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CENTRAL AND
EASTERN SYDNEY
An Australian Government Initiative

CESPHN
Needs Assessment 2017

4 December 2017

Executive Summary

The ensuring needs assessments provide an update to the CESPHN report submitted in November 2016. The process 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 to in the previous 12 months.

The report has been organised around the eight National PHN Priority Areas which are; Aged Care, Aboriginal and Torres Strait Islander Health, Digital Health, Mental Health, Population Health, Workforce, After Hours primary care, Drug and Alcohol and Remote and Remote Health. The ensuring report version has been presented differently to the previous (2016) version however, the priorities and recommendations are largely the same, or a progressive version of former recommendations.

Methods

A mixed method approach was used to capture, analyse and triangulate data to obtain a contemporary understanding of the primary care needs and services gaps for the region. Quantitative data were derived from institutional, administrative, and census based metadata sources. Data regarding access and availability of healthcare services was provided where these data existed.

Qualitative data were analysed from a range of purposeful and incidental engagement activities that occurred between November 2016 to December 2017. Qualitative data collected from key informants was considered and where contextually relevant, included in the synthesis of data. Progress made since the last needs assessment was noted, together with emerging policies that have potential to provide stimulus for future CESPHN activity. These data provided contextual information and insights, not obvious from quantitative data sources. They facilitated a deeper understanding of the profile and dynamics of the CESPHN population, workforce and service provision, and contributed to identification of barriers and enablers in the delivery of equitable primary health care across the region.

For each priority area, data for health needs have been presented for disease incidence or prevalence, characteristics or attribution, and distribution across the region. For service gaps, the frequency and distribution for identified health needs has been outlined. For each priority area, population variances have been made identified such as cultural status, gender, socioeconomic status, health literacy and age.

Quantitative data were compiled as statistical aggregates, and triangulated against qualitative data, and grey literature. The process facilitated the identification of priority areas and translated into a range of activities represented as recommendations in each report.

Findings

The succeeding reports highlight the need for continued work to identify and coordinate service providers to deliver seamless care, particularly for vulnerable populations or those requiring frequent medical care. Report 1 highlights a range of options to address local population health issues such as biomedical risk factors, chronic disease, maternal health, immunisation and sexual health. The need to increase the proportion of primary care providers that deliver culturally sensitive services has again been highlighted, as has the needs of Norfolk and Lord Howe Island. This report also identifies the need to comprehensively and consistently capture data to inform activities including patient and provider experience, activity outcome measures and micro level data from general practices was noted. Finally, the MyHealth Record expansion offers the opportunity to

augment service delivery and patient outcomes through improved communication and support integration and coordination of care.

The Mental Health Needs Assessment (Report 2) suggests the maintenance of existing activities that support the delivery of low intensity through to severe/complex care, services for children and youth and suicide prevention. It also highlights the importance of equitable access for minority populations, the role of stepped care, service provision for people aged 65 years and older, and those from rural and remote communities e.g. Lord Howe Island and Norfolk Island

Findings from the Drug and Alcohol Needs Assessment (Report 3) identified the need to support primary care to manage patients through capability building and appropriate referral pathways. Additionally, the report suggests the need to increase the capacity of the sector to effectively and efficiently address consumers with drug and alcohol disorders, through strategies to enhance integration and coordination of care.

Moving forward, CESPHN will to continue to develop options to address health and service needs. Resulting activities will be drawn from joint planning with key stakeholders including general practices, local/speciality health districts and networks, NGOs and member organisations.

Limitations

Limitations remain in mapping services related to population or priority areas, for chronic disease, mental health, after hours care and drug and alcohol services. The sheer number of services and providers across the CESPHN region makes this a significant and ongoing task for the PHN. In this case, the limitations have been annotated and the need for comprehensive, dynamic and real-time service level data marked as a focus of CESPHN to ensure a contemporaneous representation of services.

CESPHN acknowledge that data was captured from a range of administrative and survey data sets, which are subject to change. For example, data sets reporting notifiable diseases which provide a 'real time' status or where there have been errors or anomalies in earlier data sets e.g. the Australian Bureau of Statistics (ABS) revises cause-of-death data using information pertaining to coroners' cases that was not available at the time of the initial collection

Small population cohorts or underreported disease incidence limited the ability to capture detailed profiles for the following areas;

- Homeless residents of the region
- Incidence of mental health and drug and alcohol disorders
- Aboriginal and Torres Strait Island community members
- Residents of Norfolk and Lord Howe Islands
- CALD communities, particularly emerging groups

Acknowledgement of inconsistencies in the capture and thematic analysis of qualitative data for this report are noted. To limit bias or misrepresentation, a second member of the CESPHN planning team and member of the relevant program areas were co-opted to conduct a second and third review of themes. This process was used to ensure accuracy and consistency with interpretation and translation.

Where to from here?

The third iteration of the CESPHN needs assessment has offered the opportunity to establish more robust systems for data collection and synthesis including additional metadata sources providing local granularity e.g. practice level data from clinical audits and data aggregation. Despite this,

several areas were identified as areas for development or requiring future consideration. These have been summarised below;

CESPHN value the annual needs assessment however notes there are substantial resources required to produce a valid and reliable source of information for planning and allocation of resources. In response, CESPHN has suggested altering the needs assessment cycle from annual to biannual submissions. This would allow PHNs to turn efforts to evaluation and monitoring and develop meaningful (and local) data assets

Mature methods for capturing and analysing qualitative data are required to ensure context, provide analytical rigour and translation. Allowing more time in the needs assessment submission cycle would provide CESPHN capacity to implement systematic mechanisms to capture, analyse and translate the voice of key stakeholders including clinicians and consumers using the quadruple aim framework to inform the strategic direction.

Contents

Section 1: Demographic characteristics

1.1 CESPHN Population

1.1.1 Population Characteristics

The 2016 Census reported a total of n=1,495,875 residents living in the CESPHN region (1). The population is distributed across 15 statistical areas (SA3), including Norfolk Island and Lord Howe Island, both located off the eastern costs of NSW (1).

Where the availability of data permitted, the frequency and distribution of residents was analysed by age, using five-year groupings, across the 15 sub-regions (SA3) and the region as a whole (1). For data presented in the Mental Health and Alcohol and Other Drug sections, appended to this report, age groups have been considered according to standards defined by the sector.

For the CESPHN region, the highest concentration of the population resides in the Sydney Inner City sub-region (14.3%, n=214,249), followed by the Strathfield-Burwood-Ashfield sub-region (10.15%, n=151,873) and Eastern Suburbs – South (9.4%, n=140,654) (2).

1.1.2 Age and Gender

Population estimates predict an increase of people aged 65 years or older as the concentration of residents (currently) aged between 20 and 44, will age over the next 20 years. Figure 1 provides a summary of the proportion of CESPHN population by 5-year age groups, from largest to smallest (1).

1.1.3 Cultural diversity

The scope of CALD populations for this report includes emerging and established CALD communities. CALD communities have been considered as a distinct group with associated poorer health outcomes for issues related to access, health literacy and cultural translation difficulties.
The 2016 Census indicated variability in the distribution of people who speak a language other than English and/or born overseas (Figure 2). In terms of language diversity, the proportion of Asian-origin languages had the highest incidence, followed by Greek and Arabic. A summary of the most frequently occurring languages across CESPHN is outlined in Figure 3.

1.1.4 English literacy

English literacy is considered pertinent to health outcomes, impacting the ability of a person to self-manage their health condition, access healthcare services, and reduce variation in clinical outcomes. Recent literature indicates that an estimated 6.8% (n=102,739) of CESPHN residents have limited English literacy and language skills. NB: For this report, cultural and linguistic diversity was captured from the 2011 and 2016 ABS Census'(1, 2). This report used the same categories as the ABS for CALD status (1)

Figure 1 Proportion of CESPHN population by 5-year age groups - Largest to smallest

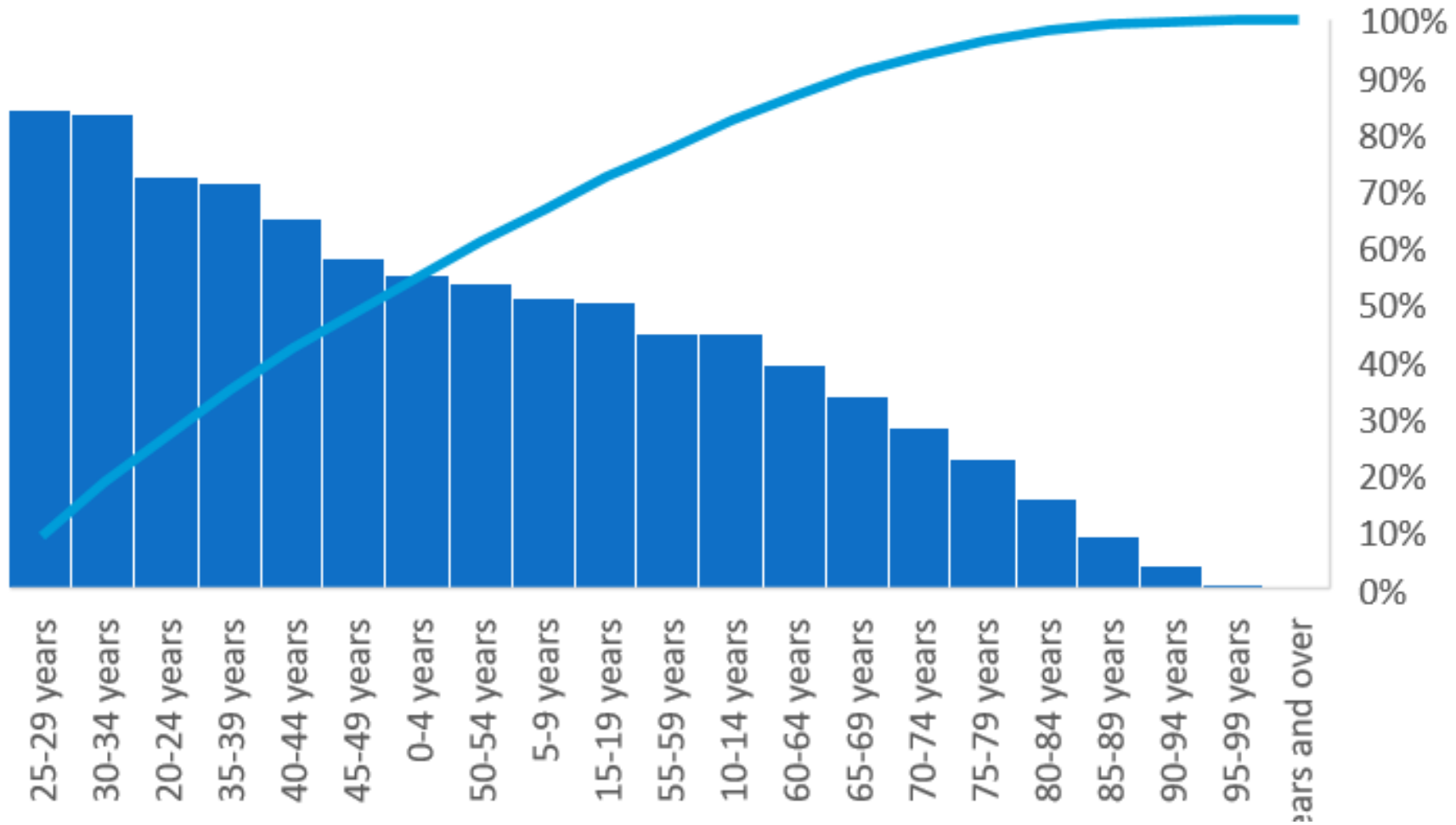


Figure 2 Proportion of CALD residents against the total CESPHN population, by SA3 (2016)

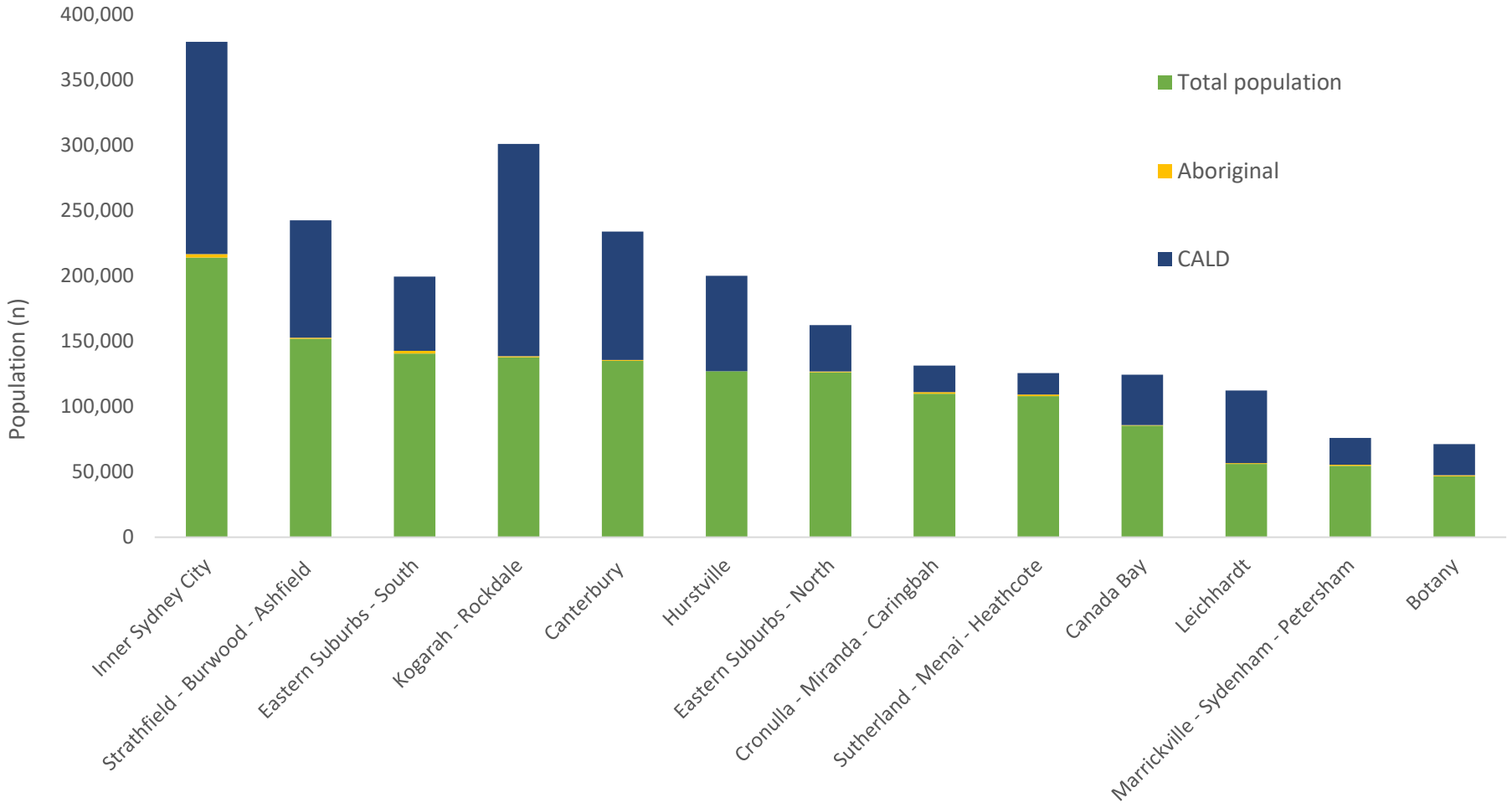
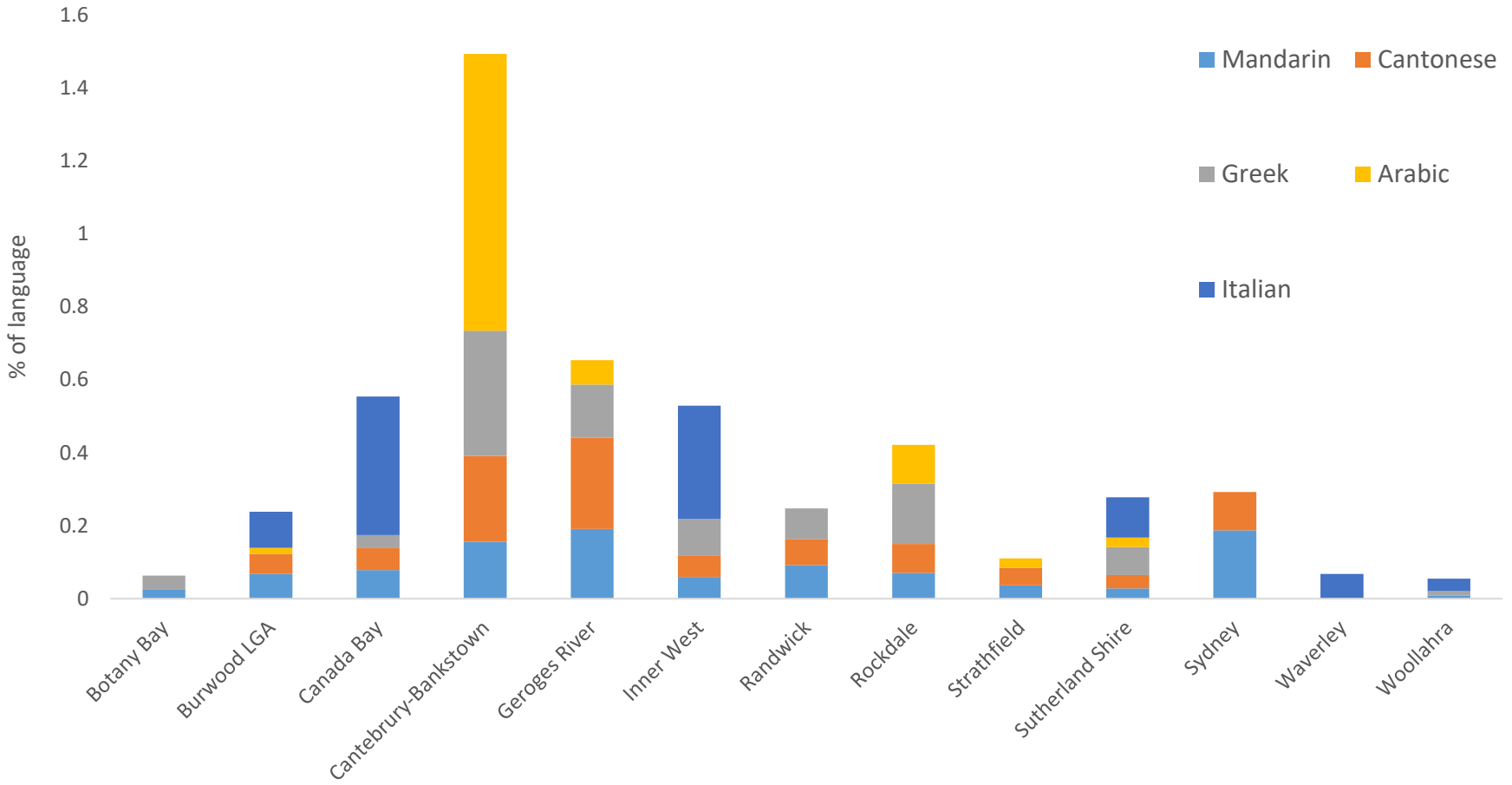


Figure 3 Distributions of languages other than English (2016)



1.1.5 Socioeconomic disadvantage

There is variation across the CESPHN region in terms of relative socio-economic advantage and disadvantage. Evidence indicates that more socioeconomically disadvantaged groups have higher utilisation rates for GP services, compared with those who are not socioeconomically disadvantaged (6). Despite the more frequent use of general practice services, there remains a high level of hospitalisation for preventable conditions (7, 8). Table 1 provides a summary of the relative socioeconomic disadvantage ranked from most disadvantaged to advantaged (6).

The most disadvantaged sub-regions within CESPHN include Canterbury (Index Score: 967.04), followed by Botany Bay (Index Score: 997.34) and then Lord Howe Island (Index Score: 1004.48).

Table 1 Index of relative socioeconomic disadvantage ranked from most disadvantaged to advantaged (2).

2006 Statistical Local Area	Score	2006 Statistical Local Area	Score
1. Canterbury	967.04	12. Sutherland Shire - East	1095.61
2. Botany Bay	997.34	13. Sydney - Inner	1099.3
3. Lord Howe Island	1004.48	14. Randwick	1100.44
4. Rockdale	1025.55	15. Sydney - West	1113.15
5. Hurstville	1043.67	16. Sutherland Shire - West	1115.74
6. Burwood	1058.34	17. Canada Bay - Concord	1121.22
7. Marrickville	1065.46	18. Canada Bay - Drummoyne	1125.75
8. Ashfield	1065.64	19. Sydney - East	1131.51
9. Kogarah	1081.19	20. Waverley	1144.5
10. Strathfield	1081.37	21. Leichhardt	1148.89
11. Sydney - South	1093.87	22. Woollahra	1190.72

NB: Throughout this report, disease incidence have been cross tabulated with rates of relative socioeconomic disadvantage, health literacy and CALD background, as reported by the Australian Bureau of Statistics (2011) (2)

Limitations: SEIFA estimates for the 2016 Census are not yet available. Data has been extracted from 2011 census.

1.1.6 Migrants and language spoken

One-third of people born in a country other than Australia had adequate or better health literacy when tested in English compared with 43% of people who were born in Australia (14, 15).

NB: *Throughout this report, disease incidence have been cross tabulated with rates of relative socioeconomic disadvantage, health literacy and CALD background, as reported by the Australian Bureau of Statistics (2011) (2)*

1.1.7 Health Literacy

Lower health literacy is associated with poorer health outcomes, limited engagement with the healthcare sector, lesser knowledge and uptake of preventive actions, impaired self-management, increased use in emergency care, hospitalisations and mortality rates (9-13). The self-assessed health of CESPHN residents (aged 15 years and older) has been provided in the proceeding sections of this report.

1.1.8 Self-assessed health (people aged 15 years & over)

It is estimated that 12.9% of CESPHN population (153,200) over the age of 15 years self-assessed her health as fair or poor between 2014-15 compared to 14.3% for New South Wales (16, 17). Canterbury (17.4%), Marrickville-Sydenham-Petersham (17.2%) and Botany (16.4%) had with the highest proportion of population over the age of 15 years with fair or poor self-assessed health (16, 17). These regions have associated high proportions of CALD population and residents aged 65 years or older, known to be associated with low health literacy and self-rated health status (16, 17). Eastern Suburbs north (8.2%), Leichhardt (9.8%) and Cronulla-Miranda-Caringbah (10.1%) are SA3 areas with the lowest proportion of population over the age of 15 years with fair or poor self-assessed health (16, 17).

Limitations: Health literacy data drawn from Self assessed health status (ABS). Most recent data available is 2007. Data is limited to self-report (14)

1.2 Patient experience

Patient experience measures are recognised as indicators of quality, access to healthcare and equitable distribution of services. Capturing the patient voice is considered a key enabler to service integration.

1.2.1 Access to General Practice

For the CESPHN region, there were more than three quarters (79.4%) of respondents that indicated they had seen a GP in the previous 12 months (2015-16). Whereas, 8.5% of respondents indicated they had seen a GP in the previous 12 months to seek urgent care (18). Similarly, there were 80.5% of CESPHN respondents that indicated they have a preferred GP in the preceding 12 months (18-20). Results from the 2015-16, Patient Experience Survey have been summaries and findings in relation of 'Frequency of Access' provided in the adjacent section of this report.
CESPHN does not currently capture consumer and/or provider experience for activities. From time to time, discrete activities have been undertaken to capture experience with the health care sector, however this is not a systematic or mandatory activity except for some discrete commissioned activities.

Largely, CESPHN has been reliant on outcomes from the AIHW Patient Experience Survey. Whilst this data source offers a standardised set of indicators that can be compared against other PHNs, there is no mechanism to systematically capture patient experience that represents local initiatives and/or the work that CESPHN is responsible and/or associated with.

1.2.2 Frequency of access

Between 2015-16, the Patient Experience Survey reported relatively low rates (8.5%) of patients that sought care from a GP for more than 12 times in the year. The frequency of visits equates to once per month and would likely relate to patients with chronic and complex medical condition (18-20).

These data provide an indication of the relative access to GPs, their confidence in seeking care/advice from a GP (measured by regular GP and frequency of access) and suggests a high proportion of the population have an awareness of the role of GPs and have sought care in response. In contrast, these data indicate that approximate 20% of the CESPHN population may not have a preferred GP or seek care for medical concerns (urgent or non-urgent) as a preventive to hospital presentations.

