the PHCAAtlas™

population health profiling
+ needs assessment + commissioning
an overview

Western Sydney Primary Health Network
[WSPHN] | March 2016
Introduction to the PHCAtlas™

This PHCAtlas™ brings together available information from a range of sources to create a population health profile and utilises the National Health Performance Authority (NHPA)’s indicators for PHNs as a starting point for analysis, highlighting variations in health status and health service utilisation. The PHCAtlas value adds where possible by drawing on additional sources (i.e. local intelligence, stakeholders and published reports) to inform the commentary. The intent is to provide an information rich and visual document for decision makers within PHNs to assist in setting priorities, as well as providing recommendations for commissioning and further in-depth analysis or planning.

A broad range of data sources are used including the Australian Bureau of Statistics (ABS), Medicare Australia, the Australian Institute of Health and Welfare (AIHW), and other key reports (see references). Many of the prevalence maps generated rely on a dataset for Primary Health Networks provided by the Public Health Information Development Unit (PHIDU) using synthetic (modelled) data estimates. These estimates should be used with caution and treated only as indicative of the prevalence of each health indicator in an Statistical Local Area (SLA). In future, data from General Practices and Aboriginal Community Controlled Health Services will provide richer and a more up to date aggregated dataset for analysis. The Western Sydney Primary Health Network (WSPHN) region is compared to the other 31 PHNs on a range of indicators, by ranking within a quintile range – the highest ranked position having the greatest health need. A colour coding system is used for the quintiles for ease of visualisation. The darker the colour, the greater the health need, relative to other PHNs. The SLAs of highest demand are also highlighted within the region.

Determinants of Health

Social, environmental and economic factors play a significant role in shaping the health and wellbeing of individuals and populations and are commonly referred to as the social determinants of health (SDH) as shown in Figure 1. Evidence documenting the contribution of the SDH to population health outcomes is well established and undisputed, leading international, national and regional health authorities to act to address these factors. The links between SDH and the development of diseases such as chronic conditions are complex, although usually associated with access to opportunities and resources such as quality education, adequate and meaningful employment, safe and affordable housing, accessible transport, nutritious food, safe local environments and accessible health services. Income also plays a critical role as it provides flexibility and options, enabling people to access the SDH they need. SDH underpin health and influence the movement of individuals and populations across the Population Health disease continuum.1,2

Figure 1 Social Determinants of Health

Source: Darlygreen, Whitehead

The above framework has been used to guide the development of the Population Health Commissioning Atlas. It describes the population health chronic disease continuum from a well population to the development of risk factors, through to the progression of established chronic disease patterns. It recognises the interconnections between the socio-economic and environmental conditions in which people live and their access to health and other services has a direct impact on the health status of a population. Action to improve health status needs to occur at each level of the continuum. It recognises a wide range of collaborative partnerships with multiple stakeholders and sectors will be required to achieve improved population health and well being outcomes.3 Primary Health Networks and Hospital and Health Services are in a prime position to drive these improvements and fulfil their mandate under the National Health Reform agenda.4

Figure 2 Population Health Chronic Disease Continuum

Source: NHPP1
The Challenge

Walter Kmet | CEO | Western Sydney Primary Health Network

Western Sydney is a diverse community and with this comes a range of diverse health needs and social circumstances. The Western Sydney PHN (WSPHN) region is closely analysed in this Population Health Commissioning Atlas. It is one important part of the planning and needs assessment role that WSPHN undertakes and shares with a broad range of health and human service policy makers, funders and service providers.

The 2016 edition of the Atlas shows that some sub-regions of western Sydney have poor health compared to those in other parts of NSW. Many communities have high rates of chronic disease (eg diabetes) and mental health issues. This is underscored by high rates of obesity and smoking, low rates of cervical and breast cancer screening, and a high impact of social determinants of health and inequity. Immunisation rates are also below average.

WSPHN is committed to working with GPs, primary care providers and key stakeholders to improve health outcomes across western Sydney. With a fast growing population, prevention strategies including health promotion, better integration of care and strong cross sector partnerships are critical enablers to improved health. WSPHN is proud to have a role to play in western Sydney to achieve better outcomes and equity.

Map 1 Western Sydney PHN Map and Age profile

Source: PHIDU

See Appendix 1 (Page 19) for detailed table
Demographics & trends

The PHN’s population has a younger profile than both Sydney and the broader NSW population.

There is a higher proportion of both males and females for all age cohorts 0-44 years of age.

