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EASTERN MELBOURNE

An Australian Government Initiative

Needs Assessment

Eastern Melbourne PHN

March 2016

We would like to acknowledge the contribution of our stakeholders who provided valuable insights and data regarding the needs of their communities. We also thank Dr Helen Keleher for her guidance during the process.

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List of abbreviations

ABS – Australian Bureau of Statistics

AIHW – Australian Institute of Health and Welfare

ALMS – Australian Locum Medical Service

AOD – Alcohol and Other Drugs

APSU – Association of Participating Service Users

ASGS – Australian Statistical Geography Standard

CALD – Culturally and Linguistically Diverse

CH – Community Health

CHS – Community Health Service

CIV – Community Indicators Victoria

CNA – Comprehensive Needs Assessment

DoH – Department of Health (Commonwealth)

DHHS – Department of Health and Human Services (Victoria)

Dept. Imm.&BC – Department of Immigration and Border Control

ED – Emergency Department

EMPHN – Eastern Melbourne PHN

EMML – Eastern Melbourne Medicare Local

ERAHMS – Eastern Ranges After Hours Medical Service

HARP – Hospital Admission Risk Program

HRVic – Harm Reduction Victoria

IEMML – Inner East Melbourne Medicare Local

LGA – Local Government Area

LHN – Local Hospital Network

MDS – Medical Deputising Service

MHCSS – Mental Health Community Support Services

MHWP – Municipal Health and Wellbeing Plan

ML – Medicare Local

MRC – Migrant Resource Centre

NHDS – National Home Doctor Service

NHPA – National Health Performance Authority

NHSD – National Health Service Directory

NMML – Northern Melbourne Medicare Local

PACER – Police and Clinician Emergency Response

PCP – Primary Care Partnership

RACF – Residential Aged Care Facility

SA2 – Statistical Area Level 2

SA3 – Statistical Area Level 3

SEIFA – Socio-Economic Indexes for Areas

STI – Sexually Transmissible Infection

VAADA – Victorian Alcohol and Drug Association

VAED – Victorian Admitted Episode Dataset

VEMD – Victorian ED Minimum Dataset

Section 1: Background

Context

Eastern Melbourne PHN (EMPHN) was formed on 1 July 2015, incorporating the catchments and drawing on the resources and experience of three former Medicare Locals (ML): Eastern Melbourne ML, Inner East Melbourne ML, and part of Northern Melbourne ML.

The EMPHN catchment (Fig. 1), comprises the whole of 12 Local Government Areas (LGAs): Banyule, Boroondara, Knox, Manningham, Maroondah, Monash, Nillumbik, Whitehorse, Whittlesea, and Yarra Ranges. The catchment also includes a proportion of two rural and relatively less populous LGAs of Mitchell and Murrindindi, amounting to 34.7% and 27.4% of their respective populations. The total population of the EMPHN catchment stands at approximately 1.5 million people in 2016, up from 1.32 million people in 2011.

The EMPHN catchment is one of considerable diversity, encompassing rural and semi-rural areas, new high-growth suburbs (Fig. 2), and older established suburbs that include some areas with high levels of low income and others that are relatively wealthy but in which there are areas of disadvantage and poor health.

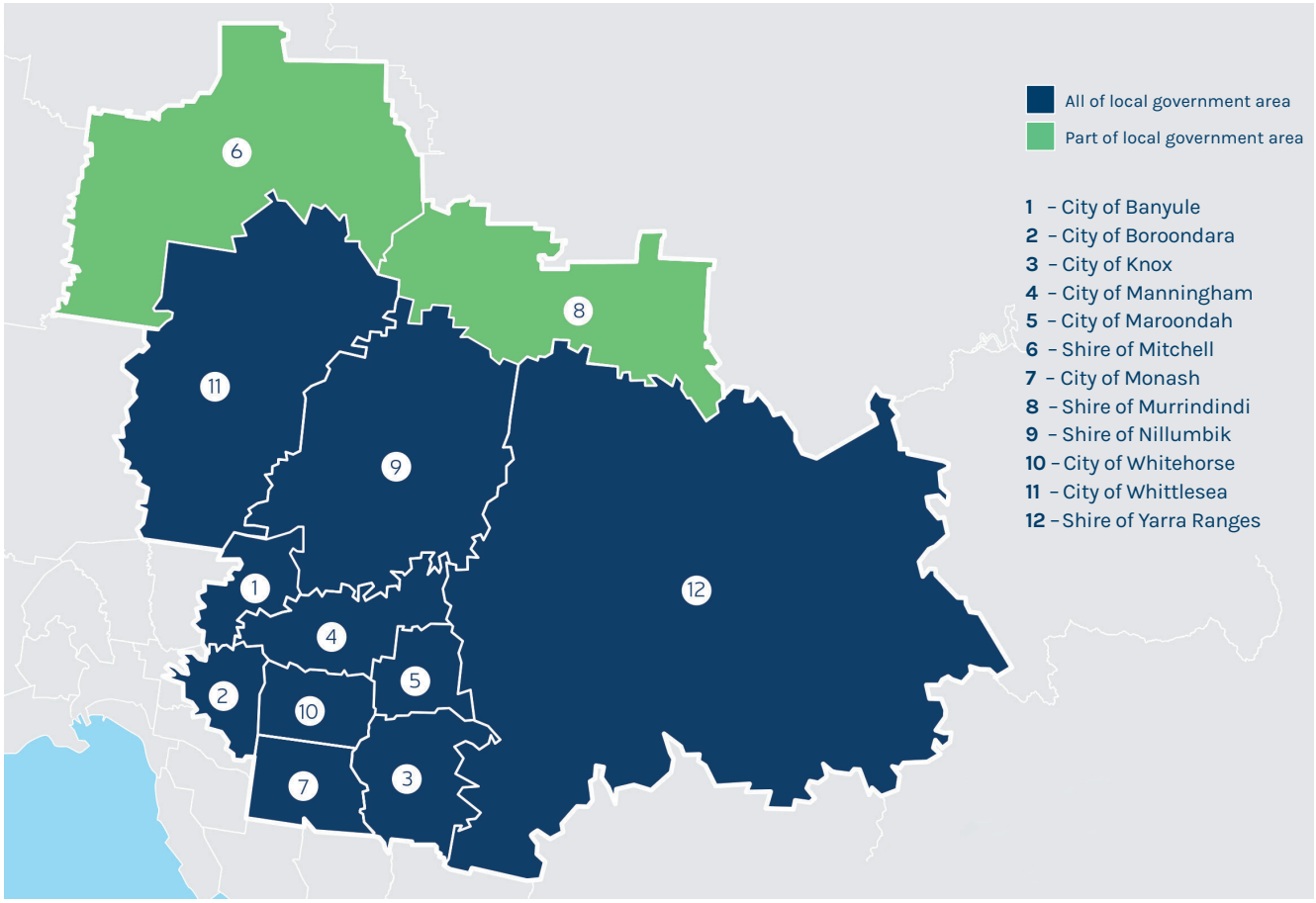

Figure 1: EMPHN catchment boundary

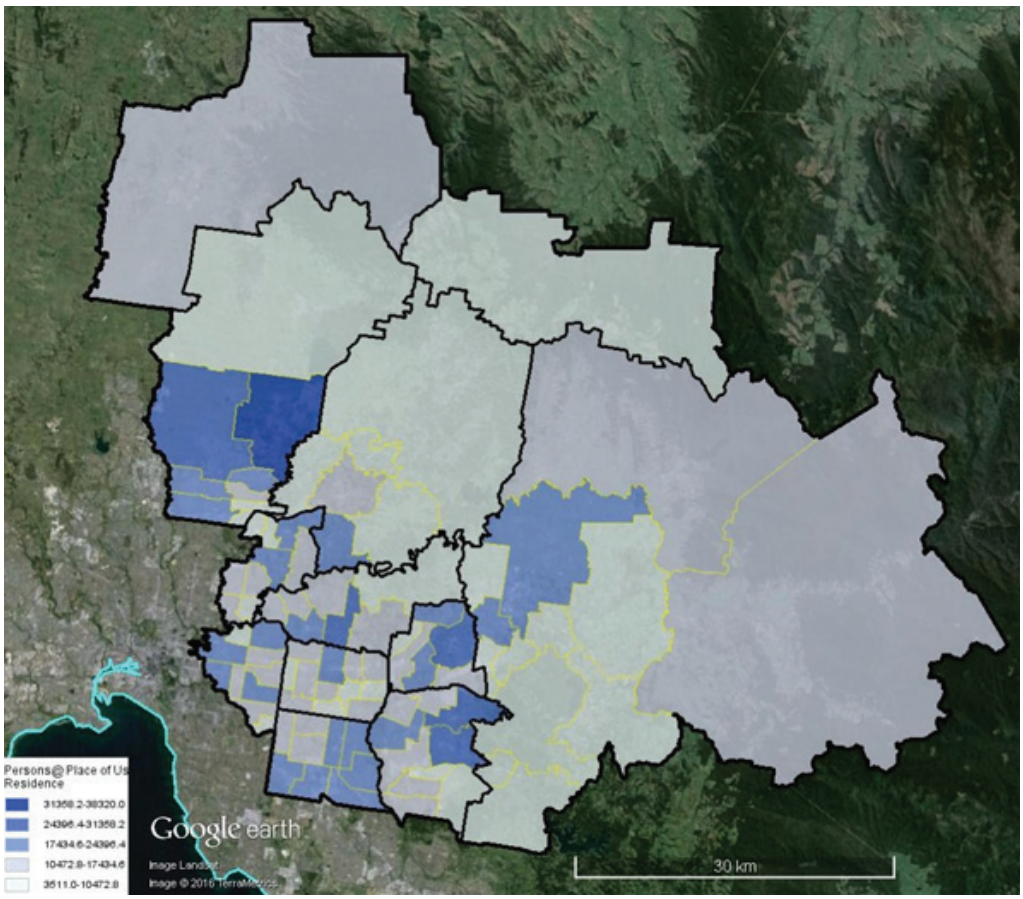

Figure 2: EMPHN population density (quintiles)

Key demographic characteristics highlighted in Table 1 include:

- an increasingly ageing profile, particularly in the inner metropolitan LGAs;
- over 5000 Aboriginal and/or Torres Strait Islander people living across the catchment, but particularly in Knox, Banyule, Whittlesea, and Yarra Ranges;
- a higher than average number of people born overseas living in Monash, Manningham, and Whittlesea;
- humanitarian and immigrant arrivals concentrating in Maroondah and Whittlesea; and
- a high-growth corridor in Whittlesea.

