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An Australian Government Initiative

# **Health needs assessment 2015**

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# Introduction

## Needs Assessment Process and Issues

### *South Eastern Melbourne Primary Health Network Catchment*

Identifying the health needs of our community is the necessary and critical first step to deliver better health outcomes for the population in South Eastern Melbourne. With this in mind, this document identifies the most critical factors contributing to the variation in health outcomes across South Eastern Melbourne and, on this basis, recommends potential activities to address many of these issues.

The population of the South Eastern Melbourne PHN (SEMPHN) catchment is not homogeneous. Certain sections of the catchment experience very high standards of living while others exhibit some of the worst living standards in Australia. This variation is similarly reflected in the health of the population residing in the SEMPHN catchment, with areas such as Dandenong, Frankston North and Cardinia exhibiting the poorest health and social outcomes of any region in the broader SEMPHN catchment.

There are also those discrete areas where generally good population health exists alongside communities with very poor health outcomes. This is best reflected in the City of Port Phillip, where there are both high standards of living and good health outcomes coupled with high rates of homelessness, mental health and drug addictions, contributing to poor health outcomes for pockets of the population. In some cases communities here literally live side by side: a four million dollar mansion neighbouring an old homestead dilapidated and occupied by 'squatters'.

The significant variability in the health of the SEMPHN community coupled with economic environment that mandates that PHNs 'do more with less' has shaped this Health Needs Assessment, including the proposed activities. In identifying areas of priority and corresponding activities, this document focuses specifically areas and cohorts exhibiting the poorest health outcomes, often across a number of domains. By doing so, the SEMPHN will be able to improve the health outcomes of our population using the most effective and efficient means.

The areas of priority and corresponding activities are designed to align with four key themes: Intelligent Commissioning; Co-Design and Patient Centricity; Health System Alignment; and, Enhancing Professional Practice Capacity. These themes reflect the central features of the SEMPHN's organisational strategy, and therefore provide the frame for all of the current and future activities for the organisation.

## Process

The baseline needs assessment aims to provide information on the population profile of the SEMPHN catchment in relation to local needs for clients accessing treatment services.

This needs analysis has used a range of secondary data sources: burden of disease data is sourced from the Department of Health and Human Services (DHHS), Local Government Area Profiles data 2013, the Victorian Population Health Survey data (2011), the Social Health Atlas of Australia (November 2014 release) produced for Primary Health Networks (PHNs) and complemented by the Social Atlas information provided by LGA released at the same time. Additionally, information from the Australian Commission on Safety and Quality in Health Care, Australian Atlas of Healthcare Variation is used to source relevant data together with data provided by SEMPHN extracted from its PHN portal.

The data has been tailored to capture the Local Government Areas (LGAs), and where data is available, information relating to the catchment LGAs is compared with total Victorian, metropolitan and rural rates and in some instances with the two other metropolitan PHNs.

<b>Task</b>	<b>Activity</b>	<b>Outcome</b>
Planning	Establish governance group Develop project plan Identify limitations and timeframe	Confirmation of roles Project plan endorsed noting tight time frame and limitations
Assess Need	Data Collection and Analysis Identify data available at geographical areas Source local data, health Inequities demographic trends, special need/hard to reach groups, health service utilisation, service provision and gaps.	Priority areas identified

Consultation - SEMPHN has drawn on a range of existing mechanisms and networks to inform the consultation phase of the Needs Assessment. These have included review of consultation reports, work with LHNs, community groups and formal consultation meetings.

Triangulation - In consultation with the governance group an overview of health need and service gaps were presented and opportunities for service development were identified with focus around chronic disease management, screening rates, immunisation and issues associated with an ageing population. More specifically populations exhibiting the greatest need were identified in the Local Government Areas of Dandenong, Frankston and Casey. Within these LGA's further analysis is required to understand the increasing burden of admission rates of preventable chronic conditions including cellulitis, COPD, angina and the high admissions for dental procedures. There are low participation rates in preventative health initiatives including screening programs and immunisation that need to be addressed in the areas of Port Phillip and Frankston.

### **Additional Data Needs and Gaps**

Having access to timely population, health and service usage data at a local level, provides greater depth to profiling the catchment, service demands and utilisation and enables initiatives to be targeted to populations that demonstrate higher rates of need. Access to appropriate level data has limited the detail and analysis completed in the needs assessment. Aggregated data can obscure the impact of SEMPHN activities, particularly pilots or interventions targeted at particular subsets of the population, such as vulnerable populations.

Population, demographic and health data can be accessed via a variety of organisation specific portals including the PHN website. Each organisation is driven by the priority of the organisation providing the data, not the audience accessing data. Subsequently data available is presented at the level of detail directed by the organisation capturing the data, the limitations imposed by the data custodians or previous clients accessing the data. Data are presented at different geographic levels and there are limitations to the data elements available. Data are not refreshed at the same scheduled rate so comparisons are made between population groups from ranging years.

Regular access to practice, service and patient record data would enable the PHN to determine as near as possible to real time where to direct our programs and to quantify the impact PHN activities are having on client outcomes. Such data would also help identify geographical areas where the general practices have significant clinical variation.

Different organisations present data on a variety of platforms, therefore data is presented through products such as Excel, modified SAS tables, dashboards and pdf files. This adds time to the data extraction process and limits the analysis to what can be readily extracted. For example ascertaining simple data on co-morbidities, length of stay in acute and sub-

acute hospital settings is currently not possible. If data were available in a timely manner at the appropriate level, needs assessments would evolve out of routine analysis completed during core business rather than as an additional reporting requirement.

### **Additional comments or feedback**

This report outlines the high level findings and it is our intention to pursue more detailed information through:

- a) work currently being undertaken which includes mapping service pathways for people experiencing moderate to severe mental health issues
- b) further exploration of general practice data to understand chronic disease and potentially preventable hospitalisations
- c) continued engagement and consultation with consumers, service providers, practitioners and LHNs
- d) deep dives into areas where the complexity of the issue requires further investigation.