The 65 plus proportion of the population is low when compared to NSW. WSPHN has the tenth lowest proportion of people aged over 85 when compared to all other Primary Health Networks.

Migration stats

Migration statistics from the 2011 census of population and housing indicate that over a quarter of the population of Western Sydney moved at least once between 2006 and 2011. There was a net increase of almost 50,000 people between 2006 and 2011 in Western Sydney. Over 60,000 people moved into the western Sydney area from another country during this same time period.

Population projections

Similar to the overall Australian projections the population of the WSPHN region is aging with an increase in all age cohorts above 45 years of age.

It is projected that by 2025 there will be a significant growth in the 65 plus population with an increase from 5.7% of the total population to 7.6% of the total population.
Demographics, Trends + Socio-Economic Status

Map 2 SEIFA Index Relative Socio-Economic Disadvantage by SLA Group

Socio-Economic Index for Areas (SEIFA)
The ABS 'Index of Relative Socio-Economic Disadvantage' is a useful summary indicator of disadvantage across regions. This summary measure provides an overview of many of the indicators of social inequality. These indicators include low income, low educational attainment, high unemployment, jobs in relatively unskilled occupations amongst others. SEIFA is a good predictor of a region’s health. Low SEIFA scores usually are indicative of poor health outcomes for a region.

Socio-Economic Analysis
A low Index of Relative Social Disadvantage (IRSD) score indicates a high proportion of relatively disadvantaged people in the area as highlighted by the dark red colours on Map 2.
Overall the IRSD for the WSPHN region is 994 slightly below the Australian Average (1000) and the greater Sydney Average (1011).
All SLA’s have great variation when considering the SA1’s within a given SLA e.g.:
- Blacktown – South-West (890 Overall score) has SA1’s with scores of as low as 480 and a maximum of 1086.
- The Hills Shire – North has the highest SEIFA IRSD Score (1105) but still has SA1’s within the area with scores as low as 874 (up to a maximum 1158).

Aboriginal & Torres Strait Islander Population
The WSPHN region is home to the largest urban Indigenous population in Australia. The 2011 Census indicates 1.4% of the population of the WSPHN region identify as an Aboriginal or Torres Strait islander (11,492 people) with the main centre of Indigenous populations being Blacktown with 8,194 Aboriginal people.

Blacktown – South West has the highest Indigenous proportion (4.6%), and this is the highest proportion of any community in Sydney.
Over 4,500 Indigenous people live in the Mt Druitt area (Blacktown – SW) which is an area with very low socioeconomic status.

The Aboriginal & Torres Strait Islander Community is a transient community with sensitivity to completing the census. It is believed the Aboriginal & Torres Strait Islander Community in Western Sydney has a population closer to 13,000–15,000.
Social Determinants of Health (SDH)

The Social Determinants of Health describe the conditions that play a key role in shaping people’s health and wellbeing. Importantly, the distribution of these determinants can vary across population, and thereby either increase or decrease a community’s opportunities to be healthy. The unequal distribution of the SDH across populations is considered to be one of the driving factors leading to differences in health status and creating health inequities – the unfair and avoidable differences seen within countries, regions and populations.\(^\text{5,6}\)

School Participation

Higher levels of education are associated with higher levels of employment and earning for individuals. Participation in schooling and/or training is an important protective factor for young people, reducing the risk of substance misuse, incarceration, social exclusion, homelessness and poverty. Evidence shows that health improves with increasing levels of educational attainment. The WSPHN region has good school participation rates overall with 80.5% of the population aged 16 attending full time secondary school. All of The Hills Shire regions have participation rates 86% and above. Conversely however, Parramatta South (69.4%) and Blacktown South West (72.4%) are two regions with participation rates well below the rest of the region.

Employment and income

Unemployment is a social problem and is associated with poor physical and mental health outcomes.\(^\text{7}\) The health effects are linked to psychological consequences, financial problems (debt) and reduced life opportunities, with outcomes worse in regions where unemployment is widespread. Overall the WSPHN region has a low youth unemployment rate (4.6%) compared to the Australian average (5.4%), however it is higher when compared to greater Sydney’s average (3.8%). Blacktown South-East, South-West and Parramatta South all have rates of youth unemployment over 6%.

In June 2013 the WSPHN region had an overall unemployment rate of 6.5%. Australian average (5.4%), Parramatta South and Blacktown SW both have unemployment rates over 11% which is more than twice the average Australian rate. These two regions also have the highest rates of total concession card holders with over a quarter of the population in each of these regions holding a centrelink concession card.