A comprehensive mapping and assessment process commenced in November 2015 with the aim of scoping and detailing the catchment's current and future health care needs and service delivery gaps. This report provides an initial assessment of these needs and services. No new quantitative data has been collected in its production, rather reliance has been placed upon available primary and secondary data together with key stakeholder consultation. Data sources were selected based upon their internal validity, accessibility, currency and relevance to the PHN.

Identified issues emerging from the needs assessment *(no particular order)*

- Avoidable hospital admissions for Ambulatory Care Sensitive Conditions (ACSCs)
- Primary-care type ED presentations
- Integrated care for chronic disease prevention and management
- Healthy ageing
- Appropriate care for diverse communities (Aboriginal and/or Torres Strait Islander, refugee, CALD and LGBTIQ communities)
- Childhood immunisation
- Family violence
- Sexually Transmissible Infections (STI)
- Cancer screening

Table 1. Demographic profile of SA3 and LGA

Indicator	Banyule	Boroondara	Knox	Manningham	Maroondah	Monash	Nillumbik	Whitehorse	Whittlesea	Yarra Ranges
Estimated population size SA3(2014, ABS)	125,107	172,812	155,697	119,485	110,270	181,661	62,535	164,766	186,368	149,420
Population increase projection SA3 (2011-2021 ABS)	0.7%	0.8%	0.7%	0.9%	0.9%	0.9%	0.3%	0.5%	3.9%	0.6%
Population under 15 years SA3 (2011, ABS)	21,074	27,765	27,647	18,267	19,489	26,345	12,580	26,138	32,209	28,862
Population over 65 years SA3 (2011, ABS)	18,637	23,582	23,582	21,470	15,537	29,167	5,744	26,199	16,531	18,000
Indigenous population SA3 (2011, ABS)	619	225	543	158	403	340	231	315	1,243	950
People born overseas (%) SA3 (2011, ABS)	26.1%	32.3%	31.0%	40.0%	24.4%	49.1%	18.0%	37.6%	36.9%	20.5%
Overseas immigrant arrivals SA3 (2011, ABS)	441	1,169	528	757	536	2,069	51	1,657	1,152	204
Humanitarian arrivals 2013-14 LGA (Dept. Im&BC)	20	0	21	30	246	4	0	20	111	102
Top 5 countries of birth and proportion of population SA3 (2011, ABS)	England (4%) Italy (3%) China (2%) India (1%) New Zealand (1%)	China (4%) England (3%) India (2%) Malaysia (2%) New Zealand (1%)	England (4%) India (2%) China (2%) Malaysia (2%) New Zealand (1%)	China (6%) Italy (3%) Malaysia (3%) Greece (3%) England (3%)	England (5%) China (1%) India (1%) New Zealand (1%) Burma (1%)	China (8%) India (4%) Sri Lanka (3%) Malaysia (3%) Greece (3%)	England (5%) Italy (1%) New Zealand (1%) Germany (1%) Scotland (1%)	China (7%) England (4%) India (2%) Malaysia (2%) Vietnam (1%)	Italy (4%) FYROM (3%) India (3%) Greece (2%) Vietnam (1%)	England (6%) Netherlands (1%) New Zealand (1%) Germany (1%) Italy (1%)

Framework

We adopted the conceptual framework used by the Australian Institute of Health and Welfare (AIHW). This approach employs the precept that a person's health and wellbeing, "result[s] from complex interplays among biological, lifestyle, socioeconomic, societal and environmental factors, many of which can be modified to some extent by health care and other interventions"[(1)]. We used the lens of social gradient to reveal levels of disadvantage, income and financial stress, education/literacy, employment, early childhood, family violence, gender equity, cultural and ethnic diversity, disability, and social inclusion/exclusion, although not all of these can be modified by the EMPHN.

The quantitative data review provides a needs-based perspective on population health in the EMPHN catchment, and encompassed the following domains, some of which share datasets:

Demographics and socioeconomic characteristics

- population groups of interest
- people living with socio-economic disadvantage
- ageing people
- vulnerable children and youth
- migration and refugee arrivals
- ethnicity and culture, through country of origin and language spoken
- social inclusion and isolation
- rural and urban environments, service provision and access issues
- education, employment and housing
- education/literacy measures as a proxy for health literacy
- family violence

Modifiable lifestyle risk factors and behaviours

- current smokers
- persons at risk from short-term harm from alcohol consumption
- percentage of persons who do not meet fruit and vegetable dietary guidelines
- people who do not meet physical activity guidelines
- cancer screening rates
- childhood immunisation rates

Health and wellbeing

- illness prevalence and distribution
- potentially preventable hospitalisations

Mental health

- people living with socio-economic disadvantage
- ageing population
- vulnerable children and youth
- social inclusion and isolation, including that of CALD groups and humanitarian arrivals
- service provision and access issues
- education, employment and housing
- family violence

Alcohol and Other Drugs (AOD)

- persons at risk from short-term harm from alcohol consumption

After-hours care

- health service use
- potentially preventable hospitalisations
- aged care

[1]Australian Institute of Health and Welfare. Canberra: AIHW; 2014. Australia's Health 2014. Australia's health series. Number 14. Catalogue number AUS 178. Available: http://www.aihw.gov.au/australias-health/2014/

Method

Approach

Data sources are listed in the Descriptions of Evidence in Sections 2 and 3. SA3 level statistics and LGA boundary data were the most sourced level of data.

In addition to statistical sources, existing plans from the region were sourced including:

- LGA Municipal Health and Wellbeing Plans (MHWP),
- catchment planning data-based documents of two Community Health Services and the regional Women's Health Service, and
- extant Medicare Local Comprehensive Needs Assessments.

Qualitative data were derived from interview consultations with stakeholders (providers) from across the catchment. A survey was also sent to GPs and medical specialists, nursing and allied health providers, and practice managers. Thirty-nine responses were received and analysed using simple statistical measures and according to themes. Additional data were sourced from the AOD stakeholder consultation (March 2016) coordinated by the Victorian PHN Alliance, which included data from the DHHS, Association of Participating Service Users (APSU), Harm Reduction Victoria (HRVic), and the Victorian Alcohol and Drug Association (VAADA).

Data were collated from these key sources to identify national, local and organisational priorities, guided by the National Headline indicators and the PHN National Priorities outlined in the Draft PHN Performance Framework.

Process

Robust community engagement already occurs at the Council level through the development of strategies and Municipal Public Health and Wellbeing Plans. Thus, in the interests of effective use of resources, the findings of community consultations undertaken by Councils and of the National Health Priority Areas (NHPA) Initiative have been incorporated into the Needs Assessment findings.

The consultation process to date has added the necessary nuances and caveats of local knowledge and understanding to the bigger picture provided by both the SA3 and LGA-level population data and the analyses of these documents. Findings from the dataset exploration and the review of planning documents were checked with stakeholders across sectors during guided interview. Their assessments of the underlying contributory factors to need were sought and the ensuing discussion was used to build a more comprehensive picture. The consultations data were analysed thematically and then triangulated with the relevant statistical data and analysis of other planning documents.

The priority areas of the previous Medicare Local (ML) Comprehensive Needs Assessments (CNA) revealed the following key issues:

- preventable hospital presentations
- maternal and child health and wellbeing (including immunisation)
- Indigenous health and wellbeing
- CALD and refugee health and wellbeing
- chronic disease prevention and management in general practice
- healthy ageing for people in the community and residential aged care facilities
- after-hours access to primary services, and
- primary healthcare workforce sustainability (GPs and practice nurses)

The review of Municipal Health and Wellbeing plans revealed the following themes, largely common across LGAs: health and wellbeing, mental health, safety, culture and diversity, social inclusion/exclusion, healthy eating and physical activity, alcohol and other drugs, infrastructure, environment and socio-economic issues.

Community health services plans have prioritised the social gradient and low income groups, while women's health services are focused on gender equity. These inform PHN priorities through the

determinants of health as they are factors that influence rates of chronic disease and poor health which, in turn, are major factors in preventable hospitalisation rates, cancer screening rates, and mental health treatment rates. The determinants of childhood immunisation rates tend to be more complex.

Many of the issues already identified across the EMPHN catchment were evident in the data and the consultation process for this Needs Assessment. Our consultation process has added local knowledge and understanding about underlying contributory factors, specific geographic locales and pockets of need, and how these are being addressed. Stakeholders were also able to elaborate on the implementation of preventative strategies. Also included are findings from our mapping of refugee health service referral pathways undertaken on behalf of the Outer North Refugee Health and Wellbeing Network.

In total, eight of the twelve councils, eleven community health services, five primary care partnerships, two women's health organisations for the region, and refugee settlement services have been consulted to date. Local hospital network consultations are underway but not finalised for inclusion in this report.

Mental health and AOD needs assessment

The mental health and AOD needs assessments (in progress) draw from the catchment-based plans undertaken recently in the region by EACH and cohealth and shared with EMPHN. A single provider on behalf of, and in partnership with other Mental Health Community Support Services (MHCSS) providers and stakeholders, is undertaking the catchment-based planning function of the MHCSS. This planning function assists MHCSS providers operating in a given catchment to develop a single common plan which will agree priorities and identify critical service gaps and pressures, as well as strategies to improve responsiveness to client and community need and population diversity.

