

Wollondilly Health Needs Review: 2020

Developed for the Wollondilly Health Alliance by:

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1. Introduction

The purpose of this Health Needs Review is to provide a snapshot of the health status of the Wollondilly population in 2020. Using existing data from a variety of sources, this Health Needs Review provides insight into Wollondilly's demographics, health status, health services and gaps. However, the data included does not consider community consultation and so some gaps and key information may not be reviewed.

2. Profile of the Wollondilly Population

2.1. About Wollondilly Shire

The Wollondilly Local Government Area (LGA) covers approximately 2,560km² in a transitional, peri-urban area on the outskirts of Greater Sydney and regional NSW (Wollondilly Shire Council, 2020). The population of Wollondilly is approximately 52,230, with a population density of 20.4 persons per km² (Profile ID, 2019) dispersed across more than 15 towns and villages. Wollondilly is one of seven LGAs covered by SWSLHD, which manages a community health centre for community health needs based in Tahmoor.

2.2. Demographics

The median age of the population is 37 (Wollondilly Shire Council, 2019); Wollondilly has a higher proportion of younger residents (aged 0-19 years) than NSW, potentially reflecting the population growth regions such as Wilton New Town (see table 1). Overall, 29.0% of the Wollondilly in 2016 was aged between 0 and 19, and 19.0% were aged 60 and over (Profile ID, 2019).

Table 1. Wollondilly age structure (2016)			
Age group	Wollondilly no.	% Wollondilly popn.	% NSW popn.
0 – 9 years	7,050	14.5	12.6
10 – 19 years	7,039	14.5	11.9
20 – 39 years	11,620	24.0	27.4
40 – 59 years	13,534	27.8	26.1
60 – 79 years	7,891	16.2	17.5
80+ years	1,372	2.8	4.3
Total population	48,506	100.0	100.0

(Profile ID, 2019)

In 2016, Aboriginal and Torres Strait Islander people made up 3.2% (1,552) of the population in Wollondilly; 49.5% of Aboriginal and Torres Strait Islander people were male and 50.5% were female (Australian Bureau of Statistics, 2016).

A total of 11.8% of Wollondilly residents were born overseas, which is significantly lower than the NSW rate (27.6%) (Profile ID, 2019). The top 5 birthplaces of those born overseas are:

1. United Kingdom (4.6% of total population)
2. New Zealand (1.0%)
3. Italy (0.4%)
4. Germany (0.4%)
5. Malta (0.3%) (Profile ID, 2019)

There is a significant range of household types across Wollondilly, particularly when compared to the NSW data (table 2), however there is no significant change from 2011 to 2016.

Table 2. Household data by type, Wollondilly and NSW, 2016

Household type	Number in Wollondilly	% Wollondilly	% NSW
Couples with children	6,845	43.3%	31.5%
Couples without children	4,086	25.8%	24.2%
One parent families	1,528	9.7%	10.7%
Other families	104	0.7%	1.2%
Group household	232	1.5%	3.9%
Lone person	2,313	14.6%	22.4%
Other not classifiable household	631	4.0%	4.8%
Visitor only household	76	0.5%	1.3%
Total households	15,815	100.0%	100.0%

(Profile ID, 2019)

2.3. Socio-economic profile & levels of disadvantage

The SEIFA Index of Disadvantage measures the relative level of socio-economic disadvantage based on a range of Census characteristics. A higher score on the index means a lower levels of disadvantage and a lower score means a higher levels of disadvantage. Based on 2016 census data, the overall score for the Wollondilly Shire is **1,043** which indicates a relatively advantaged region, and higher than benchmark regions (Greater Sydney: 1,018; NSW: 1,001). However there is disparity between individual towns and villages in Wollondilly, with the highest score (most advantaged) in Camden Park at **1,098**; and the lowest score (least advantaged) in Tahmoor at **968** (Profile ID, 2019).

There are no significant changes when comparing the 2011 and 2016 data. When compared with NSW and South West Sydney, Wollondilly stands out in terms of:

- Lower levels of educational attainment: A lower proportion of resident who have completed high to Year 12 or attained a university degree.
- Workforce participation: Levels of participation are relatively high, and levels of unemployment relatively low.
- Occupational status: Lower proportion of residents employed in a professional or managerial roles and higher proportion in trades and manual positions.
- Income: Median individual and household incomes are higher in Wollondilly than the rest of the region and NSW as a whole. However, incomes are highly divergent, with the area containing a mix of wealthy and less well-off people (Manning & Greig, 2014).

The education, employment and income characters of the Wollondilly population are summarised in the table below.

Table 3. Socio-economic characteristics of Wollondilly LGA, change from 2011 to 2016

Population characteristics	2016	2011	Change
Education			
Level of schooling: Year 8 or below	3.9%	5.0%	-185
Level of schooling: Year 9 or equivalent	8.1%	9.2%	+19
Level of schooling: Year 10 or equivalent	34.2%	37.1%	+597
Level of schooling: Year 11 or equivalent	7.1%	6.7%	+452
Level of schooling: Year 12 or equivalent	38.7%	35.0%	+3,004
Did not go to school	0.3%	0.3%	+11

Labour Force			
Employed full-time	62.3%	62.5%	+1,728
Employed part-time	31.7%	30.9%	+1,066
Unemployed	4.0%	4.2%	+65
Income			
Median household income (\$/week)	\$1,864	\$1,476	+\$388
% family households with income less than \$600 gross weekly	11.7%	N/A	N/A
% family household with income more than \$2,500 gross weekly	28.4%	N/A	N/A

(Profile ID, 2019)

2.4. Dwelling and travel profile

Commuting statistics reveal the main modes of transport, by which Wollondilly residents get to their workplaces. Figure 1 demonstrates car transport (as driver) to be the most frequently used method of travel, by a significant margin.

There is no updated data for the proportion of private dwellings with internet connection since 2011, which states 16.5% did **not** have internet connection (Manning & Greig, 2014). However, according to the ABS (2018), the proportion of households with internet access across Australia has steadily risen from 2014 to 2017 (figure 2).