Limitations: Health literacy data drawn from Self assessed health status (ABS). Most recent data available is 2007. Data is limited to self-report (14)

1.3 Leading Cause of Death

Between 2015-16, the leading cause of death in NSW was Ischemic heart disease, with the highest incidence in the 75 years and over age group. Malignant neoplasms of the digestive organs were the second leading cause of death in NSW, with the highest incidence amongst people aged 45 years and over. Table 2 summaries the leading cause of death in NSW with the top three age groups.

Table 2 Leading cause of death in New South Wales for all persons (2015-16)

Condition	Death rate /100,000	Leading cause of death by age group
Ischemic heart disease	87.0	Leading cause of death for the following age groups; 1. 75-84 years (438.5/100,000) 2. 85-94 years (1,832.4/100,000) 3. ≥95 years (4,985/100,000)
Malignant neoplasms (digestive organs)	57.7	Leading cause of death for the following age groups; 1. 45-54 years old (28.1/100,000) 2. 55-64 years old (76.9/100,000) 3. 65-74 years old (165.5/100,000)

Limitations: Data availability limited to NSW level, Not available at any further granularity.

1.3.1 Potentially preventable hospitalisations

In the 2015-16 period, the rate for potentially preventable hospitalisations (PPH) for the CESPHN region was 2,018 per 100,000. The top three diseases contributing to rates for the three PPH categories (I.e. Acute, Chronic and Vaccine Preventable) are outlined in Table 3

The average length of stay for patients admitted to hospitals under either acute, chronic or vaccine preventable PPH category was 4.5 days. These data provide some insight regarding the disease severity and/or limited discharge coordination/options. When compared against other PHNs, CESPHN ranked as the 2nd highest region (nationally) for length of stay behind Nepean Blue

Mountains (4.6 days). Second placed was shared with Hunter New England and Central Coast, Northern Sydney, South Eastern NSW and Western NSW all 4.5 days.

1.3.2 Paediatric hospitalisations

Between 2015-16, there were high rates of asthma like illness presentations across CESPHN and NSW. These rates are highest amongst children aged 5-9-year age groups (1018 per 100,000 people).

1.3.3 Potentially preventable hospitalisations

Table 3 CESPHN PPH for, per 100,000 for acute, chronic & vaccine preventable conditions (2015-16)

PPH category	Rate per 100,000 (age standardised)	PPH condition by category
Acute	937	1. Kidney and urinary tract infections
		2. Cellulitis
		3. Dental conditions
Chronic conditions	894	1. Congestive heart failure
		2. Chronic obstructive pulmonary disease (COPD)
		3. Angina
Vaccine preventable	208	1. Other vaccine-preventable conditions
		2. Pneumonia and influenza (vaccine-preventable)

Limitations: Most recent data available is 2014-15.

1.4 Urban Density

Urban density is expected to rise over the next 20 years across Sydney. The Greater Sydney Commission for Planning has announced several developments across the CESPHN region contributing to a rise in the number of dwellings, the associated infrastructure and population (3).

Growing residential infrastructure will contribute to the density of already highly populated areas. The regions earmarked for development already have highly complex populations, with associated levels of disadvantage. The additional population will place increased pressure on the region's healthcare services. Details of three large residential developments for the CESPHN region have been summarised below;

1.4.1 Local developments

The Waterloo and Green Square developments will provide 23,000 new and replacement social housing dwellings, increasing the number of households by more than 12,900. This will almost double the population in the next 12 to 13 years (4, 5). Further, there is an additional 83,500 dwellings planned for the Canterbury-Bankstown region, contributing an additional 142,000 residents in next five years (5).

CESPHN has planned to initiate engagement with the newly established Canterbury-Bankstown Council. CESPHN plan to contribute to the neighbourhood design in terms of the primary care needs for the new dwellings in Canterbury.

CESPHN has been engaged in the housing and neighbourhood design process for both the Green Square and Waterloo developments. Additional consultation has commenced with Sutherland Shire Council regarding the establishment of their Economic Development Strategy, 2018-2022 which includes the medical precinct in Caringbah (3).

1.5 Health Services

1.5.1 Local and Specialty Health Services

CESPHN share the same geographical boundaries of two Local Health Districts;

- Sydney Local Health District
- South Eastern Sydney Health District

There are three specialty Health Networks co-located within the boundaries of CESPHN, including;

- St Vincent's Health Network
- Justice and Forensic Mental Health Network
- Sydney Children's Hospital Network

Together, a formal relationship has been formed through the establishment of a governance structure to support and enhance collaborative work that streamlines the provision of care for residents. The terms of reference for this group are in line with those established by the Commonwealth Department of Health for PHNs.

1.5.1.1 Sydney Local Health District

Sydney Local Health District covers three Local Government Areas; City of Sydney, Canterbury Bankstown and Inner West Councils. The region borders the neighbouring SESLHD in the East, extending west to Canterbury and north west to Leichhardt and Concord. The District includes four public hospitals an oral health facility and a range of community and ambulatory care services. Public hospitals in the region include;

- Royal Prince Alfred Hospital (RPA)
- Concord Repatriation General Hospital
- Canterbury (District facility)
- Balmain (Sub-acute facility)
- Sydney Dental Hospital

SLHD has a large workforce made up of medical, nursing, allied health, scientific and technical staff, administrators and volunteer consumer representatives. The largest workforce group is nursing, with more than 60% of the total workforce (n=5,300), followed by n=1450 doctors, n=1440 allied health professionals.

Workforce priorities

SLHD have identified a number of areas requiring workforce development. Table 4 summarises the SLHD workforce priorities and highlights those relevant to CESPHN (21)

Table 4 SLHD Workforce priorities against CESPHN priorities

SLHD priority		**Relevance to CESPHN priorities**
Matching health service needs with workforce supply & skills	Expand capacity for training placements in line with identified areas of need	Potential ptions to support CESPHN workforce shortages, dual employment arrangements such as secondments & collaborative activities
	Implement a capability framework for non-clinical positions	Healthcare neighbourhoods Capacity building local general practices
	Develop innovative strategies to attract identified small but critical workforces	Potential to collaborate regarding shared areas of priority that require niche workforce skills e.g. primary care research
	Develop and implement workforce strategies for Health Information Technology (HIT) groups in high demand	Aligns with CESPHN digital health strategy, data stewardship and opportunities regarding data linkage
	Increase promotion of health careers and traineeships at schools and more broadly through community settings	May offer options to support CESPHN workforce shortages, and economies of scale achieved through joint initiatives under this priority.
	Actively plan and manage the impact of intergenerational differences in the workplace.	This priority aligns to the need for culturally appropriate service provision, role of the consumer and patient/provider experience (outlined later in this report).
Promoting organisational & partnership support	Strengthen partnerships with other organisations to provide support, share expertise, skill development, collaboration & innovation	Build on work to date commenced through the Partnership committee, with representatives from all LHDs and SHNs
	Ensure support and close collaboration between internal and external workforce-related service providers to advance strategic foresight and promote workforce innovation	Opportunity to collaborate regarding workforce innovation activities and translate to general practice
	Continually explore innovative approaches to delivering new models of care that incorporate increased use of technology and other skill mix changes	Aligns with CESPHN digital health strategy, data stewardship, innovation and opportunities regarding data linkage
Integrated care	Implement workforce components of integrated care initiatives	Opportunity to partner regarding integrated care initiatives that draw on primary care
Patient & family centred care	Implement workforce initiatives that encourage and promote patient and family centred care across all services	- In line with recommendations in this report regarding integration of patient/provider experience measures - Aligns with philosophy underpinning PCMN & enhancing the role of consumers/peer workers.
Aboriginal Health Worker models of care	Develop innovative Aboriginal health models of care which build on the strengths of the current AHW workforce	Opportunity to strengthen Aboriginal workforce and presence in the region through service commissioned through SLHD, under this priority

Research and innovation in daily practice	Establish new graduate positions in allied health professions to meet future workforce need	Opportunity to strengthen local healthcare workforce and address CESPHN (internal) workforce shortages
	Foster a dynamic and supportive research culture through strategic leadership and governance	Opportunities for co-designed and co-governed research

1.5.1.2 South Eastern Sydney Local Health District

SESLHD covers seven Local Government Areas; City of Sydney, Randwick, Woollahra, Waverley, Sutherland Shire Council, Georges River and Bayside Councils. The region extends from the Central Business District in Sydney, to the Royal National Park in the south. The District includes eight public hospitals and one public nursing home:

- Calvary Healthcare Sydney
- Prince of Wales Hospital
- Royal Hospital for Women
- St George Hospital
- Sutherland Hospital
- Sydney Eye Hospital
- War Memorial Hospital
- Gower Wilson Memorial
- Garrawarra Centre

A number of these facilities include services for alcohol and other drugs treatment, Breast Screen HIV/AIDS, Public Health, Women's Health, Youth Health, Sexual Health, Imaging and Pathology services.

SESLHD have a significant workforce of medical, nursing, allied health, scientific and technical staff, administrators and volunteer consumer representatives. The largest workforce group is nursing, with more than 60% of the total workforce (n=10,681), n=4,670 nurses and n=1,602 doctors. The remainder are a proportion of allied health, scientific and technical staff, administrators and volunteer consumer representatives

In July 2015, SESLHD opened a HealthOne service which supports integration of care across the LHD for high equity populations. The service engages local healthcare providers to create multidisciplinary teams consisting of GPs, allied health and ancillary health professionals. To date, a lifestyle intervention and management program has been established and clinics for specific medical conditions consisting of multidisciplinary teams.

The District also has responsibility for the Statewide health services for Lord Howe Island and Norfolk Island with access to hospitals and facilities of SESLHD (21).

Workforce priorities

SESLHD have identified a number of areas requiring workforce development. Table 5 summarises the SESLHD workforce priorities and highlights those relevant to CESPHN (21)

Table 5 SESLHD Workforce priorities against CESPHN priorities

SESLHD priority		**Relevance to CESPHN priorities**
Encourage clinician participation in, and transparency of, decision making across the organisation	Assure well-coordinated multi-campus health services are available to optimise patient outcomes and service efficiencies through guidance and direction from Clinical Streams.	Opportunity to partner regarding integrated care initiatives that draw on primary care
Build a workforce that embraces teamwork and interdisciplinary service models	Ensure Clinical streams have multidisciplinary clinical representation on peak committees and service planning opportunities, including allied health professionals.	- Build on work to date commenced through the Partnership committee, with representatives from all LHDs and SHNs - Opportunity to collaborate regarding workforce innovation activities and translate to general practice
Attract and retain an appropriately skilled, flexible and competent workforce which matches current and evolving service needs and priorities	Implement strategies and frameworks to promote multiple entry pathways into employment including traineeships, Vocational Education and Training in schools, cadetships and graduate entry and support programs.	May offer options to support CESPHN workforce shortages, dual employment arrangements such as secondments and collaborative activities
	Develop and implement strategies to improve workforce attraction and retention with a focus on professional sub groups potentially in short supply and/or required at higher levels within specific SESLHD services.	Potential to collaborate regarding shared areas of priority that require niche workforce skills e.g. primary care research
	Develop training program and resources for GPs, other doctors, mental health and other staff to assist in identifying and effectively responding to women experiencing domestic violence.	Aligns with CESPHN health priority to support general practice to screening and refer patients 'at risk' of family and domestic violence
	Implement education about Delirium and Dementia pathways, including in emergency departments and pre-admission clinics.	Aligns with CESPHN health priority to support general practice to screening and manage patients for dementia and frailty
	Implement the Good Health – Great Jobs, the NSW Aboriginal Workforce Strategic Framework 2011-2015.	Opportunity to strengthen Aboriginal workforce and presence in the region through service commissioned through SLHD, under this priority
Promote a culture of teaching, continuous learning, testing and seeking of new approaches, and performance improvement	Review clinical areas and explore options for innovative workforce redesign to better match needs: Enhanced General Medicine Stream and Hospitalists role to reflect the changing patient profile of increasing comorbidities.	- Opportunity to strengthen local healthcare workforce and address CESPHN (internal) workforce shortages - Opportunities for co-designed and co-governed research - Possible translation for PCMN

Build our reputation as a leader in innovation, research, teaching and education, in collaboration with our partners	Maximise health outcomes for SESLHD patients and community members through partnership with [research bodies] which will inform rapid translation of health research activity into the clinical setting and the St George and Sutherland Academic Health Centre.	Opportunities for co-designed and co-governed research
	Build capacity/skills of relevant staff to undertake research, and attract and retain researchers.	Opportunities for co-designed and co-governed research

1.5.1.3 St Vincent's Health Network

St Vincent's Health Network is part of an integrated network of clinical services that aim to ensure timely access to appropriate care for all residents in New South Wales. The facilities of the St Vincent's Health Network Sydney are located in the geographical boundaries of the South-Eastern Sydney and Western Sydney Local Health Districts. Collaborative arrangements have been established to ensure provision of clinical services to the communities located in these Local Health Districts.

St Vincent's Health Network Sydney (SVHNS) comprises of St Vincent's Hospital Sydney Limited as the affiliated health organisation in respect of three recognised establishments under the Health Services Act 1997 (NSW) (Health Services Act). Under the Health Services Act, St Vincent's Hospital Sydney Limited, is treated as a Network for the purposes of the National Health Reform Agreement in respect of the three recognised establishments: St Vincent's Hospital, Darlinghurst; Sacred Heart Health Service, Darlinghurst and; St Joseph's Hospital, Auburn

1.5.1.4 Sydney Children's Hospital Network

Sydney Children's Hospital, Randwick is one of Australia's leading specialist medical centres for children, caring for seriously ill and injured children from across NSW and beyond. It forms part of the Sydney Children's Hospitals Network. Sydney Children's Hospital, Randwick provides a complex and comprehensive range of services in paediatric and adolescent medicine and surgery, treating children with conditions including cancer, trauma, HIV/AIDS, congenital abnormalities, disabilities, heart disease and respiratory disorders.Whilst within the geographical boundaries of CESPHN, the SCHN provides services for patients across NSW and Australia

The Sydney Children's Hospitals Network incorporates The Children's Hospital at Westmead, Sydney Children's Hospital, Randwick, Bear Cottage, the Newborn and paediatric Emergency Transport Service (NETS), the Pregnancy and newborn Services Network (PSN) and the Children's Court Clinic.

1.5.1.5 Justice and Forensic Mental Health

Justice Health and Forensic Mental Health Network is a state-wide Board-governed Specialty Network delivering health care to adults and young people in contact with the forensic mental health and criminal justice systems, across community, inpatient and custodial settings.
Within the CESPHN region, JFMH have the Long Bay Hospital which is an 85-bed facility located on the Long Bay Complex site. The hospital has three distinct Units: Mental Health Unit - 40 beds, Medical Subacute Unit - 30 beds, Aged Care and Rehabilitation Unit - 15 beds. The new facility

provides an improved standard of accommodation for patients requiring both medical and mental health treatment. The design of the facility caters to both male and female inpatients without disadvantage and is accessible to all adults throughout the NSW correctional system.

1.5.1.6 Private Hospitals

There are 24 private hospitals operating within the CESPHN region providing a range of acute, sub-acute and ambulatory care services. Hospitals are distributed across the region with the highest number located in the Inner West Council region, followed by George River Council.

Table 6 Distribution of private hospitals across CESPHN by LGA

LGA	Number of private hospitals
Waverley Council	1
Woollahra Council	1
Inner West Council	7
Georges River Council	6
City of Sydney Council	3

1.5.1.7 General Practice

Between 2016-17, there were n=682 general practices operating within the CESPHN region. A total of n=3,063 GPs were delivering services within these practices, which equates to n=488 residents per GP (n=1,495,875). There was a higher proportion of male GPs (66%, n=2,010) than females (34%, n=1,039), evenly distributed across the region.

There was one Aboriginal Medical Service (AMS) operating in the region, with n=12 GPs employed by the Service. The located in Redfern an epicentre for the local Aboriginal community and hub for related cultural services.

Accreditation status

Data regarding the accreditation status of general practices across the region is limited, however records to date represent n=1,798 GPs work in accredited general practice.

Table 7 provides a summary of the distribution of general practices and GPs by gender. Preliminary data regarding general practice accreditation status has been provided.

LBGTI Access to general practice

To support access for people identifying as LBGTI, CESPHN have sought expressions of interest from local general practices wishing to be labelled ‘Gay Friendly’.

To date, a total of n=156 (8%) practices have indicated a ‘Gay Friendly’ status. These GPs have participated in ASHM online learning, disseminate safe sex resources within their practice and have an awareness of testing guidelines for syphilis, gonorrhoea and HIV

S100 Prescriber status

A total of n=8 GPs completed S100 prescriber training during this reporting period, slightly less that the desired performance target of n=9.

Recent data indicates that HIV diagnosis is at its lowest in the last five years, this demonstrates a need to ensure GPs who have completed the S100 prescriber course feel confident in management of HIV and, that HIV patients feel comfortable and supported by their GPs.

Currently, one GP with S100 prescriber accreditation and sexual health physicians from the RPAH provide direct support to the Redfern AMS Redfern clinic for the management of STIs.

Cultural Awareness Training

Data regarding cultural awareness training completed by local general practices is currently being validated. These data will be used as a tool to inform activities under the integrated care stream, general practice support and quality improvement. Whilst we intend to provide DoH with a figure regarding this variable for a single point in time, we expect that the cultural awareness proficiency will change over time. CESPHN are currently exploring methods of capturing these data sets dynamically, and in real time.

Speak languages other than English

A number of GPs across the region speak a language other than English. The number and languages spoken have been outlined in Table 9

Antenatal Shared Care registration

There was a total of n=983 GPs (2017) registered and actively participating the CESPHN Antenatal Shared Care Program, in partnership with local hospitals. The highest proportion of GPs (45.1%) were registered to the Royal Hospital for Women and RPA Women and Babies/Canterbury Hospital ANSC programs, followed by St George Hospital and Sutherland Hospital program (17.6%). Table 7 provides a summary of GP registrations by ANSC program.

ANSC registration

Table 7 GP registrations to CESPHN ANSC programs (2017)

	GPs registered to program	
ANSC program	**N**	**%**
Royal Hospital for Women	157	16.0
Royal Hospital for Women RPA Women and Babies Canterbury Hospital	114	11.6
Royal Hospital for Women RPA Women and Babies Canterbury Hospital St George Sutherland	25	2.5
Royal Hospital for Women St George Hospital Sutherland Hospital	12	1.2
RPA Women and Babies Canterbury Hospital	443	45.1
RPA Women and Babies Canterbury Hospital St George Hospital Sutherland Hospital	59	6.0
St George Hospital Sutherland Hospital	173	17.6
Total	**983**	100.0

Table 8 Number, distribution and gender of GPs across the CESPHN region

LGA	N practices	N GPs	Female GPs	Male GPs	Gender not stated
Ashfield	25	96	55	38	3
Botany Bay	22	78	25	53	0
Burwood	25	108	32	76	0
Canada Bay	32	66	64	1	1
Canterbury	81	321	114	204	3
City of Sydney	119	695	198	493	4
Hurstville	44	184	64	120	0
Kogarah	24	108	36	72	0
Leichhardt	27	139	36	103	0
Marrickville	39	139	47	91	1
Randwick	48	252	82	170	0
Rockdale	44	147	54	93	0
Strathfield	19	46	15	31	0
Sutherland	69	391	129	261	1
Waverley	41	175	51	123	1
Woollahra	22	110	34	76	0
Lord Howe Island	1	1	0	1	0
Norfolk Island	1	7	3	4	0

Table 9 Number of GPs speaking a language other than English

Language spoken by GP	Number
Cantonese	180
Mandarin	158
Arabic	118
Hindi	87

Practice Nurses

There was a total of n=519 practice nurses working across the CESPHN region. The highest proportion of nurse's work in the City of Sydney LGA, followed by Sutherland and then Canterbury.

Data informing the characteristics of practices nurses across the region is limited. In response, CESPHN has planned an improved data asset strategy to build and enhance relevant meta data categories. Details of the data assets needs and gaps of CESPHN have been outlined in the later part of this report.

1.5.1.7 Allied Health Professionals

In 2016, there were 17 Allied Health Professions (AHP) represented in the CESPHN region, with n=3,175 individual providers. The profession most represented was Pharmacy (n=794), followed by Physiotherapy (n=558) and Psychology (n=552). The profession least represented were Mental

Health Nurses (n=7), followed by Diabetes Educators (n=9) and Audiologists (n=29). A summary if provided in Table 10.

The distribution of AHPs was varied with the highest number of all professions located in the City of Sydney LGA (n=767), followed by Sutherland (n=587) and then Randwick (n=370). In contrast, the regions with the least number of AHPs was Strathfield (n=73), followed by Botany Bay (74) and then Ashfield (n=136).

There are limitations with the availability of data regarding the number and distribution of AHPs across the region. Existing data has relied on self-report from AHPs in the region. Secondly, the transience of this cohort, together with the level of (CESPHN) resourcing required to maintain an accurate and reliable database have limited this information. As a result, CESPHN has used this information cautiously, referring it as a source of guidance only. Moving forward, additional resources will be provided by CESPHN to building on service mapping to data and provide a more accurate representation of this workforce.

Table 10 summary of (all) AHPs by sub-regions

LGA	AHPs (Total)
Ashfield	136
Botany Bay	74
Burwood	222
Canada Bay	251
Canterbury	199
City of Sydney	767
Hurstville	271
Kogarah	144
Leichhardt	259
Marrickville	188
Randwick	370
Rockdale	142
Strathfield	73
Sutherland	587
Waverley	273
Woollahra	164
Total	**3184**

1.5.2 Interpreting Service

There are a number of allied health professionals providing services in the region that speak a language other than English. The number of professionals and language spoken has been outlined in Table 11

1.5.3 Translating services

In 2016, there were n=58 translation services delivered for allied health/patient encounters. Mandarin and Arabic were the most frequently languages required.
Sub-regions with the highest number of requests were from Campsie and Canterbury.

Table 11 Number of AHPs speaking a language other than English

Language spoken by AHP	Number
Mandarin	423
Cantonese	79
Greek	66
Arabic	50
Spanish	36

1.5.4 HealthPathways

Health Pathways – Sydney

Between October 2016 (n=1,384) and September 2017 (n=2,205), there was as increase in the number of unique users, accessing the Sydney edition of the HealthPathways initiative (Table 12).

This outcome is a likely impact of the release of the South-Eastern Sydney HealthPathways edition, which has provided access to providers in both the SLHD and SESLHD regions.

Work has commenced to develop pathways for the SESLHD edition, however pathways are not expected to be live until early 2018.

Table 12 Unique page views for Health pathways (Oct 2016-Sept 2017

Category	**Pathway**	**Number of unique page views (UPVs)**
Most viewed #1	'Antenatal – first consult'	1063
Most viewed #2	Hypertension	645
Most viewed #3	Polycystic Ovarian Syndrome (PCOS)	506
Sexual health	Chronic Hepatitis C	503
	Abnormal Liver Function Tests	495
	Hepatitis B	347
Domestic and Family Violence:	Domestic and Family Violence: Domestic and Family Violence	170
Maternal health	Non-Urgent Antenatal Care Assessment'	341
	Gynaecology Assessment/ Gynaecology Review	241
Mental health	Non-urgent Mental Health Assessment and Advice	251
	Orthopaedic Assessment	242
Aged care	Aged, Chronic Care, and Rehabilitation	379

Other clinical pathways that ranked highly in terms of unique views included;

- **Mental Health:** Non-urgent Mental Health Assessment and Advice, Drug and Alcohol Treatment, Psychological Support Services (PSS) and Perinatal Mental Health Assessment
- **Maternal Health:** Referral pathways for Non-urgent antenatal care assessment, gynaecology assessment/review, preconception and pregnancy assessment services, non-urgent antenatal care review and perinatal mental health assessment were in the top twenty unique page views in Sydney Health Pathways between October 2016 and September 2017.

1.5.5 Activities delivered by CESPHN

This section of the report outlines services delivered directly through CESPHN and those commissioned. They include activities such as general practice support and continuing professional development, delivered by CESPHN and commissioned services such as suicide prevention services, after hours outreach and services for Aboriginal mental health.