The WSPHN regions have a wide range of median weekly personal incomes, ranging from $370 in Parramatta South up to $740 for people in The Hills Shire North.
Maternal and child health

Child health is an important indicator of the health of a community. The importance of the early years and the impact they have on a child’s health and development is acknowledged in the Key National Indicators Framework by AIHW. This framework brings together all of the determinants of children’s health outcomes and includes safe communities and environments, family circumstances, exposure to risk and protective factors, learning and development, health child development and access to health and social services.

Antenatal care has been found to have a positive effect on the health outcomes for both mother and baby. Between 2009 and 2012 the WSPHN population had the highest rate of antenatal visits in Australia during the first trimester (97.7%).

Low birth weight is a risk factor for neurological and physical disabilities, and low birth weight babies may also be more vulnerable to illness throughout childhood and adulthood. Risk factors include maternal smoking, socio-economic disadvantage, the weight and age of the mother, poor antenatal care and illness during pregnancy.

The south west region of Western Sydney (Blacktown) has high proportions of mothers smoking during pregnancy. (Map 7).

Immunisation is highly effective in reducing morbidity and mortality caused by vaccine preventable diseases. Overall immunisation rates (87.2%) at 2 years of age are below the national average (92.5%). Auburn and Parramatta have the lowest rates of immunisation (Map 9).

The Australian Early Development Census (AEDC) provides a snapshot of how Australian children are tracking against national benchmarks. Data is collected every three years with the teachers of children who are in their first year of school completing measures in five key domains (Physical Health and Wellbeing, Social Competence, Emotional Maturity, Language & Cognitive Skills and Communication Skills & General Knowledge).

AEDC data is collected at city council level (rather than SLA) and the data in Figure 10 and Map 10 show city council level data. Two councils in the WSPHN have a higher proportion of children developmentally vulnerable on one or more domain than the Australian average.

All councils (except Auburn) have shown an increase between the 2012 and 2015 surveys for children vulnerable on one or more domains.
National Health Priority Areas – Risk Factors

The Social Determinants of Health influence people’s exposure to risk and protective factors. Figure 11 shows a number of nationally selected diseases and conditions where focussed prevention and management are likely to result in significant improvements in the health of Australia’s population. Communities can be supported to reduce the factors for these conditions and hence limit the need for use of hospital and ED Services.

Chronic disease prevalence

The Western Sydney Primary Health Network region’s population has prevalence rates for chronic disease close to (and slightly below) the NSW and Australian averages.

The WSPHN region population has a high rate of mortality from Coronary heart disease and stroke. Both rates are above both the NSW and Australian averages.

However, the WSPHN population has a lower rate of death for all cancers.

Poor Diet and excess body weight

Nutritious food is fundamental to good health and disease prevention. There are significant health risks associated with poor nutrition, including the increased risk of chronic diseases such as heart disease, type 2 diabetes and some cancers. Poor nutrition also contributes to a number of chronic disease risk factors such as high blood pressure, high cholesterol and obesity.

Adults across the WSPHN region on average consume a usual daily intake of two or more serves of fruit at a rate higher than the Australian average. Only in parts of Blacktown do Adults on average consume fruit at a rate lower than the Australian average (50.1 ASR per 100).

The southern part of the WSPHN are has the highest obesity rates in the region with Blacktown (South-West) and Auburn having the worst rates with over 20% of the population being obese.

Diabetes

While the overall prevalence rate across the WSPHN region of diabetes is consistent with the Australian average, the southern SLAs of the WSPHN region have rates higher than the Australia average (3.4 per 100 people).

Ischaemic Heart Disease

The WSPHN region population has a high rate of mortality from coronary heart disease with Blacktown (38.7 per 100,000) having a rate well above the Australian average (27.9 per 100,000).
Smoking continues to be Australia’s largest preventable cause of death and diseases. It increases the risk of a number of cancers (especially lung cancer), coronary heart disease, Chronic Obstructive Pulmonary Disease (COPD) and stroke. There is strong correlation between smoking rates and disadvantage, with people living in areas of most disadvantage more likely to smoke daily compared with those living in areas of least disadvantage (23% to 10% nationally). Smoking rates in the WSPHN area (18.8 per 100) are overall below the Australian average (20.3 per 100) with the Hills Shires SLA’s having significantly lower rates of smoking than Australia. Conversely however Parramatta South and Blacktown South-West have rates of smoking above the Australian average (ASR 20.3 per 100). There are significantly more males (21.9 per 100) smoking than females (15.9 per 100).

