



An Australian Government Initiative

Needs Assessment

Eastern Melbourne PHN

November 2016

We would like to acknowledge the contribution of our stakeholders who provided valuable insights and data regarding the needs of their communities.

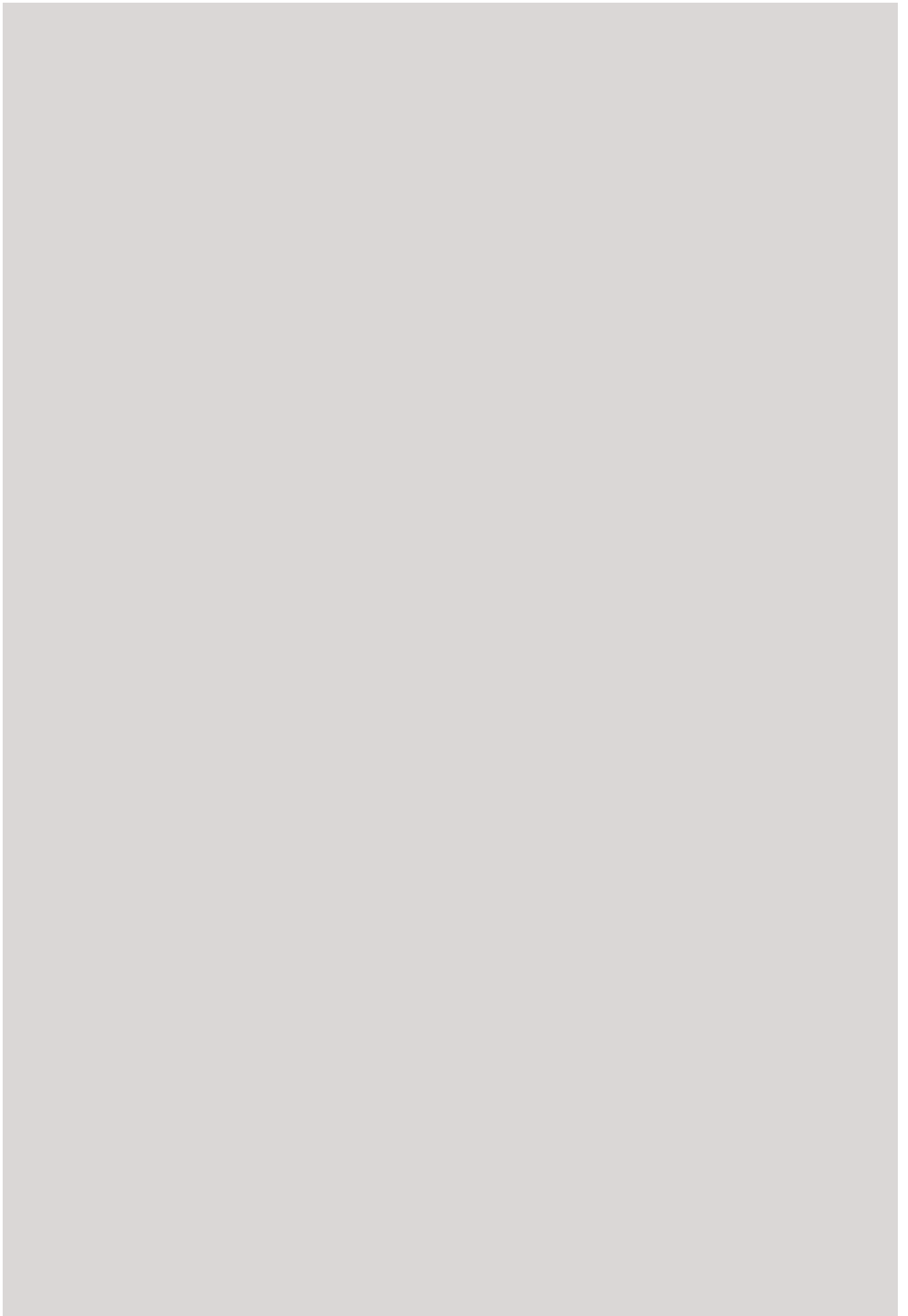
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List Of Abbreviations

| | |
|---|---|
| ABS – Australian Bureau of Statistics | HCFMD – Family Household Composition (Dwelling) |
| ACSC – Ambulatory Care Sensitive Condition | HRVic – Harm Reduction Victoria |
| ACP – Advance Care Planning | IEMML – Inner East Melbourne Medicare Local |
| ADIS – Alcohol and Drug Information Service | ISRAD – Index of Relative Socio-economic Advantage and Disadvantage |
| AIHW – Australian Institute of Health and Welfare | LGA – Local Government Area |
| AIR – Australian Immunisation Register | LGBTIQ – Lesbian, Gay, Bisexual, Transgender, Intersex and Queer |
| ALMS – Australian Locum Medical Service | LHN – Local Hospital Network |
| AMES – Adult Migrant Education Service | MBS – Medicare Benefits Schedule |
| AOD – Alcohol and Other Drugs | MDS – Medical Deputising Service |
| APSU – Association of Participating Service Users | MHCSS – Mental Health Community Support Services |
| ASGS – Australian Statistical Geography Standard | MHWP – Municipal Health and Wellbeing Plan |
| ASR/100 – Age-Standardised Rate per 100 population | ML – Medicare Local |
| ATAPS – Access to Allied Psychological Services | MRC – Migrant Resource Centre |
| ATS – Australian Triage Scale | NGO – Non-Government Organisation |
| BHNEM – Better Health North East Melbourne | NHDS – National Home Doctor Service |
| CALD – Culturally and Linguistically Diverse | NHPA – National Health Performance Authority |
| CH – Community Health | NHSD – National Health Service Directory |
| CHS – Community Health Service | NMML – Northern Melbourne Medicare Local |
| CIV – Community Indicators Victoria | PACER – Police and Clinician Emergency Response |
| CMHN – Community Mental Health Nurse | PCP – Primary Care Partnership |
| CNA – Comprehensive Needs Assessment | PHIDU – Public Health Information Development Unit |
| CRM – Customer Relationship Management System | PPH – Potentially Preventable Hospitalisation |
| CSA – Crime Statistics Agency (Victoria) | PTSD – Post-Traumatic Stress Disorder |
| DoH – Department of Health (Commonwealth) | RACF – Residential Aged Care Facility |
| DHHS – Department of Health and Human Services (Victoria) | RDNS – Royal District Nursing Service |
| Dept. Imm. &BC – Department of Immigration and Border Control | SA2 – Statistical Area Level 2 |
| EACH – Eastern Access Community Health | SA3 – Statistical Area Level 3 |
| ED – Emergency Department | SEIFA – Socio-Economic Indexes for Areas |
| EMPHCC – Eastern Melbourne Primary Health Care Collaborative | STI – Sexually Transmissible Infection |
| EMML – Eastern Melbourne Medicare Local | SVN – Shared Vision for the North |
| EMPHN – Eastern Melbourne PHN | VAADA – Victorian Alcohol and Drug Association |
| EMR – Eastern Metropolitan Region | VAED – Victorian Admitted Episode Dataset |
| ERAHMS – Eastern Ranges After Hours Medical Service | VCGLR – Victorian Commission for Gambling and Liquor Regulation |
| HARP – Hospital Admission Risk Program | VEMD – Victorian Emergency Minimum Dataset |



Section 1: Narrative

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.

About The Catchment

The EMPHN catchment (Figure 1) comprises 12 Local Government Areas (LGAs) – nine fully and three partially covered.

LGAs entirely within the EMPHN border include:

- Banyule;
- Boroondara;
- Knox;
- Manningham;
- Maroondah;
- Monash;
- Nillumbik;
- Whitehorse; and
- Whittlesea.

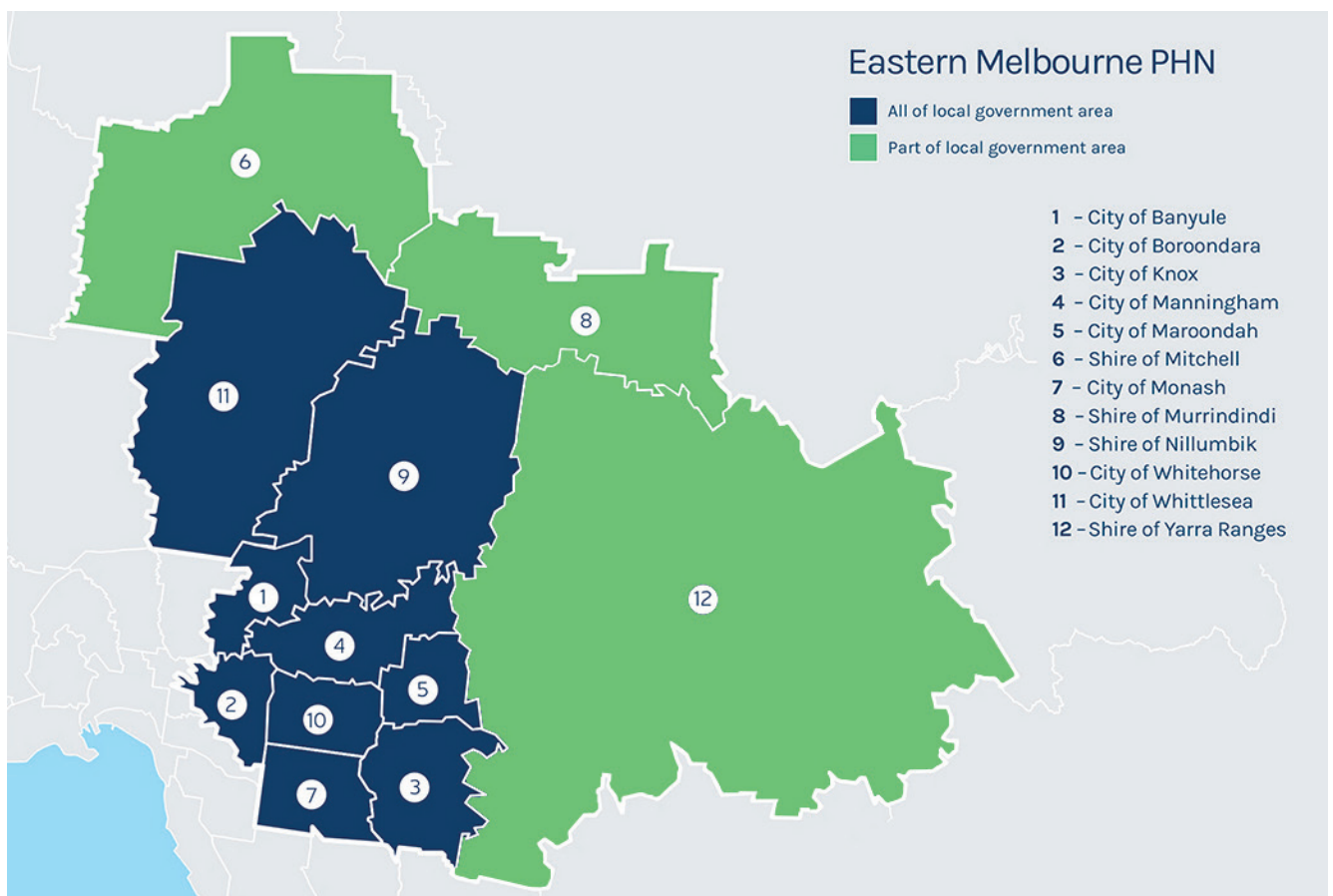


Figure 1: EMPHN Catchment Boundary

The catchment also covers part of Mitchell and Murrindindi, amounting to 35% and 27% of their respective populations. Additionally, the catchment includes part of Yarra Ranges,

although it should be noted that the portion which falls outside the EMPHN catchment is uninhabited National Park.

Demographics

The total population of the EMPHN catchment was estimated at 1.4 million people in 2016, up from 1.32 million people in 2011. Figure 2. shows the population distribution across the catchment, as well as the projected population increase.

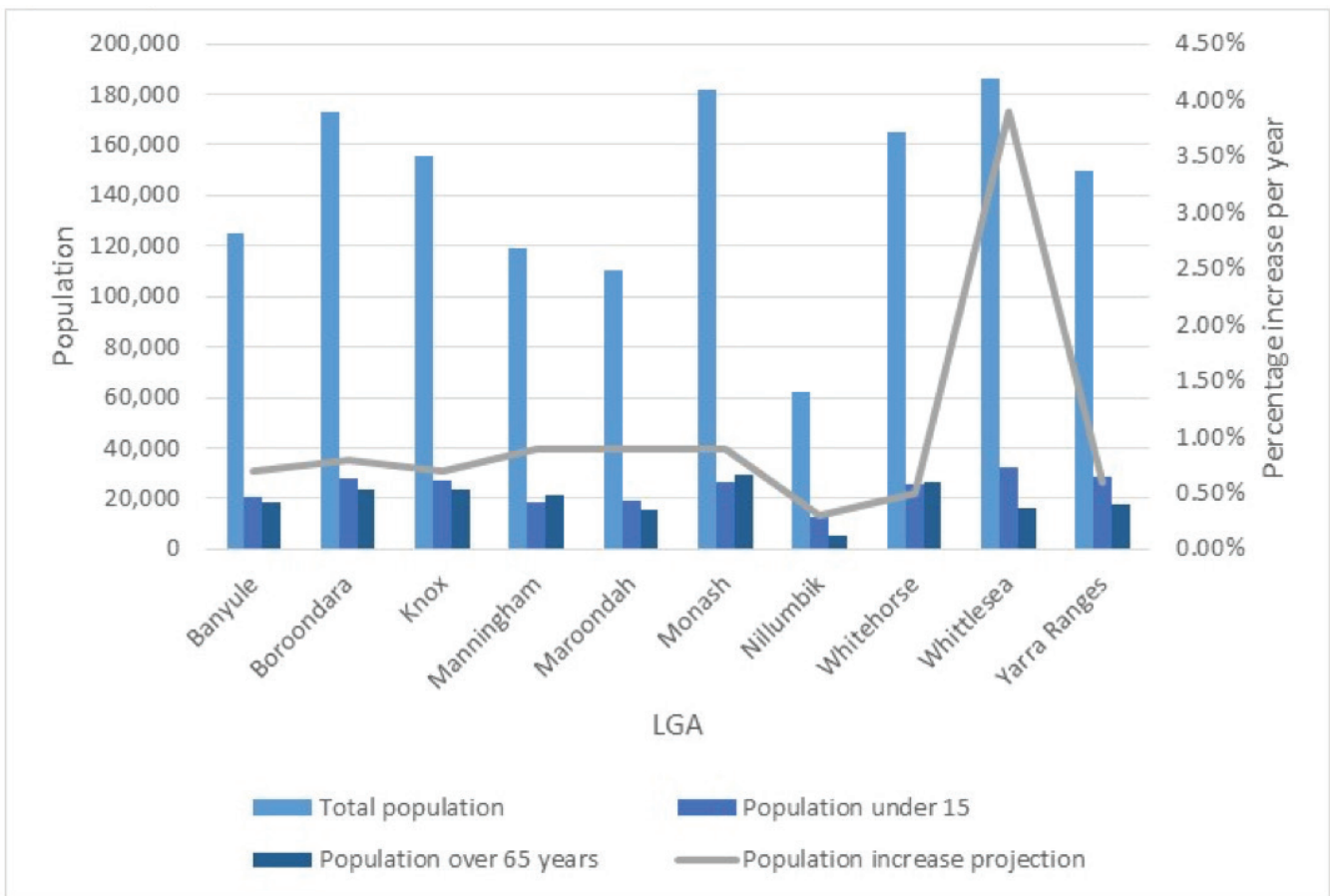


Figure 2: Population Of EMPHN Catchment

Some key features of the Eastern Melbourne PHN population include:

- Over 5,000 Aboriginal and/or Torres Strait Islander people live in the catchment, particularly in Knox, Banyule, Whittlesea, and Yarra Ranges;
- A higher than average number of people born overseas live in Monash, Manningham and Whittlesea;
- Immigrants and people arriving on humanitarian visas mostly live in Maroondah and Whittlesea; and
- Whittlesea has both a high growth rate and a relatively young population. The population in Yarra Ranges is also relatively young.