Figure 1. Method of travel to work, Wollondilly and NSW, 2016 (Australian Bureau of Statistics, 2016)

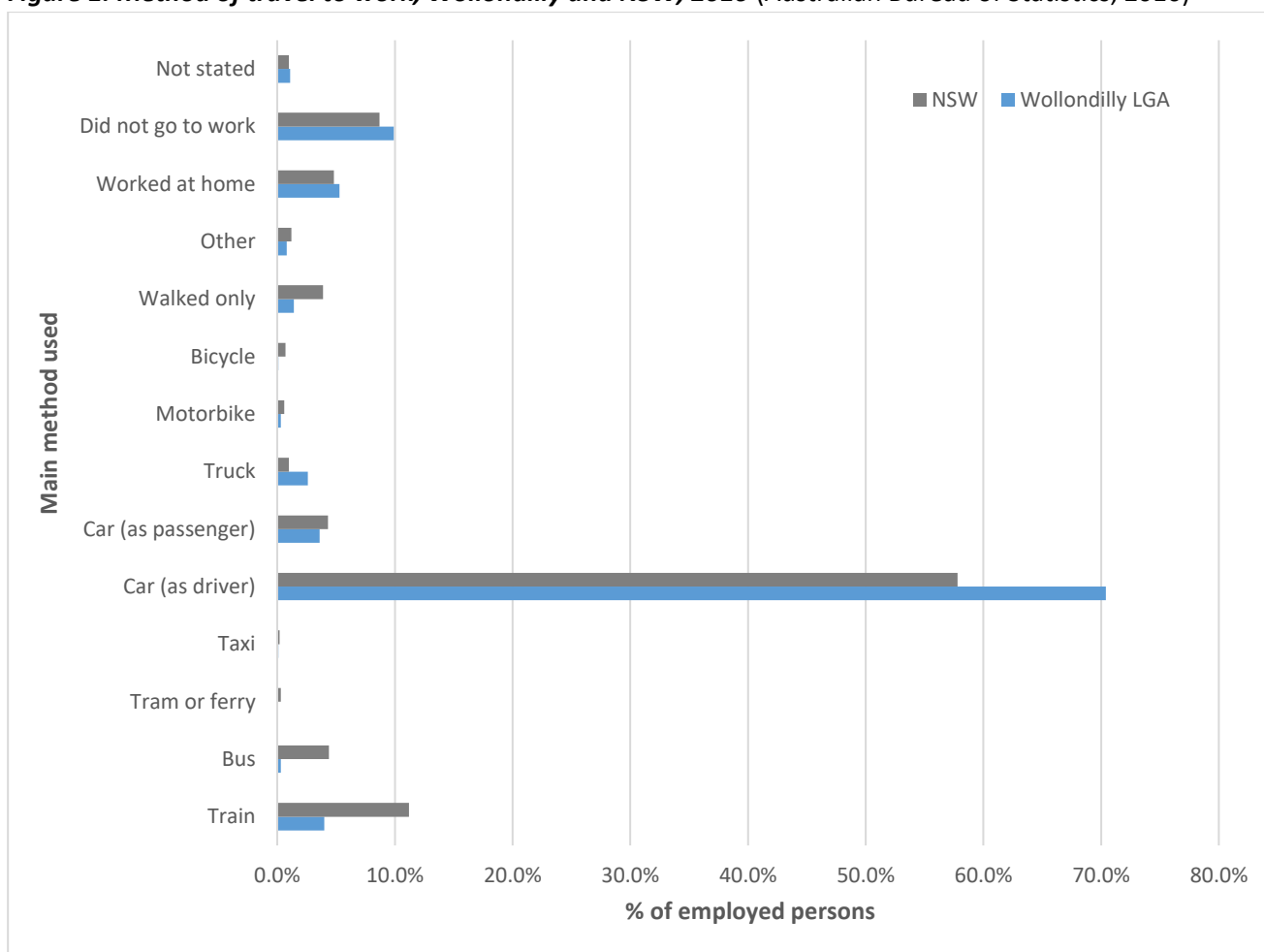
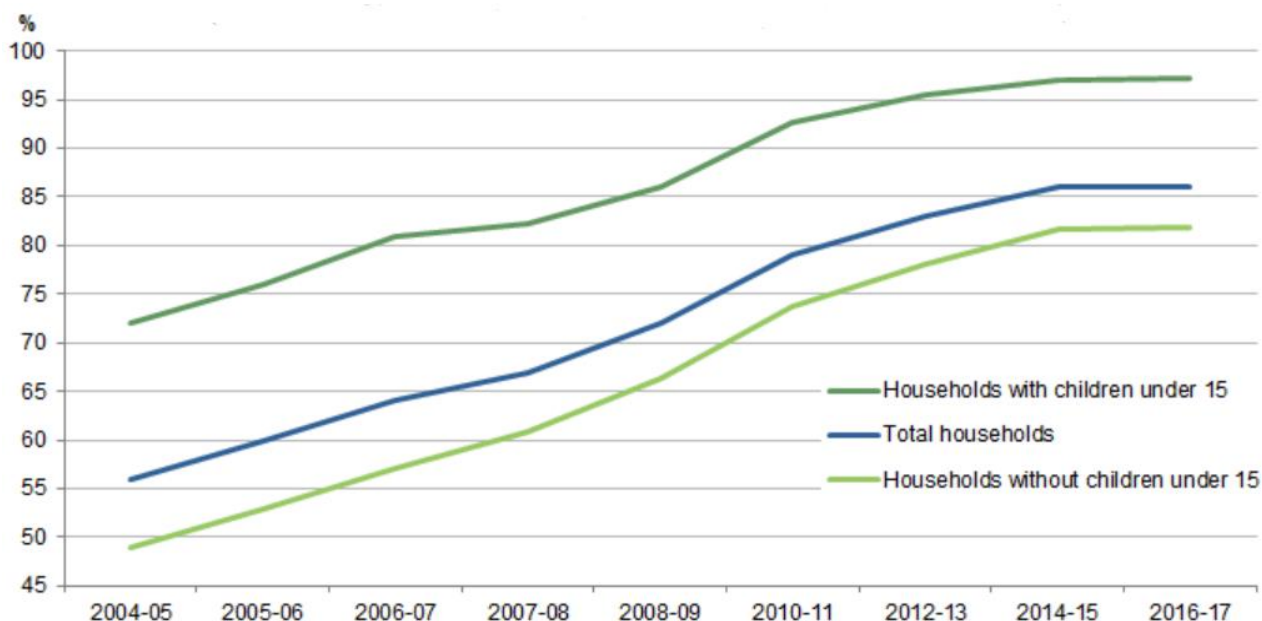


Figure 2. Proportion of Australian households with internet access, 2004-05 to 2016-17 (Australian Bureau of Statistics, 2018)



2.5. Growth projections for Wollondilly

The 2019 Population Projections indicate that the population of Wollondilly is estimated to increase by 65.5% between 2016 and 2041, from 49,850 to 82,513. The number of children aged 14 years and under is estimated to change by 43.5%, from 11,150 in 2016 to 16,000 in 2041. The working age population (aged 15-64 years) is estimated to increase from 32,350 in 2016 to 49,950 in 2041 – an increase of 65.5%. The largest growth is among the older population aged 65 years and over, from 6,350 in 2016 to 16,600 by 2041 – an increase of 161.4% (NSW Department of Planning, 2019).