Chronic Obstructive Pulmonary Disease (COPD)
COPD is currently the fourth leading cause of death worldwide and by 2020 it is estimated that it will be the third leading cause of death. COPD is associated with a high level of disability and cost (including unnecessary hospital admissions). It is under-recognised and under-diagnosed and can be better managed in primary care. Prevention across the spectrum is required for COPD is a serious long term lung disease with a high level of disability. The principal risk factor for COPD is smoking, with the amount and the length of time smoking increasing the risk. The map for COPD prevalence in Western Sydney closely matches the smoking map with the highest prevalence rates in Parramatta South and Blacktown SW. Overall the rate of 2.0 per 100 in Western Sydney is low compared to Sydney, NSW and Australian averages. Despite a high prevalence of COPD in the population of South Parramatta, between 2008-2012 there were less than 4 deaths and therefore the ASR/SDR was not calculated. The south of Blacktown had the highest rates of death from COPD with Blacktown SW having a rate 66% higher than the Australian average (7.8 per 100,000).

Lung Cancer
The primary cause of Lung cancer is smoking and once again Blacktown SW and SE have higher than Australian average rates (21.2 per 100,000) of premature mortality due to lung cancer.

Reduce The Impact
Preventing the onset of smoking and increasing the numbers of smokers who quit is the single most important strategy to reduce the prevalence of, and deaths from COPD, Lung Cancer and heart disease.
Cancer

Some cancers can be prevented and population wide screening programs are the best way to ensure early detection and best possible outcomes.

Bowel cancer

The WSPHN populations has one of the lowest bowel screening rates (31.9%) in the country ranking 56 out 61 MLs for participation in screening. Women have a slightly higher rate of screening (32.8%) compared to men (31.1%). The Hills Shire (South) is the only SLA with a national bowel cancer screening program participation rate above the Australian average (35.4%).

All SLAs in Blacktown and Parramatta South have high rates of premature mortality due to bowel cancer, and all are above the Australian average (ASR 9.6 per 100,000).

Cervical cancer

Participation in cancer screening programs is influenced by a range of factors. Barriers such as different cultural backgrounds and low socio-economic status can impact on participation rates. There is a large percentage of the WSPHN population born overseas in non English speaking background countries (35%) which along with Aboriginality is often a barrier to female cancer screening programs.

The WSPHN population has a low participation rate in cervical cancers screening programs. Overall only 51% of eligible women are screened compared to 56% overall in NSW.

Blacktown - South-West and Inner Parramatta have very low screening participation rates of less than 44%.

Prevalence of cervical cancer is however at a lower rate in the WSPHN population than the overall NSW population.

Breast cancer

Similarly the participation of females in the WSPHN region in breast cancer screening programs is also low (48% compared to 53% for NSW).

The prevalence of breast cancer in the WSPHN population is slightly lower than for the overall NSW population.

The rate of premature mortality due to breast cancer for females in western Sydney (18 per 100,000) is higher than the Australian average (17 per 100,000). Parramatta NW and Blacktown SW have very high rates - 50% more than the Australian average.
Mental Health

Data indicates that the population of Western Sydney has a high incidence of mental health related conditions.

Psychological distress is an indicator of the mental health of a community, and is considered the best population-wide measure currently available.

The WSPHN population has one of the highest rates of psychological distress in the country (12.6 per 100). Over half the SLAs in WSPHN have rates of psychological distress above the Australian average (11.7 per 100).

GP mental health care plans

GP Mental Health Plans are a requirement for patient referrals to short-term psychological interventions (e.g. CBT) under the Medicare funded ATAPS Programs. Figure 15 indicates that the preparation of GP Mental Health Plans and visits to a GP for mental health services occur more than twice as often for residents of Western Sydney compared to Australia as a whole.

Hospitalisation

WSPHN ranks 10th in the country for hospitalisations for mental health related conditions with only Parramatta-South (1044) having rates below the Australian average (1532 per 100,000).

Suicide and self harm

Compared to NSW the population of Western Sydney have a lower rate or hospitalisation for intentional self harm for males and females of all ages.

WSPHN ranks very low when compared to other old MLs (58th) when deaths from suicide/self injury are considered. All SLAs have ASR’s below the national average (12.4 per 100,000).

The rate of death from suicide has been dropping over the past 20 years in both Western Sydney and NSW overall. With Western Sydney having a rate of 6 per 100,000 people in 2013 (compared to 9 per 100,000 for NSW).
Primary Care
The population of Western Sydney is well serviced by the primary care sector with the second highest number of consults per year per person (7.3) for a PHN in the country. This is well above the average of 5.4 consults per year per person. WSPHN ranks third in Australia for after hours service utilisation.