Socioeconomic Disadvantage

Figure 3: Depicts the areas of disadvantage/advantage (IRSAD) as they exist in the catchment.

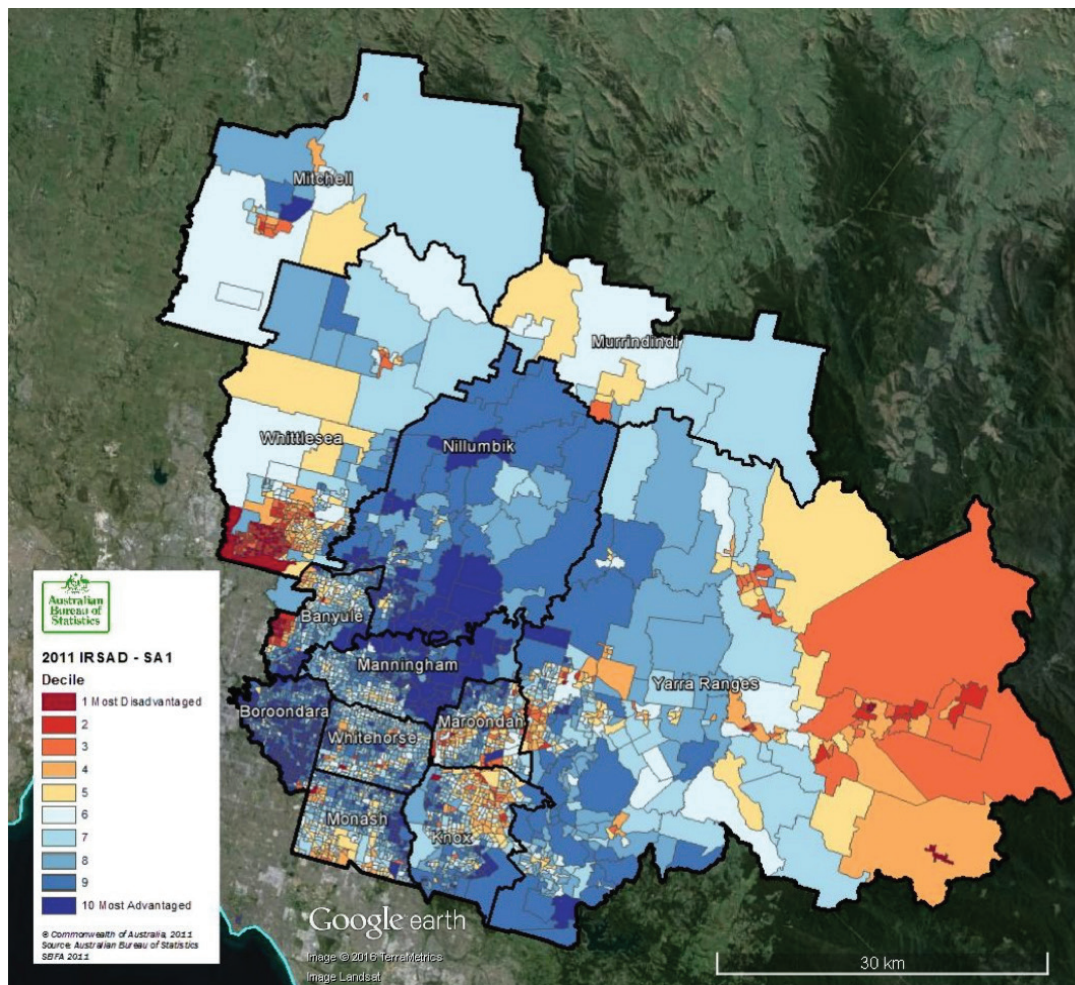


Figure 3: IRSAD Profile By SA2

Areas with higher proportions of low socioeconomic status (SES) are identified by the spectrum of red to orange (red being most disadvantaged) and those of higher SES by the light to dark blue (dark blue being most advantaged). A band of advantaged areas spans from Boroondara up through Manningham, Banyule and Nillumbik.

LGAs of lower SES included:

- Knox;
- Maroondah;
- Monash;
- Whittlesea; and
- Yarra Ranges.

Socioeconomic disadvantage is generally associated with poorer health outcomes. Our data highlighted that:

- Life expectancy was lowest in Knox for both males and females, and highest for males in Boroondara and Nillumbik and for females in Boroondara and Monash.

- Avoidable mortality was highest in Whittlesea for both males and females, and lowest for males in Boroondara and for females in Manningham.
- Diabetes prevalence was highest in Whittlesea-Wallan, and, while lowest in Maroondah and Yarra Ranges, these LGAs do score highest on the general health risk factors that are associated with diabetes, suggesting interpretation of the lower rates of diabetes in these lower SES areas warrants further interrogation.
- Cardiovascular disease prevalence was highest in Whittlesea-Wallan and lowest in Boroondara.
- COPD prevalence was highest in Banyule, Yarra Ranges, Whittlesea-Wallan and Nillumbik-Kinglake, and lowest in Boroondara, Manningham and Monash.
- The prevalence of anxiety and depression was highest in Whitehorse and lowest in Nillumbik.

Needs Assessment Process And Issues

Purpose Of This Report

This mapping and assessment process aims to scope and detail the catchment's current and future health care needs and service delivery gaps. An initial assessment of some of these needs and services was documented in a report submitted to the Australian Government Department of Health in March 2016.

This report constitutes the updated findings from a reassessment of the data and further consultations made in the seven-month period to November 2016. Available primary and secondary data were accessed from ABS, AIHW, Victorian Department of Health and Human Services, and local general practice data via the MBS.

Process

Framework

The conceptual framework used by the Australian Institute of Health and Welfare (AIHW) was adopted. 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. A social gradient lens was used to identify 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.

Data Review

The November 2016 Needs Assessment relies on the consultations and quantitative findings of the previous assessment (March 2016), expanded and amended where additional and/or updated data were available. This document aims to address deficits in qualitative and quantitative data by broadening the Mental Health and Alcohol and

Other Drug needs assessments, undertaking further provider consultation within the catchment to further test or validate quantitative findings and incorporating further community consultation.

Data sources are listed in the Descriptions of Evidence in Sections Two and Three. In addition to statistical sources, existing documents from the region were sourced for the original Needs Assessment and revisited for the refreshed Needs Assessment where updated information was available.

These data sources included:

- Current council Municipal Health and Wellbeing Plans (MHWP);
- Catchment planning date-based documents of two community health services and one woman's health organisation; and
- Extant Medicare Local Comprehensive Needs Assessments.

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.

As EMPHN is in the process of rolling out a data extraction and GP clinical auditing tool, localised GP data were not available. However, MBS item use, particularly for mental health and chronic disease management, was reviewed and incorporated into Section Two and Three findings where relevant.

We used geospatial mapping to identify areas lacking services and to compare service levels with SEIFA information.

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/>

Provider And Stakeholder Consultation

Extensive qualitative information had been obtained previously from face-to-face interview consultations with stakeholders (providers and relevant local government representatives) from across the catchment.

Findings were drawn from:

- Consultation with a wider range of primary care providers: eight councils, eleven community health services, five primary care partnerships, two women's health organisations and refugee settlement services.
- Recent mapping of refugee health service referral pathways undertaken on behalf of the Outer North Refugee Health and Wellbeing Network.
- Information from the AOD stakeholder consultation conducted in March 2016 and coordinated by the Victorian PHN Alliance. Organisations consulted at that time were DHHS, Association of Participating Service Users (APSU), Harm Reduction Victoria (HRVic), and the Victorian Alcohol and Drug Association (VAADA).

EMPHN continues to consult with LHNs, State Government, community health, PCPs, councils and general practice through its collaborative structures, which align with the large public health services in the catchment.

Survey

In October 2016, a 30-question general practice-focused survey was mailed to 394 general practices and links to an electronic form extensively advertised via newsletter and on our website. A similar survey of allied health providers, directed at pharmacists, community nurses and other community-based clinicians was also emailed and survey links advertised.

We received 124 responses to the general practice and 106 responses to the allied health surveys. The return rate for general practice surveys was 14% of all practices in the region and for allied health was indeterminate.

Community And Consumer Consultation

Consultations have added local knowledge and understanding about underlying contributory factors, specific geographic locales and pockets of need, and how these are being addressed.

- findings from councils' consultations with communities as they develop their strategies and Municipal Public Health and Wellbeing Plans;
- findings from the National Health Priority Areas (NHPA) Initiative; and
- information from existing consultations, particularly those undertaken within the Aboriginal community through the Koolin Balit Strategy.

It was decided that further consultation with the community would be most constructive if it were based on the priorities identified from existing data. Therefore, we will be exploring opportunities for community consultation through the Collaborative structures.

Mental Health And AOD Needs Assessment

A single provider, in partnership with other Mental Health Community Support Services (MHCSS) providers and stakeholders, is undertaking the catchment-based planning function of the MHCSS. The updated mental health and AOD needs assessments draw on an expanded range of indicators and the most recent catchment-based plans undertaken in the region by EACH and cohealth. We have established links with mental health and AOD Catchment Planners, but no further consultation data are yet available.

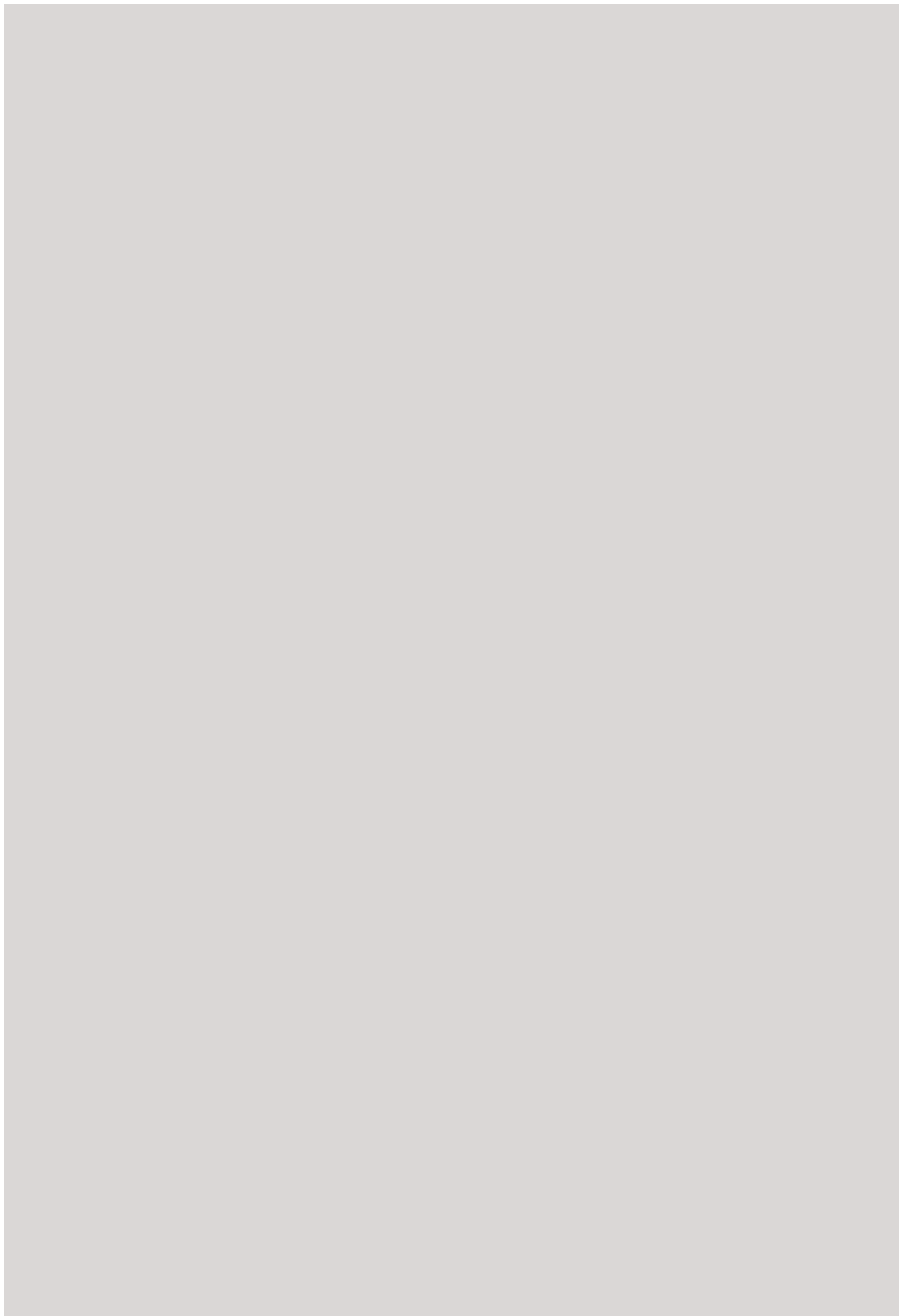
Much of the AOD-related data were drawn from the Turning Point AOD statistics obtained from the Victorian data maps (StatPlanet) which largely reflect 2012–13 and 2013–14 data by LGA. Data for Murrindindi and Mitchell Shires were generally excluded from comparative discussion with other LGAs, as the rate-based data for their relatively small populations were potentially misleading. In addition, State funded community AOD service data were made available via POLAR Population Health and findings were included within the Needs Assessment.