Figure 3. Population projection by age group, 2016-2041 (NSW Department of Planning, 2019)

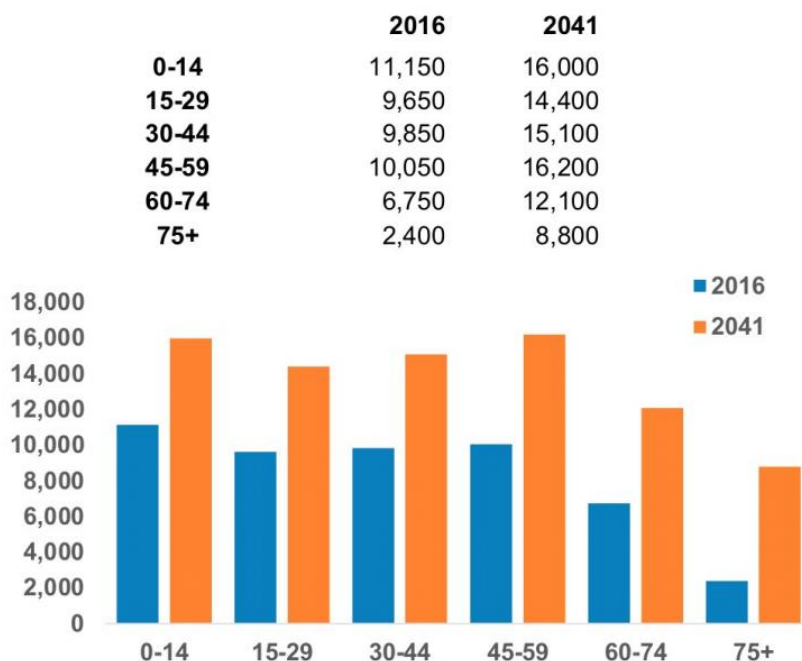
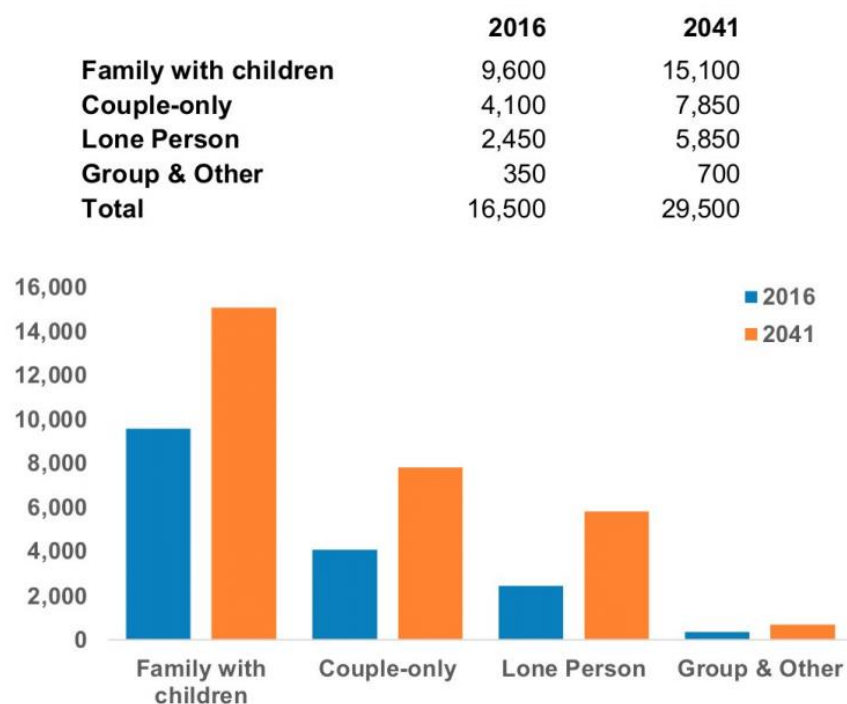


Figure 4. Population projection by household type, 2016-2041 (NSW Department of Planning, 2019)



3. Health Status

3.1. What the data tells us

3.1.1. Self-reported health

Information unable to be reviewed and updated due to need for community consultation.

3.1.2. Health risk behaviours

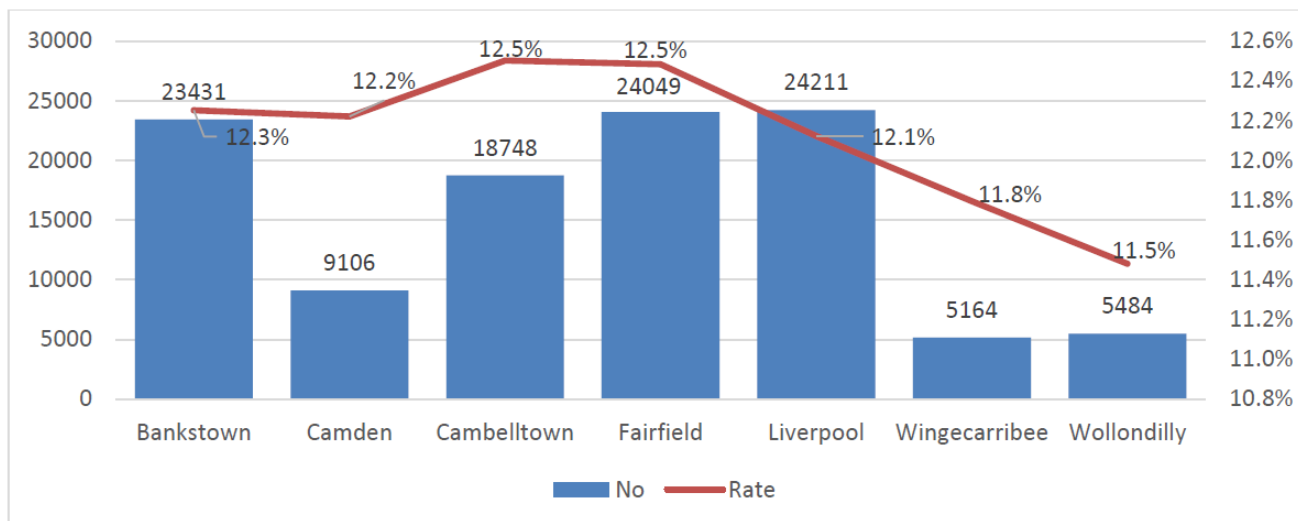
The term health risk behaviour is used to describe behaviours which may have negative effects on a person's health, such as substance abuse, unsafe sexual practices, risky driving, violent or suicidal behaviours, or disordered eating. The information included in this needs review is focused on substance abuse, smoking and weight-related behaviour.

Table 4. Health behaviour attributable hospitalisations and deaths of Wollondilly LGA and NSW, 2016-18

Indicator	Wollondilly LGA (spatially adjusted rate per 100,000)	NSW (spatially adjusted rate per 100,000)
Smoking attributable hospitalisations	642.0	646.7
Smoking attributable deaths	72.1	66.2
High body mass attributable hospitalisations	721.6	722.0
High body mass attributable deaths	40.6	36.4
Alcohol attributable hospitalisations	403.0	555.6
Alcohol attributable deaths	18.8	17.4

(HealthStats NSW, 2019)

Figure 5. Estimated prevalence rate for illicit drug use by LGA, 2016 (SWSLHD; SWSPHN, 2019)



Compared to SWS, Wollondilly has a lower prevalence rate for illicit drug use (figure 5). However, overall it is estimated that illicit drug use in SWS will increase by 29% in the year 2031.