# Health needs analysis outcomes

## Summarising the findings of the health needs analysis

### Health status of SEMP HN catchment population

#### Population Profile

**Southern Metropolitan Region** The South Eastern Melbourne Primary Health Network (PHN) catchment encompasses an area comprising 1.4 million people and stretches from St Kilda to Sorrento and as far east as Bunyip, including the major population hubs of Monash, Dandenong, Moorabbin, Caulfield, Cranbourne, Frankston and Pakenham. The area comprises of 10 local government areas across 2,888 square kilometers with a high proportion of rural land use (48.8%).

The catchment scores well on economic indicators, with the lowest percentage of low income individuals and second lowest percentages of single parent families, low income families with children and persons with food insecurity. Socio-economic disadvantage is much more widespread across the outer areas compared to the localised pockets of disadvantage found in the inner metro areas of the catchment. Unemployment, education, housing and crime are more significant issues in the Frankston, Mornington Peninsula and Greater Dandenong areas. Mortgage stress is around average and rental stress is the lowest in the state despite rental affordability being relatively low. These social determinants will impact on the health and wellbeing of the community.

Overall the region scores well on most health indicators and child and young person wellbeing indicators. Health risk factors and certain chronic conditions, such as diabetes and cardiovascular disease are more common in Dandenong, Frankston and the Mornington Peninsula. Drugs and alcohol, communicable disease and unintentional injury are more prevalent in the inner metro suburbs and thus a priority.

The rate of avoidable deaths is second highest in the state for deaths due to cancer, cardiovascular diseases, respiratory diseases and all causes. Inpatient separations are slightly above average and a higher than average percentage of these are from private hospitals. Emergency department presentation rates are below average, GP attendances are above average and rates of HACC, drug and alcohol and registered mental health clients are below average.

#### Premature mortality

Premature mortality is death that occurs at an age younger than expected (AIHW). The standardised premature death rate 2008-2012 for all causes is highest in Frankston and lowest in Bayside for both males and females.

- Rates in Frankston are highest for cancer all causes, colorectal cancer and lung cancer, with the highest rates for breast cancer in Mornington Peninsula.
- Rates for nutritional and metabolic disease were highest in Dandenong.
- Rates for Circulatory Systems Diseases are highest in Dandenong and Frankston
- Ischaemic heart disease is highest in Frankston, Dandenong and Port Phillip.
- Cerebrovascular and respiratory disease is highest in Dandenong
- Rates for external causes are highest in Cardinia, Frankston and Port Phillip
- Frankston has highest death rate due to COPD.
- The death rate due to road traffic injuries is highest in Cardinia.
- The suicide and self-inflicted injuries is highest in Frankston

## Cancer Screening

Participation in cancer screening for the catchment was similar to the Victorian screening rates for cervical cancer the SEMPHN region participation rate was 60.6% compared to Victoria 60.4%, breast cancer participation was 54.5% for Victoria and slightly lower for the region 52.4%, bowel cancer screening participation rates were 37.6% for Victoria and 35.8% for the region.

LGA	Cervical cancer screening participation	Breast cancer screening participation	Bowel cancer screening participation
Victoria	60.4%	54.5%	37.6%
SEMPHN	60.6%	52.4%	35.8%
Bayside	74.0%	54.0%	38.2%
Cardinia	58.2%	55.0%	35.6%
Casey	57.7%	53.0%	32.8%
Frankston	55.4%	49.0%	32.2%
Glen Eira	64.9%	54.0%	33.2%
Greater Dandenong	55.2%	49.0%	33.7%
Kingston	62.0%	53.0%	36.4%
Mornington Peninsula	65.0%	55.0%	38.6%
Port Phillip	62.7%	45.0%	34.1%
Stonnington	66.5%	48.0%	35.1%

LGAs below the state average

Among the five lowest LGAs in the state

The areas of Frankston, Greater Dandenong, Port Phillip and Stonnington had screening participation rates for breast cancer screening and bowel screening that were among the five lowest in the state. The highest rates of breast cancer detection were in Port Phillip, Stonnington and Frankston. Rates of high grade abnormality detected in cervical screening were highest in Port Phillip, Stonnington and Frankston.

The percentage of people who tested a positive FOBT were highest Dandenong, Frankston and Cardinia.

## Characteristics of Local Government Areas (LGAs)

**City of Port Phillip** is located on the northern edge of Port Phillip Bay and south of the Melbourne CBD. The most populous community is St Kilda. Both the total crime rate and drug offences rate are relatively high. Median household income is well above average and the percentage of low income individuals is the lowest in the state. Rates of mortgage and rental stress are among the lowest of all LGAs, despite high house prices and lack of rental affordability. The percentage of social housing is more than twice the Victorian average at 8%. Nearly 46% of persons aged 75+ live alone, the second highest of all LGAs, but the rate of age pension recipients is well below average. Port Phillip has a lower than average rate of inpatient separations, with nearly half being from private hospitals.

**City of Stonnington** incorporates residential and commercial areas in the inner south-east of Melbourne. Children aged 0-14 are underrepresented in the population, while over 37% of the population is aged 25-44. The median household income is well above average, and the percentage of low income individuals well below average. More than two-thirds of the population have private health insurance and 64.1% of hospital inpatient separations are from private hospital.

**City of Glen Eira** is located in Melbourne's inner south-eastern suburbs. Growth has been slightly below average since 2002 and is projected to slow further to 2022. Population distribution across age groups is largely in line with the state-wide pattern, although residents aged 85+ are overrepresented. 28.3% of the population were born in a non-English speaking country and 30.7% speak a language other than English at home.

The most common overseas country of birth is India, and most commonly spoken languages other than English are Greek, Russian and Mandarin. Median household incomes are above average, and levels of educational attainment are high. Glen Eira scores better than average on most health indicators. With below average percentages of type 2 diabetes, high blood pressure, arthritis, poor dental health and overweight/obesity. Smoking rates are among the lowest in the state.