Approval to publish the AOD section of the Needs Assessment is pending and will be updated on the website once approved.

Additional Data Needs And Gaps

There continue to be issues limiting access to the necessary data:

- Data about the health of Aboriginal and/or Torres Strait Islander people are not published, particularly where populations are small and can reach identifiable thresholds We are therefore unable to provide detail on the experience of health for this population group at the localised level other than through qualitative and limited quantitative information.
- There are inconsistencies in the level of aggregation of data from different sources. PHN boundaries were derived from the Australian Statistical Geography Standard (ASGS), where there is an exact match between the SA3 level and the PHN boundary. The corresponding LGA areas do not align with the EMPHN boundaries, particularly 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 possible, we have used SA2- and SA3-level population data. The NHPA had begun to offer SA3 as the standard geographical unit for new reports, however LGA-level data are difficult to disaggregate to ASGS.
- AIHW data are available primarily at national and state level, with little accessible at the SA3/SA2 level.
- Qualitative data are considered to be supportive, not representative of the full experience of any sector.



Section 2 – Outcomes Of The Health Needs Analysis

Section Two – Outcomes Of The Health Needs Analysis

Outcomes Of The Health Needs Analysis – General

**Please note that rates for Mitchell and Murrindindi should be treated with caution due to low crude numbers and a relatively smaller population, of which the EMPHN catchment includes just 34.7% and 27.4% respectively.*

| Outcomes Of The Health Needs Analysis - General | | |
|--|---|---|
| Identified Need | Key Issue | Description Of Evidence |
| Potentially preventable hospitalisations (PPH) – General | <p>Hospital</p> <p>Across the catchment, the top five ACSC were:</p> <ul style="list-style-type: none"> • Diabetes complications (18,290 presentations; 123,261 bed days); • Hypertension (13,112 presentations; 109,518 bed days); • Pyelonephritis (8,203 presentations; 81,299 bed days); • Dehydration and gastroenteritis (6,350 presentations; 46,455 bed days); and • Congestive heart failure (5,845 presentations; 60,943 bed days). <p>General practice</p> <p>The most commonly presenting infections to general practice were:</p> <ul style="list-style-type: none"> • Kidney and urinary tract infections (66% of respondents); • Gastroenteritis/dehydration (47% of respondents); • Cellulitis (42%); and • Ear, nose and throat infections—nominated by 77% of respondents as being amongst the most common presenting infections/infectious conditions in the preceding month. | <p>VAED (2014-15). Catchment wide, all LGAs. Time series analysis for all ACSC including gender disaggregation can be found in the Addendum 1 - ACSC Analysis. The colour coding indicates a value below the Victorian state average (green), up to 25% above (yellow), between 25% and 50% above (orange) and over 50% above the state average (red). Consultation:</p> <ul style="list-style-type: none"> • EMPHN General Practice Survey (October 2016). |
| Potentially preventable | Suboptimal management of asthma and COPD among RACF residents in the Yarra Ranges was reported. | EMML (2015), <i>Supporting GPs and RACFs to reduce ED admissions</i> |

| Outcomes Of The Health Needs Analysis - General | | |
|---|--|---|
| Identified Need | Key Issue | Description Of Evidence |
| hospitalisations (PPH) – Respiratory | | <p>amongst RACF residents with asthma and/or COPD project.</p> <p>Consultation:</p> <ul style="list-style-type: none"> EMPHN RACF interviews. |
| Potentially preventable hospitalisations (PPH) – Cardiovascular | A higher proportion of age standardised admissions for heart failure was seen among RACF residents in Whittlesea-Wallan. | Australian Commission on Safety and Quality In Healthcare (2015), <i>Australian Atlas of Healthcare Variation</i> . |
| Potentially preventable emergency department presentations (Category 4 and 5) – General | <p>Hospital</p> <p>Across the catchment the top five Category 4 and 5 diagnoses were:</p> <ul style="list-style-type: none"> Abdominal / Flank pain /cramps / Intestinal colic (6,481 presentations; 413 per 100,000); Fracture of wrist / Fracture of hand (includes finger) (4,665 presentations; 297 per 100,000); Viral infection (4,183 presentations; 266 per 100,000); Open wound of wrist and hand (includes finger) / Bite (non-venomous) of wrist and hand (3,997 presentations; 254 per 100,000); and Sprain/strain of ankle (2,929 presentations; 186 per 100,000). <p>The most common diagnosis given at time of presentation was <i>No Diagnosis given</i> with 11,469 cases (730 per 100,000).</p> <p>General practice</p> <p>The following conditions were nominated as being seen commonly in general practice and</p> | <p>VEMD (2014-15). Catchment wide, all LGAs.</p> <p>Consultation:</p> <ul style="list-style-type: none"> EMPHN General Practice Survey (October 2016). |

| Outcomes Of The Health Needs Analysis - General | | |
|---|---|---|
| Identified Need | Key Issue | Description Of Evidence |
| Potentially preventable emergency department presentations (Category 4 and 5) – General | would reasonably also be expected to present to the ED: <ul style="list-style-type: none"> • Acute asthma and exacerbations of COPD • Vaccine-preventable influenza and vaccine-preventable pneumonia (the predominant respiratory conditions seen in general practice in the preceding month [spring]). • Upper respiratory tract infection (URTI). | |
| Potentially preventable hospital presentations (Category 4 and 5) – Hot spot analysis | A comprehensive analysis of all Category 4 and 5 for three financial years (2012-13, 2013-14, and 2014-15) has been undertaken to identify those conditions that are above the Victorian state average. | <p>VEMD (2014-15). Catchment wide, all LGAs. Time series analysis for the top 20 Category 4 and 5 presentations can be found in Addendum 2 - Emergency Department Category 4 and 5 Analysis.</p> <p>The colour coding indicates a value below the Victorian state average (green), up to 25% above (yellow), between 25% and 50% above (orange) and over 50% above the state average (red).</p> |
| Childhood immunisation rates – Coverage | <p>Catchment-wide childhood immunisation coverage rates are broadly on par with national rates. SA3 data from 2015 indicated that immunisation coverage rates for children at age one were 91.6% (national 91.3%), age two were 90.0% (national 89.2%) and age five were 92.4% (national 92.2%).</p> <p>Available LGA-based data are slightly more recent (June 2016):</p> | AIR (2016), LGA immunisation coverage data; MyHealthy Communities (2014-15). |

| Outcomes Of The Health Needs Analysis - General | | |
|---|---|---|
| Identified Need | Key Issue | Description Of Evidence |
| Childhood immunisation rates – Coverage | <p>LGAs with the current lowest coverage rates for one year olds are Boroondara (90.2%), Manningham (91.5%), and Monash (92.3%).</p> <p>The only LGAs meeting the aspirational childhood immunisation rate of 95% in the five-year age group were the outer metropolitan/semi-rural areas of Nillumbik (95.6%) and Mitchell* (95.6%) where crude numbers were somewhat lower than other LGAs in the catchment. Manningham had the lowest proportion of children fully immunised at five years of age (90%).</p> | |
| Childhood immunisation rates – Conscientious objection | <p>Pockets of conscientious objection on ideological grounds were reported in Nillumbik and Yarra Ranges, although it is worth noting that Yarra Ranges had a coverage rate for one year olds of 96.4%, which along with Murrindindi (96.7%) was the highest for that age group in the catchment. Other LGAs meeting the 95% target for one year olds were Maroondah (95.0%) and Whittlesea (95.0%).</p> | <p>AIR (2016), LGA immunisation coverage data.</p> <p>Consultation:</p> <ul style="list-style-type: none"> • Council – Yarra Ranges Shire Council; and • CHS – healthAbility. |
| Childhood immunisation rates – Survey response | <p>Over three-quarters of survey respondents (to this item) from general practice indicated community education as their preferred means of increasing childhood immunisation rates. Other favoured strategies included client reminder/recall systems, vaccination programs in schools and immunisation programs for women, infants and children in non-medical settings.</p> | <p>Consultation:</p> <ul style="list-style-type: none"> • EMPHN General Practice Survey (October 2016). |
| Childhood immunisation rates – Aboriginal and/or Torres Strait Islander community | <p>For Aboriginal and/or Torres Strait Islander children, age one immunisation coverage was close to national at 87.2%, versus the national rate of 87.7% (both well below the ideal of a 95% minimum rate).</p> <p>Aboriginal and/or Torres Strait Islander people consulted in both the Inner and Outer Koolin Balit reports stated that there was a lack of immunisation awareness amongst mothers,</p> | <p>Inner East: Department of Health EMR Koolin Balit and Aboriginal Health Community Consultation Workshop (September 2013); MyHealthy Communities (2014-15); Outer East: Department of Health EMR Koolin</p> |

| Outcomes Of The Health Needs Analysis - General | | |
|---|--|--|
| Identified Need | Key Issue | Description Of Evidence |
| members | especially first time mothers. It was also stated that there was little knowledge of the types of support available (e.g. maternal and child health services) and how to access them. | Balit and Aboriginal Health Community Consultation Workshop (September 2013). |
| Cancer screening rates | <p>Survey respondents from the allied health sector highlighted that the following population groups either avoid, or have particular difficulty in accessing or understanding the reason for cancer screening:</p> <ul style="list-style-type: none"> • Aboriginal and/or Torres Strait Islander peoples; • Culturally and linguistically diverse people, refugees and asylum seekers due to cultural and language barriers; • The aged, especially those who are homebound or have dementia; • Low socioeconomic groups due to cost and transport barriers; • People residing in areas with lack of transport and/or poor access to health services; • Women who have experienced sexual abuse; and • Men, due to attitudes towards help seeking. | <p>Consultation:</p> <ul style="list-style-type: none"> • EMPHN Allied Health Survey (October 2016). |
| Bowel cancer screening rates | <p>One-third of SA3s had below state average proportions (33.5%) of people who participated in bowel cancer screening [inner eastern region: Monash (31.6%), northern region: Whittlesea-Wallan (29.6%) and outer eastern region: Knox (31.7%) and Yarra Ranges (33.1%)].</p> <p>One-third of SA3s had on-par or below state average proportions (state average is 31.2%) of males who participated in bowel cancer screening [northern region: Whittlesea-Wallan (27.8%) and outer eastern region: Knox (30.8%), Maroondah (31%) and Yarra Ranges (31.2%)].</p> <p>One-third of SA3s had below state average proportions (state average is 35.8%) of females who participated in bowel cancer screening [inner eastern region: Monash (33.1%),</p> | <p>PHIDU (2011-13).</p> <p>Consultation:</p> <ul style="list-style-type: none"> • EMPHN General Practice Survey (October 2016). |

| Outcomes Of The Health Needs Analysis - General | | |
|---|---|---|
| Identified Need | Key Issue | Description Of Evidence |
| Bowel cancer screening rates | <p>northern region: Whittlesea-Wallan (31.3%) and outer eastern region: Knox (32.6%) and Yarra Ranges (35%]).</p> <p>Over two-thirds of survey respondents (to this item) from general practice believed that the main contributing factor to low bowel cancer screening rates in the catchment was poor understanding on the part of consumers of the value/benefit of screening. Other commonly reported issues were people feeling embarrassed and not understanding the value/benefit in doing the test.</p> | |
| Cervical cancer screening rates | <p>Monash (59.6%) and Whittlesea-Wallan (56.9%) had below state average proportions (60%) of people who participated in cervical cancer screening.</p> <p>Lower rates of cervical cancer screening were reported among refugee women, particularly in Whittlesea.</p> <p>More than three-quarters of survey respondents (to this item) from general practice thought that embarrassment was the main contributing factor to low cervical screening in the catchment. Other commonly reported barriers included fear of pain, cultural concerns in accessing screening and the value/benefit of screening being poorly understood.</p> | <p>PHIDU (2011-13).</p> <p>Consultation:</p> <ul style="list-style-type: none"> • CHS – AMES Australia; • PCP – North East PCP; • NGO – Whittlesea Community Connections; and • EMPHN General Practice Survey (October 2016). |
| Breast cancer screening rates | <p>One-third of SA3s had below state average proportions (55.9%) of breast cancer screening participation [inner eastern region: Manningham (55.6%) and Whitehorse (55.6%), and northern region: Banyule (55%) and Whittlesea-Wallan (51%)].</p> <p>Lower breast cancer screening rates were reported among Aboriginal and/or Torres Strait Islander and refugee women, particularly in Whittlesea.</p> <p>Approximately half the survey respondents (to this item) from general practice believed that</p> | <p>PHIDU (2011-13).</p> <p>Consultation:</p> <ul style="list-style-type: none"> • CHS – AMES Australia; • PCP – North East PCP; • NGO – Whittlesea Community Connections; and • EMPHN General Practice Survey |

| Outcomes Of The Health Needs Analysis - General | | |
|---|--|--|
| Identified Need | Key Issue | Description Of Evidence |
| Breast cancer screening rates | the main contributing factors to low breast cancer screening rates in the catchment were people not understanding the value/benefit of screening and/or fear of pain. Other commonly reported issues included people's cultural concerns in accessing screening, embarrassment and lack of familiarity with the medical/health care system and what is available. | (October 2016). |
| Health status – Food insecurity | One-third of LGAs had above state average proportions (4.6%) of people who experienced food insecurity over a 12-month period (northern region: Whittlesea-Wallan [6.3%], and outer eastern region: Knox [6.3%], Maroondah [6.5%] and Yarra Ranges [8.7%]). In Knox and Maroondah, food insecurity was reportedly of greater concern among Aboriginal and/or Torres Strait Islander peoples. Food affordability was also reported as an issue in Boroondara and other inner east areas, particularly for tertiary students. | CIV (2011). Consultation: <ul style="list-style-type: none"> • Council – City of Boroondara; City of Whittlesea; Yarra Ranges Shire Council; • CHS – Mullum Mullum Indigenous Gathering Place; and • PCP – Inner East PCP. |
| Health status – Overweight (>25 BMI) persons | <p>Half the LGAs had above state average proportions (32.5%) of people who are overweight (northern region: Mitchell* [36.2%], Murrindindi* [44%], Nillumbik [34.7%] and Whittlesea [35.1%], and outer eastern region: Knox [34.3%] and Yarra Ranges [39%]).</p> <p>Almost 60% of LGAs had above state average proportions (40.6%) of males who are overweight (inner eastern region: Whitehorse [42.5%], northern region: Murrindindi* [50.3%], Nillumbik [42%] and Whittlesea [45.3%], and outer eastern region: Knox [42.6%], Maroondah [42.6%] and Yarra Ranges [47.7%]).</p> <p>Almost 60% of LGAs had above state average proportions (24.6%) of females who are overweight (inner east region: Manningham [27.2%], northern region: Mitchell* [34.9%], Murrindindi* [37.5%], Nillumbik [29.3%] and Whittlesea [25.1%] and outer eastern region:</p> | Vic. DHHS (2013), LGA Profiles. |