Plans provide the basis for improved cross-sector service coordination aiming for a more joined-up approach to the needs of individual clients.

While productive engagement has been made with a wide range of service provider organisations, there are potentially more untapped data, insights and perspectives on offer. As we progress the needs and service gaps assessments in the coming months we will consult additional stakeholders who have yet to contribute to validation of the available qualitative and quantitative data, including Aboriginal and/or Torres Strait Islander communities and other vulnerable groups.

The AOD section will be developed further and issued at a later time.

Limitations

There are some limiting issues in terms of obtaining the necessary data. The first of these is the absence of available data in some important areas. For example, there is currently no remit for Aboriginal and/or Torres Strait Islander Peoples data to be supplied or published, particularly where populations are small and can reach identifiable thresholds. The data gaps in Victorian data in the areas of both Aboriginal and/or Torres Strait Islander mental health and alcohol and drug use hinder efforts to conduct program planning that is responsive to need.

Our use of qualitative data also comes with its own caveat. Consultations across all aspects of the needs assessment were limited to both the organisations and the staff within those organisations who could make time available during the December to February period. Consequently consultation data are considered supportive and are not proposed as representing the full experience of any sector.

The other issue impacting on securing population-based data for the Needs Assessment relates to some inconsistencies in the level of aggregation of data from different sources. PHN boundaries were derived from the Australian Statistical Geography Standard (ASGS), rather than based on LGAs.

The base units of measurement within the ASGS are the SA1, SA2, SA3 and SA4 geographies, which are based upon population size. Our assessment was therefore drawn primarily from SA3-defined data as the SA3 level matches the PHN boundary exactly. The corresponding LGA areas do not align with the EMPHN boundaries; LGAs, postcode and suburb are more historical boundaries based upon physical landmarks such as roads and creeks. These old units are referred to as the Australian Standard Geographical Classification (ASGC). While there is some alignment between ASGS and ASGC, important differences are apparent in the outer regions, such as the Yarra Ranges, Murrindindi and Mitchell. The names 'Nillumbik-Kinglake' and 'Whittlesea-Wallan' used in this report are those given by the ABS to these regions and are recognised as the standard nomenclature.

Where at all possible we have used SA2- and SA3-level population data. Such data are, however, inconsistently reported to Australia Statistical Geography Standards (ASGS), specifically to these levels of SA3 and SA2. The NHPA has begun to offer SA3 as the standard geographical unit for new reports, however LGA-level data are difficult to similarly disaggregate to ASGS. SA2-level data are needed to paint the clearest picture, yet the AIHW data are primarily available at national and State level, with little at the SA3/SA2 level that are easily accessible.


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Section 2 – Outcomes of the health needs analysis

This table provides an overview of the health needs identified within the region. They are separated according to general, after-hours and mental health needs. This includes a review of the data and consultations undertaken with stakeholders to identify health needs of the population, whilst Section 3 aims to cover identified service needs.

Outcomes of the health needs analysis — General		
Identified need	**Key issue**	**Description of evidence**
Potentially Preventable Hospitalisations (PPH)	Top five ambulatory care sensitive conditions, number of admissions 2013-14: • diabetes complications (16,865) • hypertension (13,284) • pyelonephritis (7,599) • dehydration and gastroenterology (6,219) • congestive heart failure (5,734) Total PPH bed days 2013-14: • diabetes complications (13,692) • hypertension (1,170) • pyelonephritis (14,312) • dehydration and gastroenterology (data unavailable) • congestive heart failure (23,494)	NHPA (2013-14); VAED (2013-14).
Childhood immunisation rates	No LGA met the aspirational childhood immunisation rate of 95%. Manningham had the lowest proportion of children fully immunised at five years of age. Pockets of conscientious objection on ideological grounds reported in Nillumbik and Yarra Ranges.	NHPA (2014-15). Consultation: Council – Yarra Ranges Shire Council. CHS – healthAbility.
Cancer screening rates	Whittlesea-Wallan had the lowest screening rates for breast, cervical and bowel cancers. Lower rates of breast and cervical cancer screening reported among refugee women, particularly in Whittlesea. Lower rates of breast cancer screening noted among Aboriginal and/or Torres Strait Islander women, particularly in Whittlesea.	DH (2012); Vic. DHHS (2013), LGA Profiles. Consultation: CHS – AMES Australia. PCP – North East PCP. NGO – Whittlesea Community Connections.

Outcomes of the health needs analysis — General		
Healthy ageing	Elder abuse (neglect and financial) reported in Knox, Lower Hume, Manningham and other inner east areas. Isolation and mental health noted in Whitehorse and other inner east areas.	ABS (2011), Family Household Composition (Dwelling) [HCFMD]. Consultation: Council – Knox City Council; Manningham City Council. CHS – Carrington Health. PCP – Inner East PCP; Lower Hume PCP.
	Frailty and falls noted in Nillumbik, Yarra Ranges and inner east areas.	VEMD (2014-15). Consultation: Council – Yarra Ranges Shire Council. CHS – healthAbility. PCP – Inner East PCP. LHN – Eastern Health.
	Residential aged care facilities (RACFs) • Falls risk and falls associated with polypharmacy have increased in the inner east.	Consultation: LHN – St. Vincent's Hospital. GP working extensively in EMPHN RACFs.
	• More infections due to antibiotic resistant bacteria have been observed among RACF residents in Whittlesea-Wallan. These infections are increasingly needing to be treated in hospital. Northern Health's expenditure on reserved antibiotics has increased over the last three years. Whittlesea-Wallan was in the highest percentile of antimicrobial dispensing nationally, potentially contributing to antibiotic resistance in the region.	Australian Commission on Safety and Quality In Healthcare (2015), *Australian Atlas of Healthcare Variation*. Consultation: LHN – Northern Health Antimicrobial Stewardship Pharmacist.
	• Inadequate resources to manage aggression in residents with dementia in Boroondara have resulted in high (second percentile) antipsychotic use.	Australian Commission on Safety and Quality In Healthcare (2015), *Australian Atlas of Healthcare Variation.* Consultation: RACF – Needs Assessment interviews.

Outcomes of the health needs analysis — General		
Healthy ageing	• Suboptimal management of asthma and COPD in Yarra Ranges has contributed to preventable hospital presentations.	EMML (2015), *Supporting GPs and RACFs to reduce ED admissions amongst RACF residents with asthma and/or COPD* project. Consultation: RACF – Needs Assessment interviews.
	• Whittlesea-Wallan had a higher proportion (first percentile) of age standardised admissions for heart failure.	Australian Commission on Safety and Quality In Healthcare (2015), *Australian Atlas of Healthcare Variation.*
	• Unnecessary transfers to hospital from RACFs in Yarra Ranges.	Eastern Health (2015), *ED Retrospective Triage Data Analysis of Aged Care Facilities.* Consultation: RACF – Needs Assessment interviews.
	Palliative care • Inadequate GP locum knowledge in palliative care has contributed to unnecessary hospital transfers at end of life in the area serviced by Eastern Health and Northern Health.	Consultation: GP working extensively in RACF in the EMPHN catchment. RACF – Needs Assessment interviews.
	• Lack of access after-hours to a practitioner willing to prescribe medicines for end-of-life management has led to unnecessary hospital transfers.	Consultation: GP working extensively in RACF in the EMPHN catchment.
	• Lack of systems to enable discharged palliative care patients to access medicines in a timely manner from community pharmacy.	Consultation: LHN – Eastern Health. RACF – Needs Assessment interviews.
Integrated care for chronic disease prevention and management	Yarra Ranges had the highest proportion of people who experienced food insecurity. Food affordability also noted as an issue in Whittlesea, Boroondara and other inner east areas (particularly for tertiary students) and among Aboriginal and/or Torres Strait Islander residents of Knox and Maroondah.	CIV (2011). Consultation: Council – City of Boroondara; City of Whittlesea; Yarra Ranges Shire Council. CHS – Mullum Mullum Indigenous Gathering Place. PCP – Inner East PCP.

Outcomes of the health needs analysis — General		
Integrated care for chronic disease prevention and management	**Health risk factors** • Whittlesea-Wallan had the highest rate of overweight/obese males and females aged 18 years and over.	DH (2012).
	• Highest percentage of people who do not meet physical activity guidelines in Whittlesea-Wallan. Whittlesea-Wallan had highest rate of males and Maroondah and Whitehorse the highest rate of females who do not meet physical activity guidelines.	DH (2012).
	• Boroondara had the highest proportion of males and females who sit for at least 7 hours daily.	DH (2012).
	• Knox had the highest proportion of current smokers (male and female) aged 18 years and over. Whittlesea-Wallan had the highest rate of smokers aged 15-17 years.	DH (2012).
	• Monash had the highest percentage of people not meeting fruit and vegetable consumption guidelines. Highest rate of males in Knox and females in Monash who were not meeting fruit and vegetable consumption guidelines. Nillumbik had poor access to healthy food options. Many residents of Mitchell and Murrindindi reportedly had suboptimal healthy food consumption.	DH (2012). Consultation: Council – Nillumbik Shire Council. PCP – Lower Hume PCP.
	Chronic diseases • On or above state average rate of type 2 diabetes in Whittlesea-Wallan and Monash. Diabetes reportedly accounted for a significant proportion of hospital admissions in Whittlesea. Increase in diabetes noted in Yarra Ranges. Higher rates of diabetes noted among Asian population in Whitehorse.	PHIDU (2011-13); VAED (2014-15). Consultation: Council – Yarra Ranges Shire Council. CHS – Carrington Health. PCP – Hume Whittlesea PCP.
	• Whittlesea-Wallan had a higher than state average rate of cardiovascular disease.	PHIDU (2011-13).