**City of Kingston** is located about 15 km south of Melbourne's CBD, with the most populous community being Cheltenham. The level of cultural diversity is slightly above the Victorian average, with around 23% born in a non-English speaking country, and 25.7% speaking a language other than English at home. The most common languages spoken other than English are Greek, Mandarin and Italian. The unemployment rate is above average. Kingston generally scores well on most health indicators, although a higher than average percentage of females are current smokers. Cancer incidence is slightly higher than average while cancer screening participation is around average. The rate of hospital inpatient separations is above average, and a higher than average percentage are from private hospitals. Rates of HACC clients aged 70+ are higher than average.

**Greater Dandenong** is located in Melbourne's outer south-eastern suburbs. Greater Dandenong has the highest level of cultural diversity of all LGAs in the catchment, with over 55% born in a non-English speaking country and 64.5% speaking a language other than English at home. The most common countries of birth are Vietnam, India, Sri Lanka, Cambodia and China; Vietnamese is the most common language other than English, spoken at home by 11.5% of the population, and with 16.4% of this group reporting a low proficiency in English. The rate of new settler arrivals was second highest in the state at 3,761 per 100,000 population with around 20% being humanitarian arrivals. Greater Dandenong is the most disadvantaged of all the LGAs. The percentages of the population who feel safe walking alone during the day/at night are both second lowest in the state. The unemployment rate is high and citizen engagement is the lowest percentage in the state. Individual incomes are among the lowest in the state, the rate of mortgage stress is the highest of all LGAs while rental stress is fifth highest. Residents of Greater Dandenong scored poorly on a number of health indicators, including percentage of persons reporting type 2 diabetes, heart disease, osteoporosis and poor dental health.

The percentage of persons who do not meet the physical activity guidelines is the highest in the state, cancer screening participation is below average, and the percentage of persons reporting fair or poor health status is the highest in the state. The rate of private health insurance is the second lowest, GP attendance is considerably higher than average, and 92.7% is bulk billed. The rate of HACC clients is lower than average.

**Shire of Cardinia** is located on the south-eastern fringe of the Melbourne metropolitan area and Pakenham is the most populous community. Cardinia has a relatively youthful population, with 23.1% of the population aged under 15. Cultural diversity is low with 8.2% born in a non-English speaking country and 7.3% speaking a language other than English at home. Cardinia has one of the highest percentages of population who use social networking. Median household income is above average and there are proportionally fewer low income individuals than average. Median house prices and rents are around average, but mortgage and rental stress are slightly above average. A higher than average percentage commute more than two hours daily, the percentage of dwellings with no motor vehicle is well below average, and only 41.9% of the population lives near public transport. Cardinia scored average or better on indicators relating to health conditions, although overweight and obesity rates are above average among females. There are higher than average percentages of female smokers, persons at risk of short term harm due to alcohol consumption, and persons who do not meet fruit and vegetable intake recommendations. Cardinia has a relatively low percentage of persons requiring assistance with core activities and a low rate of mental health clients. While Cardinia's rate of inpatient separations is slightly below

average, the per annum change in inpatient separations since 2003 was among the highest in the state, and this trend is projected to continue to 2022.

**Casey** is located on the south-eastern fringe of Melbourne, and has experienced strong population growth since 2002, with stronger than average growth projected to continue through to 2022. Casey has a high level of cultural diversity, with over 28% born in a non-English speaking country, predominantly India and Sri Lanka, and 31% speaking a language other than English at home. Community acceptance of diverse cultures is well below average. The percentage of the population with at least a two hour commute is higher than average. 76.6% of journeys to work are by car, the highest percentage in the state. Casey has the highest percentage in the state of persons reporting heart disease, and percentages reporting asthma, type 2 diabetes and high blood pressure are also higher than average. The percentage who are overweight is lower than average but the percentage who are obese is higher. Cancer incidence is well below average. The percentage that drinks soft drink daily is among the highest in the state and the percentage who consumes alcohol at risky levels is the lowest in Victoria. Rates of GP attendances are also well above average.

**The Mornington Peninsula** is located on a promontory separating Port Phillip and Western Port Bays over 40 km to the south-east of Melbourne. Population growth since 2002 has been slightly below average and is projected to remain at around the same level through to 2022. Persons aged 45 and older are overrepresented in the population, while those aged 15-44 are underrepresented. The percentage of persons commuting more than two hours is higher than average, as is the rate of vehicle ownership. A higher than average percentage of the population reported type 2 diabetes, and the prevalence of overweight and obesity is also higher than average. However, the percentages reporting asthma, high blood pressure, osteoporosis and arthritis are lower than average. Cancer incidence is well above average, although the rate of avoidable deaths due to cancer is around average, as is cancer screening participation. The rates of intentional and unintentional injury requiring hospitalisation are relatively high, and inpatient separations are well above average. The most frequently attended public hospital is Frankston Hospital, which accounts for around 54.3% of public hospital separations for the LGA. GP attendance rates are below average.

### **Index of Relative Socio-economic Disadvantage (IRSD)**

The IRSD measure of the relative socio-economic disadvantage in a given geographic area. The ABS uses Census data to develop the IRSD. It is derived from a range of Census variables considered to reflect levels of disadvantage, including income level, employment status and level of educational attainment. Scores lower than 1000 indicate relatively disadvantaged areas – the lower the score, the greater the level of relative disadvantage. LGAs have been ranked on their levels of disadvantage (1 = most disadvantaged, 78 = least disadvantaged).

The socio-economic profile of the region shows that there are significant areas of advantage and disadvantage. Most of the inner urban LGAs are relatively advantaged, but there are small pockets of disadvantage including parts of South Melbourne, Prahran, Windsor, Highett and Clarinda/Clayton. The City of Greater Dandenong has an IRSD score below 1000 indicating relative disadvantage right across the area and ranks as the most disadvantaged area in Victoria. Neighboring areas in Casey (Cranbourne and Hallam), Cardinia (Pakenham), Frankston (Frankston North and Seaford) and Mornington Peninsula (Hastings and Rosebud) are also locations of significant disadvantage

LGA	Disadvantage score (IRDS)	Rank among LGAs (1 = most disadvantaged)	Labour force that is unemployed	Households with broadband internet
<b>Victoria</b>	-	-	<b>5.8%</b>	<b>72.6%</b>
Bayside	1091	78	3.7%	79.7%
Cardinia	1024	60	5.8%	75.1%
Casey	1006	51	5.8%	78.0%
Frankston	997	44	7.3%	73.4%
Glen Eira	1069	75	5.1%	77.2%
Greater Dandenong	895	1	9.1%	66.5%
Kingston	1038	65	7.4%	73.8%
Mornington Peninsula	1023	59	5.0%	71.0%
Port Phillip	1066	73	4.9%	75.3%
Stonnington	1084	77	3.7%	78.1%

## Diverse population groups

### Indigenous population

The majority of the Aboriginal and Torres Strait Islander population reside in the Cities of Casey and Frankston, larger communities also reside in Hastings, Rosebud, Pakenham, St Kilda and across the City of Kingston. The percentage of Aboriginal and Torres Strait Islanders is below the Victorian average (0.74%) for all LGAs/Shires other than Frankston (0.84%).<sup>1</sup>

The region has an estimated Aboriginal and Torres Strait Islander population of over 5,500.