| Outcomes Of The Health Needs Analysis - General | | |
|---|---|---------------------------------|
| Identified Need | Key Issue | Description Of Evidence |
| | Knox [26%] and Yarra Ranges [31%]. | |
| Health status – Obese persons | <p>Half the catchment’s LGAs had equal to or above state average proportions (17.3%) of people who are obese (northern region: Banyule [17.3%], Mitchell* [28.7%], Murrindindi* [19.6%] and Whittlesea [20.3%], and outer eastern region: Knox [21.2%] and Yarra Ranges [18.9%].</p> <p>Over 40% of LGAs had above state average proportions (17.4%) of males who are obese (northern region: Mitchell* [32.6%], Murrindindi* [21.4%] and Whittlesea [18.7%], and outer eastern region: Knox [22.9%] and Yarra Ranges [19.7%].</p> <p>Half the LGAs had above state average proportions (17.2%) of females who are obese (northern region: Banyule [21.5%], Mitchell* [25%], Murrindindi* [18%] and Whittlesea [22.4%] and outer eastern region: Knox [19.7%] and Yarra Ranges [17.7%].</p> | Vic. DHHS (2013), LGA Profiles. |
| Health related behaviour – Physical activity | <p>Half the LGAs had above state average proportions of people who do not meet the physical activity guidelines (inner eastern region: Monash [33.7%] and Whitehorse [34.5%], northern region: Banyule [35.7%], Murrindindi* [34.1%] and Whittlesea [40.4%], and outer eastern region: Yarra Ranges [34.1%]).</p> <p>Splitting by gender, 50% of LGAs had above state average proportions of males who do not meet the physical activity guidelines (inner eastern region: Monash [32.1%], and Whitehorse [35.7%], northern region: Banyule [40.9%], Murrindindi* [32.2%] and Whittlesea [38%], and outer eastern region: Maroondah [31%].</p> <p>Almost 60% of LGAs had above state-average proportions of females who do not meet the physical activity guidelines (inner eastern region: Manningham [41%] and Monash [35%], northern region: Mitchell* [35.2%], Murrindindi* [37%], Nillumbik [34.6%] and Whittlesea</p> | Vic. DHHS (2013), LGA Profiles. |

| Outcomes Of The Health Needs Analysis - General | | |
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| Identified Need | Key Issue | Description Of Evidence |
| Health related behaviour – Physical activity | <p>[42.3%], and outer eastern region: Yarra Ranges [39.8%]).</p> <p>Half the LGAs had above state average proportions (32.6%) of people who sit for at least seven hours daily (northern region: Banyule [34.6%], inner eastern region: Boroondara [45.9%], Monash [33.1%] and Whitehorse [41.5%], and outer eastern region: Knox [39.9%] and Maroondah [33.8%]).</p> | |
| Health related behaviour – Healthy eating | <p>One-third of LGAs had above state average proportions (51.1%) of people who do not meet the dietary guidelines for fruit and vegetable consumption (northern region: Mitchell* [53.2%], and outer eastern region: Knox [54.3%], Maroondah [53.9%] and Yarra Ranges [55.3%]).</p> <p>One-third of LGAs had above state average proportions (56.9%) of males not meeting the fruit and vegetable consumption guidelines (northern region: Banyule [57.2%], and outer eastern region: Knox [59.3%], Maroondah [64.4%] and Yarra Ranges [63.9%]).</p> <p>Over 40% of LGAs had above state average proportions (45.5%) of females who do not meet the fruit and vegetable consumption guidelines (inner eastern region: Manningham [51.8%] and Monash [45.9%], northern region: Mitchell* [53.9%], and outer eastern region: Knox [49%] and Yarra Ranges [46.4%]).</p> <p>One-quarter of LGAs had above state average proportions (15.9%) of people who consume soft drink every day (northern region: Mitchell* [21.9%], and outer eastern region: Knox [19.7%] and Yarra Ranges [24.3%]).</p> <p>There was reportedly poor access to healthy food options in Nillumbik.</p> | <p>Vic. DHHS (2013), LGA Profiles.</p> <p>Consultation:</p> <ul style="list-style-type: none"> • Council – Nillumbik Shire Council; and • PCP – Lower Hume PCP. |
| Health related | Half the LGAs had above state average proportions (15.7%) of people aged 18 years and | Vic. DHHS (2013), LGA Profiles. |

| Outcomes Of The Health Needs Analysis - General | | |
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| Identified Need | Key Issue | Description Of Evidence |
| behaviour – Smoking | <p>over who are current smokers (northern region – Banyule [16.9%], Mitchell* [18.9%], Murrindindi* [20%] and Whittlesea (21.9%) and outer eastern region – Knox [17.6%] and Yarra Ranges (19.5%)).</p> <p>Over 40% of LGAs had above state average proportions (18.5%) of males aged 18 years and over who are current smokers (northern region: Banyule [24.7%], Murrindindi* [24.2%] and Whittlesea [23.7%], and outer eastern region: Knox [22%] and Yarra Ranges [25.2%]).</p> <p>One-third of LGAs had above state average proportions (12.9%) of females aged 18 years and over who are current smokers (northern region: Mitchell* [23.3%], Murrindindi* [15.1%] and Whittlesea [20.2%], and outer eastern region: Maroondah [14%] and Yarra Ranges [13.3%]).</p> | |
| Presence of ill health or disease – General | <p>Survey respondents from general practice indicated that chronic disease management and/or chronic mental illness take up the majority of their time.</p> <p>Allied health survey respondents reported a range of barriers that people with a chronic disease experience in accessing a regular GP, including both structural and personal:</p> <ul style="list-style-type: none"> • Lengthy waiting times to see a regular GP; • Consultation time constraints favour symptomatic treatment (problem redress) over more holistic approaches and detailed education on self-management—impacting client care. • Inadequate client knowledge of their condition and poor understanding of the need for ongoing chronic disease management; • If the client has complex and/or multiple needs, chronic disease management may not be a personal priority; • The client may be homebound or have difficulty accessing transport. | <p>Inner East: Department of Health EMR Koolin Balit and Aboriginal Health Community Consultation Workshop (September 2013).</p> <p>Consultation:</p> <ul style="list-style-type: none"> • Council – Nillumbik Shire Council; • CHS – Inspiro CHS; • PCP – Lower Hume PCP; Outer East PCP; • EMPHN General Practice Survey (October 2016); and • EMPHN Allied Health Survey (October 2016). |

| Outcomes Of The Health Needs Analysis - General | | |
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| Identified Need | Key Issue | Description Of Evidence |
| Presence of ill health or disease – General | <p>Survey respondents from the allied health sector also highlighted the risk of chronic diseases such as type 2 diabetes, stroke and heart disease among middle aged people as a key existing or emerging issue in the community.</p> <p>Across the catchment, iron deficiency anaemia was noted as a common chronic issue presentation by 38% of general practice respondents.</p> <p>There was a reported increase in incidence of respiratory diseases and cancers following the bushfires in Nillumbik.</p> <p>Higher rates of long term health conditions were reported among Aboriginal and/or Torres Strait Islander people in the outer east and Lower Hume.</p> <p>Aboriginal and/or Torres Strait Islander people consulted in the Inner East Koolin Balit report stated reasons for the ‘very high’ presentation for end-stage renal disease included:</p> <ul style="list-style-type: none"> • More Aboriginal and/or Torres Strait Islander people accessing diabetes services; and • Aboriginal and/or Torres Strait Islander people becoming more aware of diabetes services and programs through health promotion programs delivered in the region over the last six years. <p>Health monitoring for Aboriginal and/or Torres Strait Islander people has greatly improved over the past five years.</p> | |
| Presence of ill health or disease – Diabetes | <p>Monash (4.7, ASR/100) and Whittlesea-Wallan (5.8, ASR/100) were on par with or above the state average Age Standardised Rate (ASR) (4.7, ASR/100) of type 2 diabetes. Diabetes reportedly accounted for a significant proportion of hospital admissions in Whittlesea.</p> | <p>PHIDU (2011-13); VAED (2014-15).</p> <p>Consultation:</p> |

| Outcomes Of The Health Needs Analysis - General | | |
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| Identified Need | Key Issue | Description Of Evidence |
| Presence of ill health or disease – Diabetes | <p>An increase in diabetes prevalence was reported in Yarra Ranges. A higher prevalence of diabetes was also reported among the Asian population in Whitehorse.</p> <p>Across the catchment, type 2 diabetes was nominated by 82% of general practice survey respondents as one of the top five presenting chronic conditions.</p> | <ul style="list-style-type: none"> • Council – Yarra Ranges Shire Council; • CHS – Carrington Health; • PCP – Hume Whittlesea PCP; • EMPHN General Practice Survey (October 2016); and • EMPHN Allied Health Survey (October 2016). |
| Presence of ill health or disease – Cardiovascular disease | <p>Whittlesea-Wallan (17.2, ASR/100) had a marginally higher than state average ASR of cardiovascular disease (17, ASR/100).</p> <p>Catchment-wide, cardiovascular issues contributed substantially to general practice attendances. Survey respondents nominated the following as most common amongst chronic disease presentations over the preceding month: angina (20% of respondents), congestive heart failure (36% of respondents) and hypertension (86% of respondents).</p> | <p>PHIDU (2011-13).</p> <p>Consultation:</p> <ul style="list-style-type: none"> • EMPHN General Practice Survey (October 2016). |
| Presence of ill health or disease – Asthma | <p>Half the SA3s had a higher than state average ASR (10.9, ASR/100) of asthma (Banyule [11.4, ASR/100], Maroondah [11.5, ASR/100], Nillumbik-Kinglake [12.2, ASR/100], Whittlesea-Wallan [11.4, ASR/100] and Yarra Ranges [11.8, ASR/100]).</p> | <p>PHIDU (2011-13).</p> |
| Presence of ill health or disease – Chronic obstructive pulmonary disease | <p>Banyule, Nillumbik-Kinglake, Whittlesea-Wallan and Yarra Ranges (all 1.9, ASR/100) were on par with the state average ASR (1.9, ASR/100) of chronic obstructive pulmonary disease.</p> | <p>PHIDU (2011-13).</p> |
| Presence of ill health or disease – | <p>Nillumbik-Kinglake (26.8, ASR/100), Whittlesea-Wallan (27.4, ASR/100) and Yarra Ranges (27.3, ASR/100) all had above the state average ASR (26.6, ASR/100) of total musculoskeletal</p> | <p>PHIDU (2011-13).</p> |

| Outcomes Of The Health Needs Analysis - General | | |
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| Identified Need | Key Issue | Description Of Evidence |
| Musculoskeletal conditions | conditions (osteoporosis, osteoarthritis and rheumatoid arthritis). | |
| Presence of ill health or disease – Hepatitis B | <p>Hepatitis B prevalence in Monash (51.7 per 100,000) was more than double the Victorian average (23.9 per 100,000). Boroondara, Manningham, Maroondah, Whitehorse and Whittlesea-Wallan also had rates above the state average.</p> <p>Whitehorse and Yarra Ranges had the highest hepatitis C prevalence (17.8 and 17.5 per 100,000 respectively). These figures were below the state average (25.3 per 100,000). Yarra Ranges had the lowest prevalence of Hepatitis B yet was on par with Whitehorse for the highest hepatitis C rate.</p> <p>A higher prevalence of hepatitis B was reported among Chinese, Indian and Nepalese populations in the inner east region.</p> | <p>Vic. DHHS (2014-15).</p> <p>Consultation:</p> <ul style="list-style-type: none"> • CHS – Access Health and Community; Carrington Health; Link Health and Community; and • NGO – Women’s Health In the North. |
| Presence of ill health or disease – Cancer | Manningham had the highest cancer incidence among both males and females (647.5 per 100,000 and 515.3 per 100,000 respectively). These figures were lower than the Victorian averages (659.4 per 100,000 and 531.6 per 100,000 respectively). | Vic. DHHS (2012), Victorian Population Health Survey. |
| Presence of ill health or disease – Sexually transmissible infections | <p>Maroondah (340.9 per 100,000) had the highest rate of sexually transmissible infections in young people. This figure was below the Victorian average (406.4 per 100,000).</p> <p>The incidence of HIV in Boroondara (3 per 100,000) was above the state average (2.5 per 100,000). Knox’s (3.2 per 100,000) and Monash’s (2.2 per 100,000) HIV prevalence were on par with or above the Victorian average (2.2 per 100,000).</p> <p>The rate of chlamydia infection in Banyule (350 per 1,000) was above the state average (325 per 1,000).</p> | <p>Victorian Child and Adolescent Monitoring System [VCAMS] (2012); Vic. DHHS (2013), LGA Profiles; Vic. DHHS (2014-15).</p> <p>Consultation:</p> <ul style="list-style-type: none"> • NGO – Women’s Health East; Women’s Health In the North; and • EMPHN Allied Health Survey (October 2016). |

| Outcomes Of The Health Needs Analysis - General | | |
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| Identified Need | Key Issue | Description Of Evidence |
| Presence of ill health or disease – Sexually transmissible infections | <p>The highest prevalence of gonococcal infection occurred in Boroondara (45 per 100,000). This figure was below the Victorian average (47.3 per 100,000).</p> <p>The highest rates of infectious syphilis were found in Boroondara and Monash (7.2 per 100,000 and 7.3 per 100,000 respectively). These figures were below the state average (14.1 per 100,000). Boroondara (10.2 per 100,000), Knox (10.4 per 100,000), Monash (11.2 per 100,000) and Whitehorse (10.8 per 100,000) had the highest rates of late syphilis. These figures were below the Victorian average (15.9 per 100,000).</p> <p>Survey respondents from the allied health sector identified sexual health among young people as a key existing or emerging issue in the community.</p> | |
| Social determinants of health – Economic and housing security | <p>Survey respondents from the allied health sector noted social and economic inequities as a key existing or emerging issue in the community.</p> <p>Housing affordability was reported as an issue in Boroondara, Manningham, Maroondah and Nillumbik (particularly among Aboriginal and/or Torres Strait Islander peoples in Hurstbridge). Housing affordability was a more prominent issue generally 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. Yarra Ranges also had a high Aboriginal and/or Torres Strait Islander population.</p> <p>Allied health survey respondents noted homelessness, couch surfing and transient populations as key existing or emerging issues in the community.</p> | <p>ABS (2011); CIV (2013).</p> <p>Consultation:</p> <ul style="list-style-type: none"> • 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; and • EMPHN Allied Health Survey (October 2016). |