Outcomes of the health needs analysis — General		
Integrated care for chronic disease prevention and management	• Half the SA3s had a higher than state average asthma rate (Banyule, Maroondah, Nillumbik-Kinglake, Whittlesea-Wallan and Yarra Ranges).	PHIDU (2011-13).
	• 40 per cent of SA3s had a higher than state average rate of chronic obstructive pulmonary disease (Banyule, Nillumbik-Kinglake, Whittlesea-Wallan and Yarra Ranges).	PHIDU (2011-13).
	• Nillumbik-Kinglake, Whittlesea-Wallan and Yarra Ranges had above state average rates of total musculoskeletal conditions (osteoporosis, osteoarthritis and rheumatoid arthritis).	PHIDU (2011-13).
	• Above state average rate of hepatitis B incidence in Banyule. More than double the state average rate of hepatitis B prevalence in Monash. Also higher than state average hepatitis B prevalence in Whitehorse, Manningham, Whittlesea-Wallan, Boroondara and Maroondah. Higher prevalence of hepatitis B noted among Chinese, Indian and Nepalese populations in the inner east region.	Vic. DHHS (2014-15). Consultation: CHS – Access Health and Community; Carrington Health; Link Health and Community. NGO – Women's Health In the North.
	• Manningham had the highest cancer incidence (males and females).	Vic. DHHS (2012), Victorian Population Health Survey.
	• Reported increase in incidence of respiratory diseases and cancers following the bushfires in Nillumbik.	Consultation: Council – Nillumbik Shire Council.
	• Higher prevalence of chronic diseases reported among Aboriginal and/or Torres Strait Islander peoples in the outer east region and Lower Hume.	Consultation: CHS – Inspiro CHS. PCP – Lower Hume PCP; Outer East PCP.

Outcomes of the health needs analysis — General		
Appropriate care for diverse communities	**Refugee and CALD communities** • High rates of family violence noted among refugees, asylum seekers and people on Partner (Provisional) visas, particularly in Whittlesea.	CSA (2014-15); Whittlesea Community Futures and Whittlesea Community Connections (2012), *Whittlesea CALD Communities Family Violence Project Scoping Exercise Report.* Consultation: CHS – AMES Australia. NGO – Whittlesea Community Connections; Women's Health In the North.
	• High prevalence of mental issues noted among refugees, particularly in Whittlesea. Precipitants included torture and trauma.	Consultation: CHS – AMES Australia. NGO – Whittlesea Community Connections. Refugee health service referral pathways mapping consultation: Council – City of Whittlesea. NGO – Spectrum MRC. LHN – Austin Health; Northern Health. Nursing – RDNS.

Outcomes of the health needs analysis — General		
Appropriate care for diverse communities	• Physical and mental health and wellbeing in relation to sexual health of females from communities where female genital cutting is traditionally practiced.	Consultation: CHS – Banyule CHS. NGO – Women's Health East; Women's Health In the North.
	• Low breast and cervical cancer screening rates reported among refugees, particularly in Whittlesea.	Consultation: CHS – AMES Australia. NGO – Whittlesea Community Connections.
	• Low employment participation reported among refugees, particularly in Whittlesea and Lower Hume. Contributing factors included levels of English proficiency, lack of qualifications, lack of Australian work experience and lack of access to transport and affordable housing close to employment.	Consultation: CHS – AMES Australia. NGO – Whittlesea Community Connections. Refugee health service referral pathways mapping consultation: NGO – Whittlesea Community Connections and UnitingCare. LHN – Austin Health.
	Aboriginal and/or Torres Strait Islander population • Increased crystal methamphetamine (ice) use noted among the Aboriginal and/or Torres Strait Islander peoples in the outer east region. There was reported association between Ice and elder abuse in the context of kin care in Whittlesea.	Consultation: PCP – Hume Whittlesea PCP; Outer East PCP.
	• High rates of long term health conditions reported among the Aboriginal and/or Torres Strait Islanders in the outer east region and Lower Hume.	Consultation: CHS – Inspiro CHS. PCP – Lower Hume PCP; Outer East PCP.
	• Low breast cancer screening rates noted among the Aboriginal and/or Torres Strait Islander women, particularly in Whittlesea.	Vic. DHHS (2013), LGA Profiles. Consultation: PCP – North East PCP.

Outcomes of the health needs analysis — General		
Appropriate care for diverse communities	**LGBTIQ community** • Whittlesea's socio-cultural profile not conducive to LGBTIQ safety.	Consultation: NGO – Whittlesea Community Connections.
	• Psychological trauma among the transgender community in Nillumbik and Lower Hume.	Consultation: CHS – Nexus Primary Health.
	• Violence in same-sex relationships in the eastern metropolitan region.	Consultation: NGO – Women's Health East.
Social gradient factors	Areas of social disadvantage included Heidelberg West (particularly Olympic Village), Watsonia, Bundoora, Bulleen, Bayswater North, Kilsyth, Mooroolbark and Warburton. Warburton's population has declined but social disadvantage has increased. The proportion of socially disadvantaged children aged 2-5 years was higher than the state average. Millgrove and Warburton had a similar SEIFA score but higher community strength in Millgrove has reportedly abated some disadvantage issues. Pockets of disadvantage in Ashburton, Ashwood, Balwyn North, Croydon, Mulgrave, Knox, Clayton, Oakleigh, Mitchell and Murrindindi. Disadvantage was reportedly higher among Aboriginal and/or Torres Strait Islander peoples, CALD community, asylum seekers, refugees, aged, unemployed and people with disabilities.	ABS (2011), Socioeconomic Indices for Areas [SEIFA]. Consultation: Council – Banyule City Council, City of Boroondara, Manningham City Council, Maroondah City Council; Yarra Ranges Shire Council. PCP – North East PCP. CHS – Banyule Community Health; EACH; Link Health and Community; Nexus Primary Health. NGO – Whittlesea Community Connections.
	The suburbs of Lalor and Thomastown in Whittlesea and Heidelberg West in Banyule had the highest proportion of children who were developmentally vulnerable on one or two domains. Other pockets of high vulnerability were in the suburbs of Ringwood East in Maroondah and Clayton in Monash.	Australian Early Development Census [AEDC] (2015).

Outcomes of the health needs analysis — General		
Social gradient factors	Electronic gaming machine (EGM) expenditure per head of adult population aged 18 years and over was highest in Whittlesea, followed by Monash. Whittlesea-Wallan had the greatest expenditure per EGM, followed by Whitehorse. Total EGM expenditure ($millions) was highest in Monash, followed by Whittlesea-Wallan. Increased EGM use noted in Nillumbik. Gaming venues often located within close proximity to shopping centres, particularly in Whittlesea. Generally, gambling was associated with alcohol and increased family violence.	VCGLR (2015). Consultation: Council – City of Whittlesea. CHS – healthAbility. PCP – North East PCP. NGO – Whittlesea Community Connections; Women's Health East; Women's Health In the North.
	Housing affordability in Whittlesea and Yarra Ranges. Vulnerable population groups included refugees and Aboriginal and/or Torres Strait Islander peoples. Whittlesea had a high proportion of refugee and Aboriginal and/or Torres Strait Islander residents. Similarly, Yarra Ranges had a high Aboriginal and/or Torres Strait Islander population. Housing affordability also noted as an issue in Boroondara, Manningham, Maroondah and Nillumbik (particularly among Aboriginal and/or Torres Strait Islander peoples in Hurstbridge).	CIV (2013); ABS (2011). Consultation: Council – City of Boroondara; City of Whittlesea; Manningham City Council; Maroondah City Council; Yarra Ranges Shire Council. CHS – AMES Australia; healthAbility; Mullum Mullum Indigenous Gathering Place; Plenty Valley CH. NGO – UnitingCare. Refugee health service referral pathways mapping consultation: CHS – Plenty Valley CH. NGO – UnitingCare. LHN – Austin Health.

Outcomes of the health needs analysis — General		
Social gradient factors	Reported social isolation among the elderly in Whitehorse and other inner east areas, refugees in Whittlesea, Indigenous youths in the outer east and residents of Manningham and Nillumbik.	ABS (2011), HCFMD; CIV (2011). Consultation: Council – City of Whittlesea; Manningham City Council; Nillumbik Shire Council. CHS – Carrington Health; Mullum Mullum Indigenous Gathering Place. PCP – Inner East PCP. NGO – Whittlesea Community Connections.
	Poor health literacy and understanding of the health system, particularly within refugee and CALD communities in Whittlesea-Wallan and Monash. Understanding of information given by health providers is variable, goals are often clinician-directed and particularly in hospital context, consumers not active participants in their care (defining treatment goals, choice of referral options).	ABS (2006), Health Literacy, Australia; ABS (2011) Proficiency in Spoken English (ENGP). Consultation: CHS – AMES Australia; Link Health and Community; Nexus Primary Health. PCP – Hume Whittlesea PCP. NGO – Whittlesea Community Connections. LHN – Eastern Health. Refugee health service referral pathways mapping consultation: CHS – cohealth. LHN – Northern Health.

Outcomes of the health needs analysis — General		
Social gradient factors	Whittlesea-Wallan had the highest family violence incidents. Family violence also reported as an issue in Maroondah, Nillumbik, Yarra Ranges, Mitchell, Whitehorse and Manningham. High rates noted among women with disabilities (Manningham) and CALD community (Whittlesea). Knox had the highest rate of total alcohol-related family violence, followed by Yarra Ranges and Banyule. In addition to alcohol, family violence was generally associated with disaster (i.e. bushfires in Murrindindi and Nillumbik) and gambling. High rates of substantiated child abuse in Knox.	AODstats by Turning Point (2012-13); CSA (2014-15); Vic. DHHS (2013). Consultation: Council – City of Whittlesea; Manningham City Council; Maroondah City Council; Nillumbik Shire Council; Yarra Ranges Shire Council. CHS – AMES Australia; Banyule CHS; Carrington Health; EACH; healthAbility; Nexus Primary Health. NGO – Whittlesea Community Connections; Women's Health East; Women's Health In the North.
Sexually transmissible infections	Above state average HIV incidence in Boroondara and prevalence in Knox. Above state average rate of chlamydia in Banyule. Maroondah had the highest rate of sexually transmissible infection in young people. Highest gonococcal infection prevalence in Boroondara. Highest rate of syphilis (infectious and late) in Monash.	Victorian Child and Adolescent Monitoring System [VCAMS] (2012); Vic. DHHS (2013), LGA Profiles; Vic. DHHS (2014-15).