Figure 18 shows the proportion of short, standard and long consults for the WSPHN population. Standard consults (Level B, less than 20 minutes) are the norm for GPs in the WSPHN area with 86% of the consultations fitting into this category. This rate is slightly higher than the Australian average, and rates of all other consults are slightly lower than the corresponding Australian averages.

Figures 19 and 20 show that Western Sydney has on average a higher number of consults both in rooms and per RACF bed than the overall Australian population.

Hospitalisations
Potentially avoidable hospitalisations are those that may have been avoided by timely and effective provision of non-hospital or primary health care including prevention. It is important to recognise that a potentially avoidable hospitalisation may have become unavoidable by the time a patient was admitted.

The rate of acute and vaccine preventable hospitalisations is the lowest in the peer group.

Figure 23 shows that the only conditions that WSPHN has higher rates of hospitalisation than the NSW and Australian averages is for Pregnancy/childbirth and Mental health related conditions.

All other conditions the rates of hospitalisations are below the overall state and national rates. In particular the rate of hospitalisations for cancer and musculoskeletal disease are significantly below the equivalent national and state rates.

The rate of ED admissions overall is more than 20% lower than the state average, which may be attributed to the high rate of primary care services in Western Sydney.
Premature Mortality

Premature mortality refers to deaths which occur at a younger age than expected and can be measured by potential years of life lost (PYLL). PYLL highlights deaths that occur at younger ages as it counts the number of years of life lost for each death before the age of 75. It can be used as an indicator of social and economic impact of premature mortality and therefore used in setting public health priorities.

When compared to other peer group PHNs, Western Sydney ranks as having the second lowest rate of potentially avoidable deaths per 100,000 people per year.

Similarly to all peer PHNs there are more potentially avoidable deaths for males than females.

Causes

Cancer is the leading cause of premature mortality (98.2 per 100,000 people), followed by circulatory system diseases (51.2).

While overall Western Sydney has a rate of death due to cancer slightly below the Australian average (96 compared to 100). Some parts of Western Sydney have rates well above the national average. South East and South West Blacktown have rates of death from cancer 10-35% higher than the national average. While in contrast The Hills Shire has rates 20-25% below the Australian average.

Overall premature mortality (from all causes) varies considerably across the WSPHN region with Blacktown SW and Inner Parramatta having rates of mortality 30-40% higher than the Australian average. The SLAs within The Hills Shire have mortality rates 35-40% lower than the Australian average.

<table>
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<tr>
<th>Cause</th>
<th>Number</th>
<th>Rate per 100,000</th>
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<tbody>
<tr>
<td>Cancer (all)</td>
<td>3,268</td>
<td>98.2</td>
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<tr>
<td>Endocrine, nutritional and metabolic diseases</td>
<td>192</td>
<td>5.8</td>
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<td>Circulatory system diseases</td>
<td>1,704</td>
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<td>Respiratory system diseases</td>
<td>467</td>
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<tr>
<td>External courses</td>
<td>827</td>
<td>21.3</td>
</tr>
<tr>
<td>Other</td>
<td>827</td>
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<td><strong>Total</strong></td>
<td></td>
<td><strong>231.4</strong></td>
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</table>

Figure 23 Premature mortality by cause (2008-2012)

Map 25 Premature mortality due to cancer (ASR per 100,000)