| Outcomes Of The Health Needs Analysis - General | | |
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| Identified Need | Key Issue | Description Of Evidence |
| Social determinants of health – Economic and housing security | | Refugee health service referral pathways mapping consultation: <ul style="list-style-type: none"> • CHS – Plenty Valley CH; • NGO – UnitingCare; and • LHN – Austin Health. |
| Social determinants of health – Social isolation | Social isolation was reported among the elderly in Whitehorse and other inner east areas, refugees in Whittlesea, Aboriginal and/or Torres Strait Islander youths in the outer east and residents of Manningham and Nillumbik. | ABS (2011), HCFMD; CIV (2011). Consultation: <ul style="list-style-type: none"> • Council – City of Whittlesea; Manningham City Council; Nillumbik Shire Council; • CHS – Carrington Health; Mullum Mullum Indigenous Gathering Place; • PCP – Inner East PCP; and • NGO – Whittlesea Community Connections. |
| Social determinants of health – Health literacy and understanding of the health system | Poor health literacy and understanding of the health system was reported, particularly within refugee and CALD communities in Whittlesea-Wallan and Monash. It was reported that understanding of information given by health providers varies. Goals are often clinician-directed and particularly in the hospital context, consumers are 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: <ul style="list-style-type: none"> • CHS – AMES Australia; Link Health and Community; Nexus Primary Health; • PCP – Hume Whittlesea PCP; |

| Outcomes Of The Health Needs Analysis - General | | |
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| Identified Need | Key Issue | Description Of Evidence |
| Social determinants of health – Health literacy and understanding of the health system | | <ul style="list-style-type: none"> • NGO – Whittlesea Community Connections; and • LHN – Eastern Health. <p>Refugee health service referral pathways mapping consultation:</p> <ul style="list-style-type: none"> • CHS – cohealth; and • LHN – Northern Health. |
| Social determinants of health – Family violence | <p>Whittlesea-Wallan (2,787) had the highest number of reported family violence incidents in 2014-15. Family violence was also reported as an issue in Maroondah, Nillumbik, Yarra Ranges, Mitchell, Whitehorse and Manningham. Higher rates were reported among women with disabilities (Manningham) and refugees, asylum seekers and people on Partner (Provisional) visas (Whittlesea).</p> <p>Violence in same-sex relationships was reported in the eastern metropolitan region.</p> <p>Knox had the highest rate of total alcohol-related family violence in 2012-13 (latest available data) (22/10,000), followed by Yarra Ranges (21.4/10,000) and Banyule (20.7/10,000).</p> <p>In addition to alcohol, family violence was generally associated with disaster (i.e. bushfires in Murrindindi* and Nillumbik) and gambling.</p> <p>It was suggested that there were high rates of substantiated child abuse in Knox.</p> <p>Survey respondents from the allied health sector noted gender inequity and family violence as key existing or emerging issues in the community.</p> | <p>AOD stats by Turning Point (2012-13); CSA (2014-15); Vic. DHHS (2013); Whittlesea Community Futures and Whittlesea Community Connections (2012), <i>Whittlesea CALD Communities Family Violence Project Scoping Exercise Report</i>.</p> <p>Consultation:</p> <ul style="list-style-type: none"> • 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; |

| Outcomes Of The Health Needs Analysis - General | | |
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| Identified Need | Key Issue | Description Of Evidence |
| Social determinants of health – Family violence | | <ul style="list-style-type: none"> • NGO – Whittlesea Community Connections; Women’s Health East; Women’s Health In the North; and • EMPHN Allied Health Survey (October 2016). |

Outcomes Of The Health Needs Analysis – Mental Health

| Outcomes Of The Health Needs Analysis – Mental Health | | |
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| Identified Need | Key Issue | Description of Evidence |
| Presence of ill health or disease – Anxiety and depression: Burden | <p>The majority of general practitioners surveyed indicated that anxiety and depression were the leading mental health conditions treated, and treatment of psychological disorders took up the majority of GP time. These conditions were also those that practitioners felt they needed the most support with.</p> <p>From the perspective of allied health practitioners, the stigma of mental illness and difficulties with access to care (particularly to a regular/preferred GP) were the major factors experienced by people with enduring mental health conditions. Particular mention was made in regard to young people (<18yrs), the elderly, males of all ages, women aged between 18 and 45, people with a history of substance abuse, CALD peoples, Aboriginal and/or Torres Strait Islander peoples, non-English speaking peoples and others from disadvantaged backgrounds.</p> <p>Mental health issues were reported as frequent and their effective management complex and exacerbated by larger social and environmental influences.</p> <p>Chronic, non-specific, mental health issues were listed as a common presentation to general practice by 14 general practice survey respondents.</p> | <p>Consultation:</p> <ul style="list-style-type: none"> • EMPHN General Practice Survey (October 2016); and • EMPHN Allied Health Survey (October 2016). |
| Presence of ill health or disease – Anxiety and depression: Prevalence | <p>Whitehorse had the highest ASR of people experiencing affective and anxiety issues (12.8, ASR/100). The ASR of affective and anxiety issues was also highest for males in Whitehorse (12.2, ASR/100) and highest for females in Whittlesea-Wallan (14.1, ASR/100). The highest ASR of high or very high psychological distress among people aged 18 years and over was recorded in Whittlesea-Wallan (12.1, ASR/100).</p> <p>Depression and anxiety were also reported in Boroondara, Manningham, Maroondah,</p> | <p>PHIDU (2011).</p> <p>Consultation:</p> <ul style="list-style-type: none"> • Council – City of Boroondara; City of Whittlesea; Manningham City Council; Maroondah City Council; Nillumbik Shire Council; and |

| Outcomes Of The Health Needs Analysis – Mental Health | | |
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| Identified Need | Key Issue | Description of Evidence |
| Presence of ill health or disease – Anxiety and depression: Prevalence | Nillumbik and Whittlesea-Wallan. | <ul style="list-style-type: none"> • CHS – Carrington Health; healthAbility; Nexus Primary Health. |
| Presence of ill health or disease – Anxiety and depression: Aboriginal and/or Torres Strait Islander people | <p>Poor social and emotional wellbeing outcomes are experienced by Aboriginal and/or Torres Strait Islander peoples, including significantly higher levels of psychological distress.</p> <p>According to national data, 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.</p> | AIHW (2015), <i>The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples</i> . |
| Presence of ill health or disease – Anxiety and depression: Social effects | <p>Mental health issues and self-harm were reported among youths in Boroondara, Manningham, Maroondah, Monash, Nillumbik and Whittlesea. High prevalence conditions and the associated psycho-social impacts were highlighted, including school absenteeism and social isolation. Monash had the highest proportion of adolescents who reported being bullied, with a reported rate of above 50%.</p> <p>Mental health issues were also reported among men in Nillumbik, particularly related to the psychological impacts following the bushfires. Increased suicide rates were reported among 50-55 year olds.</p> <p>Elder abuse (neglect and financial) was reported in Knox, Lower Hume, Manningham and other inner east areas. Isolation and mental health issues were reported among the aged in</p> | <p>Consultation:</p> <ul style="list-style-type: none"> • Council – City of Boroondara; City of Whittlesea; Knox City Council; Manningham City Council; Maroondah City Council; Nillumbik Shire Council; • CHS – AMES Australia; Banyule CHS; Carrington Health; healthAbility; Link Health and Community; Mullum Mullum Indigenous Gathering Place; Nexus Primary Health; and |

| Outcomes Of The Health Needs Analysis – Mental Health | | |
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| Identified Need | Key Issue | Description of Evidence |
| Presence of ill health or disease – Anxiety and depression: Social effects | <p>Whitehorse and other inner east areas.</p> <p>A high prevalence of mental illness was reported among refugees, particularly in Whittlesea. Precipitants included torture and trauma. Concerns were raised about the physical, sexual and mental health and wellbeing of females from communities where female genital cutting is traditionally practiced.</p> <p>Whittlesea’s socio-cultural profile reportedly was not conducive to LGBTIQ safety.</p> <p>Psychological trauma was reported among the transgender community in Nillumbik and Lower Hume.</p> | <ul style="list-style-type: none"> • NGO – Whittlesea Community Connections; Women’s Health East; Women’s Health In the North. <p>Refugee health service referral pathways mapping consultation:</p> <ul style="list-style-type: none"> • Council – City of Whittlesea; • NGO – Spectrum MRC; • LHN – Austin Health; Northern Health; and • Nursing – RDNS. |
| Presence of ill health or disease – Suicide | <p>Comparing the EMPHN catchment to the Victorian state average:</p> <ul style="list-style-type: none"> • Nine LGAs out of 12 (75%) had suicide counts higher than the state average (23.4). • Three LGAs out of 12 (25%) had suicide rates higher than the state average (11.8/10,000) and an additional three LGAs had rates less than 2.0 below the state average. <p>In 2014-15, emergency department presentations for suicide attempts and ideation in the following statistical local areas (SLAs) were:</p> <ul style="list-style-type: none"> • 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 | <p>VEMD (2014-15); Vic. DHHS (2014).</p> |

| Outcomes Of The Health Needs Analysis – Mental Health | | |
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| Identified Need | Key Issue | Description of Evidence |
| Presence of ill health or disease – Suicide | <ul style="list-style-type: none"> Whittlesea (C) – North: 80 Whitehorse (C) – Box Hill: 72 Manningham (C) – West: 68 <p>In 2014-15, emergency department presentations for suicide attempts and suicidal ideation were:</p> <ul style="list-style-type: none"> Angliss Hospital: 166 Austin Hospital: 210 Box Hill Hospital: 368 Maroondah Hospital: 474 Monash Medical Centre: data unavailable Northern Hospital: 208 | |

Outcomes Of The Health Needs Analysis – After Hours

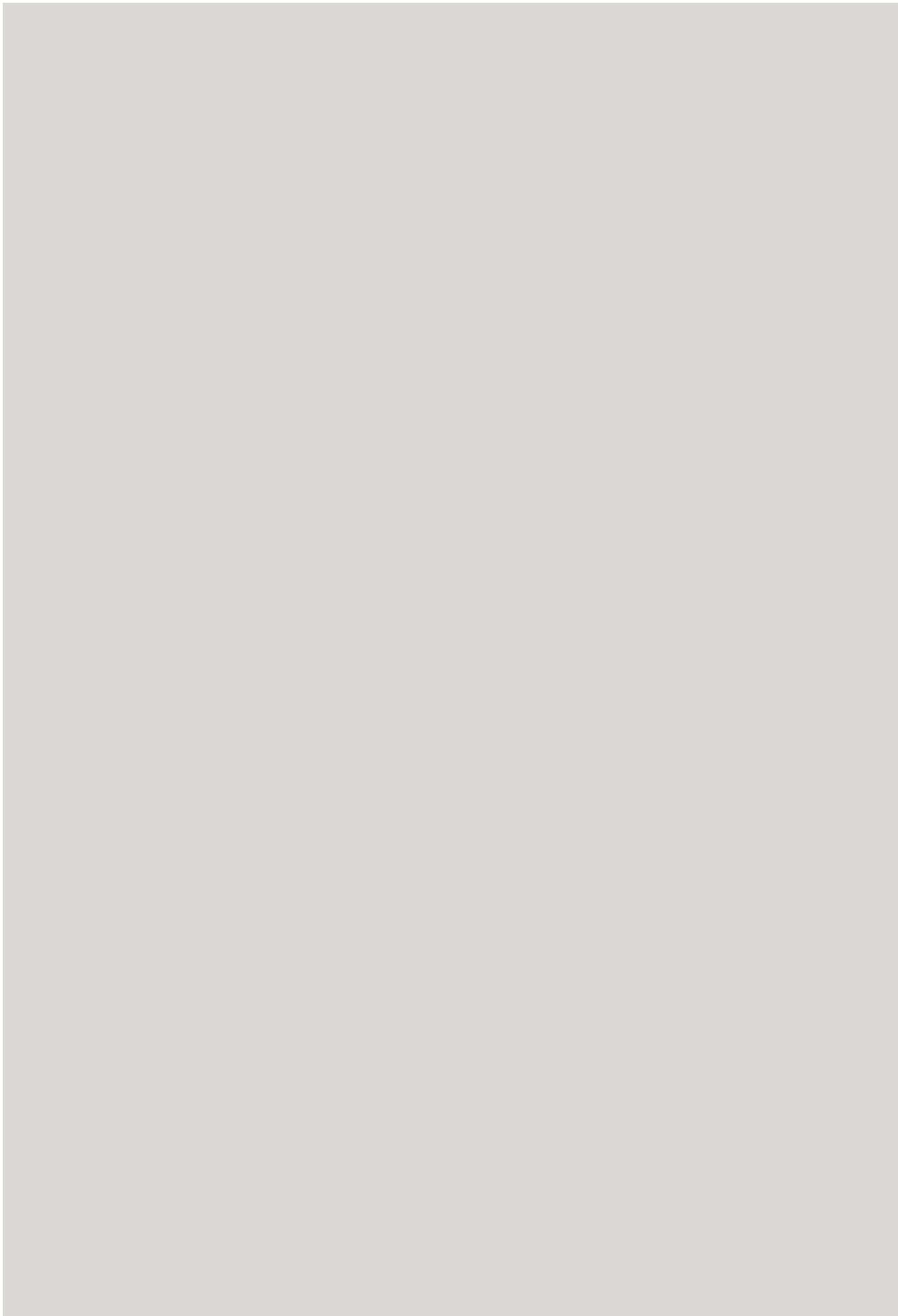
| Outcomes Of The Health Needs Analysis – After Hours | | |
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| Identified Need | Key Issue | Description Of Evidence |
| Service accessibility – GPs and other primary health care services in the after hours period | <p>Minimal access to deputising services was noted in outer metropolitan areas.</p> <p>It was noted that there was limited access to primary health care services, including GP clinics, pharmacy, radiology and pathology in the after hours period, particularly in outer metropolitan areas. Issues were experienced in accessing timely and appropriate after hours care and it was reported that the quality of after hours care varies between facilities.</p> <p>Discussion was made of high demand and waiting lists for services such as mobile X-rays, pathology, pharmacy, palliative care, Advance Care Planning (ACP) and geriatrics.</p> <p>Reduced access to respiratory, chronic disease, cancer care resources after hours was noted.</p> <p>Some RACF staff were seen to lack knowledge of after hours primary health care services.</p> <p>Poor access to services was reported for families of children with developmental disorders or intellectual disabilities.</p> <p>Significant levels of aggression in residents with dementia were noted. The issue appeared to be exacerbated after hours by the lack of staffing and resources to manage residents.</p> | <p>Australian Commission on Safety and Quality In Healthcare (2015), <i>Australian Atlas of Healthcare Variation</i>; EMML, IEMML and NMML (2012-13), Comprehensive Needs Assessments; EMPHN After Hours Survey (September – October 2015); EMPHN research on MDS coverage in the catchment; VEMD (2014-15).</p> <p>Consultation:</p> <ul style="list-style-type: none"> • 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; • Larter Consulting (September 2015), ACP Consortium Needs Analysis. • LHN – Austin Health; Eastern |

