse communities and individuals recently released from prison • Services address co-occurring mental health in the context of AOD use
7. Access, integration and coordination	**7.1 After hours** • Ensure an appropriate use, mix and distribution of after hours services for the population • Implement health promotion strategies to improve awareness of after hours services, appropriate use of emergency departments and options for after hours services. • Target frequent users of after hours services, such as people aged 65 years and over in the community and in RACFs, families with young children and priority populations such as people experiencing homelessness	• Increase number of general practices receiving the after hours PIP • Reduce low urgency care emergency department presentations
	7.2 Partnerships and HealthPathways • Develop and promote the use of HealthPathways that aim to assist healthcare providers to navigate local services • Undertake joint planning, collaborative commissioning and development of a directory of services with LHDs/ LHNs and local government • Co-design with consumers and peer workers	• Increase number of pathways developed, sessions of use, unique page views, different users • Increase number co-designed and co-commissioned services
	7.3 Digital health and data • Strengthen systematic, accurate and reliable electronic discharge summaries between hospitals and GPs • Support service providers such as general practice, allied health and RACFs to upload relevant patient data to the My Health Record and use specific digital health systems • Implement clinical auditing activities to enhance the integrity of general practice patient data • Develop robust methods for capturing, monitoring and evaluating data	• Increase rate of regular uploads to My health Record • Increase rate of discharge summaries uploaded to My Health Record • Increase rate of health care providers using specific digital health systems (smart forms, e-referrals, telehealth)

8. Workforce	**8.1 Continuing professional development** • Identify and implement relevant professional development opportunities GPs, practice nurses, practice staff, mental health and allied health professionals **8.2 Practice support** • Support practices with quality improvement activities, accreditation, bilingual community educators	• Increase the number of unique health professionals accessing professional development opportunities • Increase in number of accredited general practices • Increase the number of practices sharing data for quality improvement

Appendix A: 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.

Geography

There are several sub-regional possibilities when disaggregating to levels below that of the PHN. Where possible, CESPHN prefers to use the ABS Australian Statistical Geography Standard (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.

Sampling methods

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.

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.

Timeliness

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.

Future improvements

We 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
- Output and outcome data from commissioned services
- Continued consideration of input from stakeholders across a range of consumer, community and provider mechanisms.

Additional data tables

Table 59: 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 60: 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 61: CESPHN Estimated Aboriginal and/or Torres Strait Islander Population by Age, SA3, Persons – 2016

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+	
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 62: 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	75,830	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	**596,990**	**39.9%**	**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

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