Map 26 Premature mortality (all causes) ASR per 100,000

Source: PHIDU
## WSPHN Health Domains + Primary Health Network Data Benchmarking

### Table: WSPHN Health Domains + Primary Health Network Data Benchmarking

<table>
<thead>
<tr>
<th>Domain</th>
<th>Indicator</th>
<th>All PHNs (x31)</th>
<th>WSPHN</th>
<th>Quintile Range</th>
<th>LGA Range</th>
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<td></td>
<td>Median</td>
<td>Range</td>
<td>Result</td>
<td>Rank</td>
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<td>ACCESS UTILISATION</td>
<td>GP MBS utilisation (consults per year person)</td>
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<td>4.0-7.6</td>
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<td>GP Services Waiting Times</td>
<td>24%</td>
<td>15-38%</td>
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<td>GP After Hours Service Utilisation</td>
<td>8%</td>
<td>4-12%</td>
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<td>Allied Health utilisation (% who saw)</td>
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<td>10-32%</td>
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<td>Specialist Service Utilisation</td>
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<td>Selected Potentially Avoidable Hospitalisations</td>
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<td>LIFESTYLE 1° PREVENTION</td>
<td>Smoking Prevalence (18 years and over) (%)</td>
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<td>13.6-23.5</td>
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<td>Overweight Prevalence - Males (rate/100)</td>
<td>42.2</td>
<td>40.4-45.2</td>
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<td>Overweight Prevalence - Females (rate/100)</td>
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<td>26.8-31.8</td>
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<td>Overweight Prevalence - People (%)</td>
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<td>33.4-36.6</td>
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<td>Obesity Prevalence - Males (rate/100)</td>
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<td>Obesity Prevalence - People (rate/100)</td>
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<td>23.6-34.0</td>
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<td>Alcohol Use/abuse (rate/100)</td>
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<td>2.8-7.8</td>
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<td>Physical Inactivity (rate/100)</td>
<td>34.8</td>
<td>26.4-44.2</td>
<td>37.0</td>
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<td>CDM 2° PREVENTION</td>
<td>Prevalence Diabetes (rate/100)</td>
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<td>2.7-4.4</td>
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<td>Prevalence COPD (rate/100)</td>
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<td>1.9-2.9</td>
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<td>Death rate IHD (rate/100,000)</td>
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<td>12.9-70.5</td>
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<td>GP MBS Diabetic Annual Care Plan (SIP services)</td>
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<td>GP MBS Asthma Care Plan (SIP services)</td>
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<td>Incidence IHD (rate per 100,000)</td>
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<td>SCREENING</td>
<td>Screening participation – Breast Cancer</td>
<td>56.4%</td>
<td>36.0-63.8</td>
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<td>Incidence of Breast Cancer (female) (rate per 100,000)</td>
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<td>Screening participation – Bowel Cancer (%)</td>
<td>35.4%</td>
<td>23.3-42.3</td>
<td>30.4</td>
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<td>Incidence of Bowel Cancer (rate per 100,000)</td>
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<td>Death rate Bowel Cancer (rate/100,000)</td>
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<td>4.3-11.8</td>
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<td>Screening participation – Cervical Cancer</td>
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<td>47.0-65.4</td>
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<td>Cervical screening outcomes: high grade abnormality (20-69yo) (Rate/1,000)</td>
<td>13.3</td>
<td>8.9-20.5</td>
<td>9.2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Death rate Breast Cancer (rate/100,000)</td>
<td>17</td>
<td>5.6-18.7</td>
<td>18.2</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Death rate Cervical Cancer (rate/100,000)</td>
<td>No data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHILD HEALTH</td>
<td>Infant Mortality (rate/100,000)</td>
<td>21.3</td>
<td>7.0-45.2</td>
<td>17.7</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Life expectancy at Birth</td>
<td>81.5</td>
<td>76.1-84.6</td>
<td>82.4</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Proportion babies Low Birth weight</td>
<td>6.6%</td>
<td>4.1-9.1</td>
<td>6.4%</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Immunisation of 2 year old</td>
<td>92.9%</td>
<td>88.6-96.3</td>
<td>91.9%</td>
<td>48</td>
</tr>
<tr>
<td>MENTAL HEALTH</td>
<td>Completed Suicide Rate (rate/100,000)</td>
<td>13.6</td>
<td>7.3-29.4</td>
<td>8.2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Prevalence of Depression</td>
<td>11.6</td>
<td>8.9-13.8</td>
<td>12.6</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>Population receiving MH Care (number)</td>
<td>No data</td>
<td></td>
<td>31224</td>
<td></td>
</tr>
<tr>
<td>RACE AGED</td>
<td>Proportion aged 85+</td>
<td>1.9%</td>
<td>0.2-2.9</td>
<td>1.3%</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Aged care beds/pop. +70 years (total care places/1,000)</td>
<td>86.6</td>
<td>8.7-140.3</td>
<td>85.6</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>RACF GP services utilisation (# per patient)</td>
<td>12.9</td>
<td>7.16-18.3</td>
<td>15.9</td>
<td>5</td>
</tr>
</tbody>
</table>

* only 42 MLs are contained in PHIDU for comparison (NSW, NT and Tas not included)

# Positive screening test result Cervical cancer have been used as a proxy indicator for Cancer Incidence to enable comparison across MLs
Average GP Attendances per person 2013-2014 age-standardised by PHN National Health Performance Authority Healthy Communities Report

Self reported: percentage of adults who felt they waited longer than acceptable for a GP appointment 2013-2014, National Performance Authority Healthy Communities Report

GP After Hours Attendances per person 2011-2012, National Health Performance Authority Healthy Communities Report