The Urban South has a combined ATSI population of 1224 and has seen relatively static growth in all five LGAs from 2001-2011 most significantly in the city of Kingston with 30.9%. In comparison the wider Southern Metropolitan Region which has experienced large pockets of growth in the City of Casey, Frankston and Mornington Peninsula. The unemployment rate within the indigenous population is more than twice that of the non-indigenous population within the region (11.1% and 5.2%) and the median weekly income is 30% lower.

### Refugee Population

There is a significant refugee and migrant population. The rate of new settler arrivals per 100,000 population is above the Victorian average (656 per 100,000 population), largely due to much higher rates in the Cities of Greater Dandenong and Port Phillip (1,873 and 1,024 per 100,000 population). The Cities of Casey, Glen Eira, Kingston and Stonnington also have a large number of new settlers. The percentage of humanitarian arrivals is much higher in Greater Dandenong and Casey and it is expected that these areas will continue to be areas where people choose to settle due to community ties and affordable housing. Refugee arrivals to these areas predominately originate from Afghanistan and Sri Lanka. Between 2013 and 2014 there has been a 15-34% decrease in the number of new settlers (including humanitarian arrivals) across the region.<sup>2</sup> Our work with State Government is focused on preparation for the next wave of Syrian refugees.

The prevalence of individual chronic conditions in the region is consistent with the social gradient and age profile. Diabetes prevalence is highest in Greater Dandenong (6.0%),

<sup>1</sup> Estimates of Aboriginal and Torres Strait Islander Australians, June 2011 [Internet] Available at <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3238.0.55.001June%202011?OpenDocument>

<sup>2</sup> Migration Stream by Local Government Area - Settlement Reporting Facility, Department of Immigration and Border Protection [Internet]. Available at <<http://www.immi.gov.au/living-in-australia/delivering-assistance/settlement-reporting-facility/>>

Frankston (4.5%), Kingston (4.4%) and Mornington Peninsula (4.4%) and lowest in Port Phillip (2.7%) and Stonnington (2.8%).<sup>3</sup>

Hospitalisation rates for cardiovascular disease are higher in Mornington Peninsula, Frankston and Greater Dandenong.<sup>4</sup> Asthma prevalence is higher in Mornington Peninsula (13.5%), Casey (12.8%) and Frankston (11.3%) and the rates of malignant cancer diagnoses are higher than the Victorian average in Mornington Peninsula, Bayside, Kingston, Frankston and Glen Eira.

## Health Conditions

### Potentially Preventable Hospitalisations

Potentially preventable hospitalisations are conditions that with appropriate care co-ordination within the community the admission could have been avoided.

There were 36,109 Potentially Preventable Hospitalisations across 22 conditions classified as potentially preventable in the SEMP HN region. The average length of stay was 5.8 days for all conditions and ranged from 15.4 days for gangrene admissions and 2.1 days for ear nose and throat conditions. There were 13,986 same day admissions and 9,628 admissions for hospital in the home. The aged standardised rate for all potentially preventable hospitalisations (PPH) was 2,395 for the region and 2,436 per 100,000 for Australia. The highest rates were in Frankston (2,795 per 100,000) Casey (2,960 per 100,000) Cardinia (2705) and Dandenong (2,704 per 100,000).

### Anaemia

There were 3,709 admissions for iron deficiency anemia 81% of admissions were same day, the average length of stay is 3.5 day, across the region the aged standardized rate is 247 per 100,000.

### Asthma

The aged standardized rate for asthma is 129 per 100,000 and resulted in 1,767 admissions 39.7% were same day admissions and the average length of 2.8 days for overnight admissions.

### Congestive Heart Failure

Congestive heart failure aged standardized rates were 203 per 100,000 for the region with an average length of stay 7.3 days and accounted for 22,942 bed days. The highest rates were in Dandenong (248 per 100,000) Casey (240 per 100,000) Cardinia (226 per 100,000) and Frankston (212 per 100,000) compared to the lowest rates in Bayside (144 per 100,000) and Stonnington (149 per 100,000).

### COPD

Chronic Obstructive Pulmonary Disease (COPD) aged standardized rates were 222 per 100,000 for the region with an average length of stay 5.7 days and accounted for 20,310 bed days. The highest rates were in Frankston (314 per 100,000) Casey South (360 per 100,000) and Port Phillip (268 per 100,000) and lowest rates presenting in Stonnington (141 per 100,000) and Bayside (149 per 100,000).

### Diabetes

Aged standardized rates for hospitalisations due to diabetes complications were 160 per 100,000 for the region. 31.2% were same-day hospitalizations and the average length of overnight admissions was 5.7 days. The highest aged standardized rates were in Cardinia

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<sup>3</sup> Diabetes Australia, [Online] Available at <http://www.diabetesepidemic.org.au/#>

<sup>4</sup> Heart Foundation statistics on cardiovascular disease. [Online] <http://www.heartfoundation.org.au/information-for-professionals/data-and-statistics/Pages/interactive-map-victoria.aspx>.

(271 per 100,000) Frankston (225 per 100,000) and Casey South (203 per 100,000) and significantly lower in Stonnington (92 per 100,000) and Port Phillip (111 per 100,000).