1.5.5.1 General Practice Support

A comprehensive general practice support program is delivered to local general practices covering the following areas;

- CPD
- Accreditation
- Digital/e-health
- Cultural awareness
- Quality Improvement
- MBS items
- Immunisation
- Sexual Health

1.5.5.2 Commissioned activities

The CESPHN 2016 Needs Assessment identified several service gaps in the provision of after-hours primary care services, mental health suicide prevention, lifestyle modification programs and Aboriginal mental health. The result was several activities designed to support these health needs and service gaps. Table 13 provides a summary of services commissioned

Table 13 CESPHN Commissioned services up to Oct 2017

	N Contracts executed	**N Service Delivered**	**Education & capacity building**
After Hours	6	5	1
Drug & Alcohol	13	7	6
Drug & Alcohol Treatment Grants	8	8	
Mental Health	34	33	1
Integrated Team Care	2	2	
Partners in Recovery East/Syd	2	2	
Partners in Recovery Sth/East/Sy	3	3	
Flexible	11	6	5
Innovation	3		3
Total	81	65	16

1.5.5.3 Continuing Professional Development

CESPHN continue to provide a comprehensive and high quality Continuing Professional Development (CPD) program across the region, incorporating a variety of delivery methods and targeting a multidisciplinary audience including General Practitioners, Practice Nurse, Allied Health Professionals and Practice Support staff.

During July 2016-June 2017, 152 CPD events were delivered to 4,781 attendees, an annual increase of 5% in CDP activities. Participation survey indicated an overall satisfaction with all CDP events having 76.8% of attendees agreed that their learning needs were met.
CPD topics (including delivery method and location) are determined by:

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

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

1.5.6 Service Integration and Coordination

There is a need to enhance the coordination of health care services delivered in the CESPHN region, specifically for consumers who rely on the system for frequent and multiple services such as those aged 65 years or older, and/or with a chronic disease. These consumers have difficulty in identifying appropriate services, navigating providers and communicating health related information amongst multiple stakeholders. In addition, specific population groups such as those from CALD backgrounds, those with low levels of health literacy or the elderly are more likely to experience fragmented, inappropriate or unnecessary services because of their characteristics, which impact on their ability to understand, comprehend and/or make decisions regarding their healthcare.

Whilst the CESPHN region is inundated with primary, secondary and tertiary healthcare providers, rises in urban density and complex referral processes, wait lists and access issues have impacted the ability to provide a streamlined and patient centred journey for residents. Systemic issues impacting the ability to navigate the CESPHN region have been identified. These includes;

- Inability to systematically and reliably communicate patient information between health care providers
- Patient health literacy
- Identification and navigation of services most appropriate to an individual's disease profile and individual characteristics

1.5.6.1 HealthPathways

The Service Agreement for the provision of South Eastern Sydney HealthPathways was signed by SESLHD in June 2017. This agreement is underpinned by a Memorandum of Understanding (MoU) signed collaborating organisations including;

- SESLHD
- SVHS
- SCHN
- CESPHN

Pathways will be developed in collaboration with partner organisation and under similar governance arrangements to those established for the SLHD edition.

1.5.6.2 Healthcare neighbourhood

The health needs section of the report identified the need to enhance the capacity of general practice to systematically address prevention and management of chronic and complex medical conditions.

An over reliance on GPs has generated an increase acute care and less time for preventive activities such as screening. Methods to generate efficiencies by dispersing the responsibilities of general practice across all members of staff may address capacity issues.

The Person Centred Medical Neighbourhood is an initiative to assist general practices in the CESPHN region to transform the care they provide and ensure they are meeting the needs of patients with chronic and complex conditions, whilst remain responsive to emerging issues.

1.5.6.3 Staying well at home initiative

The Staying Well at Home pilot project is an innovation project consisting of three initiatives;

1. Initiative A: Clevetar Heart Failure application
2. Initiative B: Active living physical activity program
3. Initiative C: Quality improvement in general practice for frailty assessments

The project aims to inform strategies to reduce acute and chronic potentially preventable hospital admissions, particularly during periods of high demands e.g. Winter. The project has three main aims;

1. Acceptability and utility of an alternate patient education method (Clevatar application) amongst participants and referring clinicians, as a primary health care workforce solution
2. Acceptability and utility of a physical activity intervention amongst participants and referring clinicians, as a method of physically conditioning participants with COPD and/or CCF.
3. Understand how general practices implement a frailty assessments and advice using a clinical audit tool to identify and monitor patients meeting the frailty profile. Outcomes will describe the following;
   - *How participating general practices implement frailty assessment using the clinical audit (before and after)*
   - *Key features, processes, barriers, enablers and influences experienced by general practices within implementation of frailty assessment*

The target population for Staying Well at Home project is people aged 75 years and over with diagnosed frailty, Congestive Cardiac Failure and Chronic Obstructive

1.6 Family and Domestic Violence

Between 2014-15, the City of Sydney LGA had the highest rate for domestic and family violence (485.1 per 100,000 people) across the CESPHN region, higher than the 376 per 100,000.

The joint HeathPathways (CESPHN and SLHD) has established pathways for management of patients at risk of domestic or family violence. Between Oct 2016 to Sept 2017, these pathways had one of the highest rates of access across the region.

1.6.1 Characteristics of victims*

- Most victims were female
- 45% of all victims were aged ≥40 years
- 36% of all victims were aged 18-29 years

**Complete data was not available for public release because values were too small to report*

1.6.2 Characteristics of Offenders (43)

- There was n=2,231 domestic violence offences in the CESPHN region between 2014 and 2015 Most offenders of male were allegedly committed by males (79%); a further 589 (21%) were allegedly committed by females
- Approximately one third domestic violence related assaults were committed by males aged 40 years and over

1.6.3 Alcohol related domestic violence related assault

7 LGAs have higher than NSW proportion (30%) of domestic violence related assault related to alcohol; Canada Bay (32%), Sutherland Shire (38%), Randwick (40%), Marrickville (41%), Waverley (41%), Sydney (42%), Woollahra (43%) (43)

1.6.4 Domestic violence related assault by premise type

2.5% of domestic violence related assaults in Kogarah LGA occur in/on health premises, this is five times the proportion at NSW level. Randwick had the second highest proportion in health premises

in the CESPHN region at 1.4%; both of these LGAs have a large number of health services including hospitals (43)

1.7 Homelessness

In 2014, there were n=71 homeless residents identified in the CESPHN region. The highest proportion were in the Botany sub-region with 0.04% of without permanent housing arrangements (Table 14). Whilst these data are relatively small, qualitative data from multiple reliable sources indicates the extent of homelessness is much larger (1).

In 2015, a snapshot (Headcount) of homeless residents identified 516 homeless people in the region (44). This snapshot captured valuable insight into the reasons and influencing variables for homelessness;

- Financial barriers limiting permanent housing
- Dual housing and physical and/or mental health support required
- Enduring mental health and substance abuse issues

1.7.1 Homeless clusters

A range of geographical locations across the CESPHN region have clusters of homeless people who create a unique social dynamic. These clusters provide opportunities for intervention with access to multiple homeless people at one time. Locations include Woolloomooloo, Wentworth Park and Belmore Park.

Since November 2016, CESPHN have 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 for transition to permanent residency.

A project to examine the needs of boarding house residents in CESPHN commenced in 2017, and identified the role of inter-sectoral agencies to support approaches to attaining housing security. The intersection between homelessness, mental health, drug and alcohol and other related psychosocial issues has been noted and efforts to stabilise the physical, social and psychological aspects of residents, are a priority. To date the project is working to deliver the following;

- Service mapping and mechanisms to support service integration and coordination with a focus on dental and psychological services in the first instance
- Support residents and BH proprietors to access local, bulk billing primary care services
- Areas to target include; Ashfield, Marrickville, Petersham
- Navigational needs for disability sector including accessing services under NDIS
- Access to services to treat biomedical risk factors and chronic disease

Table 14 CESPHN Sub-regions with highest reported homelessness (2014) (44)

SA3	N of homeless persons	% of population (SA3)
Botany	16	0.04
Sydney Inner City	52	0.03
Marrickville-Sydenham-Petersham	3	0.01

Limitations: Homeless circumstances create limitation in capturing data due to the transience of the population with the number of homeless people varying from any one point in time (1).

1.8 Service Gaps

A comprehensive directory of homeless service providers delivering services to homeless residents across the region is currently being finalized. CESPHN is working collaboratively with the following key stakeholders to address the primary care needs of homeless residents;

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

1.9 Opportunities, priorities and options

Priority	Possible Options	Expected Outcome	Possible Performance Measurement	Potential Lead
See Maternal Health		-	-	
NPA: Population health **Local health/service need:** Meeting the primary healthcare needs of homeless residents	Continue to support existing activities to explore the primary care needs of homeless residents including; • Develop a comprehensive understanding of services for homeless residents across the region with a focus on aspects influencing homelessness e.g. mental health and substance misuse. • Work collaboratively with related stakeholders to develop integrated and coordinated approaches with the aim of securing permanent housing arrangements for residents. • Integrated digital health solutions where feasible as a mechanism for communicating healthcare status • Address after hours primary care needs of homeless residents through innovative approaches e.g. outreach	- Improved awareness of homeless health services across the region - Pathways for managing homeless patients - Digital health solutions in place for targeted community - Reduced unplanned hospitalisations in the after-hours period and for falls and falls related injuries.	- To be determined	CESPHN in partnership with key stakeholders

Section 2: Population Health

2.1 Risk Factors of Chronic Disease

2.1.1 Hyperlipidaemia

Estimates indicate the age standardised rate for hyperlipidemia (people >18 years) for the CESPHN region was 32.3 per 100 people. This rate is comparative to the NSW and National rates which are 32.4 per 100 (NSW) and 32.8 per 100 (National) respectively (Table 15). These data indicate an estimated n=407,498 people (2014) in the CESPHN region are living with hyperlipidemia, associated with increased risk of cardiovascular disease, stroke and circulatory disease (23, 24).

Table 15 Incidence and distribution of people (≥18 years) with hyperlipidemia, age standardised per 100 people (2014-15) (23, 24)

NSW	CESPHN	LGA	Highest incidence
32.4	32.3	Sydney[1]	32.6
		Woollahra	34
		Sutherland Shire	34.5

[1]SA3 >25% CALD [2]Socioeconomic disadvantage [3]Low health literacy

Limitations: Most recent data available is 2014-15.

2.1.2 Hypertension

There is variation in the incidence hypertension, across the region. Marrickville-Sydenham-Petersham had higher numbers of people aged 65 years or older, than the remaining two sub-regions. For people aged 18 years and over, rates of hypertension were 27.5% (n=306,934 persons) versus 22.3% for New South Wales in 2014-2015 (Table 16).

Canada Bay (19.9%), Cronulla-Miranda-Caringbah (20.5%) and Sutherland-Menai-Heathcote (22.1%) are SA3 areas with the lowest proportion of population living with hypertension (Table 7).
There were correlations with the incidence of hypertension and the distribution of the CESPHN population with higher rates of the following social determinants; CALD status, socioeconomic disadvantage and low levels of health literacy.

Table 16 Incidence and distribution of people (≥18 years) with hypertension, age standardised per 100 people (2014-15) (23, 24)

NSW	CESPHN	SA3	Highest incidence
22.3	27.5	Sydney Inner City[1]	43.7
		Marrickville- Sydenham-Petersham[123]	36.0
		Strathfield-Burwood-Ashfield[12]	29.3

[1]SA3 >25% CALD [2]Socioeconomic disadvantage [3]Low health literacy

Limitations: Most recent data available is 2014-15

2.1.3 Overweight and Obesity

It is estimated that 35.7% (427,858 persons) of CESPHN adult population are overweight and 21.2% (246.277 persons) are obese compare to 35.1% and 28.2% respectively for New South Wales in 2014-2015.

Between 2014-15, the male CESPHN) population were more likely to be overweight (43.8%) than females (27.7%). Obesity rates were similar in both male and females ; approximately 1.2% (Table 17) **(23, 24).**

Overweight rates were homogeneous across SA3 areas, however obesity rates varied; Sutherland-Menai-Heathcote (26.5%) had the highest rates, followed by, Botany (25.8%) and Canterbury (25.3%). In contrast, lowest rates were found in Eastern Suburbs North (16.0%), Sydney Inner City (17.0%) and Leichhardt (17.7%) (Table 8) **(23, 24).**

Table 17 Incidence and distribution of obesity (≥18 years), aged standardised per 100 people (2014-15) (23, 24)

NSW	CESPHN	SA3	Highest incidence
28.2	21.2% (n=427,858)	Sutherland-Menai-Heathcote	26.5
		Botany[123]	25.8
		Canterbury [123]	25.3

[1]SA3 >25% CALD *[2]Socioeconomic disadvantage* *[3]Low health literacy*

2.1.4 Psychological distress

In. 2014-15, the estimated number of people aged 18 years and over with high, or very high psychological distress (based on Kessler 10 Scale) in CESPHN was 9.7% (n=117,039 persons), versus 11.0% for NSW (Table 18) **(23, 24).**

The three regions with the highest incidence of psychological distress were Canterbury (12.6%), Botany (11.6%) and Marrickville-Sydenham-Petersham (11.2%) (Table 9). These regions have associated high rates of the following social determinants; CALD, socioeconomic disadvantage and low health literacy **(23, 24).**

Table 18 Incidence and distribution of psychological distress (people ≥18 years), standardised per 100 people (2014-15) (23, 24)

NSW	CESPHN	SA3	Highest Incidence
11.0	9.7	Canterbury[123]	12.6
		Botany[123]	11.6
		Marrickville-Sydenham-Petersham[123]	11.2

[1]SA3 >25% CALD *[2]Socioeconomic disadvantage* *[3]Low health literacy*

Limitations: Most recent data available is 2014-15.

2.1.5 Smoking

Rates for smoking varied between males (14.4%) and females (9.5%) for the CESPHN region. The three regions with the highest incidence of smoking, also have high rates of CALD populations, socioeconomic disadvantage and health literacy (Table 19) (23, 24)

Table 19 Incidence and distribution of people who smoke tobacco (≥18 years), age standardised per 100 people (2014-15) (23, 24)

NSW	CESPHN	SA3	Highest incidence
16.0	11.9	Canterbury[123]	15.4
		Cronulla-Miranda-Caringbah	14.2
		Botany[123]	13.8

[1]SA3 >25% CALD [2]Socioeconomic disadvantage [3]Low health literacy

Limitations: Most recent data available is 2014-15.

2.1.6 Nutrition

Adequate fruit intake

It is estimated that 50.6% of CESPHN population (n=602,835 persons) over 18 years of age consumed adequate fruit compared to 49.2% for New South Wales (23, 24).

Adequate vegetable intake

In 2014-15, only 7.0% of Australians aged 18 years and over met the guidelines for serves of vegetables (5-6 or more serves for men depending on age, and 5 or more for women). Only one in 20 (5.1%) adults met both guidelines (fruit and vegetable) (23, 24).

2.1.7 Alcohol

It is estimated that 15.7% of CESPHN population (n=195,499 persons) over the age of 15 years consumed more than two standard alcoholic drinks per day on average compared to 16.7% for New South Wales (Table 120) (23, 24).

Cronulla-Miranda-Caringbah (22.7%), Eastern Suburbs North (21.4%) and Leichhardt (20.6%) had the highest proportion of population that consumed more than two standard alcoholic drinks per day on average. Canterbury (8.1%), Kogarah-Rockdale (10.2%) and Strathfield-Burwood-Ashfield (10.4) had the lowest population that consumed more than two standard alcoholic drinks per day on average (Table 20) (23, 24).

Table 20 Incidence and distribution of people (≥15 years) who consume more than two standard alcohol drinks per day, age standardised per 100 people (2014-15) (23, 24)

NSW	CESPHN	SA3	Highest incidence
16.7	15.7 n-195,499	Cronulla-Miranda-Caringbah	22.7
		Eastern Suburbs North$_1$	21.4
		Leichhardt[1]	20.6

[1]SA3 >25% CALD [2]Socioeconomic disadvantage [3]Low health literacy

Limitations: Most recent data available is 2014-15.

2.1.8 Physical inactivity

It is estimated that 62.2% of CESPHN population (n=741,657 persons) over the age of 18 years undertook no or low exercise in the previous week compared to 67.1% for New South Wales (Table 21)(23, 24).

Canterbury (72.7%), Botany (69.2%) and Kogarah-Rockdale (68.9%) are SA3 areas with the highest proportion of population with insufficient physical activity. Eastern Suburbs North (49.3%), Leichhardt (56.1%) and Sydney Inner City (57.8%) are SA3 with lowest proportion of population with insufficient physical activity (Table 21) (23, 24).

Table 21 Incidence and distribution of people (≥18 years) who undertook no or low exercise in the previous week, age standardised per 100 people (2014-15) (23, 24).

NSW	CESPHN	SA3	Highest incidence
67.1	62.2 N=741,657	Canterbury [123]	72.7
		Botany [123]	69.2
		Kogarah-Rockdale [12]	68.9

[1]SA3 >25% CALD [2]Socioeconomic disadvantage [3]Low health literacy

Limitations: Most recent data available is 2014-15

2.2 Chronic Disease

2.2.1 Cardiovascular Disease

Between 2014-15, the incidence of CVD across CESPHN was 17.4 per 100 people, comparatively low compared with the NSW rate, which is 17.8 per 100 (23).There is variation in the incidence of CVD across CESPHN sub-regions (Table 22) (23)

Table 22 Incidence and distribution of people (≥18 years) with cardiovascular disease, age standardised per 100 people (2014-15) (23, 24)

NSW	CESPHN	SA3	Highest incidence
17.8	17.4	Sydney[1]	18.7
		Botany Bay[123]	18.5
		Canterbury[123]	18.5
		Rockdale[1]	18.3

[1]SA3 >25% CALD [2]Socioeconomic disadvantage [3]Low health literacy

Limitations: Most recent data available is 2014-15.

2.2.2 Type 2 Diabetes

Between 2014-15, the incidence of type 2 diabetes across CESPHN was 7.0 per 100 people (n= 102,711), comparable to the NSW rate. Incidence rates are higher in males than females. Disease rates increased with age, were higher in some geographical regions and demonstrated associations with socioeconomic status, CALD background and levels of health literacy (Table 23)**(23, 24)**

Table 23 Incidence and distribution of people (≥16 years) with type 2 diabetes, age standardised per 100 people (2014-15) (23, 24)

NSW	CESPHN	SA3	Highest incidence
8.7	7.0 (n=102.711)	Canterbury[12]	9.7
		Burwood[1]	7.9
		Botany[123]	7.6
		Rockdale[12]	7.6

[1]SA3 >25% CALD [2]Socioeconomic disadvantage [3]Low health literacy

Limitations: Most recent data available is 2014-15.

2.2.3 Musculoskeletal Disease

Between 2011-2013, the age standardised rate for musculoskeletal disease across CESPHN was 26.3 per 100 people. There were six sub-regions (LGAs) with (estimated) rates higher than the PHN. These include; Kogarah (26.4), Marrickville (26.4), Canada Bay (27.2), Leichhardt (27.3), Botany Bay (27.4) and Sutherland Shire (28.2) (Table 24) **(23, 24).**

Table 24 Incidence and distribution of people (≥16 years) with musculoskeletal system disease, age standardised per 100 people (2011-13) (23, 24)

NSW	CESPHN	LGA	Highest incidence
28.1	26.3	Sutherland Shire	28.2
		Botany Bay	27.4
		Leichhardt	27.3

[1]SA3 >25% CALD [2]Socioeconomic disadvantage [3]Low health literacy

Limitations: Most recent data available was 2011-13.

2.2.4 Musculoskeletal Disease – Arthritis

Between 2011-13, the rates of arthritis in CESPHN (13.8 per 100) were below the NSW (15.3 per 100) and National (14.8 per 100) age standardised rates (Table 25) **(23, 24).**

There were six sub-regions across CESPHN with rates of arthritis that were higher than the PHN. These were; Canada Bay (13.8), Hurstville (14), Rockdale (14.3), Sutherland Shire (14.3), Botany Bay (14.7) and Canterbury (14.9) (Table 22) **(23, 24)**

Table 25 Incidence and distribution of people (≥16 years) with musculoskeletal system disease, age standardised per 100 people (2011-13) (23, 24)

NSW	CESPHN	LGA	Highest incidence
15.3	13.8	Canterbury	14.9
		Botany Bay	14.7
		Sutherland Shire	14.3
		Rockdale	14.3

[1]SA3 >25% CALD [2]Socioeconomic disadvantage [3]Low health literacy

Limitations: Most recent data available is 2011-13.

NB: LGAs with lower socioeconomic status had the highest rates for musculoskeletal disease in the CESPHN region, these include; Canterbury, Rockdale, Kogarah and Sydney.

2.2.5 Chronic Kidney Disease

Between 2014-15, CESPHN had one of the highest rates for the incidence of biomedical signs of CKD, with 14.2-17.7 per 100,00 people, whereas the National rate was 10.0 per 100,000 people (25, 26). There was variation in the (estimated) incidence of the disease, the following suburbs were identified as having higher incidence rates (Biomedical Signs - Stages 1-5). These include; Tempe, Rozelle, Sutherland, Healthcote, Kogarah and Riverwood (Table 26).

The (estimated) incidence of CKD in Aboriginal people is twice as high as non-Aboriginal people (27)

Table 26 Adult population with biomedical signs of CKD (stages 1-5) by PHN and suburbs (25, 27)

Australia	CESPHN	Suburb	Adults with biomedical signs (%)	Adults with biomedical signs of CKD (n)
10.0 (n=1,712,500)	14.2* - 16.7*	Tempe[123]	16.7	62,600
		Rozelle	16.7	
		Sutherland	14.2	46,900
		Heathcote	14.2	
		Kogarah[1]	14.2	
		Riverwood[1]	14.2	

Estimate has a relative standard error between 25-50% and should be used with caution

[1]Suburb >25% CALD [2]Socioeconomic disadvantage [3]Low health literacy

Limitations: Most recent data available is 2014-15.

2.2.6 Acute Respiratory Disease

Between 2015-16, the rates for acute respiratory disease was higher in males than females. Disease types attributed to hospitalisations (for both genders), related to respiratory exacerbations of influenza, pneumonia and COPD. The highest incidence was in the Sutherland and Botany Bay LGAs (Table 27)

Table 27 Sub-regions (SA3) with highest (estimated) incidence of respiratory disease, age standardised (rate per 100 people)

CESPHN	LGA	Highest incidence
25.8	Sutherland Shire	30.0
	Botany Bay[123]	27.8

[1]SA3 >25% CALD *[2]Socioeconomic disadvantage* *[3]Low health literacy*

Limitations: Most recent data available is 2014-15.

Disease rates are higher in Aboriginal residents than non-Aboriginal residents across all age groups.

Table 28 Acute respiratory infection hospitalisations by Aboriginality, All acute respiratory infection (2015-16)

Rate per 100,000 people	Aboriginal	Non-Aboriginal
All ages	1560	680
0-4 years	5535	3201

Limitations: Most recent data available is 2014-15.

2.2.7 Asthma

Between 2014-15, the rates for hospitalisations due to asthma were 10.2 per 100,000 children (2-15 years) in CESPHN, compared with 12.2 per 100,000 children in NSW. Similarly, the rates for hospitalisations due to asthma for CESPHN adults was 9.3 per 100,000, compared with 11.3 per 100,000 for NSW.

There was a positive correlation between respiratory hospitalisations and socioeconomic status. Adults whom are most disadvantaged were more likely to be hospitalised for respiratory disease than their least disadvantaged counterparts. Lifestyle risk factors such as smoking are a likely influence (Table 29).

Table 29 Asthma rates hospitalisation rates by region and Aboriginal status

	CESPHN	NSW	SA3	Correlation with Aboriginal status
Children (2-15 years)	10.2	12.2	np	No
Adults (≥16 years)	9.3	11.3	np	Yes

Limitations: Most recent data available is 2014-15. No data available at LGA or SA# level.

2.2.8 Chronic Obstructive Pulmonary Disease

Between 2014-15, the rate for COPD in adults aged >18 years was 17.0 per 100,000 people in CESPHN. This was lower than the NSW rate (24.3 per 100,000 people (Table 27). COPD was more common in males than females. Age, socioeconomic disadvantage and poor health literacy were associated with the incidence and risk of hospitalisations from COPD (Table 30).

Table 30 Age standardised incidence rates for COPD by (NSW and CESPHN) 2014-2015 (Rate per 100,00 people)

NSW	CESPHN	**LGA/SA3**	**Highest incidence**
24.3	17.0	np	np
		np	np
		np	np

Limitations: Most recent data available is 2014-15. Data for LGA and SA3 was not available

2.3 Service Gaps

There are a range of agencies/providers across the CESPHN region providing services for patients with lifestyle and biomedical risk factors associated with chronic disease. Likewise, there are services for patients with established chronic and complex medical conditions. Broadly, these services are grouped into;

- Prevention (Primary and secondary)
- Management

Some of services provide both prevention and management services such as those delivered through LHDs such as hospital Diabetes Education services. A preliminary summary of services, by type is outlined in Table 31. Additional service mapping is continuing to more comprehensively identify service gaps for this priority.