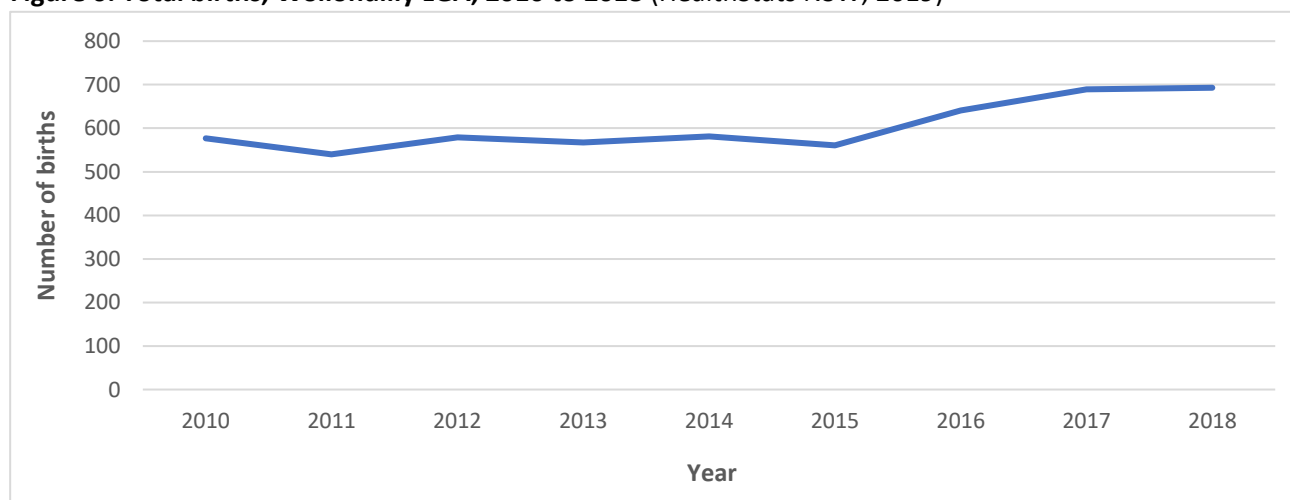
In 2018:

- 16.2% of adults in SWS smoke daily, higher than NSW (10.3%)
- 24.7% of adults in SWS consumed more than 2 standard alcohol drinks on a day, lower than NSW (31.5%)
- 47.3% of adults in SWS had insufficient physical activity levels, higher than NSW (41.2%)

The prevalence of fruit and vegetable consumption in SWS residents is similar to NSW residents (45.8% and 6.1% vs. 46.4% and 6.6%, respectively) (SWSLHD; SWSPHN, 2019)

3.1.3. Maternal indicators

Figure 6. Total births, Wollondilly LGA, 2010 to 2018 (HealthStats NSW, 2019)



3.1.4. Chronic and preventable disease

Diabetes

Wollondilly has 4.7% of the population registered with the National Diabetes Services Scheme (NDSS), lower than SWS (6.4%) and NSW (5.3%) (table 5) (National Diabetes Services Scheme, 2020). Between 2012-14 and

2017-19, the hospitalisation rate for diabetes as a principal diagnosis in Wollondilly increased from 118.2 to 145.7 (per 100,000 population). During the same period, the hospitalisation rate for diabetes as comorbidity in Wollondilly increased from 2601.9 to 3683.9 (per 100,000 population). In 2016-17, diabetes related deaths in Wollondilly was 30.6 per 100,000 population, similar to NSW (29.3 per 100,000 population) (HealthStats NSW, 2019).

Table 5. NDSS Registrants by diabetes type, Wollondilly

Diabetes type	Registrants	Prevalence
Gestational	120	0.2%
Other	30	0.1%
Type 1	280	0.5%
Type 2	2200	3.9%
Total	2620	4.7%

(National Diabetes Services Scheme, 2020)

Cardiovascular disease

In 2017-19, CVD hospitalisations in Wollondilly was 1756.5 per 100,000 population, higher than SWS (1587.9 per 100,000 population) and NSW (1666.3 per 100,000 population) (HealthStats NSW, 2019).

Table 6. Circulatory disease hospitalisation by disease type, Wollondilly and NSW, 2017-19

Disease Type	Wollondilly LGA (Spatially Adjusted Rate per 100,000 population)	NSW (Spatially Adjusted Rate per 100,000 population)
Coronary Heart Disease	558.8	492.5
Atrial fibrillation and flutter	171.9	207.3
Heart Failure	169.5	173.7
Stroke	131.2	135.1
Peripheral Vascular Disease	92.0	104.2
Varicose veins of lower extremities	74.8	66.1
Paroxysmal tachycardia	50.6	48.0
Haemorrhoids	119.9	135.0
Transient ischaemic attacks	55.4	48.6
Other CVD	500.7	439.2
All CVD	1756.5	1666.3

(HealthStats NSW, 2019)

Between 2001-02 and 2016-17, CVD deaths has been steadily declining in Wollondilly, from 281.9 to 147.4 per 100,000 population (HealthStats NSW, 2019).

Respiratory disease

Asthma

In SWS in 2018-19, it is estimated that 11.3% of children aged 2-15 years had current asthma, and 21.2% had ever had asthma. 11.8% of adults reported had current asthma. Between 2001-03 and 2017-19, Asthma hospitalisations have decreased in Wollondilly, from 135.8 to 111.9 per 100,000 population (HealthStats NSW, 2019).

Chronic Obstructive Pulmonary Disease

Between 2001-02 and 2016-17, COPD deaths rate did not change significantly in Wollondilly. In 2016-17, COPD death rate in Wollondilly was 27.8 per 100,000 population, similar to SWS (26.2 per 100,000 population) and NSW (25.1 per 100,000 population).