EPC utilisation data only, number of services per person. NO SLA data available. www.medicareaustralia.gov.au

Average specialist attendances per person 2013-2014, age-standardised by PHN National Health Performance Authority Healthy Communities Report

PHIDU Current Smokers, 18 years and over (2011-2013)

PHIDU Overweight (not obese) males, 18 years and over (2011-2013)

PHIDU Overweight (not obese) women, 18 years and over (2011-2013)

PHIDU Overweight (not obese) people, 18 years and over (2011-2013)

PHIDU Obese males, 18 years and over (2011-2013)

PHIDU Obese females, 18 years and over (2011-2013)

PHIDU Obese people, 18 years and over (2011-2013)

PHIDU Alcohol levels considered high risk to health, persons aged 18 years and over (2011-2013)

PHIDU Physical inactivity (synthetic prediction), persons aged 15 years and over (2007-2008)

PHIDU Type 2 diabetes (synthetic prediction) (2007-2008)

PHIDU Chronic Obstructive Pulmonary Disease (synthetic prediction)(2007-2008)

PHIDU Deaths from IHD, 0 to 74 years (2008-2012) ave annual rate/100,000

PHIDU Deaths from COPD, 45 to 74 years(2008-2012) ave annual rate/100,000

Completion of annual cycle of care for pts with diabetes mellitus , Western Sydney ML Jan-Dec 2013. www.medicareaustralia.com.au (A18 GP attendance associated with PIP incentive payments - #2)

Completion of the asthma cycle of care , Western Sydney ML Jan-Dec 2013. www.medicareaustralia.com.au (A18 GP attendance associated with PIP incentive payments - #3)

NSW Admitted Patient Data Collection and ABS population estimates (SAPHarI). Centre for Epidemiology and Evidence, NSW Ministry of Health. (http://www.healthstats.nsw.gov.au/Indicator/cvd_chdhos/cvd_chdhos_fhn_snap) - Range is LGA's in Western Sydney


PHIDU Participation in N CBCP (persons), 2011/12


PHIDU Avoidable Mortality as a result of colorectal cancer, 0-74 years (2008-20012)

PHIDU Cervical cancer screening participation (females aged 20-69) - women attending over a 24mth period (2011 &2012)


PHIDU Premature Mortality as a result of Breast Cancer (females), 0-74 years (2008-2012)

PHIDU child mortality(<5yrs) (2003-2007) Rate average annual rate per 100,000


PHIDU Low birth weight babies (2008-2010)

"PHIDU Fully Immunised at 2 years of age 2011/12 (91.2 @ 12 Months, 90.1% @ 5 Years

NHIPA MHC 2012-13 (90.3 @ 12 Months and 91.7 @ 5 years"

Deaths from suicide and self-inflicted injuries, 0 to 74 years (2008-2012) Average annual rate per 100,000

High very high psychological distress levels, 18 years and over (2007-08).

Group A20 GP Mental Health Treatment, Subgroup: 1 GP Mental Health Care plans” processed from January 2013 to December 2013 - prepare mental health care plan

PHIDU Persons 85 yrs and over (2012 ERP)

PHIDU Residential aged care places Total residential care places per 1,000

NHIPA MHC 2011/12 National Health Performance Authority Healthy 2013, Technical Supplement: Healthy Communities: Australians' experiences with access to health care in 2011-12.
The Western Sydney Primary Health Network region has the largest urban Aboriginal population in Australia (by number). Within Western Sydney Aboriginal people live mostly in areas of the lowest socio-economic status in particular the Mt Druitt area of South West Blacktown (4,500 Indigenous people).

Aboriginal people within the WSPHN region have a higher burden of disease and rate of premature mortality than the non-Aboriginal population. The percentage of low birth weight Aboriginal babies in the western and south-western Sydney was 12% compared to 6% of non-Aboriginal babies in the region. Similarly, teenage motherhood poses significant long-term risks for both mother and child, including poorer health, educational and economic outcomes. In western Sydney, 18% of Aboriginal women giving birth were teenagers compared to 4% of non-Aboriginal women in 2006.

Overall the population of the WSPHN region is doing well when maternal and child health is considered. Western Sydney has a higher proportion of preschool children than the rest of Australia and this is forecast to be the case into the future. While improvements could be made in some areas in regards Immunisation, the overall rate of immunisation of the WSPHN population is good.