Outcomes of the health needs analysis — Mental Health		
Identified Need	**Key Issue**	**Description of Evidence**
Anxiety and depression	Whitehorse had the highest rate of people experiencing affective and anxiety issues. Depression and anxiety also noted in Boroondara, Manningham, Maroondah, Whittlesea-Wallan and Nillumbik. Highest rate of high or very high psychological distress among people aged 18 years and over in Whittlesea-Wallan. Poor social and emotional wellbeing outcomes experienced by Aboriginal and/or Torres Strait Islander peoples, including significantly higher levels of psychological distress. Rates of admission for Aboriginal and/or Torres Strait Islander peoples were higher at all ages, with the exception of women aged over 75 years. Major causes of admission for mental disorders for Aboriginal and/or Torres Strait Islander peoples were schizophrenia, mood disorders, AOD and neurotic disorders. Except for mood disorders, rates of admission for Aboriginal and/or Torres Strait Islanders were more than twice those for non-Indigenous Australians. Mental health issues and self-harm noted among youths in Boroondara, Manningham, Maroondah, Monash, Nillumbik and Whittlesea, particularly high prevalence conditions and the associated psycho-social impacts, including school absenteeism and social isolation. Monash had the highest proportion of adolescents who reported being bullied. Mental health issues also reported among men in Nillumbik (particularly related to the psychological impacts following the bushfires, contributing to increased suicide rates among 50-55 year olds).	ABS (2011), Census of Population; AIHW (2015), *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples*; PHIDU (2011-13); PHIDU (2014); Vic. DHHS (2013), LGA Profiles. Consultation: Council – City of Boroondara; City of Whittlesea; Manningham City Council; Maroondah City Council; Nillumbik Shire Council. CHS – healthAbility; Link Health and Community; Mullum Mullum Indigenous Gathering Place; Nexus Primary Health. PCP – North East PCP.
Suicide	Comparing the EMPHN catchment to the Victorian state average: • 9 LGAs out of 12 (75%) have suicide **counts** higher than the state average (23.4) and • 3 LGAs out of 12 (25%) have suicide **rates** higher than the state average (11.8) with an additional 3 LGAs with rates less than 2 below the state average.	Vic. DHHS (2014).

Outcomes of the health needs analysis — Mental Health		
Suicide	Higher rates of **emergency department** presentations suicide attempts and ideation in the following statistical local areas (SLAs) for the period 2014-15: Knox (C) – North-East 165 Yarra Ranges (S) – Lilydale 127 Maroondah (C) – Croydon 97 Monash (C) – Waverley West 93 Maroondah (C) – Ringwood 92 Whittlesea (C) – South-West 81 Banyule (C) – Heidelberg 80 Whittlesea (C) – North 80 Whitehorse (C) – Box Hill 72 Manningham (C) – West 68 And the following hospitals located in the EMPHN catchment have the respective number of emergency department presentations for the period 2014-15: Angliss Hospital 166 Austin Hospital 210 Box Hill Hospital 368 Maroondah Hospital 474 Monash Medical Centre Data unavailable Northern Hospital 208	VEMD 2014–15 (2016).

Outcomes of the health needs analysis – After-hours		
Identified Need	**Key Issue**	**Description of Evidence**
Limited access to GPs and other primary health care services in the after-hours period	• Minimal access to deputising services in outer metropolitan areas. • Limited access to primary health care services, including GP clinics, pharmacy, radiology and pathology in after-hours period periods, particularly in outer metropolitan areas. • Poor access to services for families of children with development disorders or intellectual disabilities.	EMML, IEMML and NMML (2012-13), Comprehensive Needs Assessments; EMPHN (2015) After Hours Survey; EMPHN research on MDS coverage in the catchment; VEMD (2014-15). Consultation: CHS – EACH; Plenty Valley CH. Ambulance service – Ambulance Victoria. GP clinic – After Hours GP Clinic Box Hill; Clayton Road Doctors Medical Centre; ERAHMS clinics; Nexus GP SuperClinic Wallan; Warburton Medical Clinic. MDS – ALMS; My Home GP; NHDS.
RACFs – limited access to GPs and other primary health care services in the after-hours period	• Limited access to timely and appropriate after-hours care, and quality of care varies between facilities. Some RACF staff lack knowledge of after-hours primary health care services. • High demand and waiting lists for services such as mobile x-rays, pathology, pharmacy, palliative care, Advance Care Planning (ACP) and geriatrics. • Significant levels of aggression in residents with dementia. Issue exacerbated after-hours with the lack of staffing and resources to manage residents.	Australian Commission on Safety and Quality In Healthcare (2015), *Australian Atlas of Healthcare Variation*; Larter Consulting (2015), *ACP Consortium Needs Analysis*. Consultation: LHN – Austin Health; Eastern Health; Northern Health; Southern Health Dandenong; St. Vincent's Hospital. RACF – Needs Assessment interviews.

Outcomes of the health needs analysis – After-hours		
Provision of quality after-hours primary health care services	• Some RACF staff and GP locums unfamiliar with local after-hours services availability and how to support residents with after-hours clinical needs. • Lack of access to respiratory, chronic disease, cancer, end-of-life, ACP and palliative care resources after hours. • Information in the NHSD often inaccurate or not up-to-date, as some services are not familiar with the process of updating information. • Limited opportunities for GP services and pharmacies to expand their opening hours unless additional funding made available. After-hours services often viewed as functional aspects of general practice rather than part of planned care management.	EMML, IEMML and NMML (2012-13), Comprehensive Needs Assessments; Larter Consulting (2015), *ACP Consortium Needs Analysis*. Consultation: GP clinic – Clayton Road Doctors Medical Centre; ERAHMS clinics; Nexus GP SuperClinic Wallan; Warburton Medical Clinic. MDS – ALMS; My Home GP; NHDS. RACF – Needs Assessment interviews.
Increased community awareness of after-hours services and options	• Inappropriate after-hours service usage, partly due to a lack of community knowledge of available and appropriate after-hours services, including MDS and after-hours clinics and pharmacies. • Community perception that best clinical care is provided by EDs, and that the care is free and is a one-stop-shop for care. • Some people would be prepared to wait for long periods if there is no cost for treatment. • Lack of consistent, multilingual information about after-hours care options. • Significant numbers of inappropriate calls to 000 for an ambulance due to incorrect perceptions about the service.	EMML, IEMML and NMML (2012-13), Comprehensive Needs Assessments. Consultation: CHS – EACH. NGO – Migrant Information Centre. Ambulance service – Ambulance Victoria.

Outcomes of the health needs analysis – After-hours		
Culturally safe and accessible primary health care services for Aboriginal and/or Torres Strait Islander and CALD and refugee people	• Limited number of practices that have undergone cultural awareness training. • Limited availability of GPs with multilingual skills. • Lack of knowledge of after-hours services available for marginalised groups, including the refugee/CALD population. • Lack of access to transportation to after-hours services for some residents. • Low self-identification rates for people from Aboriginal and/or Torres Strait Islander backgrounds, decreasing the likelihood of accessing culturally safe health care.	EMML (2014), *Aboriginal Health Priorities Framework*; IEMML (2014), *Reconciliation Action Plan*. Consultation: CHS – AMES Australia; EACH. NGO – Spectrum MRC; Migrant Information Centre.
Increased access to mental health services in the after-hours period	• Mental health issues one of top two issues in the after-hours reported by Ambulance Victoria. • Limited community-based services for people with mental health needs after-hours. Lack of capacity to provide onsite psychological support as a second response to mental health crisis situations during the after-hours period. • A 'Police, Ambulance and Clinical Early Response' (PACER) program exists in a limited capacity in the inner north, but does not cover the outer north. Expanding the PACER program will enable Crisis and Assessment teams to increase operating times.	NMML (2012), *Comprehensive Needs Assessment*. Consultation: CHS – Banyule CHS; EACH Ringwood and Maroondah; Inspiro CHS. LHN – Austin Health. Ambulance service – Ambulance Victoria.

Outcomes of the health needs analysis — Alcohol and Other Drugs		
Identified need	**Key issue**	**Description of evidence**
Alcohol use	Highest rate of alcohol consumption considered high risk to health for people aged 18 years and over was Yarra Ranges, followed by Maroondah. Healesville was reported as an area of high problem drinking. Yarra Ranges had the highest number of licensed liquor venues. People in Nillumbik were at the greatest risk of short term harm from alcohol, followed by Knox and Yarra Ranges. Harmful alcohol use noted in Banyule, Boroondara and Lower Hume. Whittlesea had the highest proportion of underage people reporting drinking within the last 30 days. Whittlesea had the highest number of packaged liquor licensed outlets, followed by Monash and Yarra Ranges. High prevalence of health and social problems resulting from alcohol use among Indigenous peoples. Generally, alcohol was linked to stress/mental health, social isolation, family violence, gambling and public violence.	VCGLR (2016); DH (2012); AIHW (2015), The health and welfare of Australia's Aboriginal and Torres Strait Islander People. Consultation: Council – Yarra Ranges Shire Council, Knox City Council, City of Boroondara and Nillumbik Shire Council. CHS – Banyule CHS, AMES, Mullum Mullum Indigenous Gathering Place and healthAbility. PCP – North East PCP, Outer East PCP and Lower Hume PCP. NGO – Women's Health East, Women's Health In the North and Whittlesea Community Connections. Peak body – Victorian Alcohol and Drug Association (VAADA).
Crystal methamphetamine (ice) use	Highest crystal methamphetamine (ice) ambulance rates in Maroondah, Yarra Ranges and Mitchell. Ice use also noted in Whittlesea (young males who have weekend binges), Whitehorse and Manningham. Reported use by Indigenous peoples in Whittlesea and outer east areas.	AOD Stats (2013-14) by Turning Point. Consultation: Council – Manningham City Council and Yarra Ranges Shire Council. CHS – Carrington Health. PCP – Hume Whittlesea PCP and Outer East PCP. NGO – Whittlesea Community Connections.