| Outcomes Of The Health Needs Analysis – After Hours | | |
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| Identified Need | Key Issue | Description Of Evidence |
| Service accessibility – GPs and other primary health care services in the after hours period | | <p>Health; Northern Health; Southern Health Dandenong; St. Vincent’s Hospital; and</p> <ul style="list-style-type: none"> • EMPHN RACF interviews (September 2015 – February 2016). |
| Service accessibility – After hours primary health care services | <p>Some RACF staff and GP locums were considered to be unfamiliar with local after hours services availability and how to support residents with after hours clinical needs.</p> <p>Information in the NHSD was suggested as being often inaccurate or not up-to-date, as some services were unfamiliar with the information updating process.</p> <p>There was comment that limited opportunities existed for GP services and pharmacies to expand their opening hours unless additional funding were made available. After hours services were often viewed as functional aspects of general practice rather than part of planned care.</p> | <p>EMML, IEMML and NMML (2012-13), Comprehensive Needs Assessments; Larter Consulting (2015), <i>ACP Consortium Needs Analysis</i>.</p> <p>Consultation:</p> <ul style="list-style-type: none"> • GP clinic – Clayton Road Doctors Medical Centre; ERAHMS clinics; Nexus GP SuperClinic Wallan; Warburton Medical Clinic; • MDS – ALMS; My Home GP; NHDS; and • EMPHN RACF interviews (September 2015 – February 2016). |
| Health related behaviour – After hours service access | Inappropriate after hours service usage (ambulance and ED) was proposed, partly due to inadequate community knowledge of available and appropriate after hours services, including MDS and after hours clinics and pharmacies. | <p>EMML, IEMML and NMML (2012-13), Comprehensive Needs Assessments.</p> <p>Consultation:</p> |

| Outcomes Of The Health Needs Analysis – After Hours | | |
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| Identified Need | Key Issue | Description Of Evidence |
| Health related behaviour – After hours service access | <p>It was suggested that there was a community perception that EDs offer best clinical care, are cost free and are a one-stop-shop for care. It was also believed that people would be prepared to wait long periods if there were no fee for treatment.</p> <p>There were perceptions of significant numbers of inappropriate calls to 000 for an ambulance due to misconceptions about the role of the service.</p> <p>It was thought that there was a lack of consistent, multilingual information about after hours care options.</p> | <ul style="list-style-type: none"> • CHS – EACH • NGO – Migrant Information Centre; and • Ambulance service – Ambulance Victoria. |
| Service accessibility – Culturally safe and accessible primary health care services | <p>A limited number of practices had undergone cultural awareness training.</p> <p>There were insufficient available multilingual GPs.</p> <p>There was thought to be inadequate knowledge of available after hours services for marginalised groups, including CALD and refugee people.</p> <p>The low self-identification rates among people from Aboriginal and/or Torres Strait Islander backgrounds were thought to decrease the likelihood of their accessing culturally safe health care.</p> <p>Some residents experienced poor transport access to after hours services.</p> | <p>EMML (2014), Aboriginal Health Priorities Framework; IEMML (2014), Reconciliation Action Plan.</p> <p>Consultation:</p> <ul style="list-style-type: none"> • CHS – AMES Australia; EACH; and • NGO – Spectrum MRC; Migrant Information Centre. |
| Service accessibility – Mental health services in the after hours | <p>Attendance for mental health issues was one of the top two after hours call-outs reported by Ambulance Victoria.</p> <p>There were limited community-based services for people with mental health needs after hours, resulting in a lack of capacity to provide onsite psychological support as a second</p> | <p>NMML (2012), Comprehensive Needs Assessment.</p> <p>Consultation:</p> <ul style="list-style-type: none"> • CHS – Banyule CHS; EACH |

Outcomes Of The Health Needs Analysis – After Hours

| Identified Need | Key Issue | Description Of Evidence |
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| period | <p>response to mental health crisis situations.</p> <p>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. It was suggested that expanding the PACER program would enable Crisis and Assessment teams to increase operating times.</p> | <p>Ringwood and Maroondah; Inspiro CHS;</p> <ul style="list-style-type: none"> • LHN – Austin Health; and • Ambulance service – Ambulance Victoria. |



Section 3 – Outcomes Of The Service Needs Analysis

Outcomes Of The Service Needs Analysis – General

| Outcomes of The Service Needs Analysis – General | | |
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| Identified Need | Key Issue | Description Of Evidence |
| Potentially preventable emergency department presentations and admissions | <p>There was a high utilisation of emergency departments (ED) for primary care-type presentations during business hours, particularly in the 25-35 year-old age group.</p> <p>Users of ED services highlighted factors in choice of ED over primary care as including:</p> <ul style="list-style-type: none"> • cost benefit; • perception of timeliness and convenience of having multiple diagnostic services in one place; • home location relative to service location; and • perceptions of greater expertise in tertiary facilities by parents and many GPs (including higher rates of GP referral rate for children into the ED). <p>A tendency was noted to over-estimate the seriousness of child illness among first-time parents and parents of infants and children aged 0-4 years (generally over-represented in Australian EDs), and by parents of low income status and/or of lower education level.</p> <p>Despite use of ED services for primary care-type paediatric presentations, most survey respondents from general practice rated their expertise in paediatric care as either somewhat proficient, very proficient or highly proficient, with almost half, most of whom were either practice nurses or general practitioners, self-rating as very or highly proficient.</p> <p>General practice survey respondents nominated several drivers perceived to cause</p> | <p>AIHW (2015), Workforce Data; University of Melbourne Department of General Practice November (2015), <i>Prevention of low and non-urgent presentations of children to emergency departments</i> (draft report); VEMD (2014-15).</p> <p>Consultation:</p> <ul style="list-style-type: none"> • LHN – Eastern Health; • EMPHN Provider Survey (February 2016); • EMPHN General Practice Survey (October 2016); and • EMPHN Allied Health Survey (October 2016). |

Outcomes of The Service Needs Analysis – General

| Identified Need | Key Issue | Description Of Evidence |
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| Potentially preventable emergency department presentations and admissions | <p>consumers (especially parents of 0-4 year olds and people aged 20-35 years) to access an ED rather than a GP for non-urgent care. The most frequently nominated reason was the cost differential (cost-free care from the ED) and about half of respondents indicated one or more of the following:</p> <ul style="list-style-type: none"> • not having a regular GP; • inability to access a GP in their desired timeframe; and • the attraction of the ‘one-stop-shop’ ED for medical consultation, and additional diagnostic services (X-ray, pathology test/s and medication/s). <p>Some references were also made by survey respondents to:</p> <ul style="list-style-type: none"> • consumer desire for after hours access; • lack of consumer health literacy/knowledge and/or understanding of the health system and the purpose of ED; and • lack of faith in GP skills. <p>Allied health survey respondents added the following as further barriers to using GPs instead of EDs: cultural issues, usual pattern of accessing health services and the perception of attentiveness from a multi-specialist service such as a hospital compared to a shorter interaction with a GP.</p> <p>Suboptimal specific-GP same day appointment availability (bulk-billed) was reported for the northern growth corridor. This was likely created by lower GP concentrations in the outer suburbs of the northern growth corridor.</p> | |
| Potentially preventable hospital | <p>Inadequate GP locum knowledge in palliative care has contributed to unnecessary hospital transfers at end-of-life in the Eastern Health and Northern Health catchments. Systems were lacking that would enable discharged palliative care patients to access</p> | <p>Consultation:</p> <ul style="list-style-type: none"> • EMPHN RACF interviews (September 2015 – February |

| Outcomes of The Service Needs Analysis – General | | |
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| Identified Need | Key Issue | Description Of Evidence |
| admissions – Specialist aged care services: Unnecessary transfers | medicines in a timely manner from community pharmacy. | 2016); <ul style="list-style-type: none"> • GP working extensively in RACF in the EMPHN catchment; and • LHN – Eastern Health. |
| Potentially preventable emergency department presentations and admissions – Complex needs | <p>Current HARP and Hospital-in-the-Home arrangements are often engaged when the client/patient has more acute/complex needs. There are both gap and opportunity between general practice-based care and when hospital services are required.</p> <p>The 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.</p> <p>Chronic disease management and psychological conditions impact most heavily on general practice time, suggesting these services are resource intensive whether provided by general practice or the public hospital system.</p> <p>General practice survey responses suggested that chronic disease management and/or chronic mental illness take up the majority of general practice time: 74% of respondents nominated chronic conditions and/or psychological conditions (69% of respondents) as those conditions taking up the most time. Infections/infectious conditions and respiratory conditions also factored heavily—over one-third of respondents nominated one or both as predominating in terms of practice time. One respondent pointed out the added complexity of multiple conditions, particularly where chronic physical and mental health issues coincide.</p> | <p>Consultation:</p> <ul style="list-style-type: none"> • LHN – Eastern Health; and • EMPHN General Practice Survey (October 2016). |

| Outcomes of The Service Needs Analysis – General | | |
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| Identified Need | Key Issue | Description Of Evidence |
| System design – Integrated services | <p>There was suboptimal interconnectivity between services:</p> <ul style="list-style-type: none"> • coordination difficulties across primary, secondary and tertiary services; • disconnected tertiary-CHS care; • between-sector refugee services (such as education/employment) in the priority refugee resettlement area of Whittlesea and the northern growth corridor; • one allied health survey respondent highlighted the need for improved coordination between the acute sector and community health; • another respondent conveyed the need for an increase in My Health Record sign up; • another respondent identified the need for better integration with case workers in supporting the vulnerable with complex issues or experiencing trauma to access routine health care and cancer screening; and • two allied health survey respondents reported that pharmacy staff are not always familiar with cancer screening programs. <p>There was ineffective/suboptimal integration of primary care services into the client journey, characterised by:</p> <ul style="list-style-type: none"> • client knowledge of services poorer amongst disadvantaged people; • bypassing of community health services by referrers <ul style="list-style-type: none"> ○ stigma of CHS use ○ easy/easier to refer into tertiary services, and • acute practitioners unaware of services/failing to refer. <p>Traditional service delivery is driven by clinicians, directed by referrals and reflection of best practice guidelines. With increased emphasis on patient-centred care models and self-management, active participation of consumers is encouraged. Consequently, commissioned services must provide the framework and means in which to engage patients</p> | <p>University of Melbourne Department of General Practice November (2015), <i>Prevention of low and non-urgent presentations of children to emergency departments</i> (draft report).</p> <p>Consultation:</p> <ul style="list-style-type: none"> • Council – Maroondah City Council; Yarra Ranges Shire Council; • CHS – healthAbility; Link Health and Community; • PCP – Hume Whittlesea PCP; • EMPHN Provider Survey (February 2016) response with CHS respondent (Carrington Health); and • EMPHN Allied Health Survey (October 2016). |

| Outcomes of The Service Needs Analysis – General | | |
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| Identified Need | Key Issue | Description Of Evidence |
| System design – Integrated services | <p>in their care. This may be through the technology used to record and communicate the treatment plan as a living document or through the methods in which self-management is monitored by patient and clinician.</p> <p>Suboptimal continuity of care and subsequent disengagement of clients noted in the outer east:</p> <ul style="list-style-type: none"> poor retention of locum GPs, outreach care workers due to travel requirements; and reduced faith in services by locals, especially in Yarra Ranges. | |
| System design – Integrated services: Diabetes | One survey respondent noted 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. | <p>Consultation:</p> <ul style="list-style-type: none"> EMPHN Provider Survey (February 2016). |
| System design – Integrated services: Aboriginal and/or Torres Strait Islanders | <p>Experience of cultural insensitivity from hospital staff to Aboriginal and/or Torres Strait Islander people who presented or were admitted, resulting in:</p> <ul style="list-style-type: none"> clients experiencing discomfort in having to volunteer their indigenous status; clients feeling physically unsafe about waiting in an ED; clients discharging themselves without treatment due to long waiting times, especially if children involved; and confusion regarding the exact role of the Aboriginal Health Liaison Officer. | <p>Inner East: Department of Health EMR Koolin Balit and Aboriginal Health Community Consultation Workshop (September 2013); Outer East: Department of Health EMR Koolin Balit and Aboriginal Health Community Consultation Workshop (September 2013).</p> |
| System design – Communication between health services and other service providers | <p>Improved ease and timeliness of communication are needed between providers, between providers and services, and between clients/patients and providers/services using secure e-technologies that integrate with practice software.</p> <p>There was support, or suggestions made, for the following:</p> <ul style="list-style-type: none"> electronic patient portal; | <p>Consultation:</p> <ul style="list-style-type: none"> EMPHN General Practice Survey (October 2016); and EMPHN Allied Health Survey (October 2016). |

| Outcomes of The Service Needs Analysis – General | | |
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| Identified Need | Key Issue | Description Of Evidence |
| System design – Communication between health services and other service providers | <ul style="list-style-type: none"> • application-based means of communication; • electronic case conferencing (telehealth); and • secure email capability. <p>Security, privacy and appropriate funding for non face-to-face communications were cited as issues by GP survey respondents.</p> | |
| Service accessibility – Primary health care | <p>The use of outreach services presents an opportunity for the services in EMPHN to build the case for more innovative models of service delivery, such as increasing access through telehealth consultations. A preference for increased co-location services with shared administrative costs was expressed in community consultations, particularly in the outer areas. Future commissioning of services must consider such solutions to overcome the geographical barriers to access for consumers, and the financial disincentive for services. Survey respondents from the allied health sector highlighted a number of barriers for people with a chronic condition in accessing a regular GP, including corporate drop-in style practice models not supporting access to a regular GP and general practice availability: e.g. waiting lists and/or practice is closed after hours.</p> <p>Allied health survey respondents reported the need for increased access to community-based specialist services for people experiencing disadvantage.</p> <p>Availability, location and accessibility of primary and adjunct health care services:</p> <ul style="list-style-type: none"> • general lack of GP, specialist and support services (in context of greater demand) in Yarra Ranges and semirural/rural Kinglake; and • no respite, rehabilitation services in Nillumbik, Kinglake. | <p>ABS (2011), Census of Population; AIHW (2015), Workforce Data; CIV (2011, 2012), Transport proximity data; EMPHN CRM (2016); VEMD (2014-15); University of Melbourne Department of General Practice November (2015), <i>Prevention of low and non-urgent presentations of children to emergency departments</i> (draft report).</p> <p>Consultation:</p> <ul style="list-style-type: none"> • Council – City of Whittlesea; Manningham City Council; Maroondah City Council; Nillumbik Shire Council; Yarra Ranges Shire Council; • CHS – Access Health and Community; Nexus Primary |