Table 31 A summary of services, by and region

Service category	Name of organisation/business	Region	N services
Community based programs	Diabetes NSW	SESLHD & SLHD	Various
Hospital outpatient services	RPA, St George, Sutherland and Randwick including ComDiab at Sutherland Hospital	SESLHD & SLHD	4
General Health & Wellbeing	HealthOne	SESLHD	1
Physical Activity	GP Exercise Referral Scheme	SESLHD	2
General Health & Wellbeing	NSW Health – Get Healthy Information and Coaching line	SESLHD & SLHD	Telephone service
Physical Activity	Heart Foundation	SESLHD & SLHD	Various
General Health & Wellbeing	SLHD Multicultural Health Unit	SLHD	1
Smoking	Quitline	SESLHD & SLHD	Telephone service
Physical Activity	SHARE	SESLHD & SLHD	Various
Physical Activity	YMCA	SESLHD	Various
Physical Activity	Heart Foundation	SESLHD & SLHD	Various

2.4 Opportunities, priorities and options

Priority	Possible Options
NPA: Population Health **Local health/service need:** Screening and management of lifestyle and biomedical risk factors and/or chronic and complex diseases.	Work with GPs across the region to appropriately screen, diagnose and manage patients with lifestyle and biomedical risk factors and/or chronic and complex medical conditions e.g. Type 2 Diabetes, CKD, COPD. Options include; **Person Centered Medical Neighbourhood** Build capacity in general practices implement systematic screening and recalls for risk stratified patients **Quality improvement** Implement clinical auditing activities to enhance the integrity of general practice patient data including rates for data completion (Medical software) relevant to RACGP Red Book Guidelines. Use data to develop improvement plans, monitor and evaluate outcomes periodically. **Digital Health** Link with activities under the quality improvement program to extract and integrate patient data for the MyHealth. **Service commissioning** Commission gender/culturally specific services for communities with identified barriers to accessing general practice e.g. Rockdale Women's Health Service **Health promotion** Work with partner organisations to disseminate resources to increase population awareness of screening, eligibility, access and requirement screening, with a focus on identified areas of low participation to improve participation rates in screening programs High equity groups such as Aboriginal, CALD. **CPD** Identify and implement relevant professional development opportunities to support prevention and management of chronic disease, with a focus on address barriers experienced by GPs **Staying Well at Home** Innovative solutions to reduced potentially preventable hospitalisations such as virtual patient education resources, physical conditioning programs and tailored quality improvement activities in local general practices **HealthPathways** Continue to promote access to existing SLHD chronic disease related pathways for GPs Establish SESLHD referral pathways for chronic disease related conditions

Section 2A: *Disability*

2A.1 Disability Needs

The incidence of disability in Australia, has been outlined in Table 32 using the World Health Organisation's international classifications for disability and data from the AIHW Report on Disability, Ageing and Carers (28, 29). These data indicate there were 18.3% (n=4,290,100) Australians with a disability (2015). People with specific limitation and/or restrictions 16% (n=3,704,100) (28, 29).

The implementation of the NDIS across Australia is in its early stages, as a result the role of primary care within the Scheme is iterative. CESPHN has undertaken several activities to engage general practices and NDIS service providers to determine areas that require support within the scope of PHN contractual obligations.

2A.1.1 Disability and 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 a number of risk factors associated with the onset of chronic and complex medical conditions. A summary has been outlined in Table 33

2A.1.2 Disability support Service/Provider Transition to NDIS

In 2015–16, over 330,000 people used disability support services funded under the National Disability Agreement (NDA). With the progressive roll-out of the Scheme, existing NDA service users are expected to move to the NDIS over time (29).

Table 32 Incidence of disability by classification for CESPHN region (2015)

	Profound	Severe	Moderate	Mild
National	3.1%	2.8%	2.6%	6.1%
CESPHN	4%	np	np	np
Canterbury*[123]	2.4	np	np	np
Strathfield-Burwood–Ashfield*[1]	2.2	np	np	np
Kogarah–Rockdale*[12]	2.3	np	np	np
Hurstville*[12]	2.2	np	np	np
Eastern Suburbs–South*[1]	1.7	np	np	np

[1]SA3 >25% CALD [2]Socioeconomic disadvantage [3]Low health literacy

Limitations: Local level data for severe, moderate and mild disability classifications unavailable (30).

Table 33 Comparison of Australians with and without disability, with a risk factor associated with chronic disease (2011-12)

	% With a disability	% Without a disability
Overweight	70	60
Obesity	43	25
Inadequate physical activity	46	31
Smoke tobacco	31	15
Psychological distress	22	1

Limitations: Most recent data from 2011-2012

2A.2 NDIS workforce

Consultation with key community and disability network stakeholders identified a number of areas requiring further exploration to determine the exact interface primary care will assume with the Scheme.

- Rates of disability result in an increased reliance on primary health care providers to aid with service navigation and care coordination for those disability services.
- Migration rates are associated with an increased incidence of disability in Australia. The rate of disability attributable to recent migrants rose by 0.8% nationally in 2009.
- Understanding the characteristics of people with psychosocial disability is critical to ensure they receive the support services they require. The wide range of long-term health conditions and disabilities that can coexist with psychosocial disability highlights the importance in considering the overall health of people with psychosocial disability (22)
- The NDIS is a major service system reform that will have an impact on the local health system. Preparing the CESPHN region for the rollout of NDIS aligns with efforts to integrate and streamline the provision of services across the whole patient journey.

2A.3 Opportunities, priorities and options

Priority	Possible Options	Expected Outcome	Possible Performance Measurement	Potential Lead
NPA: Population Health **Local health/service need:** Disability service integration and coordination	Support primary care providers to navigate integration and coordination of NDIS and primary care services. Options include; **CPD** Identify and implement relevant professional development opportunities to support working with the NDIS, with a focus on addressing barriers experienced by GPs and allied health professionals **Practice support** Provide support to GPs and allied health professionals regarding clinical pathways, assessment protocol and points of entry into NDIS **HealthPathways** Establish referral pathways to support general practice navigation clinical practice and referral pathways **Chronic disease management** Establish/maintain links with key initiatives to support healthcare and disability service coordination of care and management of chronic and complex medical conditions, associated with incidence of disability. e.g. Connecting Care, Staying Well at Home **Stakeholder engagement** Work with people with disabilities, NDIS agencies, service providers and primary care providers to ensure an integrated approach between NDIS and health within the region.	- Awareness of disability services delivered across the region - Limit duplication and enhance coordination - Improved service efficiency by dispersing work amongst multiple providers - Economies of scale from collaborative approaches - Improved awareness amongst services/providers of roles and scope of practice - Understanding of barriers and enablers to accessing services, navigating and patient journey -	Patient and provider satisfaction Number of services identified and pathways developed Number of CPD opportunities provided and attendees	CESPHN

Section 2B: *Cancer*

2B.1 Cancer Health Needs

2B.1.1 Incidence

Between 2006-2010, the rate of cancer incidence (all cancers) for CESPHN (481.9 per 1000) was lower than the NSW rate (493 per 1000 people) (Table 31)(31, 32). In terms of cancer mortality, the highest rates (nationally) were for colorectal cancer, followed by breast cancer (Table 34).

Rates of cancer incidence rise with age (31, 32). Population projections and an increase in the proportion of people aged 65 years or older in the coming 20 years suggest an accompanying rise in incidence of cancer (31, 32). Based on evidence to prevent or delay the onset of cancer, there is opportunity to intervene by addressing the following;

- Lifestyle behaviour modification
- Health literacy
- Screening protocols and systems in general practice
- Referral pathways

Table 34 Age-standardised incidence (2006–2010) – CESPHN, NSW and SA3 (31, 32)

Per 100,000	**CESPHN**	**NSW**	**Highest incidence**
All cancers	481.9	493	N/A
Cervical cancer	7.5	7.0	np
Breast cancer	114.1	114.1	1. Eastern Suburbs North[1] (1.36.3 2. Eastern Suburbs South[1] (128.2) 3. Sydney Inner City[1] (123.9)
Bowel	56.8	62.3	1. Kogarah-Rockdale[12] (60.0) 2. Cronulla-Miranda-Caringbah (59.3) 3. Canterbury[123] (59.0)

[1]SA3 >25% CALD [2]Socioeconomic disadvantage [3]Low health literacy

Limitations: Most recent data available is 2014-15.

Table 35 Mortality estimates attributable to cancer, standardised per 100 people

Mortality estimates attributable to cancer, standardised per 100 (Australia)	**%**
Deaths (2017)	3.2
Colorectal (bowel) deaths from all cancers	8.6
Breast deaths from all cancers	6.5
Five-year survivorship rate (2009–2013)	68

2B.1.2 Cancer Screening

Cancer screening is a method of systematic diagnosis for certain cancers based on specific risk measures. In Australia, there are three main cancer screening programs with relevance to primary care designed to look for early signs of the disease before symptoms emerge. These include;

1. Breast cancer screening
2. Cervical cancer screening
3. Bowel cancer screening

There is variation in screening rates for eligible population groups;

- 65-69-year-old age group demonstrated the highest rate with 55.2% (n=526,538)
- The mean rate for participation across the CESPHN region was 50.61% (SD: 3.1).
- For eligible CESPHN residents aged 50 years and older, participation in breast cancer screening was highest in Sutherland-Menai–Heathcote (57.4%) (Table 36).

NB: *CESPHN are continuing to consolidate mapping data regarding to number, distribution, type, location and referral mechanisms required for cancer screening. The CESPHN HealthPathways teams are supporting this process to accompany existing cancer treatment pathways. The information will be collated and used by the CESPHN population health and practice support teams to seek information in a dynamic format. It is anticipated this information will be available mid-2018.*

Between 2015-2016, participation rates for bowel cancer screening across the CESPHN varied from highest rate, 40.2% of eligible residents (n=15,850) in the Sutherland-Menai-Heathcote region (SA3), through to lowest rate 32.1% of eligible residents (n=21,046) in the Sydney Inner City region (SA3). These data exclude Lord Howe Island who were unable to report screening rates due to an insufficient denominator. The mean participation rate for bowel cancer screening across the CESPHN region was 34.88% (n=5,034, SD:7). All sub-regions of CESPHN ranked lower than the national bowel cancer screening participation rate (40.9%, n=3,174,835)

Table 36 Participation in the Cancer Screening Programs (NSW, CESPHN and SA3) for people aged 50–74 (2015-2016)

Screening program	NSW rate %	CESPHN rate %	SA# with lowest rates
Bowel Cancer screening	30.6	28.4	Woollahra (25%)
			Canterbury (25.6%)
Breast Cancer Screening	51.4	47.2	Sydney Inner City1 (43.2%)
			Eastern Suburbs – North (45.2)
			Canterbury (45.4%)
Cervical Cancer Screening	55.1	57.4	Sydney Inner City1 (47.8%)
			Kogarah – Rockdale12 (48.4%)
			Canterbury123 (50.6%)

2B.2 Opportunities, priorities and options

Priority	Possible Options	• Expected Outcome	Possible Performance Measurement	Potential Lead
NPA: Population Health **Local health/service need:** Increase screening rates for Breast, Bowel and Cervical cancer	Work with GPs across the region to increase cancer screening rates for Breast, Bowel and Cervical Cancer, adhering to relevant guidelines for screening, with a focus on identified areas of low participation e.g. high equity groups such as Aboriginal, CALD. Options include; **Person Centered Medical Neighbourhood** Build capacity in general practices to implement systematic screening and recalls for eligible patients **Quality improvement** Implement clinical auditing activities to enhance the integrity of general practice patient data including rates for data completion (Medical software) relevant to cancer screening measures. Use data to develop improvement plans, monitor and evaluate outcomes periodically. **Digital Health** Link with activities under the quality improvement program to extract and integrate patient data for the MyHealth Record. **Service commissioning** Commission gender/culturally specific services for communities with identified barriers to accessing general practice e.g. Rockdale Women's Health Service **Health promotion** Work with partner organisations to disseminate resources to increase population awareness of cancer screening, eligibility, access and requirements **Clinical Leaders Program** • Strengthen the clinical leaders program to increase GP/clinician confidence and knowledge regarding cancer screening	• Increase in cancer screening rates across the region • Increase in practices using systematic approaches to screening patients • Increase in the number of GPs uploading screening data to MyHealth Record • Increase in (general practice) data completion rates for relevant clinical measures within patient databases. • Improved community literacy regarding eligibility and local access points for screening • Identification of areas to improve patient and provider experience • Satisfactory patient and provider experience with cancer screening programs (incl GP), self-efficacy and knowledge of cancer screening	Cancer screening rates for cervical, bowel and breast cancer, disaggregated by age and Aboriginal and Torres Strait Islander status Number of quality improvement activities implemented in general practices for; • Breast screening • Bowel screening • Cervical screening	CESPHN

	• Promote changes to screening practice e.g. new guidelines and testing protocols **CPD** Identify and implement relevant professional development opportunities to support cancer screening, with a focus on addressing barriers experienced by GPs			

Section 2C: Maternal Health

2C.1 Maternal Health Needs

2C.1.1 Maternal age and births

In 2015, the total population across the CESPHN region was n=1,119,882, a rise of n=18,122 from the previous year (2014) (1) (Table 37).

Between 2010-15, there were n=87,829 births in the CESPHN region. The highest birth rate was for the 35-39-year-old age group. The City and Inner SA4 region recorded the highest birth rate (42.4 per 1,000 people) for women aged 15-19 years, whereas the lowest rate was in the Sydney Eastern Suburbs SA4 (18.4 per 1,000) (1) (Table 37).

The median age for mothers giving birth was 33.1 years. Sutherland SA4 had the lowest median age (n=32.5), with the highest in Sydney Eastern Suburbs SA4 (n=34) (1). Inner South West region had the lowest median age of mothers giving birth (1). Inner South West had the highest rate of women aged 15-19 years giving birth, 50.4 per 1,000 women (1). Sydney Eastern Suburbs - lowest rate for women aged 15-19 years giving birth, 18.4 per 1,000 women (1).

Table 37 Trends in the number of births and maternal age for CESPHN (2010-15)

CESPHN	2010	2011	2012	2013	2014	2015
Estimated total population	1,039,059	1,050,433	1,064,809	1,082,243	1,101,760	1,119,882
N Births (%)	15,079 (1.67)	14,577 (1.39)	14,798 (1.39)	15,160 (1.4)	13,667 (1.24)	14,548 (1.3)
Median age of mother (years)	33	33.1	33.1	33.1	33.1	33.2

2C.1.2 Maternal Health

Overweight and Obesity

Overweight and obesity in children and adolescents has been linked with the onset of numerous chronic and complex medical conditions and associated with increased risk of obesity as an adult. More recent evidence indicates that those children who are overweight are more vulnerable to issues with self-esteem and psychosocial behaviours.

Between 2014-15, the estimated rate of children (2-17 years) in CESPHN considered overweight was 16.8% (n=39,258 persons), lower than the NSW rate (16.4%). Rates for obesity in this cohort were estimated as 6.7% (n=16,103 persons) compared 7.8% for New South Wales.

There were variations in the proportion of males to females overweight in CESPHN, with 19.9% of boys (2-17 years) considered overweight, versus male 13.3% girls of the same age. In constraint, females were more likely to be obese (8.0%) compared with males (6.0%) (16, 33, 34).

Canterbury (18.8%), Botany (18.1%) and Marrickville -Sydenham-Petersham (17.9%) had the highest child and youth rates for overweight, higher than the NSW rate. Canterbury (10.1%), Eastern Suburbs -South (7.8%), Botany (7.8%) and Kogarah-Rockdale (7.1%) had the highest rates for child and youth obesity (16, 33, 34). Eastern Suburbs- North, Leichhardt and Cronulla-Miranda-Caringbah area SA3 area with the lowest child and youth overweight and obesity rate (16, 33, 34).

Weight related behaviours

Children in the overweight or obese (BMI) categories were less likely to eat breakfast daily, meet daily physical activity recommendations, had lower cardio-respiratory fitness and had higher rates of consumption of soft drinks, snacks and meals from takeaway and fast food outlets and be driven to school compared to children in the healthy BMI category. Children in the overweight and obese BMI categories were however more likely to meet sleep recommendation than children from healthy BMI category (16, 33, 34).

Adolescents in the overweight and obese BMI categories were more likely to have lower cardio-respiratory fitness and a lower prevalence of brushing teeth twice a day. Adolescents in the overweight BMI category were less likely to eat breakfast daily. Adolescents in the thin BMI category were significantly less likely to meet recommended sleep duration on non-school nights compared with adolescent in the healthy weight BMI category (16, 33, 34).

Physical Activity level

It is estimated that 23% of primary school children and 23% of secondary school adolescents met recommended daily physical activity in NSW. Girls were generally less active than boys. Cultural background appeared to be a factor affecting physical activity level. Primary school children from Middle Eastern or Asian cultural background and secondary school adolescents from Asian cultural background being the least active groups (33)

Adequate fruit and vegetable intake

It is estimated that 67.3% (133,708 persons) of the CESPHN child and youth population are consuming adequate fruit intake compared to 67.8% for New South Wales (67.8%) between 2014-15.

Cronulla-Miranda-Caringbah (70.6%), Sydney Inner City (68.8%), eastern Suburbs-North (68.8%) and Hurstville (68.7%) are SA3 areas with the highest child and youth population consuming adequate fruit. Canterbury (62.4%) and Marrickville-Sydenham-Petersham (63.9%) are SA3 areas with the lowest child and youth population consuming adequate fruit.

From the 2015 SPAN report, only 5% of Primary school children and 11% of adolescents in secondary school in New South Wale met recommended daily vegetable intake.

It is estimated that 23% of primary school children and 23% of secondary school adolescents met recommended daily physical activity in NSW. Girls were generally less active than boys. Cultural background appeared to be a factor affecting physical activity level. Primary school children from Middle Eastern or Asian cultural background and secondary school adolescents from Asian cultural background being the least active groups (33)

Smoking in pregnancy

In 2015, there were 3% of women smoking during pregnancy, compared to 8.9% across NSW. Table 38 provides an overview of regions with highest rates of smoking during pregnancy (2015) (19,38).

Table 38 Smoking grates during pregnancy, by region (2014)

Smoking	Regions with the highest smoking rates in women include;	%
	Marrickville	8
	Canterbury	7
	Ashfield	6
	Rockdale	6
	Strathfield	6
	Sydney	6

NB: No LGAs had rates at or above NSW rate.

Gestational diabetes

In 2014, rates for gestational diabetes in CESPHN were higher than National rates. Table 36 provides a summary of the rates for gestational diabetes in 2014, Nationally, CESPHN and LGA at or above the CESPHN rate the region presented as a proportion of the Australian population, including LGAs with proportion higher than national rate shown in Table 39 (23, 24).

Table 39 Rates for gestational diabetes by region, presented as a proportion of the Australian population

National	**CESPHN**	**LGA**		**LGA at or above CESPHN rate**
0.1	0.2	Ashfield [1]	Lord Howe Island [2]	
		Botany Bay [123]	Hurstville [12]	
		Burwood [12]	Kogarah [12]	0.2
		Canada Bay [1]	Leichhardt [1]	
		Marrickville [123]		
		Canterbury [123]		
		Rockdale [12]		0.3
		Strathfield [1]		

[1]SA3 >25% CALD [2]Socioeconomic disadvantage [3]Low health literacy

2C.1.3 Antenatal to Post Natal Care

Antenatal Care

Time to first visit – 14 weeks and 20 weeks (LHD)

Women from socioeconomic disadvantage were more likely to begin antenatal care later in pregnancy, to smoke and to be overweight or obese than those from the socioeconomic advantage. These women were more likely to have pre-term births and babies with low birth weight, than women from the highest socioeconomic areas (19,38).

Women from CALD backgrounds were less likely to attend antenatal care by 14 weeks, smoke during pregnancy and/or be overweight during pregnancy, than women born in Australia (Table 40).

Infant feeding at discharge from hospital

In 2015, 81.4% of infants were solely being breast fed at discharge from hospital, compared to 78.9% across NSW; 13.1% of infants were receiving some breastmilk at discharge from hospital, compared

to 10.5% across NSW; 5% of infants were solely being fed formula at discharge from hospital, compared to 9.7% across NSW (19,38).

Table 40 Antenatal first visit – 14 weeks (16, 35)

NSW (%)	CESPHN (%)	LGA	%
64.3	72	Burwood[1]	62
		Kogarah[12]	62
		Hurstville[12]	61
		Rockdale[1]	60
		Ashfield[1]	58
		Marrickville[123]	57

[1]SA3 >25% CALD proportion of region [2]Socioeconomic disadvantage [3]Low health literacy

2C.1.4 Perinatal Depression

Data informing the incidence of perinatal depression across the region is limited. A number of determinants are associated with the likelihood of onset. Indicators of their incidence and distribution for 2014, outlined in Table 41

In October 2017, the Commonwealth Government released new Clinical Practice Guidelines for perinatal mental health. The new guidelines ask primary care clinicians to assess the presence of; Depression, Anxiety, Bipolar Disorder, Puerperal Psychosis, Schizophrenia and Borderline Personality Disorder (36).

Supporting the implementation of the new clinical management guidelines are the new MBS Items relevant to antenatal shared care in general practice which makes provision for planning and management of a pregnancy, and postnatal consultation including a mental health assessment with screening for drug and alcohol use and domestic violence (37)

Table 41 Incidence perinatal depression according to indicators associated with the onset of perinatal depression (2014) (16, 34, 35);

Age (<25 years) (1)	Several sub-regions have high rates of births for women aged under 25 years including;
	The City and Inner (42.4 per 1,000)
	Inner South West (50.4 per 1,000)
Smoking (38)	Regions with the highest smoking rates in women include;
	Marrickville 8%
	Canterbury 7%
	Ashfield 6%
CALD (1)	Regions with the highest proportion of CALD community;
	Inner Sydney City (10.88%)
	Kogarah – Rockdale (10.88%)
	Canterbury 6.57%
	Strathfield - Burwood – Ashfield (6.01%)
	Hurstville (4.88%)
Socioeconomic disadvantage (1)	CESPHN regions with highest socioeconomic disadvantage include;
	Canterbury [123]
	Botany [123]
	Rockdale [12]

[1]SA3 >25% CALD [2]Socioeconomic disadvantage [3]Low health literacy

2C.2 Service Gaps

There are a range of agencies/providers across the CESPHN region providing services for child and maternal health. Broadly, these services are grouped into;

- Pre-natal
- Post-natal
- Paediatric care
- Family based care

NB: *CESPHN are continuing to consolidate mapping data regarding to number, distribution, type, location and referral mechanisms required for maternal and child services. The CESPHN HealthPathways teams are supporting this process to accompany existing maternal care pathways. The information will be collated and used by the CESPHN population health and practice support teams to seek information in a dynamic format. It is anticipated this information will be available mid-2018.*

2C.2.1 Maternity services

Table 42 Number of maternity services across the CESPHN region

	Type	N facilities
Public	Level 6	5
	Level 5	1
	Level 4	2
Private	N/A	4
Child & Family Health centres across the CESPHN catchment		42

HealthPathways

A search of the CESPHN stakeholder database shows that 154 General Practitioners in the CESPHN region (approximately 8%) have a special interest in child and family health. The July 2016 Evaluation of the Sydney HealthPathways program showed that Antenatal – First consult was the most viewed page both in recent time periods and across the life of the project

Perinatal mental health

The child and maternal health governance groups have provided feedback regarding barriers to accessing services for peri-natal depression.