Western Sydney has a large Culturally and Linguistically Diverse (CALD) population (35%) and of these a large proportion of these people are new arrivals (over 60,000 arrived from overseas between 2006 and 2011). People from CALD backgrounds may have a higher risk of developing some chronic diseases such as diabetes. There are often additional considerations needed with people from CALD backgrounds as they may have language barriers, problems with health literacy, absence of family support, financial stress, low social status and a sense of disempowerment. There highlights a need for multilingual services to be available across the region.

Western Sydney has an overall young population and therefore the needs of this population into the future need to be considered with Health Literacy being something which needs to be an important focus for the future.

Western Sydney is one of the two Local Health Districts with the highest crude rates of Hepatitis B Virus (HBV) in NSW. Untreated chronic hepatitis B leads to cirrhosis, liver failure and liver cancer with associated increased mortality, morbidity and health care costs. Auburn has the highest rate of hepatitis B infection of any LGA in NSW.
Summary and key considerations for setting priorities and commissioning services within the Western Sydney Primary Health Network

1. Screening participation rates
2. Risk Factors for chronic diseases, including diabetes
3. Young people - health literacy required
4. Aboriginal and Torres Strait Islander population - largest urban population with most living in low socio-economic areas.
5. People from CALD backgrounds - over a third of population of Western Sydney are from overseas from primarily non English speaking countries.

Concepts of Need

Need is an important concept in public health. It is used in the planning and management of health services including health improvement, resource allocation, and equity. However, need is a multi-faceted concept with no one universal definition. The need for healthcare should be distinguished from the need for health. The need for health is broader and can include problems for which there is no known treatment. Need for healthcare exists when an individual has an illness or disability for which there is effective and acceptable treatment or care. Health economists have also distinguished need from supply and demand. Need is defined as capacity to benefit; demand is defined as what individuals ask for; and supply is defined as what is provided (i.e. the services that are available). Demand is influenced by factors such as the social and educational background of an individual, the media and the medical profession. Supply is influenced by historical patterns and public and political pressure. Finally, health systems are concerned not only with maximising health, but also with the fair distribution of health.

Appendix 1
Western Sydney PHN Age profile

<table>
<thead>
<tr>
<th>SLA Name</th>
<th>0-4</th>
<th>5-19</th>
<th>20-34</th>
<th>35-64</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auburn (C)</td>
<td>5,778</td>
<td>13,874</td>
<td>24,127</td>
<td>27,729</td>
<td>6,778</td>
</tr>
<tr>
<td>Holroyd (C)</td>
<td>8,370</td>
<td>18,926</td>
<td>26,567</td>
<td>37,533</td>
<td>12,473</td>
</tr>
<tr>
<td>Parramatta (C) - Inner</td>
<td>3,737</td>
<td>5,811</td>
<td>21,056</td>
<td>16,148</td>
<td>3,984</td>
</tr>
<tr>
<td>Parramatta (C) - North-East</td>
<td>2,954</td>
<td>8,690</td>
<td>10,316</td>
<td>19,263</td>
<td>6,699</td>
</tr>
<tr>
<td>Parramatta (C) - North-West</td>
<td>2,899</td>
<td>6,919</td>
<td>8,474</td>
<td>14,865</td>
<td>5,956</td>
</tr>
<tr>
<td>Parramatta (C) - South</td>
<td>3,145</td>
<td>7,756</td>
<td>9,833</td>
<td>12,346</td>
<td>3,703</td>
</tr>
<tr>
<td>Blacktown (C) - North</td>
<td>9,263</td>
<td>22,917</td>
<td>25,259</td>
<td>41,263</td>
<td>7,756</td>
</tr>
<tr>
<td>Blacktown (C) - South-East</td>
<td>7,745</td>
<td>19,834</td>
<td>24,377</td>
<td>38,133</td>
<td>11,382</td>
</tr>
<tr>
<td>Blacktown (C) - South-West</td>
<td>8,888</td>
<td>26,326</td>
<td>23,021</td>
<td>37,645</td>
<td>8,760</td>
</tr>
<tr>
<td>The Hills Shire (A) - Central</td>
<td>5,193</td>
<td>15,667</td>
<td>14,543</td>
<td>32,426</td>
<td>9,126</td>
</tr>
<tr>
<td>The Hills Shire (A) - North</td>
<td>4,026</td>
<td>13,945</td>
<td>9,602</td>
<td>24,286</td>
<td>5,579</td>
</tr>
<tr>
<td>The Hills Shire (A) - South</td>
<td>2,333</td>
<td>8,416</td>
<td>7,729</td>
<td>18,376</td>
<td>5,739</td>
</tr>
</tbody>
</table>
Disclaimer
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