| Outcomes of The Service Needs Analysis – General | | |
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| Identified Need | Key Issue | Description Of Evidence |
| Service accessibility – Primary health care | <p>Service locations in the east are mostly aligned with population. However, the north is home to a rapid growth corridor where the availability of service sites is not increasing in line with the growing population, causing greater travel distances for people seeking access to services. On the other hand, in Manningham, services are clustered in one area that is poorly serviced by public transport. Poor public transport options create a problem in the northern and outer areas.</p> <p>There is a lack of services (in general) in the northern growth corridor (areas of recent [and anticipated to be ongoing] population growth): Nillumbik, Wallan, Whittlesea (and notably mental health services in Whittlesea).</p> <p>Healthcare ‘islands’ were described in Whittlesea – namely northern Lalor, Thomastown, Mill Park and outer Epping.</p> <p>Service accessibility in the outer north and Yarra Ranges areas is problematic due to distribution of services towards the more population-dense inner areas of those regions.</p> | <p>Health; and</p> <ul style="list-style-type: none"> • PCP – Hume Whittlesea PCP; North East PCP. |
| Service accessibility – Specialty service needs | <p>There are insufficient care facilities specific for:</p> <ul style="list-style-type: none"> • younger people who are currently housed in aged care facilities, e.g. acquired brain injury, younger onset dementia; and • ageing people with a disability (functional and mental health). | <p>Consultation:</p> <ul style="list-style-type: none"> • PCP – North East PCP; and • EMPHN RACF interviews (September 2015 – February 2016). |
| Service accessibility – Primary health care: Transport | <p>Inconveniently distributed or orphaned services and location at sites poorly served by public transport create access barriers:</p> <ul style="list-style-type: none"> • 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 | <p>ABS (2011), Census of Population; AIHW (2015), Workforce Data; CIV (2011, 2012), Transport proximity data; EMPHN CRM (2016); University of Melbourne Department of General Practice November (2015) <i>Prevention</i></p> |

| Outcomes of The Service Needs Analysis – General | | |
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| Identified Need | Key Issue | Description Of Evidence |
| Service accessibility – Primary health care: Transport | <p>Valley-Warburton); and</p> <ul style="list-style-type: none"> Manningham has poor transport access and experienced recent bus route cuts. Although it is within the catchment of some services, many choose not to locate a branch within the region, increasing travelling distance for clients. | <p><i>of low and non-urgent presentations of children to emergency departments</i> (draft report); VEMD (2014-15).</p> <p>Consultation:</p> <ul style="list-style-type: none"> 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; and NGO – Whittlesea Community Connections; Women’s Health East. |
| Service accessibility – Affordability | <p>Affordability of care is challenging in areas of greatest social disadvantage, for those experiencing unemployment and for CALD communities:</p> <ul style="list-style-type: none"> 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; and | <p>ABS (2011).</p> <p>Consultation:</p> <ul style="list-style-type: none"> Council – Banyule City Council; City of Boroondara; Manningham City Council; Nillumbik Shire Council; Yarra Ranges Shire |

| Outcomes of The Service Needs Analysis – General | | |
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| Identified Need | Key Issue | Description Of Evidence |
| Service accessibility – Affordability | <ul style="list-style-type: none"> 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 patients in Nillumbik-Kinglake, Ashwood, Mulgrave, Oakleigh, Clayton. | <p>Council; and</p> <ul style="list-style-type: none"> CHS – Link Health and Community. |
| Service accessibility – Culturally safe primary health care: Identification of Aboriginal and/or Torres Strait Islander people | <p>Under-identification of Aboriginal and/or Torres Strait Islander clients:</p> <ul style="list-style-type: none"> clients do not identify until trust established (requires continuity of care); Aboriginal and/or Torres Strait Islander people consulted in the Koolin Balit workshop stated that staff usually did not ask if they identify; and it was noted that if staff were not providing culturally appropriate care, clients wanted to leave the service as soon as possible, even against medical advice. <p>Access to suitable services for Aboriginal and/or Torres Strait Islander clients:</p> <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> no local, culturally appropriate specialty services provision; and affordability is an issue, compounded by limited bulk-billing. <p>Around three-quarters of general practice survey respondents (to this item) from general practice indicated that Aboriginal and/or Torres Strait Islander clients, and in particular children and youth under 18 years, did not tend to present (or were not being identified as attending) their practice. This was confirmed by the majority of allied health survey respondents.</p> | <p>ABS (2011), Census of Population; Inner East: Department of Health EMR Koolin Balit and Aboriginal Health Community Consultation Workshop (September 2013).</p> <p>Consultation:</p> <ul style="list-style-type: none"> Council – Yarra Ranges Shire Council; CHS – healthAbility; Mullum Mullum Indigenous Gathering Place; LHN – Eastern Health; EMPHN General Practice Survey (October 2016); and EMPHN Allied Health Survey (October 2016). |
| Service accessibility – Culturally safe | <p>Prolonged waiting periods for refugee mental health services were described:</p> <ul style="list-style-type: none"> gap-fill services needed to counter long wait times and red tape processes; and lack of services supporting mental health and wellbeing noted for refugee youth in | <p>Consultation:</p> <ul style="list-style-type: none"> CHS – AMES Australia; healthAbility; Link Health and |

| Outcomes of The Service Needs Analysis – General | | |
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| Identified Need | Key Issue | Description Of Evidence |
| primary health care: Access for refugee/asylum seeker/CALD populations | <p>Nillumbik, Afghan community in south east.</p> <p>There are Insufficient early years and childcare support services (health and/or education).</p> <p>Service barriers exist 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).</p> <p>More than half of general practice survey respondents from general practice indicated that people from culturally and linguistically diverse communities, refugee and asylum seeker clients, and in particular children and young people under 18 years, did not present to their practice. This was confirmed by survey respondents from the allied health sector.</p> <p>Workforce:</p> <ul style="list-style-type: none"> • more refugee health nurses are required; and • more interpreters (qualified, rarer languages) are required. | <p>Community;</p> <ul style="list-style-type: none"> • NGO – Women’s Health in the North; • EMPHN General Practice Survey (October 2016); and • EMPHN Allied Health Survey (October 2016). <p>Refugee health service referral pathways mapping consultation:</p> <ul style="list-style-type: none"> • CHS – AMES Australia; headspace; Plenty Valley CH. |
| Service accessibility – Culturally safe primary health care: Responsiveness to risk | <p>Lack of refugee and emerging CALD groups-oriented infectious diseases planning response noted in the north.</p> | <p>Consultation:</p> <ul style="list-style-type: none"> • CHS – Nexus Primary Health. |
| Service accessibility – Culturally appropriate sexual and | <p>There is increasing refugee/asylum seeker/CALD settlement with unique and culturally sensitive health considerations, including:</p> <ul style="list-style-type: none"> • a tradition of female genital cutting; and • poor/absent history of cancer screening | <p>Consultation:</p> <ul style="list-style-type: none"> • NGO – Women’s Health East; Women’s Health In the North. <p>Target groups: African origin, Sri</p> |

| Outcomes of The Service Needs Analysis – General | | |
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| Identified Need | Key Issue | Description Of Evidence |
| reproductive health services | Community understanding and awareness of regular screening opportunities is low. | Lankan and Arabic/ Persian-speaking CALD immigrants, noted as settling in outer areas, during consultation with: <ul style="list-style-type: none"> • Council – City of Whittlesea; Nillumbik Shire Council; • CHS – AMES Australia; and • PCP – North East PCP; Outer East PCP. |
| System design – Communication | <p>Claims were made of inadequate discharge communication and consultation with the RACFs initiated by Northern Health and private hospitals in the inner and outer east catchment. There is a major risk of preventable hospital readmissions.</p> <p>Key themes include:</p> <ul style="list-style-type: none"> • timeliness of discharge; • communicating adequately so that RACFs can assess if they are resourced to manage the resident's condition; • the value of being able to speak to someone who can provide relevant information; • discharge summaries issues; and • medicines reconciliation. | <p>Consultation:</p> <ul style="list-style-type: none"> • EMPHN RACF interviews (September 2015 – February 2016). |
| Presence of ill health or disease – Specialist aged care services | <p>Survey respondents from the allied health sector indicated the increasing ageing population and the health issues of ageing, such as senile dementia, as key existing or emerging issues in the community.</p> <p>Inadequate resources to manage aggression in RACF residents with dementia in Boroondara have resulted in high (second percentile) antipsychotic use.</p> | <p>Australian Commission on Safety and Quality In Healthcare (2015), <i>Australian Atlas of Healthcare Variation</i>.</p> <p>Consultation:</p> <ul style="list-style-type: none"> • EMPHN RACF interviews |

| Outcomes of The Service Needs Analysis – General | | |
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| Identified Need | Key Issue | Description Of Evidence |
| Presence of ill health or disease – Specialist aged care services | | (September 2015 – February 2016); and <ul style="list-style-type: none"> EMPHN Allied Health Survey (October 2016). |
| Service accessibility – RACF access to after hours primary medical care | Lack of access after hours to a practitioner willing to prescribe medicines for end-of-life management has led to unnecessary hospital transfers. | Consultation: <ul style="list-style-type: none"> GP working extensively in RACF in the EMPHN catchment. |
| System design – 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: <ul style="list-style-type: none"> Council – Nillumbik Shire Council. |

Outcomes Of The Service Needs Analysis – Mental Health

| Outcomes Of The Service Needs Analysis – Mental Health | | |
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| Identified Need | Key Issue | Description Of Evidence |
| Service accessibility – Mental health services for diverse communities | <p>Diverse communities face the following mental health challenges:</p> <ul style="list-style-type: none"> • 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; • paucity of mental health services catering to refugees, CALD community members and people from non-English speaking backgrounds; • ageing CALD groups in Manningham (Bulleen); and • large CALD population with mental health needs and coincident levels of social disadvantage in Banyule and Monash. | <p>EACH (2015), <i>Eastern Metropolitan Region Integrated Mental Health and Alcohol and Other Drugs Catchment Plan 2016-18</i>.</p> <p>Consultation:</p> <ul style="list-style-type: none"> • 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; • EMPHN General Practice Survey (October 2016); and • EMPHN Allied Health Survey (October 2016). |
| Service accessibility – Mental health services: General | <p>Suboptimal alignment of location with areas of greatest need — paucity of services in new growth areas and in outlying areas of disadvantage:</p> <ul style="list-style-type: none"> • Whittlesea – poor transport links; • Yarra Ranges – poor transport services and few service hubs; • Manningham – drift in distribution of services in established area. Services covering | <p>cohealth (2015), <i>North Western Region Catchment Based Mental Health Community Support Strategic Plan 2015-18</i>; EACH (2015), <i>Eastern Metropolitan Region Integrated Mental Health and Alcohol and Other Drugs Catchment Plan</i></p> |

| Outcomes Of The Service Needs Analysis – Mental Health | | |
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| Identified Need | Key Issue | Description Of Evidence |
| Service accessibility – Mental health services: General | <p>Manningham catchment have moved out of the municipality in recent years, creating accessibility issues. No rail network and poor bus services, particularly in Warrandyte.</p> <ul style="list-style-type: none"> Whittlesea has just one ATAPS provider in outer areas and is in the bottom 10 (state-wide) of numbered services per 1000 head of population. <p>Suggestion of suboptimal service access exacerbated by policy.</p> <ul style="list-style-type: none"> Existing referral pathway guidelines bind community mental health nurses to registration with a single general practice. (Practitioner recommendation to open up referral pathways to Community Mental Health Nurses [CMHN] in northern area to more than a single practice). One allied health survey respondent also noted access to psychological support for people who are ineligible for the NDIS as a key existing or emerging issue in the community. <p>There was indication of the need for greater support structures for general practice-coordinated management of patients with psychological conditions.</p> <ul style="list-style-type: none"> Over half of general practice survey respondents nominated patients with psychological conditions as amongst those whom they felt least supported to manage; Approximately one-quarter of general practice survey respondents asked to nominate required or deficient services or service pathways indicated a mental health care service issue or need. A common theme was the need for public mental health care: bulk-billing psychiatrists or other mental health services. <p>Carer issues of stress/depression/anxiety/Post-Traumatic Stress Disorder</p> | <p>2016-18; PHIDU (2011-13); VEMD (2014-15).</p> <p>Consultation:</p> <ul style="list-style-type: none"> Council – Manningham City Council; CHS – Access Health and Community; PCP – Hume Whittlesea PCP; EMPHN Provider Survey (February 2016); EMPHN General Practice Survey (October 2016); and EMPHN Allied Health Survey (October 2016). |

| Outcomes Of The Service Needs Analysis – Mental Health | | |
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| Identified Need | Key Issue | Description Of Evidence |
| Service accessibility – Mental health services: General | (PTSD)/fatigue/inability to address their own health issues were described, along with a lack of low-cost or no-cost counselling/support/monitoring for high prevalence mental health issues, that is, anxiety, depression. | |
| Service accessibility – Children and youth services | <p>A lack of services specifically catering to the needs of children and young people was described. Hotspots were created by:</p> <ul style="list-style-type: none"> • service gaps in Manningham resulting from movement of services out of the municipality; and • Nillumbik having a large youth population and high problematic use of alcohol and other drugs. | <p>cohealth (2015), <i>North Western Region Catchment Based Mental Health Community Support Strategic Plan 2015-18</i>; EACH (2015), <i>Eastern Metropolitan Region Integrated Mental Health and Alcohol and Other Drugs Catchment Plan 2016-18</i>.</p> <p>Consultation:</p> <ul style="list-style-type: none"> • Council – Manningham City Council; and • CHS – healthAbility. |
| System design – Integrated services | <p>Allied health survey respondents reported the need for improved service coordination between mental health and AOD services.</p> <p>Very few services cover the client from illness recognition right through to crisis, save for telephone advice, help and referral lines. There is a gap where consumers will need to exit one service and enter another, creating a risk for continuity of care.</p> | <p>EACH (2015), <i>Eastern Metropolitan Region Integrated Mental Health and Alcohol and Other Drugs Catchment Plan 2016-18</i>.</p> <p>Consultation:</p> <ul style="list-style-type: none"> • EMPHN Allied Health Survey (October 2016). |