Table 43 Summary of Perinatal care services by type, including barriers to access Service type

	Service	Barriers
Hospital Inpatient	St John of God	1 facility open, for privately paying patients
	Professor Marie Bashir Centre	Limited number of beds for perinatal mental health services
	Concord Centre for Mental Health –	no public funded beds
MOTHERCRAFT SERVICES	Hospital based in SESLHD and SLHD	Long wait lists for existing mothercraft support services such as infant feeding and settling support
Patient education maternal	Resources	Limited promotion /awareness of PND resources for women
Psychiatry	Psychiatry	Limited/no bulk billing psychiatrists in the region
Psychological services	PSS program	Difficult to attract psychologists to Canterbury LGA area
Perinatal screening	General practice	Barriers to screening and referral in general practice usually related to lack of time or self-efficacy of clinician
HealthPathways	Maternal care pathways available through SLHD edition	Pathways specific to SESLHD are not yet in place

2C.3 Opportunities, priorities and options

Priority	Possible Options	Expected Outcome	Possible Performance Measurement	Potential Lead
NPA: Population Health **Local health/service need:** Maintain access to maternal primary care services	Maintain access to maternal primary care services. Options include; **Health promotion** Work with partner organisations to disseminate resources to increase population awareness and facilitate access to antenatal care for vulnerable populations, prior to 14 weeks gestation e.g. CALD, Aboriginal population groups. Target sub-regions should include Canterbury, Botany and Marrickville-Sydneham-Pertersham. e.g. ANSC, culturally specific services **Perinatal mental health** Explore community based options such as commissioned services, to address limited services for perinatal care in the region. Specifically, access to Psychiatrists that bulk bill, and Psychologists speaking a language other than English. There are requirements for specific languages targeting regions most vulnerable in maternal health e.g. Canterbury **Practice support** Provide support to GPs regarding new guidelines for pre- and post-natal assessments and the implementation of new MBS items screening for perinatal depression and family and domestic violence. **HealthPathways** • Continue to promote access to existing SLHD pathways for GPs including those for ANSC and domestic violence • Establish SESLHD referral pathways for domestic violence **Family and domestic violence** Continue to engage relevant agencies and service providers to identify and access **CPD** Continue to support the GP ANSC program through the following; • Individual GPs through education, training and specialist referral opportunities • Work in partnership with local maternity facilities to monitor/adjust the ANSC model of care ensuring high quality, uniform standard of antenatal care **Digital Health** Link with activities under the quality improvement program to extract and integrate patient data for the MyHealth.	- Maintain or increase GP participation rates and distribution within the ANSC program - Identify options for the provision of community based perinatal mental health services - Support delivered to GPs regarding new maternal health MBS items.	- ANSC participation rates (GPs and patients) - Parental support programs identified and utilised. - Number of families supported by placed based initiatives - Frequency of clinical document uploads to My Health Record - Identify community based options for perinatal mental health - Number of maternal health items claimed (MBS Item 16591 and 16407)	CESPHN

Section 2D: Child Health

2D.1 Child Health Needs

2D.1.1 Infant Mortality

Between 201-14, the estimated infant death rate for CESPHN was 2.9 per 1,000 infant population (annual figure), lower than the New South Wales average 3.7 per 1,000 infant population(16, 39, 40) There was variation across the region for infant deaths rates with Canterbury (3.7), Botany (3.6), Sydney Inner City (3.6) and Kogarah-Rockdale (3.6) areas with highest rates. Eastern Suburbs-South (1.8), Eastern Suburbs- North (1.9) and Leichhardt (2.1) are SA3 areas with the lowest infant death rates (16, 39, 40).

Limitations: Data limited to 2010-15 band

2D.1.2 Early childhood development

In 2014, the estimated child population within CESPHN with, assessed as developmentally vulnerable (using the health and wellbeing domain for developmental vulnerability) was 7% (n-1,061), lower than the NSW rate (8.5%). Sub-regions with the highest rates of developmental vulnerability include Canterbury, Hurstville and Kogarah-Rockdale (Table 44) (16, 39-41).

Assessments for those at risk of developmental vulnerability were similar with the CESPHN rate (12.2% n=1844) lower than the NSW rate (13.7%) and Botany, Canterbury and Sydney Inner City being the regions with the higher stars estimated incidence (16, 39-41).These findings indicate the following;

- Socioeconomically disadvantaged populations were more likely to experience developmental vulnerability.
- Children from CALD, Aboriginal, and parents with low health literacy, were more likely to be developmentally vulnerable (16, 39-41).
- Similar population trends exist for social competence, emotional maturity, communication skills and general knowledge and language and cognitive skills in terms of socioeconomic disadvantage, CALD and Aboriginal background.

Table 44 Estimated population of children, with CESPHN with developmental vulnerability - 2014 (16, 39-41).

Developmental vulnerability			
NSW %	**CESPHN %**	**SA3 %**	
8.5	7.0%	Canterbury [123]	10.3
		Hurstville [12]	9.8
		Kogarah- Rockdale [12]	8.5
At risk of developmental vulnerability			
13.7	12.2%	Botany [123]	16.8
		Canterbury [123]	16.5
		Sydney Inner City [1]	16.5

[1]SA3 >25% CALD proportion of region [2]Socioeconomic disadvantage [3]Low health literacy

2D.1.3 Childhood Immunisation Coverage

Tables 42 and 43 provides a summary of vaccination coverage according to the Australian Childhood Immunisation Schedule. Key findings include;

12-15 months: Waverley had the lowest coverage of 88.8%, while the other LGAs are all above 90%

24-27 months: The lowest coverage was in Botany Bay LGA (82.4%), followed by Burwood (85.4%) and Sydney (85.5%)

60-63 months: Waverley had the lowest coverage of 86.7%, followed by Sydney (88.6%) and Strathfield (88.65)

CESPHN has worked with General Practices in Burwood, Strathfield and Sydney sub-regions and identified that most of the overdue patients were considered inactive. Once the medical records for the inactive patients is corrected with ACIR, it is expected the rate will improve significantly.

Table 45 CESPHN vaccination coverage as per the Australian Immunisation Schedule (all vaccines) - (Oct 2016 – Sept 2017) (42)

	%								
Age Group	**DTP**	**Polio**	**HIB**	**HEP**	**MMR**	**Pneu**	**MenC**	**Varicella**	**Fully**
12-<15 M	94.3	94.2	93.8	94.1	0.0	94.0	0.0	0.0	93.1
24-<27 M	92.3	95.6	93.9	95.4	92.0	0.0	94.0	91.5	88.4
60-<63 M	92.5	92.5	0.0	0.0	94.0	0.0	0.0	0.0	91.9

Table 46 CESPHN Immunisation Coverage by SA3 - (Oct 2016 – Sept 2017) (16, 42)

	%		
LGA	**12-15 months**	**24-27 months**	**60-63 months**
Ashfield	93.3	90.2	95.9*
Burwood	92.6	~85.4	91.3
Canada Bay	93.3	~87.8	90.6
Canterbury	93.1	~86.4	92.8
Leichhardt	96.2*	~88.8	94.9
Marrickville	96.6*	~86.5	94.1
Strathfield	91.5	~86.3	~88.9
Sydney	94.3	~85.5	~88.6
Botany Bay	92.5	~82.4	93.4
Hurstville	94.4	~89.7	~89.2
Kogarah	95.1*	~89.6	93.8
Randwick	95.8*	~88.6	~88.2
Rockdale	91.6	~87.2	93.7
Sutherland Shire	94.7	93.6	94.5
Sydney	94.3	~85.5	~88.6
Waverley	~88.8	~84.6	~86.7
Woollahra	93.2	~86.5	~89.4

**Meets aspirational target ~Coverage <90% Lowest coverage*

2D.1.4 HPV vaccine coverage

Estimated HPV coverage for 12-13-year-old males and female (2016) which is higher than NSW immunisation rates for both males and females 12-13 years old (16, 39, 40) (Table 47).

Table 47 summaries the HPV vaccination rates for CESPHN males & female (2016) (16, 39, 40).

Males 12-13 years *Fully immunised (HPV)*					
NSW (%)	**CESPHN (%)**	**SA3 Highest Rates (%)**		**SA3 Lowest Rates (%)**	
69.9	72.1 (n=9,474)	Leichhardt [1]	88.0	Sydney Inner City	61.5
		Canada Bay [1]	75.0	Eastern Suburbs-North	67.9
		Botany [123]	75.0	Kogarah-Rockdale	69.0
Females 12-13 years *Fully immunised (HPV)*					
82.5	84.7 (n=10,764)	Marrickville-Sydenham-Petersham[123]	94.4	Eastern Suburbs-North	76.7
		Leichhardt [1]	93.3	Canada Bay	77.8
		Strathfield-Burwood-Ashfield [1]	90.4	Kogarah-Rockdale	80.4

[1]SA3 >25% CALD proportion of region [2]Socioeconomic disadvantage [3]Low health literacy

2D.2 Opportunities, priorities and options

Priority	Possible Options	Expected Outcome	Possible Performance Measurement	Potential Lead
NPA: Population Health **Local health/service need:** Refine pathways for children with developmental delays	Implement strategies to refine pathways for children with developmental delays. Options include; **Access to services** Consider activities to enhance access to paediatric services for developmental delays such as; • Commissioning activities to address developmental delay, particularly for CALD communities. • Enhancing access to allied health professionals addressing culturally diversity and non-English speaking communities • Draw on findings from consultations with SLHD and SESLHD regarding healthcare for infants and youth. **HealthPathways** Implement strategies to support GPs and work with LHD, community health and specialists in identifying, managing and appropriately referring children who do not meet developmental milestones such as a 3-year-old health check. **Person Centred Medical Neighbourhood** Work with practices to expand the role of practice nurses in early childhood interventions.	HealthPathways developed related to child health - Childhood screening and assessment – associated with immunisation points	- Number and type of child health specific pathways developed - Number of GPs/PNs undertaking early childhood screening - Number of childhood assessments completed	CESPHN
NPA: Population Health **Local health/service need:** Increase immunisation coverage rates in line with National aspirational targets	Increase immunisation coverage rates across the region. Options include; **Practice Support** Provide immunisation support programs with a focus on vulnerable populations and populations with low childhood immunisation coverage rates **Cold chain management** Cold chain management support in general practice **Collaborate with Public Health Unit (PHU)** Work with the PHU to communicate timely information to General Practices	- Increased immunisation coverage rates	Percentage of children fully immunised at 5 years, disaggregated by Aboriginal and Torres Strait Islander status.	CESPHN in coordination with PHU

Section 2E: Sexual Health

2E.1 Sexual Health Needs

In 2015, the rates for sexually transmissible diseases were high across the region. An outline of the incidence and distribution of the sexually transmissible diseases across the region are summarised in the following section;

2E.1.1 Chlamydia

For CESPHN, Chlamydia notifications were 13% higher in 2016 than 2015. Key points regarding the incidence and distribution of chlamydia are outlined below;

- In 2016, the chlamydia notification rate was 337 notifications per 100,000 population, 13% higher than 2015 (297 per 100,000).(45)
- In 2016, Sydney (1,767 per 100,000 population), Marrickville (638 per 100,000 population), Waverley (644 per 100,000 population) and Randwick (759 per 100,000 population) LGAs all had rates higher than the PHN rate (595 per 100,000).
- Chlamydia rates in the SESLHD portion of the CESPHN region have increased by 40% in 2016 compared to 2015

2E.1.2 Gonorrhoea

Rates for Gonorrhoea in CESPHN are on the highest in NSW. Rates for Hepatitis B in CESPHN are higher than the NSW rate (1.44% versus 1.11%) Key points regarding the incidence and distribution of gonorrhoea are outlined below;

- In 2016 gonorrhoea notification rates in the CESPHN region were 245 per 100,000. This was the highest rate for NSW PHNs (46)
- 2016 data shows NSW gonorrhoea rates were 90 per 100,000, 27% higher than 2015 at 71 per 100,000.
- 2016 data shows that Sydney LGA (955 per 100,000), and Marrickville (364 per 100,000) had the highest rates within the CESPHN region.
- Over 40% of all cases occurred in the 24-34-year age group for both sexes.
- Sydney and Marrickville LGAs continued to have the highest notification rates in SLHD, 51.2% and 18.2% respectively.
- By the end of 2016, there were an estimated 37 537 new gonorrhoea infections in gay and bisexual men. Of those, an estimated 9482 (25%) were diagnosed, 9008 (95% of those diagnosed) received treatment, and 5405 (60% of those treated) had a retest between six weeks and six months after diagnosis.
- Reduced susceptibility to the first-line gonorrhoea treatment (ceftriaxone) is emerging in urban Australia. Between 2012 and 2016, the proportion of gonococcal isolates tested for antimicrobial resistance with decreased susceptibility to ceftriaxone fluctuated between 1.7% and 4.4%(47).

2E.1.3 Hepatitis B

In NSW, an estimated 60% of people living with hepatitis B were born overseas. In general, the proportion of people living with chronic hepatitis B reflects the proportion of the population born in a country with high prevalence of hepatitis B. The number of hepatitis B notifications in an LHD is most likely a reflection of migrant settlement patterns of people who acquired infection at birth overseas and targeted testing in these areas (50). Key points regarding the incidence and distribution of Hepatitis B are outlined below;

- 2015 data shows that an estimated 239,167 individuals were living with Chronic Hepatitis B (CHB), representing approx. 1% of the population. In NSW, the prevalence is estimated at 1.11% and 1.44% in the CESPHN region.
- 2014/2015 data shows that across the CESPHN region, there was a notification rate for Hepatitis B of 52.3 per 100,000 population in 2014; this is higher than the NSW rate of 30.9 per 100,000 population, consistently higher than the NSW rate from 2006. The national notification rate is 26.8 per 100,000.
- The burden of chronic hepatitis B is highest in Canterbury (2.16%), Hurstville (2.07%), Strathfield Burwood-Ashfield (1.99%), Kogarah-Rockdale (1.68%), Sydney Inner City (1.59%), and Botany (1.52%). The national average is 1%.

2E.1.4 Hepatitis C

Hepatitis C notification rates for CESPHN were below the NSW rate, however demonstrated an increase between 2012/13 and 2013/14 for all age groups Key points regarding the incidence and distribution of Hepatitis C are outlined below;

- 2016 data shows that across the CESPHN region, a notification rate for Hepatitis C was 53 per 100,000 in SLHD and 38 per 100,000 in SESLHD. The NSW rate was 55 per 100,000 population
- The Kirby Institute UNSW estimates between 1 March 2016 and 31 March 2017, 20,890 people in the CESPHN catchment is living with hepatitis C. Of those, approx. 13.9 % have initiated treatment on the new direct acting anti-viral treatments.
- Migrants from high-prevalence regions (Egypt, Pakistan, the Mediterranean and Eastern Europe, Africa and Southern Asia) represent a population that is currently under-served with respect to model of care for Hepatitis C treatment uptake. (49)

2E.1.5 HIV

HIV notification rates were consistently high across the region. In Australia, over the past five years (2012–2016) the proportion of HIV notifications with late diagnosis, was highest in people born in Central America (45%), sub Saharan Africa (43%) and Southeast Asia (43%) (48).

In Quarter 1 of 2017 (NSW), there was a 34% reduction in the number of Australian born people newly diagnosed with HIV when compared to the Q1 average over the last 5 years. This reduction was not observed in people born overseas for the same period meaning, people born overseas recently now make up 54% of new diagnosis, compared to 45% average for the same Quarter, over the last 5 years (44). Key points regarding the incidence and distribution of HIV are outlined below;

- The NSW HIV Strategy 2016 – 2020 April – June 2017 Data Report shows that since 1981, most NSW residents notified with newly diagnosed HV infection resided in South Eastern Sydney LHD (31.2%) and Sydney LHD (16.9%). SESLHD has consistently had the highest number and proportion of newly diagnosed NSW residents, followed by Sydney LHD, respectively 26.2% and 30% in 2016.
- In 2016, 91.8% of all HIV positive newly diagnosed NSW residents are male; 6.9% were females. Across the PHN catchment, it is reported that nearly 95% of all new HIV infections are in males.
- In 2016, the rate of HIV infections in SLHD males was three times the rate of infection in males across NSW, with females largely unaffected.
- Self-reported HIV risk exposure showed that 62.9% of newly diagnosed HIV infections were in men who have sex with men; 19.9% of diagnoses had an unknown self-reported risk and 8.9% were from heterosexual exposure

- Sydney LGA had the highest number of newly diagnosed HIV infections across the CESPHN region (highest rate in each LHD respectively)
- From 1 January 2016 to 31 December 2016, 55.1% of Antiretroviral therapy (ART) dispensed to patients resided in SESLHD (28.3%) and SLHD (26.8%)
- In 2016, 90% of all new HIV infections in SLHD residents were acquired through homosexual contact compared to 77% across NSW

2E.1.6 Syphilis

- 2014 and 2015 combined data shows that across the CESPHN region, there was a notification rate for infectious syphilis of 563 per 100,000 population (Healthstats.nsw.gov.au)
- 2016 data shows that across NSW there were 11.1 per 100,000 rates of infectious syphilis, 5% higher than 2015 at 9.9 per 100,000.
- The CESPHN region had the highest number of infectious syphilis notifications in NSW (75 per 100,000 compared to 11.1 per 100,000).
- Sydney and Marrickville LGAs continued to have the highest notification rates (SLHD).
- The sexual exposure of men diagnosed with infectious syphilis is predominantly MSM and this trend has remained consistent over time. In 2016, 87% of men who were diagnosed with infectious syphilis were reported to have had male-to-male sex exposure.(45)

2E1.7 Lymphogranuloma Venereum (LGV)

- LGV notifications in SLHD make up approximately 40% of all LGV notifications in NSW.
- Across the CESPHN region, all LGV notifications were in males. Sydney LGA across SLHD and SESLHD has the highest notification rate.
- In 2016, there was an outbreak of LGV amongst 30-39-year-old men, mostly residing in SLHD and SESLHD.

2E1.8 Shigella

- In SESLHD, there was an increase in shigella notifications in 2016, with 96 notifications being, compared with an average of 52 per year 2012-2015.

2E.1.9 Special population groups - Youth

CESPHN has one of the highest incidence of sexually transmissible infections for NSW. Youth and Youth Services are listed as a priority area under the NSW STI Strategy 2016-2020.

The NSW Ministry of Health is currently reviewing the Youth Health Policy which CESPHN have contributed to. CESPHN, in partnership with SLHD, FACS, and other key agencies are developing a youth health and wellbeing plan which will address sexual health and social determinants such as homelessness influence disease incidence (38, 45, 47).

- Chlamydia is one of the most frequently diagnosed notifiable infections in NSW with over 22,000 infections were notified in NSW in 2014. The majority (74%) occur among young people aged 15-29 years
- In NSW, the highest annual gonorrhoea notification rate was among the 25-29 years age group (275 notifications per 100,000 population) followed by the 20-24 years age group (250 per 100,000 population)

- Recent Australian data shows between 2012 and 2016, gonorrhoea notification rates increased 99% in major cities and 63% increase in notification rates in major cities between 2015 and 2016 (27.5 to 44.8 per 100 000) with specific rises amongst young heterosexual people in major cities.
- Most of the young people experiencing homelessness rough sleeping (74% n=26), with other participants indicating they were currently residing in a Crisis Accommodation Service (25% n=9) or with friends and family (1% n= less than 5).

2E.2 Service Gaps

There are a range of agencies/providers across the CESPHN region providing services for patients with lifestyle and biomedical risk factors associated with chronic disease. Likewise, there are services for patients with established chronic and complex medical conditions. Broadly, these services are grouped into;

- Prevention (Primary and secondary)
- Management

Some of services provide both prevention and management services such as those delivered through LHDs such as hospital Diabetes Education services. A preliminary summary of services, by type is outlined in Table 48. Additional service mapping is continuing to more comprehensively identify service gaps for this priority.

Table 48 A summary of services, by and region

Service category	Name of organisation/business	Region	Services (n)
Community based programs	Diabetes NSW	SESLHD & SLHD	Various
Hospital outpatient services	RPA, St George, Sutherland and Randwick including ComDiab at Sutherland Hospital	SESLHD and SLHD	4
General Health & Wellbeing	HealthOne	SESLHD	1
Physical Activity	GP Exercise Referral Scheme	SESLHD	2
General Health & Wellbeing	NSW Health – Get Healthy Information and Coaching line	SESLHD and SLHD	Telephone service
Physical Activity	Heart Foundation	SESLHD and SLHD	Various
General Health & Wellbeing	SLHD Multicultural Health Unit	SLHD	1
Smoking	Quitline	SESLHD and SLHD	Telephone service
Physical Activity	SHARE	SESLHD and SLHD	Various
Physical Activity	YMCA	SESLHD	Various
Physical Activity	Heart Foundation	SESLHD and SLHD	Various

2E.3 Opportunities, priorities and options

Priority	Possible Options	Expected Outcome	Possible Performance Measurement	Potential Lead
NPA: Population Health **Local health/service need:** Support primary care providers to deliver services to address the incidence of sexually transmitted infections and other blood borne conditions	Support primary care providers to deliver services to address the incidence of sexually transmitted infections and other blood borne conditions. Options include; **Primary care development** • Increase the role of practice nurses around STI testing and need for early treatment, management and follow up. • Improve GP capability for opportunistic testing for STIs in priority populations • Increase number of GP prescribers for HVB, HVC, HIV S100 medications • Consider the integration of the Person Centred Medical Neighbourhood as a method of addressing systematic sexual health screening and management **Targeted responses** Respond to rising rates of sexually transmitted infection with a specific focus on vulnerable groups e.g. Aboriginal, CALD, youth and homeless **Person Centered Medical Neighbourhood** Build capacity in general practices to implement systematic screening and recalls for eligible patients **Quality improvement**	- Enhanced capability in general practices to conduct sexual health screening activities - Increased accessibility to HVB, HVC, HIV S100 medications through additional accredited prescribers - Increased number of general practices systematically screening and recalling patients for sexual health related screening/treatment - Increase in early diagnosis of sexually transmissible infections and commence treatment - Improved uptake of STI testing across general practice - Increased awareness and uptake around new and existing treatments among health professionals - New models of care implemented	- Number of programs aimed to build capacity of general practice to address prevention and management of sexual health issues - Number of new models of care implemented - Frequency of clinical document uploads to My Health Record	Consider the roles of other stakeholders including Peak bodies, LHDs, GPs, PNs, consumers, etc

Priority	Possible Options	Expected Outcome	Possible Performance Measurement	Potential Lead
	Implement clinical auditing activities to enhance the integrity of general practice patient data including rates for data completion (Medical software) relevant to measures of sexual health. Use data to develop improvement plans, monitor and evaluate outcomes periodically. **Digital Health** Link with activities under the quality improvement program to extract and integrate patient data for the MyHealth Record. **Health promotion** Work with partner organisations to disseminate resources to increase population awareness of sexually transmitted infections and blood borne conditions. **Clinical Leaders Program** • Strengthen the clinical leaders program to increase GP/clinician confidence and knowledge regarding STI testing • Promote changes to screening practice e.g. new guidelines and testing protocols **CPD** Identify and implement relevant professional development opportunities to support sexual health screening and management, with a focus on addressing barriers experienced by GPs			

Section 3: Aged Care

3.1 Health Needs

In 2014, the CESPHN region had n=225,592 residents aged 65 years or older, or 13.5% of the total CESPHN population. The distribution of residents aged 65 years or older varies across the region. Regions with the highest proportion of this cohort are shown in Table 49 (1).

The CESPHN region has a diverse, multicultural population with more than one-third born overseas. These populations are distributed across all sub-regions with concentrated pockets in Burwood, Strathfield and Canterbury LGAs (1).

The most frequent languages spoken, other than English are Mandarin, Greek, Cantonese, Arabic and Italian. In terms of humanitarian arrivals, the highest number of refugees are from China, Burma, Iran, Iraq, Sri Lanka, Bangladesh, and Egypt (between 2008 to 2013)(1). Data regarding the age distribution of CALD communities is limited, however feedback from LHD staff working across the region indicates that proportions match those represented through age statistics

Table 49 CESPHN sub-regions with highest proportion of people aged 65 years or older, by region

SA3	N of ≥65 years	% SA3 population
1. Lord Howe Island	396	18.2
2. Cronulla-Miranda Caringbah	112,834	17.9
3. Hurstville[1]	126,883	15.9

[1]SA3 >25% CALD [2]Socioeconomic disadvantage [3]Low health literacy

3.1.1 Falls

Falls are more common amongst people aged 65 years of older with one in four people of this cohort experiencing at least one fall per year (48). They are a significant cause of harm with fall-related injuries making a significant contribution to the burden on the health and aged care systems with respect to social, psychological and economic factors (49).

3.1.1.1 Incidence of Injuries resulting from falls

In terms of hospital attendances related to falls, the direct standardised rate for falls injuries for people aged 65 years and older were highest in the following Local Government Area's (2016)(24);

Table 50 Direct standardised rate for falls injuries people aged ≥65 years, by SA3

LGA	Direct standardised rate per 100,000 (2016)
Leichhardt [1]	4218.7
Botany Bay[123]	3464.8
City of Sydney [1]	3429.3
The lowest rate occurred in Sutherland Shire (2651.6), Median rate(CESPHN) n=2350.3 (SD=1164.8)	

[1]SA3 >25% CALD [2]Socioeconomic disadvantage [3]Low health literacy

3.1.1.2 Incidence of Injuries resulting from falls

In 2014/15, the direct standardised rate for hospital attendances for injuries resulting from falls varied across the region and by age and geographical region. Rates for people aged 65 years and older were higher across all LGAs than all other ages (50, 51) (Table 48).

3.1.1.3 Factors influencing falls

Falls rates in the CESPHN region are highest in Leichhardt, Botany Bay and City of Sydney LGAs. These sub-regions had associated levels of socioeconomic disadvantage, higher proportions of CALD populations and for Botany, low levels of health literacy.