Outcomes of the health needs analysis — Alcohol and Other Drugs		
Prescription medication misuse	Mitchell had the highest ambulance rate for prescription medication misuse, followed by Murrindindi and Maroondah. Highest emergency department rates for prescription medication misuse in Maroondah, Whittlesea and Monash. Maroondah, Whitehorse and Monash had the highest hospital rates for prescription medication misuse. Prescription medication abuse also noted in Boroondara and Nillumbik.	AOD Stats (2012-13) by Turning Point. Consultation: Council – City of Boroondara and Nillumbik Shire Council. CHS – Inner East/Manningham CHS. NGO – Whittlesea Community Connections. Peer-based organisation – Harm Reduction Victoria.
Cannabis use	Reported use of cannabis in Boroondara, Whittlesea and Nillumbik.	Consultation: Council – City of Boroondara, City of Whittlesea and Nillumbik Shire Council.

Section 3 – Outcomes of the service needs analysis

Outcomes of the service needs analysis — General		
Identified Need	**Key Issue**	**Description of Evidence**

Potentially preventable emergency department presentations and admissions	**High utilisation of emergency departments for primary care-type presentations:**
	• High primary care type attendances during business hours, particularly in 25-35 year old age group.
	• Users of emergency department (ED) services highlight factors in choice of ED over primary care as including:
	  • cost benefit,
	  • perception of timeliness and convenience of having multiple diagnostic services in one place,
	  • home location relative to service location
	  • perceptions of greater expertise in tertiary facilities by parents and many GPs (including higher rates of GP referral rate for children into the ED),
	  • higher rates of parents' inflated perceptions of seriousness of child illness in:
	  » infants and children 0-4 years (generally over-represented in Australian EDs)
	  » first-time parents
	  » parental lower education level
	  » parental low income status
		University of Melbourne Department of General Practice November (2015), *Prevention of low and non-urgent presentations of children to emergency departments* (draft report); VEMD (2014-15).
		
		Consultation:
		LHN – Eastern Health.

Outcomes of the service needs analysis — General		
Potentially preventable emergency department presentations and admissions	• Suboptimal specific GP same day appointment availability (bulk-billed) in northern growth corridor generally; lower GP concentrations in outer suburbs of northern growth corridor. • Current HARP and Hospital-in-the-Home arrangements are often engaged when client/patient is more acute/complex. There are both gap and opportunity between general practice-based care and when hospital services are required. • Increasing rate of obesity is reducing mobility of more patients within the community – home-based outreach models that support general practice to maintain care in the community require further investigation. **Top 10 admissions for Ambulatory Care Sensitive Conditions 2014-15:** • Diabetes complications (18,290) • Hypertension (13,112) • Pyelonephritis (8,203) • Dehydration and gastroenterology (6,350) • Congestive heart failure (5,845) • Chronic Obstructive Pulmonary Disorder (COPD) (5,474) • Iron deficiency anaemia (4,400) • Cellulitis (3,128) • Convulsion and epilepsy (2,804) • Asthma (2,745)	University of Melbourne Department of General Practice November (2015), *Prevention of low and non-urgent presentations of children to emergency departments* (draft report). Consultation: LHN – Eastern Health. VAED (2014-15).

Outcomes of the service needs analysis — General		
Potentially preventable emergency department presentations and admissions	**Categories 4 & 5 diagnoses in business hours 2014–15:** • Abdominal pain (3,059) • No diagnosis given (2,953) • Fracture of wrist (2,532) • Attendance for follow-up (1,954) • Open wound of hand/wrist (1,790) • Viral infection (1,758) • Eye, discharging/inflammation/itchy/mass/red/swelling/ other disorders of the eye (1,506) • Unwell generally-no disease found (1,193) • Sprain/strain of ankle (1,173) • Abortion, threatened (1,075) **Categories 4 & 5 diagnoses made after-hours 2014–15:** • No diagnosis given (8,516) • Abdominal/flank pain/cramps/intestinal colic (3,628) • Viral infection (2,567) • Fracture of wrist/fracture of hand (includes finger) (2,409) • Open wound wrist and hand (includes finger)/Bite (non-venomous) wrist and hand (2,310) • Sprain/strain of ankle (1,827) • Open wound of face (excludes eye)/Bite (non-venomous) of face (excludes eye) (1,588)	VEMD (2014-15).

Outcomes of the service needs analysis — General		
Potentially preventable emergency department presentations and admissions	• No disease found/Illness NOS/Other symptoms/Unwell generally (1,532) • Diarrhoea with no other symptoms/Gastroenteritis, presumed infectious (1,296) • Open wound of head/bite (non-venomous) of head (excludes face) (1,113) • Bacteriuria/urinary tract infection/urinary sepsis (1,104) • Infection, upper respiratory tract (1,008) • Eye, discharging/inflammation/itchy/mass/red/swelling/other disorders of the eye (995) • Hyperemesis/nausea and/or vomiting (excludes Hyperemesis Gravidarum) (989) • Backache, unspecified (973) • Foreign body: external eye (940) • Abortion, threatened (927) • Chest pain, NEC (855) • Constipation (848)	VEMD (2014-15).
Service coordination/ integration	**Suboptimal interconnectivity between services:** • Coordination difficulties across primary, secondary and tertiary services • Disconnected tertiary-CHS care (Nillumbik) » Tertiary care admission and discharge planning/communication » Outer east youth and children services coordination • Between-sector refugee services (such as education/employment) in priority refugee resettlement area (Whittlesea and northern growth corridor)	University of Melbourne Department of General Practice November (2015), *Prevention of low and non-urgent presentations of children to emergency departments* (draft report). Consultation: Council – Maroondah City Council. CHS – healthAbility. PCP – Hume Whittlesea PCP.

Outcomes of the service needs analysis — General		

Service coordination/ integration	**Ineffective/suboptimal integration of primary care services into client journey:**
	• Client knowledge of services poorer amongst disadvantaged
	• Bypassing of community health services by referrers
	  • Stigma of CHS use
	  • Easy/easier to refer into tertiary services
	  • Acute practitioners unaware of services/failing to refer
		Consultation:
		CHS – healthAbility; Link Health and Community.
		Survey response with CHS respondent (Carrington Health).

Access to primary health care	**Availability, location and accessibility of primary and adjunct health care services:**
	• General lack of GP, specialist and support services (in context of greater demand) in Yarra Ranges and semirural/rural Kinglake
	  • No respite, rehabilitation services in Nillumbik, Kinglake.
	Inconveniently distributed or orphaned services and location at sites poorly served by public transport create access barriers:
	• Scattered service locations in Maroondah
	• Services at distance from coordinated public transport networks in: Manningham (of note: Warrandyte), Whittlesea (of note: Mernda), in servicing Maroondah Hospital, Boroondara (Balwyn North) and in outer east and isolated areas off highway (Yarra Valley-Warburton).
	  • Manningham has poor transport access and experienced recent bus route cuts. Although it is within catchment of some services, many choose not to locate a branch within the region, increasing travelling distance for clients.
		ABS (2011), Census of Population; AIHW (2015), Workforce Data; CIV (2011, 2012), Transport proximity data; EMPHN CRM (2016).
		Consultation:
		Council – City of Whittlesea; Manningham City Council; Maroondah City Council; Nillumbik Shire Council; Yarra Ranges Shire Council.
		CHS – Access Health and Community; Nexus Primary Health.
		PCP – Hume Whittlesea PCP; North East PCP.
		NGO – Whittlesea Community Connections; Women's Health East.

Outcomes of the service needs analysis — General		

Access to primary health care	**Availability, location and accessibility of primary and adjunct health care services (cont'd):**
	• Service accessibility in the outer North and Yarra Ranges areas problematic due to distribution of services towards the more population-dense inner areas of those regions:
	  • Whittlesea (particularly general practice and hospital),
	  » Highest rate of business hours primary care type presentations to the emergency department (ED) in Whittlesea-Wallan, with simultaneously lowest rates after-hours access of ED, suggesting deferral of presentation for reasons of access,
	  • Nillumbik (primary, secondary care and after-hours services),
	  • Manningham,
	  • Yarra Ranges.
		University of Melbourne Department of General Practice November (2015), *Prevention of low and non-urgent presentations of children to emergency departments* (draft report); VEMD (2014-15).
		
		Consultation:
		Council – City of Whittlesea; Manningham City Council; Nillumbik Shire Council; Yarra Ranges Shire Council.
		CHS – Nexus Primary Health.

	Service affordability Unaffordability in areas of greatest social disadvantage, unemployment and CALD communities: • General disadvantage in areas of Knox, Mooroolbark, West Heidelberg, Watsonia, Whittlesea, Yarra Valley. • Masked disadvantaged in generally more affluent areas: St Andrews, pockets of asset-rich/cash poor elderly in Boroondara, pockets of general disadvantage in Boroondara, Manningham and Nillumbik. • Above average rate of delayed presentation for care and deferral of prescribed medication purchases in Banyule, Maroondah, Knox, Whittlesea-Wallan and Yarra Ranges, with uninsured highlighted in Nillumbik-Kinglake, Ashwood, Mulgrave, Oakleigh, Clayton.	ABS (2011). Consultation: Council – Banyule City Council; City of Boroondara; Manningham City Council; Nillumbik Shire Council; Yarra Ranges Shire Council. CHS – Link Health and Community.