Outcomes Of The Service Needs Analysis – After Hours

| Outcomes Of The Service Needs Analysis – After Hours | | |
|--|--|--|
| Identified Need | Key Issue | Description Of Evidence |
| Service accessibility – After hours primary health care services | <p>General practices have limited opening hours in the after hours periods, particularly after 8 PM on all days of the week.</p> <p>There is a shortage of after hours GP services in outer metropolitan areas, and shortages of GPs that are prepared to work in after hours clinics.</p> <p>The increased costs of running an after hours GP clinic make after hours services less viable.</p> <p>The inner metropolitan areas are fully covered by after hours medical deputising services – specifically the local government areas 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.</p> <p>There is limited availability of other health care services such as pharmacy, radiology and pathology in after hours periods, particularly in outer metropolitan areas.</p> <p>Some general practice survey respondents indicated a belief that there were consumers accessing the ED for non-urgent care because they preferred and were unable to otherwise obtain after hours access.</p> | <p>EMML, IEMML and NMML (2012-13), Comprehensive Needs Assessments; EMPHN After Hours Survey (2015); EMPHN research on MDS coverage in the catchment; VEMD (2014-15).</p> <p>Consultation:</p> <ul style="list-style-type: none"> • 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; and • EMPHN General Practice Survey (October 2016). |
| Service accessibility RACFs – Access to GPs and other primary health | <p>A poor after hours system response for residents in some aged care facilities was reported, resulting in:</p> <ul style="list-style-type: none"> • Variable quality of locum care; <ul style="list-style-type: none"> ○ Insufficient residential in-reach services; and ○ Inappropriate referral to emergency departments for some conditions. | <p>Australian Commission on Safety and Quality In Healthcare (2015), <i>Australian Atlas of Healthcare Variation</i>.</p> <p>Consultation:</p> |

| Outcomes Of The Service Needs Analysis – After Hours | | |
|--|---|--|
| Identified Need | Key Issue | Description Of Evidence |
| care services in the after hours period | <p>Inadequate back-fill for residential in-reach programs impacts service delivery.</p> <p>Aged care facility staff lack knowledge of after hours primary healthcare services.</p> <p>There is a critical workforce shortage of nurses and personal care attendants.</p> <p>Procedures and processes for admitting and discharging of patients are confusing, arduous and can lead to medication mismanagement and patient deterioration.</p> <p>Poor access to radiology, palliative care and pathology in the after hours periods, particularly in outer metropolitan areas, and the lack of pharmacy access both in and out of hours can result in avoidable hospital admissions.</p> <p>Lack of access to after hours locum care resulting in unnecessary transfers to hospital.</p> <p>Inadequate resources to manage acute aggression in residents with dementia (noted in Boroondara) resulting in high (second percentile) antipsychotic use.</p> | <ul style="list-style-type: none"> LHN – Austin Health; Eastern Health; Northern Health; Southern Health Dandenong; St. Vincent’s Hospital; and EMPHN RACF interviews (September 2015 – February 2016). |
| System design – After hours primary health care services | <p>There was often poor communication between service providers: inadequate reporting provided by medical deputising services (MDS) back to local GPs was identified as an issue by some GPs.</p> <p>Some (MDS) GPs lack expertise in elements of specialised after hours care, including palliative and end-of-life care.</p> <p>There is apparent underuse of telephone interpreter services.</p> | <p>EMML, IEMML and NMML (2012-13), Comprehensive Needs Assessments; Larter Consulting (2015), <i>ACP Consortium Needs Analysis</i>.</p> <p>Consultation:</p> <ul style="list-style-type: none"> GP clinic – Clayton Road Doctors Medical Centre; ERAHMS clinics; Nexus GP SuperClinic Wallan; |

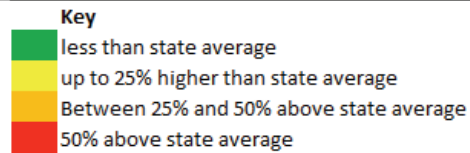
| Outcomes Of The Service Needs Analysis – After Hours | | |
|---|--|---|
| Identified Need | Key Issue | Description Of Evidence |
| System design – After hours primary health care services | <p>The information provided in the National Health Services Directory (NHSD) can be inaccurate or outdated.</p> <p>It was proposed that there were limited opportunities for GP services and pharmacies to expand their opening hours unless additional funding was made available. After hours services are often viewed as functional aspects of general practice rather than part of planned care.</p> | <p>Warburton Medical Clinic;</p> <ul style="list-style-type: none"> • MDS – ALMS; My Home GP; NHDS; and • EMPHN RACF interviews (September 2015 – February 2016). |
| Health-related behaviour – After hours service access | <p>Community knowledge of after hours services, including MDS and after hours clinics, pharmacies and other primary health care services is limited:</p> <ul style="list-style-type: none"> • Comprehensive information sources in languages other than English are lacking. <p>Multifaceted community education programs are needed to address community perceptions that:</p> <ul style="list-style-type: none"> • Emergency departments offer the best or most accessible primary care service after hours (leads to inappropriate/inefficient emergency department presentations); and • Ambulances are appropriately accessed as cost-free transport to a cost-free service. | <p>EMML, IEMML and NMML (2012-13), Comprehensive Needs Assessments.</p> <p>Consultation:</p> <ul style="list-style-type: none"> • CHS – EACH; • NGO – Migrant Information Centre; and • Ambulance service – Ambulance Victoria. |
| Service accessibility – Culturally safe and accessible primary health care after hours services | <p>Many consumers lack awareness about, or lack transport access to after hours services.</p> <p>There is a shortage of after hours services that are appropriate for Aboriginal and/or Torres Strait Islander, and CALD and refugee communities.</p> <p>Inexperienced GPs, potentially including visiting MDS GPs, may have incomplete understandings of the effects of trauma and torture:</p> <ul style="list-style-type: none"> • Interpreter services are underutilised. • Rates of self-identification in the Aboriginal and/or Torres Strait Islander community are believed to be low. | <p>EMML (2014), <i>Aboriginal Health Priorities Framework</i>; EMML, IEMML and NMML (2012-13), Comprehensive Needs Assessments; IEMML (2014), <i>Reconciliation Action Plan</i>.</p> <p>Consultation:</p> <ul style="list-style-type: none"> • NGO – Foundation House; Migrant Information Centre; and • Network – Eastern Region Refugee |

| Outcomes Of The Service Needs Analysis – After Hours | | |
|---|--|---|
| Identified Need | Key Issue | Description Of Evidence |
| | | Health Network; Northern Region Refugee Health Network. |
| Service accessibility – Mental health after hours services | <p>The community-based service system for people experiencing mental health problems after hours is limited.</p> <p>Youth, including homeless youth, who have an increased rate of mental health problems, have poor access to specialist services.</p> <p>Those experiencing drug and alcohol problems have limited after hours services available:</p> <ul style="list-style-type: none"> • There is limited after hours access to the PACER programs. • Mental health services for young people in Nillumbik are limited, and this is perceived to be reflected in relatively high ED mental health presentations. • Knox and Yarra Ranges had high ambulance-serviced ED attendances for drug related issues. | <p>Consultation:</p> <ul style="list-style-type: none"> • CHS – EACH Ringwood and Maroondah. |

Addendum 1 – ACSC Analysis

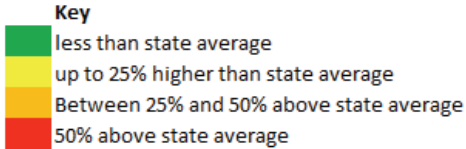
Preventable Hospitalisations Hot Spot Analysis-General (Return To Section Two)

| | Banyule | | | Boroondara | | | Knox | | | Manningham | | | Maroondah | | | Mitchell | | | Monash | | | Murrindindi | | | Nillumbik | | | Whitehorse | | | Whittlesea | | | Yarra Ranges | | |
|-----------------------------|---------|---------|---------|------------|---------|---------|---------|---------|---------|------------|---------|---------|-----------|---------|---------|----------|---------|---------|---------|---------|---------|-------------|---------|---------|-----------|---------|---------|------------|---------|---------|------------|---------|---------|--------------|--|--|
| | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | | | |
| Angina | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Asthma | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cellulitis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chronic Obstruct Pulmonary | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Congestive Heart Failure | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Convulsion & Epilepsy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dehydration & Gastroent | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dental Conditions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Diabetes Complications | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ear Nose & Throat Infection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gangrene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hypertension | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Influenza | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Iron Deficiency Anaemia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nutrition Deficiencies | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other Vaccine | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pelvic Inflammatory Disease | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Perforated Bleeding Ulcer | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyelonephritis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



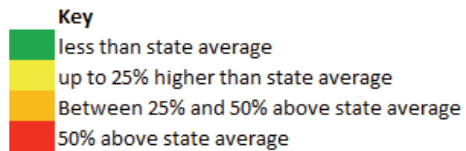
Preventable Hospitalisations Hot Spot Analysis – Male (Return To Section Two)

| | Banyule | | | Boroondara | | | Knox | | | Manningham | | | Maroondah | | | Mitchell | | | Monash | | | Murrindindi | | | Nillumbik | | | Whitehorse | | | Whittlesea | | | Yarra Ranges | | |
|-----------------------------|---------|---------|---------|------------|---------|---------|---------|---------|---------|------------|---------|---------|-----------|---------|---------|----------|---------|---------|---------|---------|---------|-------------|---------|---------|-----------|---------|---------|------------|---------|---------|------------|---------|---------|--------------|--|--|
| | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | | | |
| Angina | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | | | | |
| Asthma | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | | | | |
| Cellulitis | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | | | | |
| Chronic Obstruct Pulmonary | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | | | | |
| Congestive Heart Failure | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | | | | |
| Convulsion & Epilepsy | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | | | | |
| Dehydration & Gastroent | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | | | | |
| Dental Conditions | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | | | | |
| Diabetes Complications | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | | | | |
| Ear Nose & Throat Infection | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | | | | |
| Gangrene | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | | | | |
| Hypertension | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | | | | |
| Influenza | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | | | | |
| Iron Deficiency Anaemia | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | | | | |
| Nutrition Deficiencies | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | | | | |
| Other Vaccine | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | | | | |
| Perforated Bleeding Ulcer | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | | | | |
| Pyelonephritis | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | | | | |
| Total | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | Green | | | | |



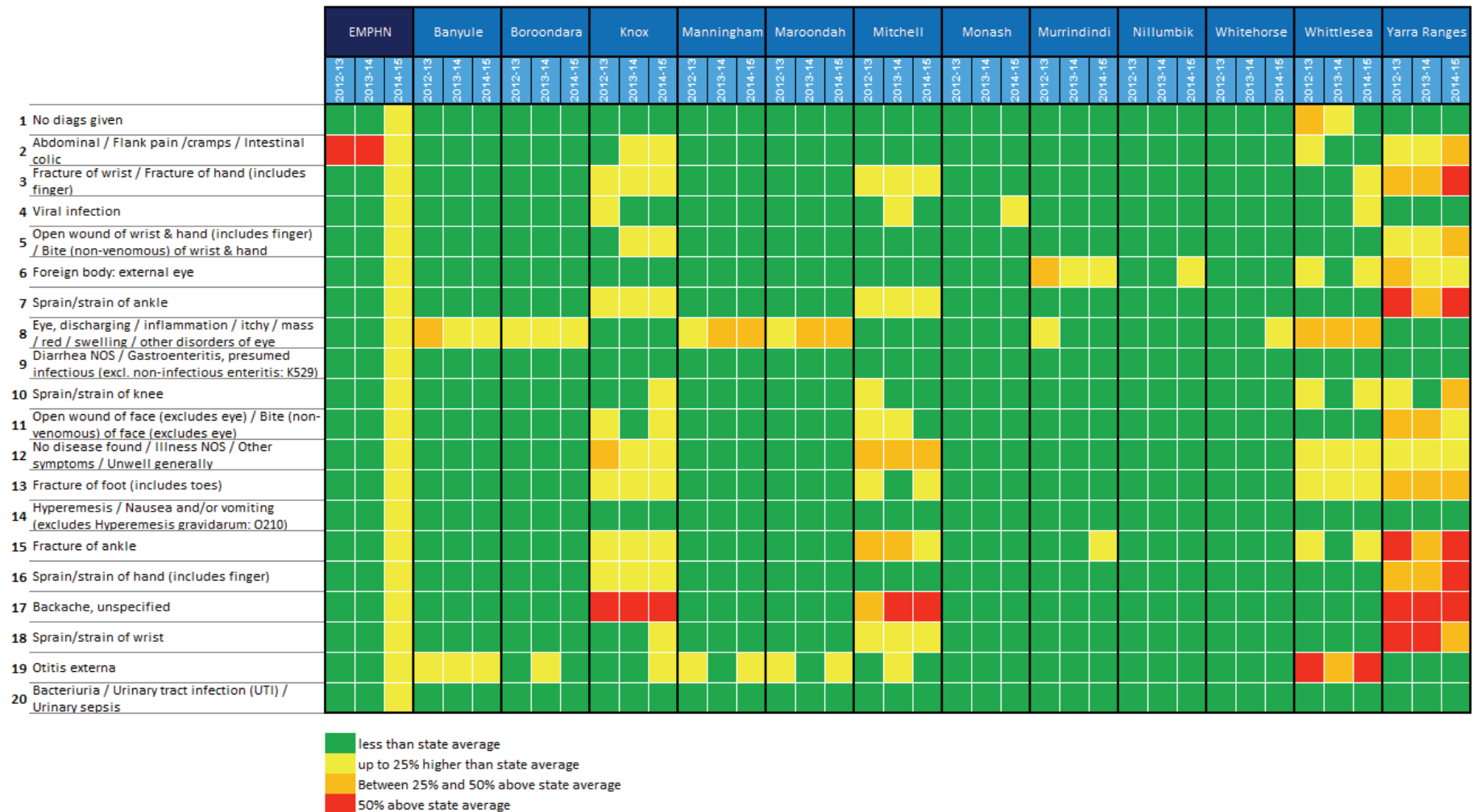
Preventable Hospitalisations Hot Spot Analysis – Female (Return To Section Two)

| | Banyule | | | Boroondara | | | Knox | | | Manningham | | | Maroondah | | | Mitchell | | | Monash | | | Murrindindi | | | Nillumbik | | | Whitehorse | | | Whittlesea | | | Yarra Ranges | | |
|-----------------------------|---------|---------|---------|------------|---------|---------|---------|---------|---------|------------|---------|---------|-----------|---------|---------|----------|---------|---------|---------|---------|---------|-------------|---------|---------|-----------|---------|---------|------------|---------|---------|------------|---------|---------|--------------|--|--|
| | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | 2012-13 | 2013-14 | 2014-15 | | | |
| Angina | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Asthma | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cellulitis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chronic Obstruct Pulmonary | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Congestive Heart Failure | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Convulsion & Epilepsy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dehydration & Gastroent | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dental Conditions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Diabetes Complications | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ear Nose & Throat Infection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gangrene | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hypertension | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Influenza | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Iron Deficiency Anaemia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nutrition Deficiencies | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other Vaccine | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pelvic Inflammatory Disease | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Perforated Bleeding Ulcer | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pyelonephritis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



Addendum 2 – ED Category 4 and 5 Analysis

Preventable ED Presentations Hot Spot Analysis ([Return To Section Two](#))







FOR MORE INFORMATION

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