Risk factors for falls among older people include gait, balance deficits and peripheral sensation caused by musculoskeletal problems (e.g. arthritis), peripheral neuropathy (e.g. resulting from diabetes), neurological disorders such as Parkinson disease and impairments caused by a previous stroke. Other risk factors include impaired vision, use of certain medications such as psychotropic medications, and, disorders causing syncope such as neuro-cardiogenic syncope and carotid sinus syndrome. People in this cohort have higher rates of osteoporosis, which increases the likelihood of fractures resulting from falls, as well the use of anti-coagulant medication which can increase the risk of bleeding.

3.2 Dementia

Dementia presents a significant challenge to health and aged care in Australia, and affects almost 1 in 10 (8.8%) people aged 65 years and over. While dementia is not caused by age, it does primarily affect older people (52).

3.2.1 Incidence of Dementia

There are an estimated n=354,000 people with dementia in Australia in 2016 (1). Between 2006 to 2016, there was a 40% (n= 252,000) rise in people with dementia in Australia, with an estimated 43% of those diagnosed (n=108,360) aged 85 years or older (50, 52).
There is a high proportion of people aged 65 years or older residing in the CESPHN region (Table 49). Several sub-regions have higher rates of this cohort than others with co-existing levels of vulnerability, such as high proportions of people of whom English is a second language, have low levels of health literacy and socioeconomic disadvantage (Table 49).

Estimates indicate the number of people living in the CESPHN region between 2011-2020 with dementia is n=20,445 (52). Incidence varies across CESPHN sub-regions (SA3) between males and females.

Table 49 Estimated dementia incidence by sub-region and gender (50, 52);

Total population/SA3	Males/SA3	Females/SA3
1. Kogarah-Rockdale[12] (n=829)	1. Kogarah-Rockdale (N=829)	1. Hurstville (n=1,374)
2. Strathfield-Burwood–Ashfield[1] (n=724)	2. Strathfield-Burwood–Ashfield (n=724)	2. Cronulla-Miranda–Caringbah (n=1,360)
3. Cronulla-Miranda–Caringbah (n=2,138)	3. Cronulla-Miranda-Caringbah (N=778)	3. Strathfield-Burwood–Ashfield (n=1,355)
Lowest incidence: Lord Howe Island (n=7) Botany (n=568) CESPHN mainland region		

[1]SA3 >25% CALD [2]Socioeconomic disadvantage [3]Low health literacy

3.2.2 Hospitalisations and bed days attributable to dementia

Hospitalisations attributable to dementia are relatively low for the CESPHN region in comparison to other PHNs, however the number of hospital bed days is higher than the NSW and Australian rate.

These data may be an indication of disease severity/complexity, poor management and/or limitations with discharge options.

The number of 'bed days' attributed to dementia have been used as a measure of disease prevalence and severity/complexity. These measures can inform the activities related to tailored medical management to prevent hospitalisations or limit bed days. For the CESPHN region, the SA3 areas ranked highest in terms of bed days related to dementia care in hospital have been outlined in Table 50 (53).

3.2.3 Hospitalisations

For the CESPHN region, the following SA3 areas ranked highest in terms of hospitalisations for dementia (53-55).;

1. Eastern Suburbs South (72/100,000)
2. Hurstville (60/100,000)
3. Sutherland-Menai-Heathcote (58/100,000)

In contrast, the Strathfield-Burwood–Ashfield sub-region demonstrated the lowest number of hospitalisations attributable to dementia with a rate 53/100,000.

3.2.4 Hospital Bed Days

Table 50 Hospital bed days attributed to dementia by sub-region

SA3	Rate/100,000	N=Total SA3 Population	N bed days	% Dementia Beds by population (SA3)
1. Eastern Suburbs South[1]	1,053	143,776	1514	1.1
2. Leichhardt	1,024	58,138	595	1.0%
3. *Botany[123]	875	44,742	391	0.9%
Lowest rate: Kogarah-Rockdale n=381/100,000				

[1]SA3 >25% CALD [2]Socioeconomic disadvantage [3]Low health literacy

There was a correlation between hospital presentations and bed days attributable to dementia and the characteristics of the population. Data indicates those sub-regions with higher rates of people from CALD background. The Botany and Kogarah-Rockdale sub-regions have associated health literacy and socioeconomic disadvantage.

3.3. Frailty

In Australia, estimates indicate one in four older people aged 85 years and older are frail. For the CESPHN region this equates to n=8,437.25 people (0.5%) of the population (2016)(1) (Table 51).

Frailty screening can help identify older people with multiple interacting medical and social problems who require comprehensive assessment in addition to the following;

- Adaptations of care processes, personalisation of interventions and modifications of standard protocols will benefit frail older patients.
- Screening and assessment for frailty should begin in general practice, supporting early recognition and complex management.
- Good nutrition, including adequate protein intake, is important in preserving muscle health.
- For frail older people, any physical activity is better than none, and there should be a focus on limiting sedentary behaviour (56)

3.3.1 Burden to healthcare sector

Participants of the CESPHN Partnership Day conducted 20 October 2017(57), indicated a range of limitations related to supply and demand for aged care services. Participants indicated that navigating the My Aged Care initiative, long wait lists, cost, availability or proximity of services and workforce shortages as prohibitive in accessing services for people in the aged care cohort. The modifiability of frailty, if screened using clinical, functional, behavioural and biological markers, can enable preventative strategies to delay progression (56, 58, 59).

Table 51 Estimated frailty rates by SA3

SA3	N	% of SA3 population (2016)
1. Hurstville[12]	n=3479	2.7%
2. Cronulla-Miranda-Caringbah	n=3302	2.2%
3. Sutherland-Menai-Heathcote	n=3338	3.0%

[1]SA3 >25% CALD proportion of region [2]Socioeconomic disadvantage [3]Low health literacy

3.3.2 Frailty projections

Projecting to 2050 (using ABS 2013), indicate that almost 850,000 older Australians living in the community are likely to be frail. CESPHN has commenced liaison with investigators from the Centre for Research Excellence in Frailty Healthy Ageing, from Adelaide University. The aim is to more accurately estimate the burden of frailty for the region, and map this accordingly by local sub-regions (LGA and/or SA3). This information will inform CESPHN planning to provide tailored, best practice preventive and management strategies. This information will inform CESPHN planning to provide tailored, best practice preventive and management strategies (1, 58).

3.4 Service Gaps

3.4.1 Aged care facilities and Services

The is a current emphasis on the delivery of aged care services through residential aged care facilities rather than community based options. Population projections regarding the number and proportion of people aged 65 years and older will limit access to existing aged care infrastructure and alternative solutions to create capacity are require. Additionally, the brevity and complexity of the aged care section, specific service and referral arrangements pose barriers to clinicians and consumers in navigating care, in a timely manner.

In 2016, there was 16,987 Operational Aged Care Facilities and Services within the CESPHN region. For the aged care sector, the CESPHN geographical region is divided into two sub-regions;
South East Sydney Aged Care Planning Region (ACPR)
Inner West Aged Care Planning Region (ACPR)

In 2016, there were n=10,834 admissions into residential aged care facilities across the region. These were split 47% (n=5105) for respite care and, 53% (n= 5,729) permanent places. The proportion of admissions was higher in the South Eastern ACPR (69%) than the Inner West ACPR (31%) of all 2016 admissions

This is an over-representation of people aged 65 years and older, requiring aged care support within aged care facilities contrasting to Home Care support. The proportion of Home Care admissions, during 2016 14.8% (n=12,723), compared with 85.2% (60).

The burden of an ageing population is and will continue to place pressure on the aged care industry to cater for the growing 'bulk' of the population. Recent research indicates that only 8% of Australians aged 65 years and older are currently living in residential aged care facilities (60). With projections set to shift the bulk of the population to the 65 years and over category, need for alternate aged care solutions are required. Options should consider stepped care, with an emphasis on sustainable services such as those offered through community based solutions.

3.4.2 My Aged Care

Discussions with key stakeholders has indicated consumers and some providers encounter significant issues navigating the My Aged Care portal. The scope of the report herein does not cover the utility of the My Aged Care portal, however suggests the need for additional investigation to see what barriers are experienced and how these can be overcome.

The distribution of aged care facilities, home care packages, places in facilities, including transitional places has been outlined in Table 52.

Table 52 Distribution of aged care facilities and services across the region

ACPR	LGA	Aged Care facilities	Homes care packages	Aged Care Facility places	Transitional places e.g. Respite
South East Sydney	Sutherland Shire Bayside [123] Georges River [1] City of Sydney[1] Woollahra [1] Waverley [1] Randwick[1]	198	2,871	11,061 (65.11%)	170
Inner West	Canada Bay[1] Canterbury-Bankstown[123] Inner West[1] Burwood[12] Strathfield[1]	119	1,435	5,926 (34.89%)	90
CESPHN		317	4,306	16,987	260

[1]SA3 >25% CALD proportion of region [2]Socioeconomic disadvantage [3]Low health literacy

3.4.3 Homes Care Admissions in CESPHN

In 2016, 1,889 Home Care Admissions were made across the CESPHN region. 44.3% (n=836) of admissions were in the Inner West (ACPR), 1,053 admissions (55.7%) were in the South-East Sydney ACPR.

- 68 admissions (3.6%) were for Level 1 home care (basic care needs)
- 1,240 admissions (65.64%) were for Level 2 home care (low level care needs)
- 183 admissions (9.69%) were for Level 3 home care (intermediate care needs)

398 admissions (21.07%) were for Level 4 home care (high-level care needs)

3.5 Palliative Care

Palliative care services in Australia are delivered from a mix of Federal and State government portfolios, with a range of government-subsidised and regulated services provided to people. The complexity of these service arrangements has been associated with increased fragmentation in the sector, making navigation of services difficult for consumers and healthcare providers (61).

People aged 65 years or older contribute significantly to mortality rates, with approximately 20% of all deaths from this age group (1, 62-64). For the CESPHN region, this proportion represents n=45,118 individuals each year. With the rates of this age group expected to rise, reported earlier in this document, adequate arrangements for palliative are more pertinent. Of these deaths, an estimated 20% will require acute medical care at some point during their end of life (1, 62-64). Acute palliative care is delivered via specialist palliative care services, operating from a variety of settings, including admitted patient settings; community-based specialist services and residential aged care facilities (1, 62-64). Services are delivered from multidisciplinary professions including; nursing, allied health, medical, spiritual and pastoral care providers. The contribution these services make and distribution across the CESPHN region has been outlined below;

3.5.1 Role of general practice

Evidence indicates that general practice has a pivotal role in primary and secondary prevention, including screening and risk management activities. Despite this, several barriers influencing their

efficacy in prevention and management of chronic disease. These barriers relate to attitudes and confidence towards identification, treatment, and management (65).

In 2014–15, it was estimated that 1 in 1,000 GP encounters were for palliative care. Of these encounters, nine in ten were for patients aged 65 years or older. The characteristics of GPs providing palliative care services indicates that the majority were female (66.5%) versus 33.5% for males (66)

3.5.2 Residential aged care facilities

For permanent residents of aged care facilities, the most common reason for separation from the facility for their last care episode was due to death, accounting for around 95%, or 54,000 people, in 2013–14 (50, 62, 67). Less than half of these people had stayed for less than 12 months in the residential care facility. Around 15% of deaths in residential aged care facilities involved patients who were accessing palliative care services in 2013–14 (50, 62, 67). While data are available on the proportion of services meeting national standards, there are no national level data on the quality of patient-assessed end-of-life care across the aged care service sector.

3.5.3 Other palliative care services

Other palliative care services are provided by acute inpatient facilities, palliative care specific facilities e.g. hospices, community based services and services provided by GPs. They include; assistance with personal care, light household duties, meal preparation, medication management, incidental transport, companionship, specialist dementia care and palliative care support at home. Despite the range of services, there are few of the specialist palliative care services deliver purposeful and systematic advanced care planning for patients at or commencing their end of life phase. This limits options for pre-emptive strategies to mitigate acute or unplanned care during this period.

- In Australia, there are approximately 57,000 hospital separations containing a palliative care component.
- Estimates indicate that GPs provide 140,000 palliative care-related services (between 2012–13)(62)
- Palliative care medical specialists provided an estimated 63,000 (between 2012-13) (62).

Table 53 A summary of the number of distribution of specialist palliative care services across the CESPHN region is provided below;

SLHD	N=8	**NB**: n=3 services in Bankstown (SWSLHD) yet service some areas of SLHD
SESLHD	N=3	
SVHN	N=1	
SCHN *(Randwick)*	N=1	

3.5.4 Palliative care support services

A Palliative Care service mapping report produced through CESPHN indicated n=12 organisations across the CESPHN region delivering support services to palliative patients (68). These services include activities such as; advanced care planning, assistance with personal care, light household duties, meal preparation, medication reminders, incidental transport, companionship, specialist dementia care and palliative care support at home. The distribution of services is weighted to the SESLHD region (n=8), compared to n=4 in the SLHD. Whilst this mapping data identified n=12

services, it is anticipated that additional services may exist for residents, operating under with aged care, cancer or other disciplines.

3.5.5 Palliative care service activity

The end-of-life experience for Australians has become increasingly institutionalised over the last century, with only around 20% of Australians dying outside of hospital or residential aged care in the first decade of the 21st century—one of the lowest rates in the developed world. While most Australians report that they want to die at home if faced with a terminal illness the reality when the time comes can be vastly different. As Australians approach the end of their lives, they often confirm where they want to die, or sometimes make a change to their preferred place of death. However, even when a person has made their preferred place to die known to others, only around half of people have their preferences met. Similar results have been found across the developed world (69-71)

3.5.6 Advanced Care Planning

Advance care planning is an extremely complex health system activity and despite proposed benefits of implementation, the feasibility of establishing and executing the wishes of patients. Despite evidence indicating the benefits to end of life care, patient experience and psychological distress associated with this phase, the rate of completion in Australian is poor.

Evidence indicates barriers to the uptake of advance care plans during the end of life journey specifically with information technology/management infrastructure and its ability to facilitate point to point communication (72, 73). Relying on written advance directives as the dominant approach to advance care planning is not adequate and requires multiple points of access for timely communication of information, such as those offered through the MyHealth Record (74). Additionally, patient attitudes, cultural differences, and clinician self-efficacy regarding establishing plans have been highlighted as barriers to uptake.

Recent research supports the integration of several key elements in planning the palliative phase of patient care. These include;

1. Advanced care plans should cover an extended period of time and include a wider range of issues to improve patient outcomes (75)
2. Ensure timely diagnosis of terminal disease and information regarding management (76)
3. Advanced care plans should be done as soon as possible after diagnosis (77)
4. The plan should capture an individual's values and beliefs (78)
5. Ensure one of more substitute decision makers should be made and documented within the plan (79)
6. Each patient should be involved in discussions and decision-making as much as possible (80)

For patients with dementia, care is needed when transferring between health care settings (80).

3.6 Opportunities, priorities and options

Priority	Possible Options	Expected Outcome	Possible Performance Measurement	Potential Lead
NPA: Aged Care **Local health/service needs:** Increase community based services for aged care priorities	**Increase community based services for aged care priorities** - Identify or commission community based options for aged care priorities (frailty, dementia, falls and palliative care) to address the demand on services and disease burden. **Healthy Ageing services/activities** Explore options to establish/commission initiatives to support healthy ageing and reduce variation in care for priority areas and prevent PPH. Options might include; - Prehabilitation programs/physical conditioning for management of patients with osteoarthritis preventing or delaying the need for joint replacement - Health promotion strategies to enhance patient health literacy regarding implementing a healthy lifestyle **Capacity building to prevent after hours care** - Services commissioned under the After-Hours Schedule to educate staff from RACFs to reduce hospital transfers. **Staying Well at Home** Innovative solutions to reduced potentially preventable hospitalisations such as virtual patient education resources, physical conditioning programs and tailored quality improvement activities in local general practices	**Falls** - Increased number of eligible patients screened for falls risk - Improved GP confidence in assessing and advising patients regarding falls prevention/risk - Enhanced access to falls prevention/healthy ageing programs - Increased use of MyHealth Record and HealthPathways for aged related diseases - Reduced unplanned hospitalisations through the after-hours period - Improved continuity of care for the ageing population across the health sectors. - Improved education and awareness of aged related issues among health providers **Frailty** - Increased number of eligible patients screened for frailty - Improved GP confidence in assessing and advising patients regarding frailty - options for treatment and management	- Proportion of population 75 years or over with a 75 plus year old health assessment - Total number of GP type ED services (defined as triage category 4 and 5 patients) provided to patients within the PHN during after-hours times - Potentially preventable hospitalisations, total and for selected conditions including: asthma; diabetes and cardiac failure, disaggregated by age and Aboriginal and Torres Strait Islander status - Number of pathways developed and utilisation rates - Patient and provider experience - Data completeness for disease specific measures in line with clinical management guidelines established by RACGP Red book - Number of patients entering Staying Well at Home program - Screening rates for falls, dementia and frailty (via clinical audits)	CESPHN

	HealthPathways Promote existing SLHD pathways related to dementia, falls, frailty and palliative care. Establish and disseminate SESLHD pathways related to dementia, falls, frailty and palliative care. **Practice support & Person Centered Medical Neighbourhood** - Screening programs dementia patients, falls risks and frailty - Advance care planning and palliation services - Disseminate resources to support/enhance general practice implementation of screening programs **Staying Well at Home** Work with general practices in the Canterbury and Sutherland LGAs to systematically identify patients aged 75 years and over with CCF, COPD and/or frailty and link into a chronic disease management program.	- Enhanced access to falls prevention/healthy ageing programs **Dementia** - Increased number of eligible patients screened for dementia - Improved GP confidence in assessing and advising patients regarding dementia - options for treatment and management - Enhanced access to falls prevention/healthy ageing programs **Palliative care** - Increased number of advanced care plans - Uptake of MyHealth Record for palliative purposes		

NPA: Workforce **Local health/service need:** Develop a workforce and primary care service plan to address ageing population	**Establish a comprehensive workforce strategy to sustain and/or increase access to primary care services across the region** - Support practices to implement the new Quality Improvement (QI) PIP to be introduced 2018 - Work with training providers to support GP registrars - Conduct individual, practice-based business modelling to promote employment of practice nurses. - Identify GPs nearing retirement and create transitional or succession plans to to ensure population coverage - Support newly opened practices – including both general practices and allied health practices - Undertake a regional Strategic workforce plan to determine the state of primary care in the region. - Provide opportunities for professional development to GPs, practice nurses, practice staff and allied health professionals. - Provide opportunities for cultural awareness training - Continue to lay the foundations of the health care home model by: - Supporting practices through targeted quality improvement initiatives and practice support visiting program	- Ensures accountability against distribution of resources - Inform future work and distribution of resources - Enhanced understanding of local needs - Patient and provider experience data to match to activity evaluations - Supports person centred and co-designed approaches to activity development and implementation	Ratio of service providers to population for the following periods; - 2018 - 2028 (projected) - 2038 (projected) - 2048 (projected) - Plan in place to meet capacity and capability requirements for projected ratios - Number of general practices participating in Person Centred Medical Neighbourhood - Number of practices participating in quality improvement activities - Measures to assess success of pre-emptive activities (to be developed)	CESPHN

	(accreditation, practice management and workforce support) - Promoting the model of team based care in practices - Building capacity of staff to systematically manage and refer patients with chronic disease - QI activities, Q pulse and new digital PIP incentives - Continue to work with organisations involved in local urban planning to ensure the equitable and appropriate supply of primary health care providers in areas of new developments			

Section 4: Aboriginal & Torres Strait Islander Health

4.1 Health Needs

The number of residents that identified as Aboriginal and/or Torres Strait Islander was 12,765 (1% CESPHN population). The distribution followed a similar trend as the total population with the highest number and proportion of Aboriginal and/or Torres Strait Islander residents living in Inner Sydney City (0.17%, n=2,489). Figure 4 and Table 54 provides a summary of the Aboriginal population by (CESPHN) SA3.

4.1.1 Demography

The Aboriginal population has a considerably younger age profile than the non-Aboriginal population (Table 54). Socioeconomic disadvantage impacts upon the Aboriginal population who are vulnerable to poor lifestyle choices and diseases. The local government area of Botany Bay has an Index of Relative Socioeconomic Advantage and Disadvantage below the Australian average, which is also home to our largest Aboriginal and Torres Strait Islander population.

4.1.2 Age and distribution

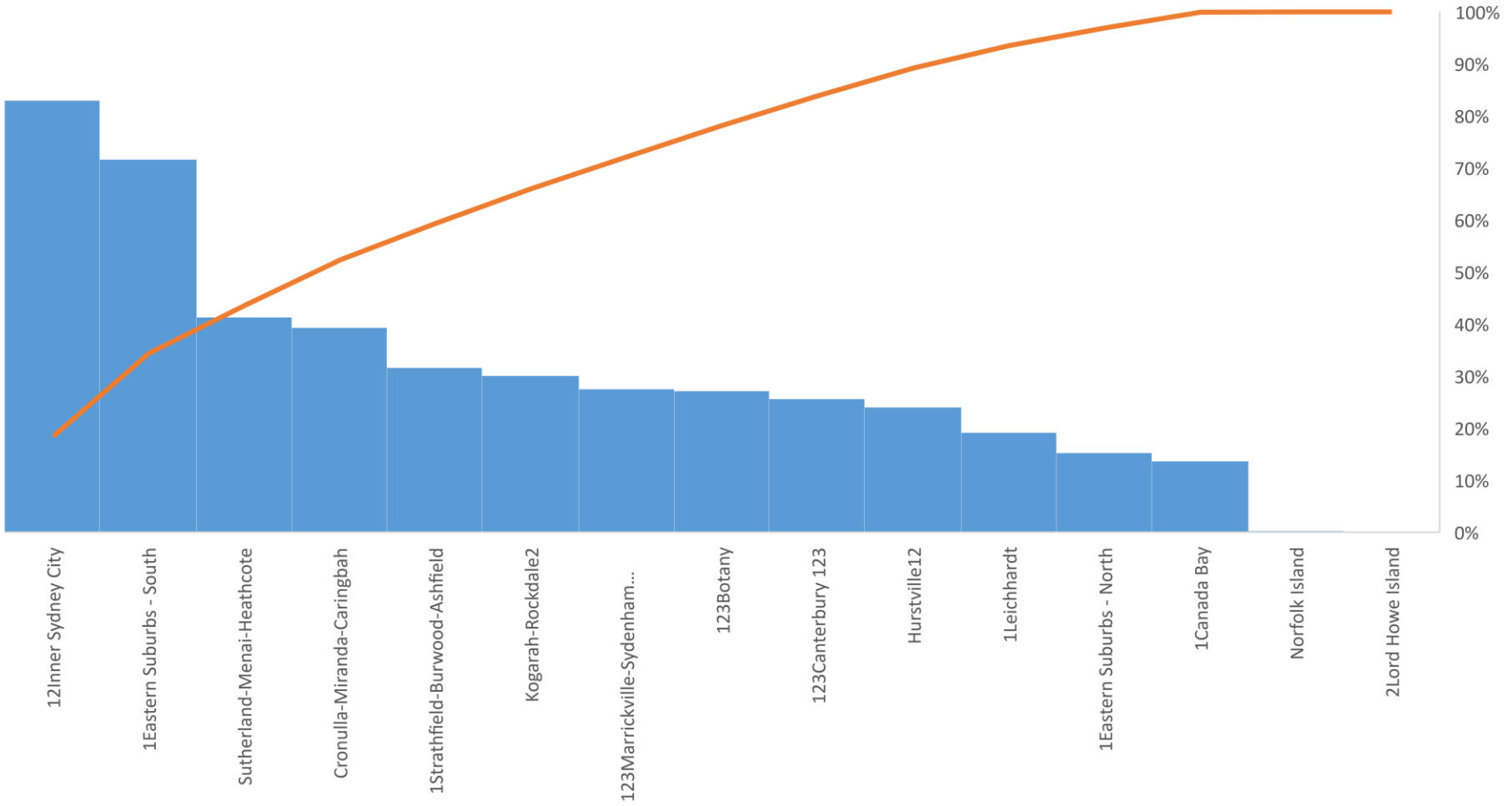
The distribution of Aboriginal and Torres Strait Islander residents varies by sub-region with the highest proportion residing in the Inner Sydney City, followed by Eastern Suburbs South and then Sutherland-Menai-Heathcote. Figure 4 provides a summary of the distribution of Aboriginal population across CESPHN. Table 54 itemised the CESPHN Aboriginal population across age groups. Figure 4 presents the CESPHN Aboriginal population by gender and sub-regions.