Influenza and pneumonia

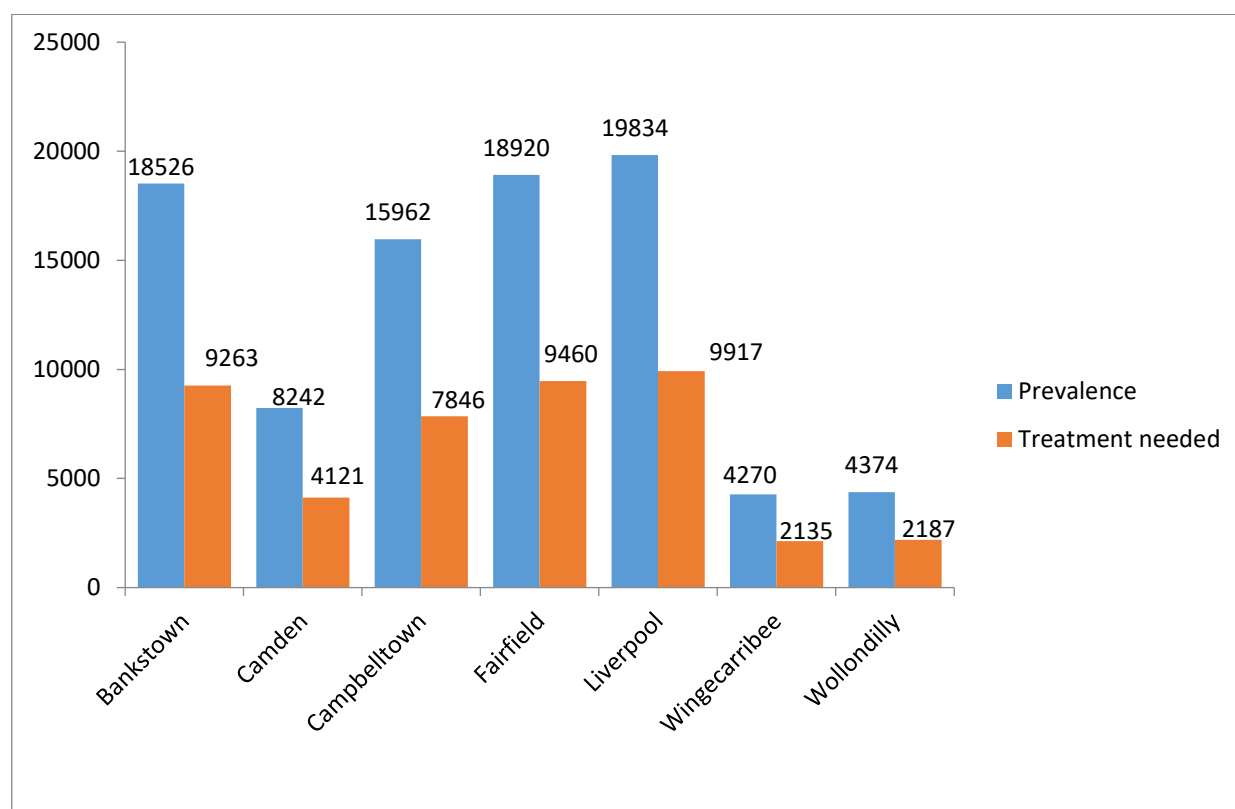
In Wollondilly, there has been a steady increase of Influenza and pneumonia hospitalisations between 2011-13 and 2017-19, from 258.1 to 392.3 per 100,000 population (HealthStats NSW, 2019).

3.1.5. Mental health

People with mild mental illness

Mild mental illness refers to anxiety and depression with duration of less than 12 months and minimal impact on functioning. For Wollondilly, the estimated prevalence rate for mild mental illness in 2018 was 9.0% or 4374 people affected (National Mental Health Service Planning Framework, 2018).

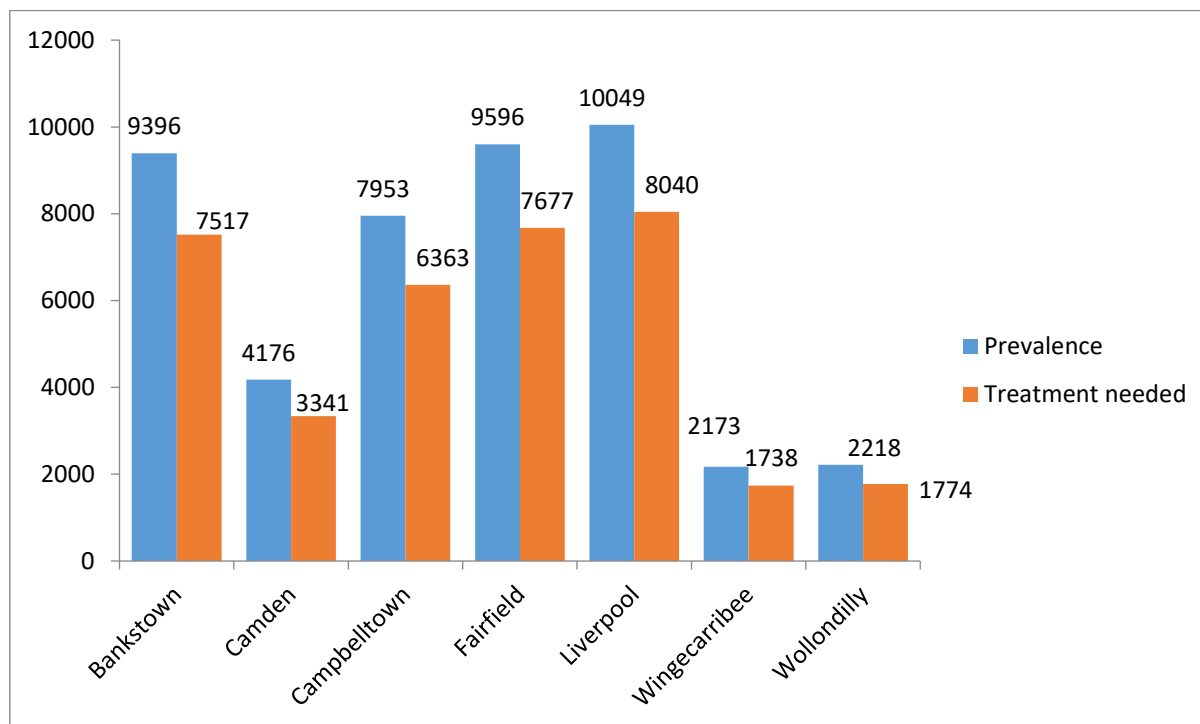
Figure 7. Estimated number of SWS residents with mild mental illness and who need treatment by LGA, 2018 (National Mental Health Service Planning Framework, 2018)



People with moderate mental illness

Moderate mental illness is diagnosed mental illness with a duration of more than 12 months which does not meet the definition of severe or has a moderate impact of illness. An estimated prevalence rate for moderate mental illness in Wollondilly in 2018 was 4.6% or 2,218 people affected (National Mental Health Service Planning Framework, 2018).