Outcomes of the service needs analysis – General		
Culturally safe primary health care	**Under-identification of Aboriginal and/or Torres Strait Islander clients** • Aboriginal and/or Torres Strait Islander clients do not identify until trust established—requires continuity of care.	Consultation: Council – Yarra Ranges Shire Council. CHS – healthAbility. LHN – Eastern Health.
	Access to suitable services for Aboriginal and/or Torres Strait Islander clients Centralisation of Aboriginal health services creates access difficulties and disincentive for the greater numbers of clients in catchment's outer areas needing culturally appropriate care: • No local, culturally appropriate specialty services provision • Affordability an issue, compounded by limited bulk-billing.	ABS (2011), Census of Population. Consultation: CHS – Mullum Mullum Indigenous Gathering Place.
	Access to services for refugee/asylum seeker/CALD populations ***Services:*** Prolonged waiting periods for refugee mental health services. • Gap-fill services needed to counter long wait times and red tape processes. • Lack of services supporting mental health and wellbeing noted for refugee youth in Nillumbik, Afghan community in south east. • Insufficient early years and childcare support services (health and/or education). • Service barrier for asylum seekers due to fee-for-service (versus no out-of-pocket for refugee clients) in respect of infectious diseases treatment (Hepatitis B, Tuberculosis).	Consultation: CHS – AMES Australia; healthAbility; Link Health and Community. Refugee health service referral pathways mapping consultation: CHS – AMES Australia; Plenty Valley CH.

Outcomes of the service needs analysis — General		
Culturally safe primary health care	***Workforce:*** • More refugee health nurses required • More interpreters (qualified, rarer languages) required	Consultation: CHS – Women's Health in the North. Refugee health service referral pathways mapping consultation: CHS – AMES Australia; headspace.
	Lack of responsiveness to risk — communicable diseases Lack of refugee and emerging CALD groups-oriented infectious diseases planning response noted in the north.	Consultation: CHS – Nexus Primary Health.
	Lack of services (in general) in northern growth corridor (areas of recent [and anticipated to be ongoing] population growth): Nillumbik, Wallan, Whittlesea (and notably mental health services in Whittlesea). • Healthcare 'islands' in Whittlesea – namely northern Lalor, Thomastown, Mill Park and outer Epping.	University of Melbourne Department of General Practice November (2015), *Prevention of low and non-urgent presentations of children to emergency departments* (draft report). Consultation: Council – City of Whittlesea; Manningham City Council; Yarra Ranges Shire Council. CHS – Nexus Primary Health.
	Inadequate specialty service needs: Lack of care facilities specific for younger people who are currently housed in aged care facilities, e.g. acquired brain injury, younger onset dementia. Ageing people with a disability (functional and mental health).	Consultation: RACF – Needs Assessment interviews. Consultation: PCP – North East PCP.

Outcomes of the service needs analysis — General		
Specialist aged care services	Inadequate discharge communication and consultation with RACFs initiated by: • Northern Health • Private hospitals in the Inner and outer east catchment. Major risk: preventable hospital readmissions. Key themes: • Timeliness of discharge • Communicating adequately so that RACFs can assess if they have the resources to manage the resident's condition • Being able to speak to someone who can provide relevant information • Discharge summaries issues • Medicines reconciliation	Consultation: RACF – Needs Assessment interviews.
Continuity of care	**Suboptimal continuity of care and subsequent disengagement of clients in outer east:** • Poor retention of locum GPs, outreach care workers due to travel requirements • Reduced faith in services by locals, noted as occurring in Yarra Ranges Valley region.	Consultation: Council – Yarra Ranges Shire Council.
	Lower than expected rates of referral of newly diagnosed patients with diabetes from general practice to Community Health Service diabetes educators in Whitehorse. Potential under-referral seen to impact on prevention of long-term diabetes complications.	Consultation: Survey response with CHS respondent (Carrington Health).

Outcomes of the service needs analysis — General		
Continuity of care	Inadequate discharge communication and consultation with RACFs from: • Northern Health • Private hospitals in the Inner and outer east catchment. This is resulting in preventable hospital readmissions. Key themes: • Timeliness of discharge • Communicating adequately so that RACFs can assess if they have the resources to manage the resident's condition • Being able to speak to someone who can provide relevant information • Discharge summaries issues • Medicines reconciliation	Consultation: Ambulance service – Ambulance Victoria. RACF – Needs Assessment interviews.
	Risk from information loss: • Outdated transfer processes preventing information critical to patient care being transferred efficiently from RACFs to hospital • Electronic patient summaries from GPs (noted in the outer and inner east) often contain inaccurate or incomplete medicines lists.	Consultation: LHN – Eastern Health Accredited Pharmacist.
Culturally appropriate sexual and reproductive health services	Increasing refugee/asylum seeker/CALD settlement with unique and culturally sensitive health considerations, including: • Tradition of female genital cutting • Poor/absent history of cancer screening. Low community understanding and awareness of regular screening opportunities.	Consultation: • NGO – Women's Health East; Women's Health In the North. • Target groups: African origin, Sri Lankan and Arabic/Persian-speaking CALD immigrants, noted as settling in outer areas, during consultation with: • Council – City of Whittlesea and Nillumbik Shire Council. • CHS – AMES Australia. • PCP – North East PCP; Outer East PCP.
Alternative models for infrastructure development	'Green wedge' embargo on infrastructure development in Nillumbik requires co-design service planning around co-location and alternative delivery models.	Consultation: Council – Nillumbik Shire Council.

Outcomes of the service needs analysis — Mental Health		
Identified Need	**Key Issue**	**Description of Evidence**
Access to mental health services for diverse communities	• Paucity of mental health services catering to refugee needs. • Ageing CALD groups in Manningham (Bulleen). • Large CALD population with mental health needs and coincident levels of social disadvantage in Banyule and Monash. • Apparent under-representation of CALD populations, relative to their numbers in the community, accessing community-based mental health and AOD services in the Eastern Metropolitan region.	EACH (2015), *Eastern Metropolitan Region Integrated Mental Health and Alcohol and Other Drugs Catchment Plan 2016-2018*. Consultation: Council – Manningham City Council; Maroondah. City Council; Nillumbik Shire Council. CHS – Access Health and Community; AMES Australia; Banyule CHS; Link Health and Community. NGO – Whittlesea Community Connections.

Access to mental health services – general	Suboptimal alignment of location with areas of greatest need
	• Paucity of services in new growth and in outlying areas of disadvantage
	  • Whittlesea – poor transport links
	  » Above Victorian average and highest rates in catchment of psychological distress
	  » Highest rates ED presentations with anxiety in the catchment
	  » In bottom 10 statewide of numbered services per 1000 head of population
	  » Of note: single ATAPS provider in outer areas servicing Whittlesea
	  • Yarra Ranges – poor transport services and few service hubs.
	• Drift in distribution of services in established area: Manningham
	  » Services covering Manningham catchment have moved out of municipality in recent years creating accessibility issues. No rail network and poor bus services, particularly in Warrandyte.
		cohealth (2015), *North Western Region Catchment Based Mental Health Community Support Strategic Plan 2015-18*; EACH (2015), *Eastern Metropolitan Region Integrated Mental Health and Alcohol and Other Drugs Catchment Plan 2016-2018*; PHIDU (2011-13); VEMD (2014-15).
		
		Consultation:
		Council – Manningham City Council
		CHS – Access Health and Community.
		PCP – Hume Whittlesea PCP.
		Consultation (survey response) from independent psychologist practicing in Epping area.

Outcomes of the service needs analysis — Mental Health		
Access to mental health services – general	Suggestion of suboptimal service access exacerbated by policy • Existing referral pathway guidelines bind community mental health nurses to registration with a single general practice. (Practitioner recommendation to open up referral pathways to CMHN'S in northern area to more than a single practice). • Refugees lose health care card with family income >$800.	Consultation (survey response) from independent mental health nurse practicing in Wallan area.
Access to services – youth and young people	Lack of specific services catering to needs of youth and young people. Hotspots created by: • Service gaps in Manningham, resulting from movement of services out of the municipality. » Lack of youth-specific support an issue • Nillumbik having large youth population and high problematic use of alcohol and other drugs.	cohealth (2015), *North Western Region Catchment Based Mental Health Community Support Strategic Plan 2015-18*; EACH (2015), *Eastern Metropolitan Region Integrated Mental Health and Alcohol and Other Drugs Catchment Plan 2016-2018*. Consultation: Council – Manningham City Council. CHS – healthAbility.

Outcomes of the service needs analysis — After-hours		
Identified Need	**Key Issue**	**Description of Evidence**
Limited access to GPs and other primary health care services in the after-hours period	• Limited general practice opening hours in the after-hours periods, particularly after 8 pm on all days of the week • Shortage of after-hours GP services in outer metropolitan areas, and shortages of GPs that are prepared to work in after-hours clinics. • Increased costs of running an after-hours GP clinic, making after-hours services less viable. • The inner metropolitan areas are fully covered by after-hours medical deputising services – specifically the local government areas (LGAs) of Banyule, Boroondara, Knox, Manningham, Maroondah and Monash. However, numerous gaps were identified in the availability of medical deputising services in outer metropolitan areas, in both residential care and community. • Poor access to other health care services such as pharmacy, radiology and pathology in after-hours periods, particularly in outer metropolitan areas. • Poor access to after-hours services for families of children with developmental disorders or intellectual disabilities.	EMML, IEMML and NMML (2012-13), Comprehensive Needs Assessments; EMPHN (2015), After Hours Survey; EMPHN research on MDS coverage in the catchment; VEMD (2014-15). Consultation: CHS – EACH; Plenty Valley CH. Ambulance service – Ambulance Victoria. GP clinic – After Hours GP Clinic Box Hill; Clayton Road Doctors Medical Centre; ERAHMS clinics; Nexus GP SuperClinic Wallan; Warburton Medical Clinic. MDS – ALMS; My Home GP; NHDS.