Table 54 Aboriginal and/or Torres Strait Islander age breakdown within CESPHN region

	Males		**Females**		**Persons**	
Age	**N**	**%**	**N**	**%**	**N**	**%**
0-9	1,176	8.7	1,173	8.7	2,355	17.5
10-24	1,799	13.3	1,805	13.4	3,597	26.7
25-49	2,413	17.9	2,438	18.1	4,809	35.7
50-64	922	6.8	945	7.0	1,898	14.1
65+	386	2.9	455	3.4	819	6.1

[2]Socioeconomic disadvantage [3]Low health literacy

Figure 4: Number & distribution of Aboriginal residents by SA3 (2016) (1).



4.1.3 Hospitalisations

In 2014-15, the most common reason for the hospitalisation for Aboriginal and Torres Strait Islander people in Australia was for 'Factors influencing health status and contact with health services' (mostly for care involving dialysis), accountable for 50% of hospital attendances (81). The number and proportion of hospitalisations for Aboriginal and Torre Strait Islands across Australia, by principal diagnosis is outlined in Table 55

4.1.1 Potentially preventable hospitalisations

In 2014-15, the rate of overall (national) rate for potentially preventable hospitalisations was around three times higher for Aboriginal and Torres Strait Islander people than those for non-Aboriginal people (81).

The numbers, proportions (%), and hospitalisations for leading causes of hospital separations, using Aboriginal and Torres Strait Islander, and non-Aboriginal rate ratios, is shown in Table 55 (2014-15) (81)

Limitations: Data regarding the rate of hospitalisations in Aboriginal communities can provide some insights into disease incidence and management. However, conclusions are difficult to draw due to the relatively small number of individuals the data represents. For this reason, data at a local level is, in most cases not available.

Table 55 Hospital separations, using Aboriginal and Torres Strait Islander, and non-Aboriginal rate (2014-15) (81)

Principal diagnosis (ICD)	Number of attendances	Proportion of separations (%)
Injury, poisoning and certain other consequences of external causes	29,237	6.6
Pregnancy, childbirth and the puerperium	23,831	5.4
Diseases of the respiratory system	22,960	5.2
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	21,644	4.9
Diseases of the digestive system	21,441	4.8
Mental and behavioural disorders	16,941	3.8
Diseases of the circulatory system	12,520	2.8
Diseases of the genitourinary system	12,038	2.7
Diseases of the skin and subcutaneous tissue	8,750	2.0
Diseases of the musculoskeletal system and connective tissue	8,398	1.9
Certain infectious and parasitic diseases	7,326	1.7
Endocrine, nutritional & metabolic diseases	6,920	1.6
Neoplasms	6,632	1.5
Diseases of the nervous system	5,843	1.3
Factors including health status & contact with health services	223,264	50.4
All causes	443,097	100

4.1.5 Sexual Health

NSW Health have identified STIs as priority area for Aboriginal and Torres Strait Islanders with a focus on HIV, Hepatitis B and Hepatitis C. Evidence in relation to the sexual health of Aboriginal and Torres Strait Islander residents of CESPHN is outlined in the adjacent section of this report.

Risky Sexual Behaviours

According to the Australian Needle and Syringe Program Survey, in all years between 2006 and 2015 except 2012, a higher proportion of Aboriginal and Torres Strait Islander female participants (50 – 76%) reported inconsistent condom use with casual partners in the last month compared with non-Aboriginal female participants (34–54%)(47, 82, 83)

HIV

- HIV notification rates nationally among Aboriginal and Torres Strait Islander men have doubled over the past five years and rates of chlamydia, gonorrhoea and infectious syphilis are 3, 10 and 6 times greater than the non–Aboriginal population in 2015 (47)
- Between 2011 and 2015, there was a 2–fold increase in HIV notifications rates in Aboriginal and Torres Strait Islander males. Over the same period, the rate in the Australian–born non–Aboriginal male population decreased by 13%
- In the last five years, a higher proportion of newly diagnosed HIV infections among the Aboriginal and Torres Strait Islander population were attributed to injecting drug use (16% vs. 3%) and heterosexual contact (21% vs. 14%), as compared with the non–Aboriginal Australian–born population.
- Just under a third (30%) of the new HIV diagnoses among the Aboriginal and Torres Strait Islander population in 2015 were determined to be late (they were in people who were likely to have had their infection for at least four years without being tested).

Hepatitis C

- In Australia, the rate of newly diagnosed hepatitis C infection among the Aboriginal and/or Torres Strait Islander population increased between 2010 to 2015, from 119 per 100 000 in 2010 to 167 per 100,000, a rate 4.6 times greater than among the non-Aboriginal population (36 per 100,000)(47).
- In NSW, the hepatitis C notification rate among Aboriginal people was 275 per 100,000 in 2015, which is 8.5 times higher than the rate among non-Aboriginal people (32 per 100,000) (38).
- In 2015, receptive syringe sharing, a key risk factor for hepatitis C transmission was higher among Aboriginal and Torres Strait Islander respondents (24%) than among non–Aboriginal respondents (14%), according to data from the Australian Needle and Syringe Program Survey

Hepatitis B

- In Australia (2015), the notification rate of newly diagnosed hepatitis B infection among the Aboriginal and Torres Strait Islander peoples was three times that of the non-Aboriginal population (66 per 100,000 versus 22 per 100,000) (47)
- In NSW, the hepatitis B notification rate among Aboriginal people was 24 per 100,000 in 2015, which is 1.3 times higher than the rate among non-Aboriginal people (18 per 100,000)(47)

Chlamydia

In 2015, the chlamydia notification rate in major cities in the Aboriginal and Torres Strait Islander population was two times higher than that among the non–Aboriginal population, increasing to eight times higher in remote areas (47)

Gonorrhoea

Nationally in 2015, the gonorrhoea rate among Aboriginal and Torres Strait Islander people was 10 times that of the non-Aboriginal population (626 vs 62 per 100,000 population), 71% of these cases were Aboriginals aged 15-29 years.

Infectious Syphilis

In Aboriginal and Torres Strait Islander peoples, the number of infectious syphilis notifications among males and females was nearly equal in 2015, indicating predominantly heterosexual transmission. In contrast, diagnoses in non–Aboriginal peoples are predominantly in men, in urban settings, suggesting that transmission is primarily related to sex between men.

4.1.6 Maternal health

There is variation between Aboriginal and non-Aboriginal maternal health such as the number of births, perinatal mortality, Smoking during pregnancy, Gestational Diabetes and Australian Early Development Index (84, 85)

Births

In 2015, there were n=111 births among Aboriginal mothers in the SLHD region (1.3% of the population), this has increased over the last 10 years (n=74 in 2005, representing 1% of the population) (85). In 2015, there were 110 births to Aboriginal mothers in the SESLHD region (1% of the population), this has increased over the last 10 years (n=72 in 2005, representing 0.7% of the population) (85).

Perinatal mortality

In NSW, perinatal mortality among Aboriginal babies from 2012-15 has reduced slightly from 12.7 per 1000 live births (n=69) to 10.7 per 1000 live births (n=59) compared to 7.9 and 8.0 per 1000 live births for non-Aboriginal mothers over the same period (84, 85).

Rates of smoking during pregnancy

In 2014, the CESPHN rate was lower than the NSW rate (45.2%) for Aboriginal women who smoke during pregnancy. SESLHD 34.3% and SLHD 40.0%. South Eastern Sydney LHD has the lowest proportion of all NSW LHDs (84, 85).

4.2 Service Gaps

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

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) 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.

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

A summary of primary care services available to Aboriginal and Torres Strait Island community members in the CESPHN region has been outlined in Table 56 and 57

Care involving dialysis accounts for the largest difference in hospitalisation rates between Aboriginal and non-Aboriginal people (3.5 times higher). This holds true locally, where in 2014/15, dialysis hospitalisation rates were highest for Aboriginal people (16285.4 per 100,000) compared to non-Aboriginal people (4427.7 per 100,000) and this rate has continued to climb over the last eight years.

In 2014/15, hospitalisation for mental disorders was the second highest rate across the PHN (4004.6 per 100,000 population), this was substantially higher than the State (2908.5) and second highest among all NSW PHNs. This rate has continued to climb over the last eight years. Hospitalisations for circulatory disease, respiratory diseases and injury and poisoning are at a higher rate than for non-Aboriginal people.

Less than 8% of the practices in the CESPHN region are registered to the Aboriginal Health incentive, which impacts on access to primary health care services for Aboriginal people. Limited numbers of practices offering health assessment and PBS entitlements ('CTG script') is an ongoing issue, particularly in areas with high proportions of Aboriginal residents. In 2015/16, n=1,379 MBS Item 715 were completed by up to 124 practitioners across the CESPHN region; this is an increase from 2014/15, where 989 MBS Item 715 were completed by up to 110 practitioners

Table 56 Summary of Aboriginal specific and/or culturally sensitive services within CESPHN region

Domain	Description	Do existing services satisfy health needs of population in region
Primary health care	Culturally appropriate primary care services are provided through the following; • Aboriginal Medical Service (Redfern) • La Perouse Aboriginal Community Health Centre • Local primary care providers	Yes ☐ No ☑ Undetermined ☐ **Mitigating action**: additional primary care providers are continually sought to participate in cultural awareness training and register for the Aboriginal PIP
Maternal health	New Directions: Mothers and Babies Services	Yes ☐ No ☐ Undetermined ☑ **Mitigating action**: CESPHN is consultation further consultation to determine the need for specific maternal services for the community
Youth services	Kirinari Youth Hostel	Yes ☐ No ☑ Undetermined ☐ **Mitigating action**: commissioned services delivering a range of youth focus health, social and welfare services
Social and emotional wellbeing services	Respite Care and transport for the frail aged and younger people with disabilities,	Yes ☑ No ☐ Undetermined ☐ **Mitigating action**: This type of service is considered outside the remit of PHNs.
Substance use services	Treatment, support services to prevent harmful substance use among A&TSI people	Yes ☐ No ☐ Undetermined ☑ **Mitigating action**: CESPHN is consultation further consultation to determine the need for specific substance use services for the community
Aboriginal Home Care	Homecare support for Aboriginal community	Yes ☑ No ☐ Undetermined ☐ **Mitigating action**: This type of service is considered outside the remit of PHNs.

Table 57 Summary of activities and services commissioned by CESPHN

Health domain	Service commissioned	N services
Mental health	Aboriginal MH through the PSS service. Wave Youth service delivers youth mental health for people identifying as Aboriginal &/or Torres Strait Islander	1
Chronic disease prevention and management	Culturally specific healthy Eating Activity and Lifestyle programs in the Canterbury area	1
	Targeting low cervical cancer screening rates in the Rockdale and Kogarah	1
	SESLHD and SLHD have been funded to provide to provide Care Coordination and Outreach Services to Aboriginal and Torres Strait Islander people through better access to co-ordinated and multidisciplinary care, as well as improving access to culturally appropriate mainstream primary care services.	2
Care coordination	A program for local Aboriginal and Torres Strait Islander people with respiratory disease, renal disease, cardiovascular disease, diabetes or cancer.	1
Outreach 4 (identified positions)	Offering support and assistance to Aboriginal and Torres Strait Islander people to access local primary health services including GP's, specialists and allied health providers. Mental Health;	4
Coaching Services	Bolton Clare funded to train coaches to provide one-on-one support to Aboriginal and Torres Strait Islander people experiencing mild anxiety or depression. Services provided via phone, video conferencing, or face to face supports.	2
Psychological Support Services	Culturally appropriate psychological therapies to Aboriginal and Torres Strait Islander Communities in the region.	Various
Early Intervention groups	Aboriginal and Torres Strait Islander young people accessing Kirinarri Youth Hostel have access to information, self-help strategies, and mental health services via a group program.	1
Early intervention groups	Dialectical Behaviour Therapy (DBT) groups	2
Group psychological therapy	GUIR has been funded to provide face-to-face group therapies for Aboriginal and Torres Strait Islanders in the region.	1
Youth Health and Wellbeing program	La Perouse Local Aboriginal Land Council has been funded to employ two health and wellbeing coordinators to support young people access culturally appropriate mainstream services.	2

	Youth Outreach program through Headspace Ashfield has been funded to provide outreach supports and linkages to Aboriginal and Torres Strait Islander young people.	1
Drug and Alcohol Programs Community Restorative Centre Transitions Project	The Community Restorative Centre was funded to provide outreach, community based rehabilitation and psychological counselling for people with problematic substance use and complex support needs who are exiting prison	1
	Weave Youth and Community Services has been funded to provide drug and alcohol care coordination, counselling, information and referral support and group activities for young people	1
	The Aboriginal Medical Service in Redfern has been funded to provides Drug and Alcohol counselling, referrals, pharmacotherapy and community education.	1
CESPHN direct support activities		
General Practice Support	Direct support to local general practices regarding cultural awareness, Aboriginal MBS items and referral pathways	Various
Cultural Awareness training (provided by Aboriginal Trainers)	Improve the accessibility and uptake of cultural awareness and sensitivity training offered and delivered by CESPHN, and to provide and open, flexible, interactive, engaging and collaborative approach to the delivery of Aboriginal and Torres Strait Islander cultural training to primary health service providers and commissioned services in the CESPHN region.	Various
Resource Development	Cultural awareness training, resources supporting IHI and promoting care co-ordination and outreach programs, as well as the redevelopment of the Aboriginal Health Toolkit.	Various
Reconciliation Action Plan (RAP)	Plan to formally deliver support, strengthen and shape a world class, people centred primary health care system focusing on health equality, respecting the learning experiences with meaningful connections, and including Aboriginal peoples in areas of organisation policy, planning and decision making.	1

4.3 Opportunities, priorities and options

Priority	Possible Options	Expected Outcome	Possible Performance Measurement	Potential Lead
NPA: Aboriginal and Torres Strait Islander Health **Local health/service need:** Improve access to culturally appropriate adult mental health and drug and alcohol services	Improve access to culturally appropriate adult mental health services. Options include; **Integrated care teams** Continue to support the ITC program - SESLHD and SLHD have been funded to provide to provide Care Coordination and Outreach Services to Aboriginal and Torres Strait Islander people through better access to co-ordinated and multidisciplinary care, as well as improving access to culturally appropriate mainstream primary care services. Care coordinators provide support to local Aboriginal and Torres Strait Islander people with respiratory disease, renal disease, cardiovascular disease, diabetes or cancer. The Outreach staff offer support and assistance to Aboriginal and Torres Strait Islander people to access local primary health services including GP's, specialists and allied health providers. **Coaching Services** Fund suitable 'coaches' to provide one on one support to Aboriginal and Torres Strait Islander people experiencing mild anxiety or depression via phone, video conferencing, or face to face supports. **Psychological Support Services** Fund services to deliver culturally appropriate psychological therapies to Aboriginal and Torres Strait Islander Communities in the region. **Community Restorative Centre Transitions Project** Continue to work with the Community Restorative Centre to provide outreach, community based rehabilitation and psychological counselling for people with problematic	- Increased access to culturally appropriate (adult) drug and alcohol services - Multiple service delivery options for Aboriginal and Torres Strait Islander patients - Increased access to culturally appropriate drug and alcohol services - Multiple service delivery options for Aboriginal and Torres Strait Islander patients	- Number of providers with cultural awareness certification - Number of providers participating in cultural awareness training (6/12-month reporting period) - Number and type of services provided - Number of patients receiving services - Number of providers with cultural awareness certification - Number of providers participating in cultural awareness training (6/12-month reporting period) - Number and type of services provided - Number of patients receiving services	CESPHN

	substance use and complex support needs who are exiting prison including Aboriginal and Torres Strait Islander people. **Weave Youth and Community Service** Partner with Weave Youth and Community Services to provide drug and alcohol care coordination, counselling, information and referral support and group activities for young people including Aboriginal or Torres Strait Islanders. **Aboriginal Medical Service (AMS) - Redfern** Collaborate with the AMS in Redfern to deliver Drug and Alcohol counselling, referrals, pharmacotherapy and community education.			
NPA: Aboriginal and Torres Strait Islander Health **Local health/service need:** Improve access to culturally appropriate youth mental health services	Improve access to culturally appropriate youth mental health services. Options include; **Early intervention groups** Continue to work with Aboriginal youth service providers to deliver education/training and resources to support self-help strategies, and mental health services. There are three options considered; **Dialectical Behaviour Therapy (DBT)** Interventions to address incidence of personality, mood disorders, those at risk of or currently self-harming, suicidal ideation, and substance abuse. These disorders were identified as health needs by the CESPHN Aboriginal community. **Youth Health and Wellbeing program** Facilitate access to mainstream health services in the absence of specific/community owned services, for Aboriginal youths. Facilitate this priority by appointing up to two health and wellbeing coordinators to engage with and support young people to access culturally appropriate, mainstream services to support their health and wellbeing needs. **Youth Outreach program**	- Increased access to culturally appropriate (youth) mental health services - Multiple service delivery options for Aboriginal and Torres Strait Islander youth		

	Deliver outreach services to Aboriginal communities facilitating affiliation between youths and adult community leaders.			
NPA: Aboriginal and Torres Strait Islander Health **Local health/service need:** Develop a culturally appropriate Workforce	Increase cultural awareness training participation rates. Options include; **Practice Support** Support primary care providers and practices to deliver safe, high quality services to consumers, and assist both general practice and allied health practices by focusing on practice management, accreditation and workforce support, offered on Aboriginal health program initiatives. **Cultural Awareness training (provided by Aboriginal Trainers)** Deliver cultural awareness training to local primary care service providers across the region. **Resource Development** Develop/revise and disseminate resources to support cultural awareness training, including those detailing the Aboriginal Health Incentive, promoting care co-ordination and outreach programs, as well as the redevelopment of the Aboriginal Health Toolkit. **Reconciliation Action Plan (RAP)** Finalise and implement RAP to underpin CESPHN activities ensuring meaningful connections, and including Aboriginal peoples in areas of organisational policy, planning and decision making.			Commissioned services

Section 5: Rural and Remote

5.1 Lord Howe Island Health Needs

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 the significant tourism industry. It is serviced by one health service located on the Island, operating as both a primary, secondary and tertiary care facility

There were 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 on the individual provider.

5.1.1 Population

In 2016, 0.03% of the total CESPHN population resided on Lord Howe Island. The median age of residents was 44 years, higher than the NSW median age, which was 38 years. There was an even distribution of males (50.26%) to females (50.00%) (Table 58).

Table 58 Lord Howe Island population characteristics

Population (2010-14)		
NSW N= 7,480,228	CESPHN N =1,495,875	Lord Howe Island N =382
Age	0-14 years	58 (15%)
	15-24 years	30 (8%)
	25-64 years	226 (59%)
	65+ years	73 (19%)
Gender	Male	192 (50%)
	Female	191 (50%)
Median age at death	Males	67
	Females	76 years
	Persons	71.5 years
Life expectancy	Male	80.3 years
	Female	84.4 years

5.1.2 Immunisation

Coverage rates for childhood vaccinations are 100% for the 12-<15 Month and 24-<27 Month points, however coverage rates drop for the Polio and MMR vaccinations, and combination vaccine diphtheria, pertussis and tetanus at the 60-<63-month point (Table 59)

Table 59 Lord Howe Island vaccination coverage as per the Australian Immunisation Schedule (all vaccines) - (Oct 2016 – Sept 2017) (45)

Age Group	%DTP	%Polio	%HIB	%HEP	%MMR	%Pneumo	%MenC	%Varicella	% Fully
12-<15 M	100.00	100.00	100.00	100.00	0.00	100.00	0.00	0.00	100.00 *
24-<27 M	100.00	100.00	100.00	100.00	100.00	0.00	100.00	100.00	100.00 *
60-<63 M	80.00	80.00	0.00	0.00	80.00	0.00	0.00	0.00	80.00*

5.2 Lord Howe Island - Service Gaps

5.2.1 Gower Wilson Memorial Hospital

Lord Howe Island has one medical facility service primary, secondary and tertiary care for residents and visitor. The service has three inpatient beds currently used for acute medical and/or surgical admissions. Complex cases are transferred to the mainland. A summary of primary care services. Delivered using MBS items is provided in Table 60

SESLHD Clinical Service Plan encompasses Lord Howe Island (86). 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.

5.2.2 Primary care services

Between 2015-16 there were n=2383 primary care (MBS) services delivered to residents and/or visitors of Lord Howe Island. Most services were for regular attendances (Item 23, n=1464), followed by Item 36 (n=677). There was a small number of services delivered outside of the consulting rooms, likely as home visits (Item 37, n=11). 4.1% of attendances were for urgent after-hours services (Item 597, n=98). A summary of items claimed during 2015-16 is outlined in Table 60

Table 60 Summary of MBS items claimed during 2015-16

Item N	N	Description of Item
3	97	Level A attendance
23	1464	Level B attendance (less than 20 minutes)
36	677	Level C attendance (at least 20 minutes)
37	11	Level C (not at consulting room)
161	7	Prolonged attendance (2-3 hrs), patient in imminent danger of death
597	98	Urgent attendance after hours (not more than one patient on the 1 occasion)
73806	6	Pathology (pregnancy test)

NB: Items not claims have been excluded from this summary

5.3 Norfolk Island Health Needs

Norfolk Island is an external Australian territory location 1600km off the eastern coastline of NSW. The population is n=1,748 (0.12% of the CESPHN population) with a slightly higher proportion of female residents (53.2%) than males (46.8%). The median age of people in Norfolk Island was 49 years. People aged 65 years and over comprise more than 24% of the population, and children (aged 0 - 14 years) 16.9%. There was n=491 families making up the population, with an average of 1.8 children per family.

5.3.1 Population Characteristics

Residency

Table 61 Country of birth for residents of Norfolk Island (1)

Resident Country of Birth	% of Norfolk Island population
Australia	39.7%
Norfolk Island	22.1%,
New Zealand	17.6%
Fiji	2.7%
England	2.6%
Philippines	2.3%

Aboriginal Population

It is estimated that 0.5% of the Norfolk Island population identifies as Aboriginal and/or Torres Strait Islander. Of these, 75.0% are female and 25% male. The median age of the Aboriginal population is 49 years.

Marital status

On the Island, there is a total of n=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.

Cultural and language diversity

Cultural and linguistic diversity has been measured by place of birth (resident, resident parents) and languages spoken.

Australian residency (Table 62)

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 and estimated 6% of residents do not have permanent residency, limiting access to social services such as those provided through Medicare and the PBS (1).

Internet connection

There are an estimated 19.2% of the Norfolk Island households that 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 MyHealth Record, certain health literacy strategies and telehealth style responses to delivery of healthcare for to remote regions.

Table 62 Proportion of Norfolk Island residents at risk of developing cardiovascular disease by select indicators – compared against rates for Australian population

Risk factor	Factors leading to increased CVD risk	% Norfolk Island with increased risk	% Australian population with increased risk
Body Mass Index	>25	57	60
High Blood Pressure	Diagnosed hypertension	17	30
Smoker	Current smoker	22	24
Heart disease	Existing	7	4
Genetic	Family history	61	52
Cholesterol (HDL)	>4	49	50

Socio-economic *status*

The 2011 census data indicates that Norfolk Island income levels were on average lower than in the rest of the Australian community with 69 % of the community having an income less than $800 per week, compared with 58% for the remaining Australian community (87).

5.4 Patient experience

The self-reported health status of the Norfolk Island population was comparable to the NSW rate (82%) with 83% of residents reporting "good" to "very good" health status. However, there was variation in those that reported "excellent" health status, with Norfolk Island only 13% of residents reporting "excellent" compared with 22% for NSW population (87, 88).

5.5 Chronic disease

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

Estimates indicate unacceptable rates of hypertension amongst the Norfolk Island population. These rates, upwards of 17% of the total population are indicative of a range of risk factors in addition to genetic predisposition including lifestyle behaviours such as smoking, overweight, physical inactivity and alcohol consumption. Related to the prevalence of these risk factors are rates for the prevalence of type 2 diabetes which is estimated to be up to 40% of the population (89, 90).

Mental health

The Norfolk Island population reported higher levels of "High" to Very High" psychological distress compared to the NSW population (13 per cent compared with 9.8 per cent), 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 (23, 24, 88).

There are gaps in number and distribution of mental health service providers on the Island, limited access to psychological and counselling services

Drug and alcohol

Several data sources indicate the 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 (23, 24, 88).

5.6 Norfolk Island Service Gaps

Access to specialist medical providers is limited to those located or visiting the Island. Options to deliver services via telehealth are under development, however require implementation, together with relevant infrastructure and resourcing to service residents.
Primary services to be targeted for telehealth service provision should include those related to urgent medical care and life limited conditions such as chronic disease.