### **Cellulitis**

Cellulitis accounts for 2,857 PPH with an aged standardized rate of 189 per 100,000. The average length of stay is 5.4 days, with the highest rate is Casey South (233 per 100,000). In other areas the rates are Cardinia (253 per 100,000), Glen Eira (194 per 100,000) and Kingston (191 per 100,000). The lowest rates are in Bayside (146 per 100,000), Stonnington (157 per 100,000) and Port Phillip (170 per 100,000).

### **Kidney and Urinary Tract Infections**

Kidney and urinary tract infections accounted for 4,542 PPH in the region. 33.6% were same day admissions and the average length of overnight admissions is 5.2 days. The aged standardized rate is 296 per 100,000. The highest rate was in Cardinia (367 per 100,000) Casey (352 per 100,000) Dandenong (343 per 100,000) and Frankston (320 per 100,000) with the lowest in Bayside (225 per 100,000).

### **Dental**

Dental conditions accounted for 3,330 PPH in the region, 87.1% were same day and the average length of overnight admissions is 1.2 days. The aged standardized rate is 237 per 100,000.

Across the region, Casey, Greater Dandenong and Mornington Peninsula have the higher proportion of population eligible for public dental care. There are six community dental services that provide general and specialist services in the region with 7 chairs in Bentleigh East, 8 in Parkdale, 8 in Prahran/South Melbourne, 18 in Frankston/Hastings/Rosebud and 24 others across south-eastern Melbourne. A lack of public dental chairs in Casey and Cardinia has been identified by the previous South Eastern Melbourne Medicare Local along with the high demand on the Dandenong service which has long waiting lists and sees 20-30 emergency cases per day (a significant number of these are refugee and Aboriginal patients).<sup>5</sup>

### **Vaccine Preventable**

Vaccine preventable conditions accounted for 2,056 preventable hospitalisations with an average length of inpatient stay of 7.9 days. The rate of influenza notifications in the region (153.9/100,000) was significantly higher than the Victorian average (113.1/100,000) and ranged from a high of 239.5 in Bayside to a low of 112.7 in Frankston. The region had the highest rate of mumps mainly related to cases in Greater Dandenong, Casey and Port Phillip.

### **Communicable disease and injury**

The rate of notifiable sexually transmitted infections (STI) such as HIV, syphilis, chlamydia and gonococcal infection were all higher than the Victorian average. The Cities of Port Phillip and Stonnington had rates of Chlamydia infection and other STIs well above the Victorian average, while Cardinia, Casey and Frankston also had Chlamydia rates slightly above the Victorian average. Tuberculosis notifications were significantly higher from Greater Dandenong (27.4/100,000) and to a lesser extent the City of Casey (9.0/100,000) compared to the Victorian average (7.4/100,000).<sup>6</sup>

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<sup>5</sup> South Eastern Melbourne Medicare Local, Comprehensive Needs Assessment 2013.

<sup>6</sup> State of Victoria. Department of Health Infectious Diseases Epidemiology & Surveillance [Internet] available at <http://ideas.health.vic.gov.au/index.asp>

## Disadvantaged areas

### *Socio-economic disadvantage*

People with socio-economic disadvantage experience a disproportionately greater chronic disease burden. The inner urban LGAs are relatively advantaged, but there are small pockets of disadvantage including parts of South Melbourne, Prahran, Windsor, Highett and Clarinda/Clayton. The City Dandenong has an IRSD score below 1000 indicating relative disadvantage right across the area. Neighboring areas in Casey (Cranbourne and Hallam), Cardinia (Pakenham), Frankston (Frankston North and Seaford) and Mornington Peninsula (Hastings and Rosebud) are also locations of significant disadvantage.

### *Access to public housing*

The total number of applicants on the public housing waiting list at the end of 2015 was 32,564 for Victoria. 27% were requests for public housing in the Southern region and 11% were from Dandenong the highest level in the State in addition 8%, 622 residents in public housing in Dandenong are on a transfer list to move to other areas.

## Life style risk factors

### *Smoking status*

Based on the latest Victorian Population Health Survey, the rate of current smoking in the region is slightly lower than the Victorian average. Across the catchment the rate varies with it being significantly below average in Glen Eira, and is higher in Frankston 17.4%. Physical activity levels are significantly low in Greater Dandenong and high in Stonnington.

### *Diet*

Fruit and vegetable consumption is significantly below average in Casey and above average in the Mornington Peninsula.

### *Physical Activity*

The prevalence of overweight and obesity is significantly below the Victorian average in Glen Eira, Port Phillip and Stonnington and higher in Frankston and Mornington Peninsula (not significantly). The percentage of people at risk from short term alcohol related harm (injury) is significantly higher than the Victorian average in Kingston, Mornington Peninsula and Port Phillip (over half the population in these areas consume large amounts of alcohol on any one occasion). The risk of long term alcohol related harm (liver failure) is also significantly higher in Mornington Peninsula.<sup>7</sup>

Participation in population based preventive measures such as immunisation and cancer screening is on target or close to average for the region as a whole. Childhood immunisation rates in 2012/13 at one, two and five years of age were lower than or equal to the target of 90% in Stonnington, Port Phillip, Bayside and Dandenong and on target at 91% to 95% in all other areas<sup>8</sup>; however, it should be noted that figures for the LGA may mask pockets of low immunisation coverage at the suburb level. Breast cancer screening participation is highest in Cardinia (59.6%) and lowest in Port Phillip (48.2%) compared to the Victorian average of 55.9%. Bowel cancer screening is close to or above average in Cardinia, Bayside and Mornington Peninsula. Cervical cancer screening is above average across the region.<sup>9</sup>

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<sup>7</sup>Victorian Department of Health. Victorian Population Health Survey 2011-2012. [Online] <<http://www.health.vic.gov.au/healthstatus/>>.

<sup>8</sup>My Healthy Communities. [Online] National Health Performance Authority. <[http://www.myhealthycommunities.gov.au/medicare-local/ml202#\\_>](http://www.myhealthycommunities.gov.au/medicare-local/ml202#_>).

<sup>9</sup> Social Health Atlas of Australia 2014 (see footnote 5).