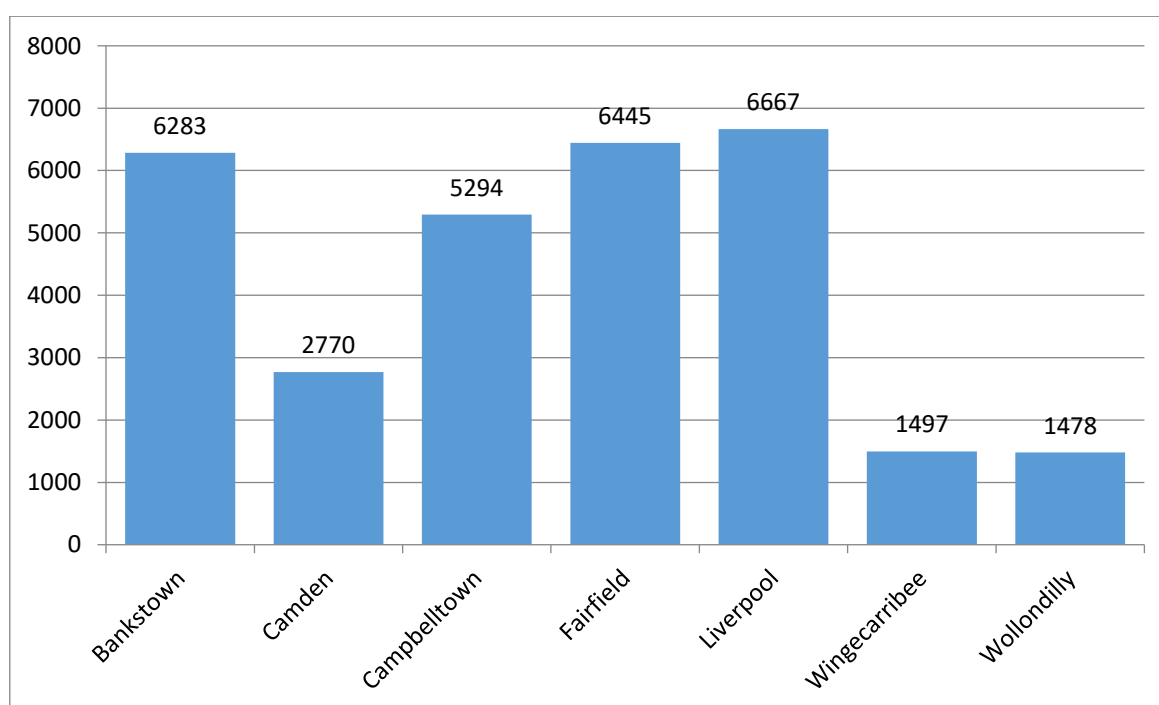
Figure 8. Estimated number of SWS residents with moderate mental illness and who need treatment by LGA, 2018 (National Mental Health Service Planning Framework, 2018)



People with severe and complex mental illness

Severe mental illnesses are defined by diagnosis, degree of disability and the presence of some abnormal behaviour. This includes schizophrenia and psychosis, severe mood problems and personality disorder. Severe mental illness can cause considerable distress over a long period of time to both the person affected and his or her family and friends. An estimated prevalence rate for severe mental illness in Wollondilly in 2018 was 3% or 1,478 persons affected (National Mental Health Service Planning Framework, 2018).

Figure 9. Estimated number of SWS residents with severe and complex mental illness by LGA, 2018 (National Mental Health Service Planning Framework, 2018)



Mental health hospitalisations

In Australia, depressive episode (14.8%) and Schizophrenia (14.1%) were the most common diagnoses for overnight mental health separations with specialised psychiatric care. Aboriginal and Torres Strait Islander people rates of overnight mental health separations with and without specialised care were about 2.4 and 3.4 times the rates for other patients (Australian Institute of Health and Welfare, 2020).

Table 7. Overnight admitted mental health-related population rates of separations and bed days, 2017-18

	Separations	Patient days	Separations per 10,000 population	Patient days per 10,000 population
Wollondilly	416.0	4,815.0	96.1	1,112.4
SWS	10,100.0	118,788.0	102.3	1,203.0

(Australian Institute of Health and Welfare, 2020)

Intentional self-harm: hospitalisations

Intentional self-harm includes purposely self-inflicted poisoning or injury or attempted suicide with intent based on notes recorded by the treating clinician. In 2017-19, intentional self-harm hospitalisation rate was 60.4 per 100,000 population) in Wollondilly, lower than NSW of 93.0 per 100,000 population. The rate was higher among females than males (Centre for Epidemiology and Evidence, 2019).

3.1.6. Infectious disease

In 2019 in Wollondilly:

- 94.9% of children aged 12 months are fully immunised, higher than SWS (93.2%) and NSW (94.4%).
- 93% of children aged 24 months are fully immunised, compared to 90.4% in SWS and 91.8% in NSW.
- 93.6% of children aged 60 months are fully immunised, lower than SWS (95.2%) in SWS and NSW (94.7%).

3.1.7. Cancer

Between 2012-2016, Wollondilly had a slightly higher incidence rate for all cancers compared to NSW (522.6 and 500.0 per 100,000 population respectively). The age-standardised incidence rate for all cancers have increased between 1972 and 2018 in Wollondilly (figure 10), while mortality rate for all cancers has decreased during the same period. Both cancer incidence rate and mortality rate are higher among males than females. The most common cancer types in Wollondilly are: Prostate, Breast and Melanoma of the skin (figure 11) (Cancer Institute NSW, 2020).

Cancer screening:

- Between 2011-12 and 2018-19, breast screening participation among women aged 50-74 years increased in Wollondilly, from 46.3% to 50.9%. It is lower in Wollondilly compared to NSW (Cancer Institute NSW, 2020).
- In 2017-18, 41.9% people aged 50-74 participated in bowel cancer screening in Wollondilly, higher than SWS (36.4%) and NSW (39.5%) (National Bowel Cancer Screening Program, 2019).
- In 2015-16, 53.7% of women aged 20-69 years in Wollondilly participated in Cervical Screening, higher than SWS (50.4%) but lower than NSW (55.1%) (Australian Institute of Health and Welfare, 2019).

Figure 10. Incidence rate, all cancers, Wollondilly LGA, 1972-2016 (Cancer Institute NSW, 2020)