The SESLHD Clinical Service Plan encompasses Norfolk Island ((86). This includes their responsibilities for the Norfolk Island Health and Residential Aged Care Service (NIHRACS), out of which the general practice services operate. CESPHN continues to 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, and ongoing education for GPs.

CESPHN's work on Norfolk Island has identified the need for health promotion and health literacy to promote an understanding for why services might be accessed. As residents had previously only accessed a GP when necessary, due to needing to pay a flat fee as Medicare was not available, there are gaps in understanding of what general practice can provide. The need for a clinical role for children, young people and families has also been identified as there is only one counselling and one social work role working in NIHRACS to support all. Both the school and the child welfare and wellbeing coordinators identified the need for ongoing clinical support including around drug and alcohol issues.

5.7 Opportunities, priorities and options

Priority	Possible Options	Expected Outcome	Possible Performance Measurement	Potential Lead
NPA: Rural and remote health **Local health/service needs:** Lord Howe Island	- Continue to support SESLHD in the delivery of health care services and advice regarding primary care related activities such as accreditation and MBS utilization - Integrate digital health solutions for relevant aspects of care to enhance connectivity and access to specialty care and improve meaningful use			SESLHD
NPA: Rural and remote health **Local health/service needs:** Norfolk Island	Continue to implement activities under the 2016-2018 activity work plan focusing on the following; - Coordination and integration of primary health care services for residents and visitors of the Island including support for local GPs and integration of digital health solutions - Increase access to mental healthcare services with a focus on psychological support services and enhancing community health literacy and capacity of general practice to manage patients diagnosed with psychosocial disorders. - Improve local access to drug and alcohol treatment services by enhancing community health literacy regarding risk behaviours and harm reduction - Integrate digital health solutions for relevant aspects of care to enhance connectivity and access to specialty care and improve meaningful use	See CESPHN Activity Work Plan 2016018	See CESPHN Activity Work Plan 2016018	SESLHD and CESPHN

Section 6: Digital Health

6.1 Provider experience

A series of consultations were undertaken to inform the status and priorities for the digital health program at CESPHN including consultations with GPs, LHDs and SHNs. Outcomes have been outlined in the proceeding section of this report.

6.1.1 GP consultation

CESPHN have contact with approximately 400 of the ~750 GP practices within its boundaries, with most communication occurring with less than 100 practices. A number of GPs were consulted as part of this needs assessment to obtain feedback regarding their experience, perceptions and interest in digital health solutions. Most GPs consulted indicated they had a poor experience with digital health solutions in the past including;

- substantial problems with electronic discharge summaries
- poor understanding of the My Health Record system
- patchy / inconsistent use of secure messaging for referrals
- limited or no contextual understanding of the digital health landscape.

6.1.2 SLHD consultation

Consultation with SLHD identified the following barriers and enablers to the CESPHN digital health strategy;

- Clinical quality and comprehensive (in terms of detail) provided in GP referrals, limiting the knowledge of patient condition and prohibiting the intake/admission process
- Alternative communication mechanisms are currently being explored within SLHD for three specialty areas, using a link through the HealthPathways asset, rather than secure messaging. At this point the tool is limited to Medical Director software.
- Limitations regarding execution of electronic discharge summaries
    - Limited to GPs registered with GPCOMS system, with no option to include additional GPs at this point due to changes occurring with the Health-e-Net.
    - Suspension of electronic discharge summaries at some SLHD sites due to the requirement to incorporate electronic medication management

Limitations were identified for the following areas;

- Community and outpatient service patient records unavailable in EMR
- Electronic communication through Health-e-Net to general practice regarding ED, ambulatory and outpatient attendances
- No (current) provisions for antenatal shared care through the EMR maternity solutions

6.1.3 SESLHD consultation

Consultation with SESLHD identified the following barriers and enablers to the CESPHN digital health strategy;

- A new secure messaging transmission mechanism will be introduced by the end of 2017, negating the need for GPs to have an Argus license
- The quality, comprehensiveness and reliability in obtaining electronic discharge summaries was raised
- Representatives indicated a desire to explore data sharing and analytics opportunities.

6.1.4 SCHN consultation

Consultation with SCHN identified no geographical remit and provides children's services nationally, although the provision of a children's emergency department at Randwick does result in stronger local service coordination within the SESLHD catchment area.

6.1.5 SVHN consultation

Consultation with SVHN identified the following barriers and enablers to the CESPHN digital health strategy;

St Vincent's Health Network has a history implementing digital health solutions as one of original e-health sites supporting the Personally Controlled Electronic Health Record. Consultation has proven difficult with changes in staff, restructure and redevelopment work occurring, shifting priorities for SVHN. Whilst additional consultation opportunities are being source, anecdotally the Network continues to support:

- electronic referrals to the public hospital and St Vincent's Clinic (hosting >350 private specialists)
- electronic discharge summaries from the public hospital
- electronic nurse-led discharge summaries from the private hospital
- electronic admission and discharge notifications from both the public and private hospital
- electronic attendance letters from ED
- electronic outpatient letters from some clinics at the public hospital
- electronic specialist letters from some private specialists at the St Vincent's Clinic (where specialist practice systems operate)
- submission of discharge summaries and specialist letters to the My Health Record System

integrated access to the My Health Record system from within the EMR at the public and private hospital.

Summary

6.2 Opportunities, priorities and options

Priority	Possible Options	Expected Outcome	Possible Performance Measurement	Potential Lead
NPA: Digital Health **Local health/service need:** Empower primary care providers for the digital health journey	Empower primary care providers for the digital health journey to improve experience and uptake of the MyHealth Record. Options include; **Communication/stakeholder engagement strategy** Establish and implement a broad communication strategy to generate awareness and introduce digital health concepts to achieve the following; - Improve GP experience and empower them to use digital health solution - Ensure clarity regarding resumption of electronic referrals including timelines for recommencement **Digital health** Assign CESPHN resources to implement a systematic approach to supporting digital health in general practice to capture, appropriately intervene and monitor the following aspect: - a register of digital health capability for each practice - the baselining of each practice's current state of digital health - systematically raising the baseline of each practice in line with PHN agreed priorities and targets, constrained only by resource capacity - link quality improvement initiatives to enhance integrity of general practice patient databases	- Enhanced knowledge, confidence and (provider) self-efficacy regarding digital health solutions - Increased participation in MyHealth Record strategy, focused on meaningful use - Support in addressing workforce and service gaps by increasing efficiencies in services	- Increase awareness of digital health technologies among health professionals and consumers - Improved GP experience regarding use of digital health solutions - Measure of provider readiness to uptake digital health solutions - Improved data accuracy and completeness in general practice patient databases - Frequency of clinical document uploads to My Health Record	CESPHN
NPA: Digital Health **Local health/service need:** Strengthen systematic, accurate and	Strengthen systematic, accurate and reliable discharge summaries between hospital and GP. Options include; **Strategic partnerships** Establish strategic, formal partnerships, service level agreement or memorandum of understanding to facilitate infrastructure requirements for digital heath transmission between LHD/SHNs. **Collaborative approaches**	- Formal partnerships with key stakeholders - Enhanced patient data accuracy and reliability	- Improved uptake of digital health technologies among health professionals and consumers - Increase awareness of digital health technologies among health professionals and consumers as well as increased electronic communications between health care	CESPHN

reliable discharge summaries between hospital and GP	Meaningful use is considered the optimal outcome for digital health solutions. To achieve this, it is recommended that CESPHN, LHD/SHNs, Healthscope and Ramsay collaborate on a meaningful use implementation of My Health Record, including the establishment of an overarching governance structure, mutually agreed commitments relating shared health summaries and MyHealth Record. To ensure meaningful use of the MyHealth Record, rather than just registrations, the following actions should be considered; - The provision of shared health summaries for all patients from priority cohorts that attend a GP consultation - The viewing of the My Health Record system by public and private hospitals when the patient attends public and private hospitals - An agreement on the mutual obligations of the parties - Data sharing arrangements to support population health planning given the role CESPHN has in commissioning and service design. **Data quality** Implement activities to improve quality and reliability of electronic discharge summaries into the functions of the CESPHN digital health team to achieve the following; - Ensure all practices capable of receiving electronic discharge summaries are receiving them - Quality clinical content appropriate to the referral reason (a requirement of referees) - Pre-population of the referral content from practice management systems - Synchronisation with an up-to-date address book (preferably the Centralised Health Care Provider directory (CHSCPD) - Acknowledgement receipt of the referral within GP practice systems **Data quality** Invest CESPHN resources in quality improvement activities to support and/or enhance data integrity in local general practices. Outcomes should aim to achieve the following;	- Consistent, real-time data regarding patient journey - Reduced duplication through shared information	providers – such as secure messaging, accessing My Health Record - Increase use of technologies to support digital health initiatives including use of PRISM, PenCAT - Improved sharing of patient health information across health care providers - Data completeness measures according to RACGP clinical management guidelines - Partnerships in place for strategy - Frequency of clinical document uploads to My Health Record	

	- Quality communication (via digital health solutions) with other healthcare providers - Accreditation - Practice incentive program payments - Healthcare Homes (the detail to be determined) - Continuous quality improvement initiatives - The My Health record system - Collaborative population health, including targeted interventions in keeping people out of hospital - PHN data analytics.			
NPA: Digital health **Local health/service need:** Implement innovative approaches to use digital health solutions	**Innovation** Explore innovative approaches to the use of digital health solutions to enhance capability and capacity across the sector. Options include; - Workflow routing within public hospitals - Integration with triage and appointment booking by public hospitals with this information sent electronically to GPs - Capability for GPs to update the referral (for example, with new information since the original referral) - Linking referral creation to Health Pathways - Supporting referrals independently of Health Pathways	- Opportunity to investigate alternate digital health solutions - Enhance interest amongst stakeholders in digital health space - Increased efficiencies through shared information and integrated data	- New technologies identified, by purpose (possible case study analysis) - Patient and provider experience measures - Relationship to uptake of digital health technologies among health professionals and consumers (qualitative) - Frequency of clinical document uploads to My Health Record - Relationship to increased awareness of digital health technologies among health professionals and consumers as well as increased electronic communications between health care providers – such as secure messaging, accessing My Health Record (qualitative) - Increase use of technologies to support digital health initiatives including use clinical audit tools such as PenCAT and Granhite - Improved sharing of patient health information across health care providers	CESPHN

Section 7: After Hours Primary Care

7.1 Service Gaps

In 2017, there were n=350 general practices across the CESPHN region registered to the After-Hours PIP program. The largest proportion of registrations were for Level 1 category with 67.4% (n=236) practices registered. This was followed by Level 5 (13%) and then Level 2 (9%).

Between 2015 to 2017 the number of general practices in the CESPHN region registered to the Level 1, After-Hours PIP Incentive increased by 24.2% (n=46). A similar increase was observed for Level 2 registrations with an increase of 24% (n=6), rising from n=25 practices in August 2015, to n=31 in August 2017. The largest proportionate increase was for Level 3 registrations (20%, n=6), moving from n=20 practices in August 2015 to n=26 in August 2017.

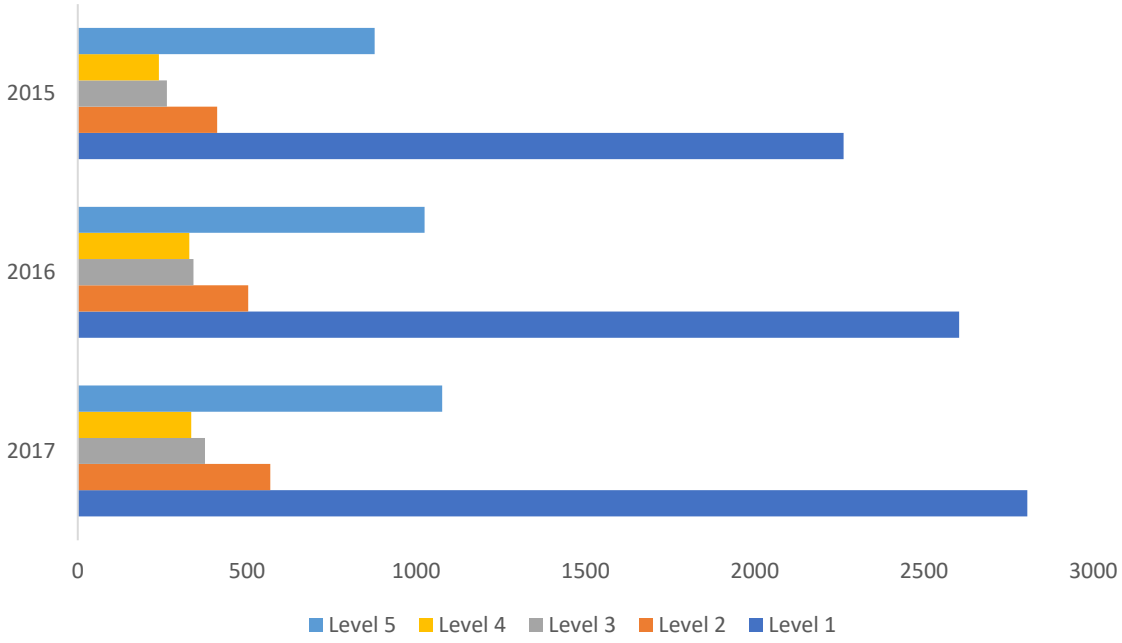
Level 4 saw a slight reduction in registration (7.7%) with one practice withdrawing from this PIP level in 2016. It is surmised that this practice moved to another category under the PIP arrangements, particularly because of the increase observed across all other levels. The remaining category, Level 5 saw an increase of 15.4% (n=6) in practice registrations between the same period. Table 63 provides a summary of general practice registrations, by registration category between 2016 to 2017.

7.1.1 After Hours Practice Incentive Program

Registration to the After-Hours Practice Incentive Program has shown an increase across all levels during the period 2011 to 2016. Figure 5 provides a summary of changes in the number of payments for Levels 1-5 for the period 2015-2017.

The most noteworthy increase was for Level 1 incentive payments (n=543), followed by Level 5 (n=200), then Level 2 (n=157), Level 3 (n=113) with the smallest difference in items claimed between 2015-2015 (August quarter) was for Level 4 Items (n=95). Figure 5 provides a summary of the After Hours incentive payments by level 1-5 (August 2015, Aug 2016 and Aug 2017)*

Figure 5 After Hours incentive payments by level (2015, 2016 Aug 2017)*



Limitations: Comparisons have not been made due to heterogeneity in data completeness. Comparisons for quarter 3 (August) 2015 to 2017 has been completed to identify trends in uptake.

Table 63 After Hours ED Attendances per 1,000 people for sub-regions with rates higher than CESPHN rate (2015-16)

CESPHN	SA3	SA3 >CESPHN Rate
91	Canterbury[123]	113
	Kogarah – Rockdale[12]	110
	Botany [123]	108
	Eastern Suburbs-South[1]	98

[1]SA3 >25% CALD [2]Socioeconomic disadvantage [3]Low health literacy

7.1.2 PPH After Hours Emergency Department Attendances

There were four sub-regions (SA3) that had higher rates for ED attendances, per 1,000 people for the period 2015-16. The sub-regions have been outlined in Table 64

7.1.3 Attendances in aged-care facilities

In 2015-16 the number of GP attendances within aged care facilities within the CESPHN region was 15.9 per 1,000 people (crude rate). This was rise of 1.4 per 1,000 from 2013-14. Figure 6 shows the progressive rise in attendances for the period: 2013–14 to 2015–16 (91)

7.1.4 Key informant feedback

CESPHN has undertaken extensive consultation with representatives from each of the LHDs, SHNs and RACFs across the region. From these consultations a profile of patients more likely to access after-hours services was developed (Table 64).

7.1.5 Repeat Prescription Promotional Material

Consultation with key informants across the region identified a need to address patients requiring medical services to facilitate repeat prescriptions. These consultations highlighted the need to inform consumers about the purpose of emergency department services and alternatives for seeking repeat prescriptions.

7.1.5 After Hours commissioned services

There was n=6 After Hours primary care activities commissioned to date, with a total 5 delivered. Of these services, n=6 were service improvement projects focusing on the burden of after-hours care attributable to RACFs across the region. These included a program to educate RACF staff regarding prevention and management communicable diseases and repeat prescriptions. There was an additional service focused on the transition of the St George After Hours GP Clinic, previously auspiced by the St George Division of General Practice, to a new independent provider. The remaining commissioned activity included an improvement project to inform approaches to reducing inappropriate emergency department presentations. The University of Wollongong has been co-opted for this project with findings expected to inform responses to after-hours primary care in SLHD, SESLHD and SVHN.

7.1.6 Review of urgent MBS after-hours services funded

There are a range of Medicare Benefits Schedule (MBS) items available for urgent and non-urgent services provided after-hours including those that take place in consultation rooms, at a patient's home and services provided to patients in residential aged care facilities. The MBS pays for two kinds of after-hours care; standard care and clinically urgent care, which is a higher payment.

The Taskforce is recommending changes that will ensure appropriate use of 'urgent' after-hours primary care services delivered by appropriate providers that will achieve good patient outcomes. CESPHN is cognisant of the recommendations provided by the MBS review Taskforce regarding after hours home visits and provision to limit urgent afterhours items to patient's 'usual' GP.

Figure 6 GP attendances in aged-care facilities per 1,000 for the period 2015-16

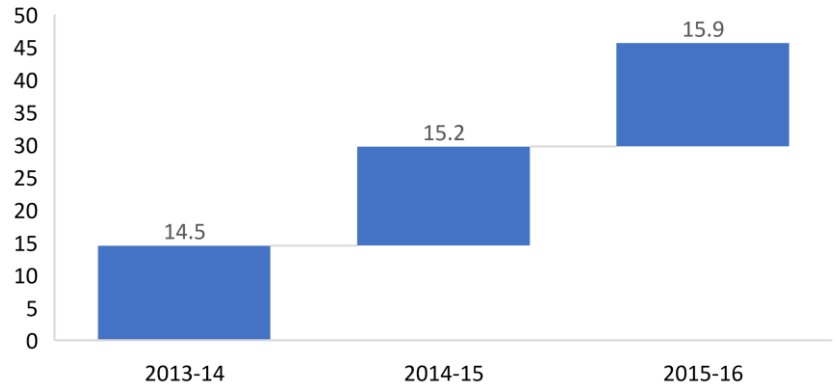


Table 64 characteristics of patients more likely to access after-hours services year (92)

Characteristics		**Region**
Homeless and at least one of the sub-categories	Complex chronic conditions	SVHN
	Psychosocial issues	SVHN
	Requiring general primary health care	SVHN
	Requiring drug and alcohol services	SVHN
CALD		SESLHD & SLHD
Aboriginal		SESLHD, SLHD &SVHN
Children aged 0-4		SESLHD & SLHD
People aged ≥85 years		SESLHD & SLHD
Requiring mental health		SESLHD & SLHD
Requiring drug and alcohol services		SESLHD & SLHD
Multiple ED attendances within 1 year		SESLD
Residents of RACFs		SESLHD, SLHD & SVHN

7.2 Opportunities, priorities and options

Priority	Possible Options	Expected Outcome	Possible Performance Measurement	Potential Lead
NPA: After Hours Primary Care **Local health/service need:** Ensure appropriate use, mix and distribution of after-hours services for the CESPHN population	Implement a range of approaches to ensure the after-hours service needs of the region are appropriately met. Options include; **Commissioned services** Continue to commission services to target frequent users of after-hours services e.g. people aged 65 years and older in the community and in RACFs and vulnerable populations such as homeless residents **Awareness of after hour service options** Implement health promotion strategies to communicate appropriate use of emergency departments and options for PPH after hours services. There should be a focus on emerging community groups and those from non-English speaking background. **Repeat Prescription Promotional Material** Implement a communication campaign to inform patients about the purpose of emergency department services and alternatives for seeking repeat prescriptions. **Digital health** Support general practices to upload relevant patient data to the MyHealth Record for patients meeting criteria for frequent after-hours user e.g. ≥65 years, CALD, chronic and complex medical conditions **Quality improvement**	• Reduced unplanned hospitalisations in the after-hours period and for falls and falls related injuries. • Improved education and awareness of after-hours services issues among health providers • Improved understanding of patients more likely to access after-hours care • Increased uptake of MyHealth Record -	- Total number of GP type ED services (defined as triage category 4 and 5 patients) provided to residents within the PHN during after-hours times - Potentially preventable hospitalisations, total and for selected conditions including: asthma; diabetes and cardiac failure, disaggregated by age and Aboriginal and Torres Strait Islander status - Frequency of clinical document uploads to My Health Record - Number of services commissioned to address health/service needs in the region - Number of patients accessing or benefiting from commissioned services - Descriptive data: characteristics of patients receiving commissioned after hours services including reason for attendance and related diagnoses	CESPHN in partnership with identified stakeholders/services

	To support digital health strategy - Implement clinical auditing activities to enhance the integrity of general practice patient data including rates for data completion (Medical software). Use data to develop improvement plans, monitor and evaluate outcomes periodically.			

Section 8: Organisational Needs

8.1 Evaluation and evidence translation

CESPHN has identified a need to enhance methods for monitoring and evaluating activities to capture valuable data to inform planning including commissioning activities, assess patient outcomes and patient/provider experience, translate evidence into practice and disseminate lessons learnt through networks within and external to CESPHN region.

An illustration of this opportunity is the introduction of the Staying Well at Home Pilot program. CESPHN has established this project as a proof of concept to translate evidence into practice. The project aims to address service capacity limitations in general practices such as GP time to implement preventive activities. The project provides alternative solutions to traditional methods for enhancing capacity. Whilst there is significant evidence demonstrating the benefits associated with tailored interventions for patients with frailty, COPD and CHF, there is little known about the acceptability or utility of capacity building options.

8.2 Data assets and governance

Parallel to enhancements to evaluation and evidence translation is the need to develop comprehensive systems for data extraction and aggregation across the region. The existing data extraction and aggregation tools such as PenCAT require greater participation from local general practices to ensure the investment offers analytical rigour for the following;

- Micro level planning and quality improvement for providers and consumers
- Meso level planning, activity development and monitoring for the PHN including commissioning and alignment to national performance indicators from a local perspective
- Inform policy change and/or development at a jurisdictional/Macro level

Evidence-based commissioning and clinical governance models will be important to the success of PHNs in building an improved primary health care system. Several PHNs have built sophisticated data collection, warehousing and reporting mechanisms that focus outcomes at a local (mirco level). These data offer the opportunity for capacity build and quality improvement at a micro (practice level) and help to inform support initiatives by tailoring to the specific needs of practices. Pooled and aggregated data provides a measure of performance against National PHN and local indicators, and substantiates the enduring role of PHNs within the healthcare sector.

8.3 Opportunities, priorities and options

Priority	Possible Options	Expected Outcome	Possible Performance Measurement	Potential Lead
NPA: Workforce **Local health/service needs:** Need for robust methods for capturing, monitoring, evaluating data as an organisational asset	**Monitoring and evaluation** Establish and implement an organization-wide monitoring and evaluating framework to capture valuable data to inform patient outcomes, patient and provider experience, commissioning outcomes, translation of evidence and scalable options. Outcomes should focus on enhancing access to local, real time data for planning, commissioning, co-design and monitoring functions. **Develop comprehensive, real time data assets** CESPHN allocate resources to create a comprehensive data asset and governance strategy to capitalise on the introduction of the Quality Improvement PIP, scheduled for release in 2018, the digital health strategy and monitoring/evaluation and planning under the commissioning framework.	- Ensures accountability against distribution of resources - Inform future work and distribution of resources - Enhanced understanding of local needs - Patient and provide experience data to match to activity evaluations - Supports person centred and co-deigned approaches to activities development and implementation	- Monitoring and evaluation framework in place with mix of quantitative and qualitative data informing activities outcomes and contextual information. Framework integrated into commissioning cycle. - Patient and provider experience measures established and integrated into relevant activities - Data governance framework established and in place.	CESPHN
NPA: Workforce **Local health/service needs:** Strategic approach to stakeholder engagement	- Identify and plan engagement with stakeholders - Develop a roadmap for planned activities and map relevant stakeholders to support/enhance implementation and outcomes - Allocate resources for the maintenance (and development) of a strategic approach to stakeholder engagement, directly aligned to activities to address health needs and service gaps. - Integrate concurrent methods of capturing stakeholder feedback and experience with CESPHN and mechanisms for feedback to ensure contemporary representation of the stakeholder voice	- Systematic stakeholder engagement strategy aligned to strategic objectives and activities in the activity work plan. - Link evaluation and data governance framework to stakeholder engagement activities to concurrently capture data.	Stakeholder engagement framework in place Stakeholder engagement roadmaps established for planned activities	CESPHN

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