## ***Mental Health and Substance Use***

People with mental disorders experience disproportionately higher rates of mortality and are at increased risk of chronic diseases and adverse social outcomes such as poverty, homelessness and inappropriate incarceration. Mental health disorders are therefore increasingly recognised as a priority health issue in the region by stakeholders (Bayside Medicare Local 2014/15 needs assessment, South Eastern Melbourne Medicare Local 2013/14 needs assessment) and consumers (Frankston Mornington Peninsula Medicare Local 2013/14 needs assessment). A report from SEMML has identified that refugees are more likely to require hospital treatment for mental health diagnoses and obstetric complications related to female genital mutilation.<sup>10</sup> By 2022, it is anticipated that around 25% or one in every four Victorians will report they suffer from depression or anxiety. The current rate of self-reported psychological distress across the region is higher in Greater Dandenong, Casey and Stonnington.

The use of illicit drugs varies by social characteristics and population groups. The highest proportion of recent drug use across all subpopulations in Australia was for people who identified as homosexual/bisexual (35.7%); the lowest was for people who were retired or on a pension (6.1%). The catchment has a large population of male homosexual and transgender people in the Stonnington area including the largest transgender community in Australia. Significantly higher illicit drug use is also seen among single people without children, those with lower socioeconomic status, and those who mainly speak English at home and among Indigenous Australians.<sup>11</sup> Based on the regional population health profile it is therefore estimated that substance use issues are a significant priority health issue.

## ***Older people aged care***

The older age groups are over represented in the region and account for a large proportion of primary care attendances, emergency department presentations and inpatient episodes to manage the complexity associated with multiple chronic conditions.

In 2010 the region ranked the highest in terms of dementia prevalence and incidence compared to other Victorian regions, with around 16,000 prevalent cases of dementia and 4,800 new cases. Between 2010 and 2050, the three catchments (Bayside, Frankston-Mornington Peninsula and south-eastern Melbourne) are expected to have the most growth in dementia prevalence and incidence.

## ***Health literacy***

The ability to access and use health information is a fundamental skill which allows people to make informed decisions and helps them to maintain their basic health. On a broader level, adequate levels of health literacy may help to reduce some of the costs in the health system, prevent illness and chronic disease, and reduce the rates of accident and death. Health literacy affects not only a person's involvement in the formal health care system, but also decisions they make in the home, workplace and community. The level of a person's health literacy impacts on tasks such as reading dosage instructions on a package of medicine and also affects whether people seek screening or diagnostic tests.

Nationally consistent Health Literacy data has not been collected since the Australian Bureau of Statistics undertook the Adult Literacy and Life Skills Survey (ALLS) in 2006. Those data are only available at the state level and are almost 10 years old

## ***ehealth***

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<sup>10</sup> An evaluation of the primary health care needs of refugees in South Eastern Metropolitan Melbourne, May 2011.

<sup>11</sup> Australian Institute of Health and Welfare 2011. 2010 National Drug Strategy Household Survey report. Drug statistics series no. 25. Cat. no. PHE 145. Canberra: AIHW.

With regards to the effective use of technology and the sharing of information, the SEMPHN catchment has similar challenges to other metro areas. The ehealth function most GPs would like is interoperable secure messaging. A single system would not suit the environment. Most GPs don't send electronically but almost all receive messages - particularly pathology results.

Interoperability may be possible, and SEMPHN is currently investigating how it could be catalysed through requirements built in to our commissioning framework. A foundational element of secure messaging, pathways, and other functions, is a high quality directory of providers. We have implemented two projects for this. One is a web application for consumers that searches for GPs, dentists, and pharmacies who are open near them. The database for the application is our own internal CRM. We are also implementing a system to synchronise our CRM data with the NHSD.

# Service needs analysis outcomes

## Workforce

*Timely access to health care is predicated upon ready access to community and hospital based care, which in turn requires an available workforce.*

*The distribution of the health workforce is significantly influenced by how established the area is, its socio-economic status and the proximity of public and private hospitals. So LGAs with hospitals will have relatively high numbers of medical specialists, which is the case in SEMPHN.*

*New growth areas in particular Casey and Cardinia are under-served for general practitioners, dentists and allied health workforce, as demonstrated by practitioner / population rates and standardized rates for access to MBS Better Access Programs.*

Access to GP services varies widely across SEMPHN, from lows of 57 and 61 GPs / 100,000 population in Cardinia and Kingston respectively to 160, 164 and 173 in Port Phillip, Stonnington and Bayside respectively<sup>1</sup>. Similarly availability of dental services ranges from 34.8 / 100,000 in Casey, 38.7 in Cardinia and 47.8 in Frankston to 90 in Port Phillip, 105 in Bayside and 160 in Stonnington LGAs.

Per capita annual GP attendance rates vary from 4.7 in Bayside, Stonnington and the Mornington Peninsula<sup>2</sup> up to 6.6 in Casey and Greater Dandenong, with a Victorian average of 5.5.

Access to GPs and community based specialist may also impact rates of attendance at Emergency Departments, with rates per 100 population of 15 in Stonnington and 17 in Glen Eira compared with 28 in Greater Dandenong, 27 in Cardinia and 26 in Mornington Peninsula, Casey and Frankston.

In relation to access to psychology services through the Better Access program rates exceeded 8 attendances / 100 population in Glen Eira, Stonnington and Port Phillip, but were less than 5 / 100 population in Greater Dandenong, Cardinia, Casey and Frankston.

Access rates for social workers exceeded 1.4 / 100 population in Bayside, Port Phillip and Glen Eira but were less than 0.5 / 100 population Greater Dandenong and Cardinia. Similarly Better Access OT exceeded 250/100,000 attendances in Bayside, Stonnington, Port Phillip and Glen Eira but were less than 50 / 100,000 in the other LGAs.

## Service Mapping

*Population shifts to the outer south east in Casey and Cardinia in particular warrant the development of new health resources in those areas, whilst the ageing population in established areas requires a response to meet the needs of the health and illness mix of those residents. Residents are living longer and require access to hospital services, whether public or private.*

There are 5 major public hospitals in the catchment, The Alfred, Monash Medical Centre, Dandenong, Casey and Frankston Hospitals, as well rehabilitation, palliative care and private hospitals. Public hospital admissions range from 11 ASR / 100 population in Stonnington, 14 in Bayside and Glen Eira to 24 in Cardinia and Casey and 26 in Frankston.