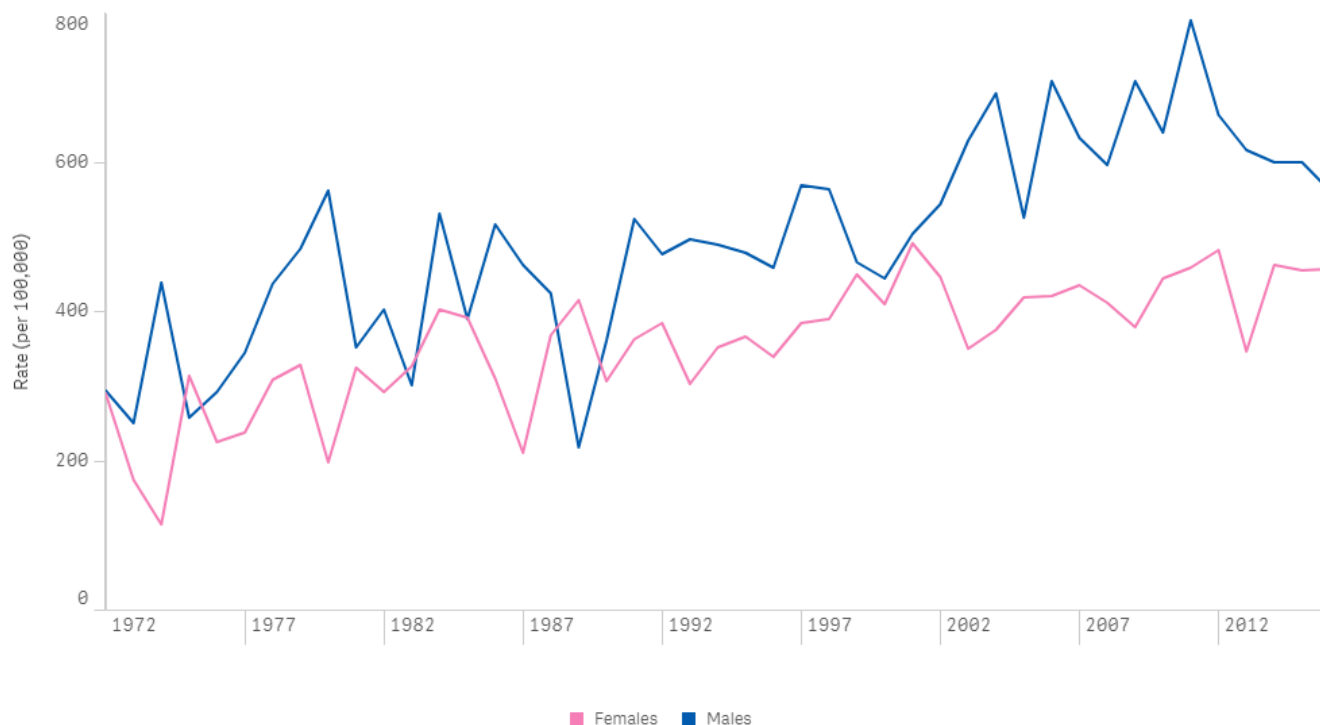
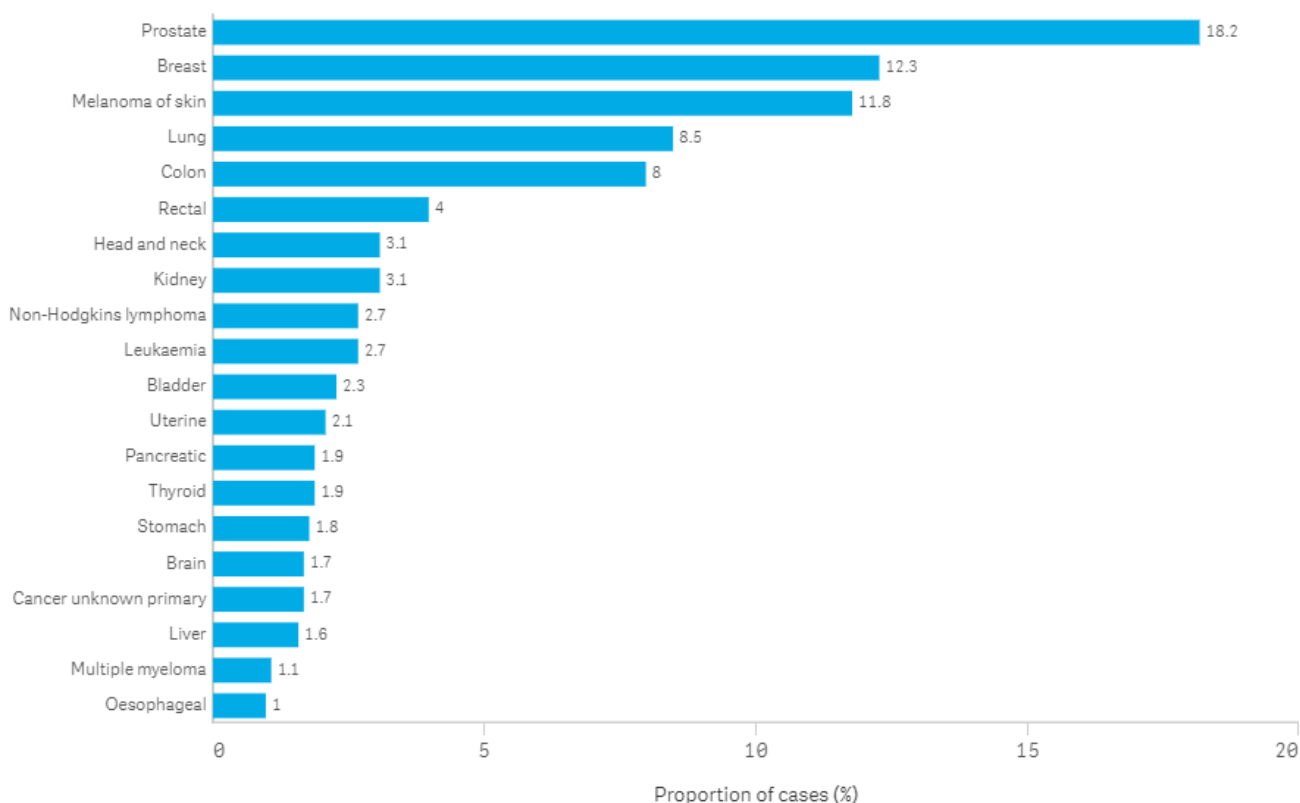


Figure 11. Most common cancer types, Wollondilly LGA, 2012-16 (Cancer Institute NSW, 2020)



3.1.8. Rates of mortality

Data on mortality rate and life expectancy for Wollondilly residents is provided in table 8. There is no significant difference between Wollondilly and NSW, and no significant change over time.

Table 8. Deaths, Wollondilly and NSW, 2012 and 2018				
	2017		2012	
	Wollondilly	NSW	Wollondilly	NSW
Standardised death rate	5.4	5.4	5.8	5.7
Life expectancy at birth (male)	80.6	81.5	80.3	80.5
Life expectancy at birth (female)	84.6	85.7	84.2	84.8

(Australian Bureau of Statistics, 2019)

3.2. Community perceptions of health issues

Information unable to be reviewed and updated due to need for community consultation.

4. Provision and Utilisation of Health Services

4.1. General practice

There are 13 General Practices in Wollondilly LGA (SWSPHN 2020). The number of GPs in Wollondilly has increased from 22 GPs in 2014 (WHA Needs Assessment 2014) to 33 GPs in 2020 (SWSPHN 2020).

Wollondilly has a GP ratio of 1 GP:1,846 people (SWS Our Health 2020). This compares with a ratio of 1 GP:917 people across SWS, and a national rate of 1 GP:894 people (SWS Our Health 2020). Despite an increase in the number of GPs since 2014, Wollondilly continues to have the lowest ratio of GPs to population amongst the local government areas in SWS and considerably below the national benchmark.