RACFs – limited access to GPs and other primary health care services in the after-hours period	Poor after-hours system response for residents in some aged care facilities, including:
	• Variable quality of locum care,
	  • Insufficient residential in-reach services
	  • Inappropriate referral to emergency departments for some conditions.
	• Critical workforce shortage of nurses, personal care attendants
	• Lack of access to pharmacy in and out of hours can result in avoidable hospital admissions.
		Australian Commission on Safety and Quality In Healthcare (2015), *Australian Atlas of Healthcare Variation.*
		
		Consultation:
		LHN – Austin Health; Eastern Health; Northern Health; Southern Health Dandenong; St. Vincent's Hospital.
		RACF – Needs Assessment interviews.

Outcomes of the service needs analysis — After-hours		
RACFs – limited access to GPs and other primary health care services in the after-hours period	• Procedures and processes for admitting and discharging of patients are confusing, arduous and can lead to medication mismanagement and patient deterioration. • Aged care facility staff lack knowledge of after-hours primary healthcare services. • Poor access to other health care services such as pharmacy, radiology, palliative care and pathology in after-hours periods, particularly in outer metropolitan areas. • Inadequate back-fill for Residential In-Reach programs impacting on service delivery. • Inadequate resources to manage acute aggression in residents with dementia (noted in Booroondara) resulting in high (second percentile) antipsychotic use • Lack of access to after-hours locum care resulting in unnecessary transfers to hospital	
Provision of quality after-hours primary health care services	• Lack of knowledge by some MDS GPs around some specialised after-hours care, including palliative and end-of-life care. • Underuse of telephone interpreter services. • Inadequate reporting provided by MDS back to local GPs has been identified as an issue by some GPs. • The information provided in the NHSD can often be inaccurate or not up to date • Limited opportunities for GP Services and pharmacies to expand their opening hours unless additional funding made available. After-hours services are often viewed as functional aspects of general practice rather than part of planned care management.	EMML, IEMML and NMML (2012-13), Comprehensive Needs Assessments; Larter Consulting (2015), *ACP Consortium Needs Analysis*. Consultation: GP clinic – Clayton Road Doctors Medical Centre; ERAHMS clinics; Nexus GP SuperClinic Wallan; Warburton Medical Clinic. MDS – ALMS; My Home GP; NHDS. RACF – Needs Assessment interviews.

Outcomes of the service needs analysis — After-hours		
Increased community awareness of after-hours services and options	• Lack of community knowledge of after-hours services, including medical deputising services and after-hours clinics, pharmacies and other primary health care service providers. • Need multifaceted community education to address community perception that: 1. Emergency departments offer the best or most accessible primary care service after-hours (leads to inappropriate/ inefficient emergency department presentations), and 2. Ambulances provide free transport to a free service. • Lack of information in languages other than English.	EMML, IEMML and NMML (2012-13), Comprehensive Needs Assessments. Consultation: CHS – EACH. NGO – Migrant Information Centre. Ambulance service – Ambulance Victoria.
Culturally safe and accessible primary health care services for Aboriginal and/or Torres Strait Islander, and CALD and refugee people	• Shortage of after-hours services that are appropriate for Aboriginal and/or Torres Strait Islander, and CALD and refugee communities. • Low rates of self-identification in the Indigenous community. • A lack of use of interpreter services in the health system • Incomplete understanding by GPs of the effects of trauma and torture, including visiting MDS GPs. • Lack of awareness about, and access to, transportation to after-hours services for some residents.	EMML (2014), *Aboriginal Health Priorities Framework*; EMML, IEMML and NMML (2012-13), Comprehensive Needs Assessments; IEMML (2014), *Reconciliation Action Plan*. Consultation: NGO – Foundation House; Migrant Information Centre. Network – Eastern Region Refugee Health Network; Northern Region Refugee Health Network.
Increased access to mental health services in the after-hours period	• Poor/limited community-based service system for people experiencing mental health problems after-hours. • Poor access to services for youth, including homeless youth, who have an increased rate of mental health problems. • Poor access to services for those experiencing drug and alcohol problems after-hours. Limited after-hours access to the PACER programs. There are limited mental health services for young people in Nillumbik, perceived to be reflected in high ED presentation numbers. There are also high ED presentation and overdose rates in Knox and Yarra Ranges (ambulance-related attendances for drug related issues).	Consultation: CHS – EACH Ringwood and Maroondah.

Outcomes of the health needs analysis — Alcohol and Other Drugs		
Identified need	**Key issue**	**Description of evidence**
Access to services – Indigenous peoples	Up to one quarter Indigenous adults (males>females) are exceeding single occasion and lifetime risk levels for harm from alcohol. • Highest density of Indigenous people in catchment is in Yarra Ranges (especially Healesville) and Whittlesea. • Aboriginal Health services centrally located (transport issues). Absence of services perceived as culturally safe/appropriate local to aboriginal populations. • Access to AOD services for Indigenous peoples may be impacted by geography, e.g. physical distance to health service and transport, the cultural competency of services, affordability and availability of services. • Additional barriers include cultural beliefs and attitudes concerning AOD use, such as shame associated with seeking treatment, concern about getting into trouble with the law and fear of losing children. • Key social and emotional wellbeing issues reported in terms of staff time and organisational resoures were: depression/hopelessness (86%), family relationship issues (78%) and grief and loss issues (73%).	Australian Aboriginal and Torres Strait Islander Health Survey: First Results (ABS, 2012-13). Consultation: CHS – Inspiro, Peer-based organisation – Harm Reduction Victoria AIHW (2014) Consultation: Mullum Mullum Indigenous Gathering Place
	Lack of a dedicated Aboriginal and Torres Strait Islander harm reduction workforce to support AOD strategies in line with National Drug Strategy.	Consultation: Mullum Mullum Indigenous Gathering Place
	AOD issues in teenagers more likely to be unrelated to Mental Health: • Teen drinking, 'pre-loading', parental drinking (modelling behaviours) • Mental health model and service access models for AOD are different – need to separate.	Consultation: PCP – Outer East PCP. Consumer Representative Body – Association of Participating Service Users (APSU). Peak Body – VAADA.

Outcomes of the health needs analysis — Alcohol and Other Drugs		
Reduce abuse of alcohol and other drugs	Regions/pockets of problematic alcohol use in youth • Particularly notable in outer east and north: o Nillumbik: Alcohol use by young people is double the state average o Whittlesea-Wallan: Highest percentages in catchment of underage youth having consumed alcohol in the last 30 days (69.8%) o Outer East (Knox, Maroondah, Yarra Ranges): Highest rates in catchment of alcohol-related episodes of care 15-24 years (65.1-75.4/10,000).	Consultation: Peer-based organisation – Harm Reduction Victoria (Young people ill-informed of risk) cohealth catchment planning document. Alcohol and Other Drugs usage data (Source: Department of Health [2012]) Alcohol-related episodes of care data (Source: Turning Point)
	Areas of problematic alcohol consumption >18 years • Particularly notable in outer east and north: o North (Banyule, Nillumbik-Kinglake) and outer east (Knox, Maroondah, Yarra Ranges): Highest rates in catchment of risky drinking (4.6-5.3/100).	Alcohol consumption at high risk to health >18 yrs data (ASR/100) (Source: Turning Point)
	High prevalence problem use of alcohol and other drugs in Indigenous peoples • Lower alcohol usage rates than in community overall, but higher individual problem usage • Anecdotally potentially higher 'ice' use in Indigenous communities (numerical data not available). • "Disconnect between AOD service providers and local Aboriginal people due to lack of knowledge of both Aboriginal culture and Aboriginal service provision policy. This is further exacerbated by lack of accessible and appropriate rehabilitation and detoxification services for Ice and poly drug use, psychiatric services lacking the capacity to respond to drug-related mental health problems, lack of systematic AOD awareness education in schools and AOD sector workforce and organisational capacity constraints"- Jimi Peters, Mullum Mullum Indigenous Gathering Place.	AIHW (2011). *Substance use among Aboriginal and Torres Strait Islander people* (Report). Consultation: Council – Yarra Ranges Shire Council, CHS – AMES, PCP – Outer East PCP. Consultation: CHS – Mullum Mullum Indigenous Gathering Place. Mullum Mullum Indigenous Gathering Place highlighted the need for more holistic and comprehensive approaches to AOD treatment and support, including dual diagnosis approach.

Outcomes of the health needs analysis — Alcohol and Other Drugs		
Reduce abuse of alcohol and other drugs	Problematic alcohol use in select refugee/asylum seeker communities, in the presence of aculturated reluctance to engage in help seeking behaviours • Chin (Burmese) settled in Knox, Maroondah.	Consultation: DHHS.(92% service users ESB) CHS – AMES. Peer-based organisation – Harm Reduction Victoria.
Reduce preventable hospital admissions/ presentations	Redressable preventable hospital presentations require additional preventative (public health) and case-managed AOD intervention. • High rate of pharmaceutical related ambulance attendances and emergency department presentations in Nillumbik • Above average drug overdose risks Yarra Ranges and Maroondah • Problem-drinking hotspots: o Inner and outer north (Banyule, Nillumbik-Kinglake) and east/outer east (Knox, Maroondah, Yarra Ranges) o Boroondara: subgroup of (often) relatively affluent divorced women living alone.	EACH and cohealth catchment planning documents AOD Stats (2012-13) by Turning Point, 'People at risk of short-term harm from alcohol' data (Vic DoH, 2012) Consultation: Council – City of Boroondara. Consumer Representative Body – Association of Participating Service Users (APSU). (longer term support post withdrawal) Peak Body – VAADA (Case managed intervention).
Reducing avoidable deaths	Redressable avoidable presentations require additional preventative (public health) and case-managed AOD intervention. • Rates of avoidable deaths related to alcohol vary across the catchment from 11.5-17.1/10,000 • notably lower rates in the outer north areas featuring young populations--suggestive of fewer accumulated years of drinking (assumption that majority of alcohol-related deaths related to chronic and not acute use).	Alcohol-related death rate data. Source: AOD Stats (2012-13) by Turning Point

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FOR MORE INFORMATION

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