When private hospital admission are added to public hospital admissions the ASRs are 33 for Stonnington, 35 Port Phillip, 40 Bayside, Casey and Cardinia and 44 Frankston, demonstrating a much greater use of private hospital in the inner south east.

Currently the median age at death in Bayside is 87.0 for females and 84.0 for males; in Glen Eira the median ages are 82.0 and 86.0 respectively. This compares with 76.0 for males in Port Phillip and Casey and 82.0 for females in Cardinia and Casey.

## **Avoidable risk factors, risk of chronic illness**

*Obesity and smoking are two recognized risk factors for ill-health, hospital admissions and premature death. The rates vary widely across the SEMPHN LGAs. Targeted approaches to reduce the prevalence of these two risk factors may be undertaken as part of SEMPHNs strategy to reduce avoidable hospital admissions and improve population health outcomes.*

In 2013 it was estimated that there were 185,748 current smokers in SEMPHN, with ASR rates per 100 population in Bayside of 12.4, Stonnington 12.9, and Glen Eira of 13.1, which compares with Greater Dandenong at 20.1, Mornington Peninsula at 20.7, Cardinia at 20.9, and Frankston with a rate of 22.5.

There were 30561 residents who drink alcohol at high risk rates to health, with an ASR of 2.5 / 100 in Bayside to a high of 3.2 /100 in Frankston and Cardinia.

There were about 204,000 residents aged over 18 years categorized as obese in 2013, ranging from a low of 15.2 ASR / 100 population in Port Phillip, 15.8 in Stonnington and 17.7 in Bayside to 28.5 in Greater Dandenong and 28.9 in Cardinia and Frankston. The Victorian average is 25.8 ASR / 100 population.

Premature mortality (0-74 years) due to all avoidable causes represents about 4000 deaths a year in SEMPHN, with the lowest ASR / 100,000 population in Bayside 70.8, Stonnington 80.2 and the highest in Port Phillip 122.2 and Frankston 132.1 ASR / 100,000

## **Services for people with chronic and complex care needs**

*There is a very substantial number of residents in SEMPHN with chronic health conditions, with an uneven spread across the catchment. Poor communication, lack of information sharing and coordination of care across health providers leads to fragmentation of care, which can be particularly problematic these people. The diabetes caseload will require increasing role for GPs in initiating and stabilizing patients on insulin.*

In 2013 it was estimated that there were 46,447 residents aged over 18 years with Diabetes, from a low of 3.4 ASR / 100 people in Bayside to 8.3 in Greater Dandenong, which is 77% higher than the State average. Within ten years of diagnosis almost all DM patients will require insulin. There were also 213,890 residents<sup>3</sup> with circulatory disorders ranging from ASR 15.3 / 100 people in Bayside to 17.4 in Frankston, with a Victorian average of 16.6.

Asthma affects 137,531 residents ranging from an ASR of 8.8 in Stonnington to 13.0 in Cardinia.

There were an estimated 168,819 residents with mental or behavioral problems, with a fairly even spread across the PHN, from a low of 11.6 ASR in Casey to 13.9 in Frankston.

## **Social and economic disadvantage**

*People with socio-economic disadvantage experience a disproportionately greater chronic disease burden and delay accessing needed services. The burden is unevenly spread across the SEMPHN catchment.*

Community Consultation identified issues related to: poor health literacy; food insecurity; limited skills of providers in understanding poverty and disadvantage as a social influence on health access and equity. The SEIFA indices ranged from a low of 895 in Dandenong and 997 in Frankston to 1091 in Bayside, with an average of 1022 for SEMPHN.

There are an estimated 140,000 catchment residents who delay a medical consultation because of an inability to afford it; 110,000 delayed purchasing a prescribed medication, and 43,000 who didn't have ready access to transport. The rates of delayed medical treatment were more than twice as high in Frankston 17.6 ASR / 100 population compared with Bayside and Stonnington.

## **Reduce avoidable hospital readmissions and avoidable ED presentations, including in the after-hours.**

*Poor transfers of care across health and community providers due to inadequate communication, information sharing and coordination of care*

*Person centered-care and patient self-management strategies require a greater focus by service providers.*

*The above noted issues are relevant to both the in and after-hours periods. In relation to the after-hours period, the existing work that SEMPHN has already undertaken has identified that given the highly urban nature of the catchment that availability of general practitioners during the after-hours period is rarely the cause for primary care type presentations to ED (PCTEDs) (notwithstanding the existence of a few 'hot spots').*

*Rather, principal reasons for PCETDs during after-hours in the SEMPHN region relate to the lack of connection between in and after-hours services (often as a result of poor or no messaging between general practitioners), the lack of an integrated care approach between primary health care providers, and the inconsistent transition procedures adopted by hospitals and general practitioners in the region.*

Consultation with acute, community and primary health services providers. Key findings (which relate to both in and after-hours services):

- Fragmentation of care results from poor understanding of accountability for communication and information by providers across the boundaries of care;
- Patients with complex care needs experience disproportionately more fragmentation of care;
- Service supports (including telehealth and integrated IT systems for clinical records) are under-utilised.

## **Potentially preventable hospitalisations**

*Address workforce capacity and investigate models of care to improve management of COPD, heart failure, iron deficiency and diabetes complications in general practice. Ensure timely transmission information across the care continuum from community to hospitals and back. Improve access to community dental services and immunisations.*

SEMPHN has the highest rate of PPH in Victoria with 2395 ASR / 100,000 population, which is the 14<sup>th</sup> highest of the 31 PHNs. Overall there are about 36000 PPH admissions a year, with about half related to chronic conditions in particular in particular heart failure, COPD, iron deficiency and diabetes complications. There are also more than 3000 acute dental admissions which may reflect the low rates of community dentists in some areas. In addition there were more than 2000 vaccine preventable admissions.