Among the 13 General Practices, 9 practices have practice nurse/s and 5 practices have Registrar/s (SWSPHN 2020).

Other key features of general practice in Wollondilly include:

- Three practices comprise solo practitioners, 6 are small practices with 2-5 GPs and 3 are large practices with 6+ GPs (SWSPHN 2020)
- After hours services: All practice close by 7.30pm on weekdays (most by 5:00 – 6:00pm) (Health Direct 2020). Two of the practices open for part of Saturdays, and three open on both Saturdays and Sundays (Health Direct 2020).
- Home visiting: 8 GPs provide home visiting services (SA3 level)
- RACF visiting: 9 GPs provide RACF visiting services (SA3 level)

4.2. Allied health

Information unable to be reviewed and updated due to lack of data sources.

4.3. Pharmacy

Information unable to be reviewed and updated due to lack of data sources.

4.4. Diagnostic services

Information unable to be reviewed and updated due to lack of data sources.

4.5. Community health

Wollondilly is serviced by the Wollondilly Community Health Centre located at Tahmoor. This centre provides a variety of community health services including child and family services (including speech pathology, audiometry, psychology, occupational therapy), some specialist services (oral health, drug health, mental health) and community nursing.

Updated information on service utilization and waiting times unavailable.

4.6. Medical specialists

Information unable to be reviewed and updated due to lack of data sources.

4.7. Aboriginal health services

The Tharawal Aboriginal Medical Service operates from Airds in Campbelltown and covers Wollondilly Shire. It provides general medical, specialist, dental and allied health services, child and family services, mental health and drug and alcohol services. They also provide social support and wellbeing programs (Tharawal Aboriginal Corporation, 2019).

In addition, SWSLHD employs a small group of Aboriginal health staff to work across the region in early childhood, drug health, mental health, sexual health, chronic disease and inpatient services. The Aboriginal Chronic Care Program (ACCP) is run as a collaboration between SWSLHD and SWSPHN, based at Budyari Community Healthy Centre in Miller.

4.8. Hospitals

There are no public or private hospitals in Wollondilly and residents rely on those in adjoining local government areas – particularly Bowral and District Hospital, Camden Hospital and Campbelltown Hospital – as well as the specialist services provided at Liverpool Hospital and other metropolitan hospitals. There are also private hospitals in Campbelltown and Bowral.

Table 9. Use of emergency departments for lower urgency by SA3 level, 2018-19

Wollondilly (rate per 1,000)	Camden (rate per 1,000)	Campbelltown (rate per 1,000)	National (rate per 1,000)
126.3	134.6	114.4	117.4

(Australian Institute of Health and Welfare, 2020)

Table 10. Potentially preventable hospitalisation by SA3 level, 2016-17

PPH category	Wollondilly (age standardised rate per 100,000)	Camden (age standardised rate per 100,000)	Campbelltown (age standardised rate per 100,000)
Total PPH	2,380	3,180	3,088
Total chronic (e.g. Diabetes, CVD, COPD)	982	1,301	1,351
Total acute (e.g. infection)	1,278	1,611	1,455
Total vaccine-preventable (e.g. influenza)	133	310	314

(Australian Institute of Health and Welfare, 2019)

4.9. Mental health services

Since July 2017, SWSPHN mental health program has delivered 9,200 episodes of services to 1,114 distinct clients in Wollondilly. In 2018-19, there were 3,441 commissioned mental health services provided to 581 distinct clients in Wollondilly (SWSPHN, 2020).

Table 11: SWSPHN Commissioned Mental Health Service, Wollondilly, 2018-19

Severity	Session Hours	% of total
Mild to Moderate	38295.6	59.3%
Severe and Complex	25664.3	39.8%
Continued suicidal ideation (low to medium risk)	576.1	0.9%
Total Session Hours	64536.0	100.0%

(SWSPHN, 2020)

4.10. Age care services

Wollondilly has three residential aged care facilities:

- Durham Green Manor at Menangle
- RSL LifeCare Taara Gardens in Thirlmere
- RSL LifeCare Queen Victoria Park in Picton

Information about the proportion of residents living in facilities is unable to be reviewed and updated due to lack of data sources.

5. Issues and concerns with the service system

Information unable to be reviewed and updated due to need for community consultation.

6. Planning Considerations

The development of strategies and actions to address the issues identified in the previous chapters needs to have regard to the directions set by current relevant planning frameworks and the efforts that have been made in recent years to address health issues. The key planning frameworks to guide actions for the Wollondilly Health Alliance and some of the initiatives previously undertaken to address key issues are outlined below.

Key planning frameworks for consideration:

- NSW Health Plan
- NSW Integrated Care
- Premier's priorities
- SWSLHD Strategic Plan
- SWSLHD Care in the community plan
- Wollondilly Council plans
- Western Sydney City Deal Health Alliance

7. Priorities and Strategies

The gaps and issues listed below have been identified based on the information collected in this 2020 Health Needs Review to guide the Wollondilly Health Alliance in their planning for the next 2 years (2021-2022).

Gap/issue	Supporting data & background
GP shortage	While the number of GPs in Wollondilly have increased since 2014, the GP ratio is still significantly lower than the SWS ratio (section 4.1). Additionally, the growth projections for Wollondilly are significant, thus causing the GP ratio to be an increasing issue over the next 20 years (section 2.5)
Population growth	There is predicted to be significant population growth in Wollondilly, with an estimated increase by 65% between 2016 and 2041 (section 2.5). This may result in increased strain on local health services, and neighbouring hospital services.
Car dependence	Car transport (as driver) is the most frequently used method of travel in Wollondilly, by a significant margin (section 2.4). Long commute times have been linked to sedentary lifestyle and increased risk of chronic disease.
High BMI & associated chronic disease	While on par with NSW, SWS has a significant level of hospitalisation due to high BMI, insufficient levels of physical activity and low level of fruit and vegetable consumption (section 3.1.2). In Wollondilly's recent years, hospitalisation from diabetes has increased; there has been an increasing rate of cardiovascular disease hospitalisations (section 3.1.4).
Mental health	There has been an increase in the availability of local mental health services since 2014 (section 3.1.5). However, the devastating 2019 bushfire season and following COVID-19 pandemic can be linked to increased mental health issues.
Cancer screening	Wollondilly has a slightly higher incidence rate for all cancers compared to NSW, with the most common cancer types being prostate, breast and melanoma. While screening rates in Wollondilly has increased since 2014, rates are still lower than NSW, particularly for breast cancer screening (section 3.1.7).
Planning for service delivery, access and equity	Considering the significant population growth expected in Wollondilly in the next 20 years, coupled with the low levels of available health services in Wollondilly, a key focus should be planning for future strain on services and equitable access to services for residents of the Wollondilly region (sections 2.5 and 4.1).

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