## **Newborn children at high risk of adverse health and social outcomes**

*Low birth weight newborns and babies born to mothers who smoke are at great long term health risks. There are very high levels of smoking during pregnancy in a number of LGAs in SEMPHN.*

The percentage of low birth weight babies averaged 6.4% of total births in SEMPHN (2009-2011), which was slightly lower than the Victorian average of 6.6%. However the rates varied from a low of 4.8% in Bayside to a high of 7.5% in Greater Dandenong.

The rate of maternal smoking during pregnancy averaged 11.2%, but with a very wide range from 3.9% in Bayside to 15.6% in Casey, 18.6% in Frankston and 20.5% in Cardinia.

## **Childhood immunisation**

*Services need better support to deliver immunisations as per the National Immunisation Program Schedule in an accessible and equitable health system. Population rates of 95% to optimise the community benefits of immunization.*

In 2014, only 90.4% of SEMPHN children were fully immunised at age 1, and 91.1% and 91.7% at two and five years respectively, all of which are slightly lower than the Victorian average, though well below the target rate of 95%. There is not a great difference between LGAs in the catchment, from a low of 88.6% for children at age 11 in Dandenong up to 92% in Frankston.

## **Immunisation**

*Services need better support to deliver immunisations as per the National Immunisation Program Schedule in an accessible and equitable health system.*

In 2014 the rates of full HPV immunisation for the target population of teenage girls was 75.5% in SEMPHN, which is lower than the state average of 78.3%. There was wide variation within the catchment ranging from 86.6% in Port Phillip to just 64.9% in Cardinia, which may well reflect access to GP services.

There were about 2000 vaccine preventable admissions in 2013/14 for residents of SEMPHN.

## **Inappropriate use of hospital services by aged services**

*Frequent presentation and re-presentation to hospitals of residents who could otherwise be managed within the aged care facility.*

Consultation with the residential aged care sector and hospitals. There are about 12,000 SEMPHN residents living in residential aged care facilities, with a further 3,000 on community care packages. Because of increasing age it is expected that they will require much higher rates of health resource use, whether or not they live in the community or in a RACF; however, there appears to be little difference in presentation rates from the community or RACF, even though RACF have access to nursing, allied health and medical resources.

## **ATSI residents**

*Ensuring access to culturally appropriate health services in a timely fashion.*

According to the 2011 census there were 5557 ATSI residents in SEMPHN, representing 0.4% of the population, an increase of 28.9% from 2006. The highest population concentrations are in Casey, Frankston and Mornington Peninsula, where ATSI residents constitute 0.6-0.7% of the population. The health outcomes of the local ATSI population are generally poor and this issue will require resource allocation to ensure improvement.

The hospital admission rates for indigenous persons in the region are much lower than the statewide admission rate which for 2011/12 was 292.6 per 1000 persons for the indigenous population and 451.4 per 1000 persons for the non-indigenous population. One of the major causes of the low admission rate for indigenous persons in the region is the extremely low number of admissions for haemodialysis associated with renal failure.

The rate for indigenous persons presenting to Emergency Departments in the region is significantly higher than the rate for non-indigenous persons with a rate of 341.8 presentations per 1000 persons Region compared to 233.5 for non-indigenous in 2011-12.

Smoking is a major contributing risk factor for chronic disease among Aboriginal and Torres Strait Islander peoples. In 2003, smoking was responsible for one-fifth of deaths and accounted for 12 per cent of the total burden of disease among Aboriginal and Torres Strait Islander peoples. In many parts of Frankston and Mornington Peninsula smoking rates are

higher than the Victorian average, and deaths from lung cancer are higher than the Victorian average. Smoking during pregnancy has been identified as a particular issue in that region.

Findings from the consultations with the Aboriginal and Torres Strait Islander Community in the catchment undertaken by the Dandenong & District Aborigines Co-operative indicated that the community needs should be addressed by

- Delivering a broad range of culturally safe services and programs
- Delivering relevant services and programs in various locations
- Delivering affordable services.

Priority health and wellbeing issues include:

- Psychological distress
- Domestic violence
- Family conflict and in-turn homelessness and / or relationship issues
- Smoking
- Alcohol and drug use and abuse
- Unhealthy food intake.

## **CALD / refugee**

*Ensuring access to appropriate health services in a timely fashion.*

According to the 2011 census, 42,240 residents (3.5% of catchment population) had poor English proficiency. There was a significant concentration of these people in Greater Dandenong (13.9% of population), Monash Part B (6%) and Casey (3.5%).

## **Cancer screening – Bowel, Breast and Cervical**

*Cancer screening rates need to be improved. Bowel cancer screening rates are low across Australia, with participation of only about a third of the target population, with SEMPHN rates broadly consistent, which leads to unnecessary and premature deaths. Breast screening and cervical cancer screening rates can also be improved.*

*Other barriers to cancer screening may include: being unemployed, high levels of anxiety, history of sexual abuse, low overall levels of health usage and the costs associated with the bowel cancer screening test.*

The bowel screening rates in 2012/13 in SEMPHN are consistent with national rates, but vary by about 4% in absolute terms for both females and males from the LGAs with the best rates (Bayside and Mornington Peninsula: 37% female / 32% male) and the lowest rates (Port Phillip: 32%female / 27% male). In SEMPHN the annual rate of premature deaths due to colorectal cancer is 480 people.

The breast screening participation rates in 2013/2014 in SEMPHN for women aged 50-69 years was 52.4%, but ranged from a low of 49% in Port Phillip to 56.8% on the Mornington Peninsula.

Cervical screening rates in the catchment are 60.5%, which is broadly in line with elsewhere in Victoria, but again there is a wide variation from a low of 54% in Greater Dandenong to 74% in Bayside.

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<sup>1</sup> PHIDU, Social Atlas of Australia (Victoria) Data by Local Government Area, 2015; Health Workforce 2011

<sup>2</sup> PHIDU, Social Atlas of Australia (Victoria) Data by Local Government Area, 2015; MBS 2010

<sup>3</sup> PHIDU, Social Atlas of Australia (Victoria) Data by Local Government Area, 2015; Estimates of chronic disease 2011-2013