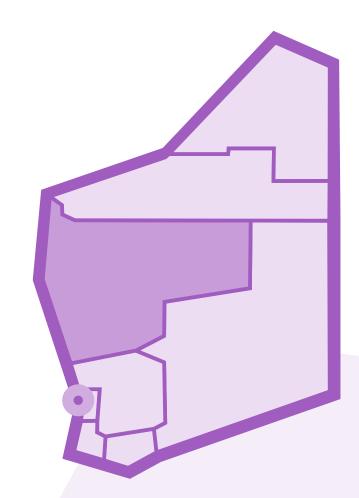




# Midwest

Needs Assessment 2022-2024



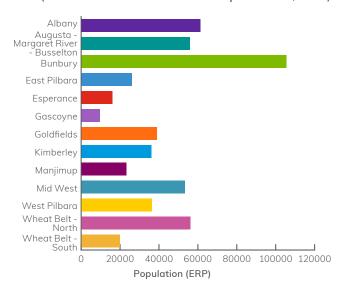
# **Midwest**

### **Population Demographics**

The Midwest health region of Western Australia covers more than 605,000 square kilometres, approximately one quarter of the total land mass of WA and services a population of around 64,000. The region is located in the northern central area of Western Australia and incorporates the health districts of Gascoyne, Geraldton, Midwest and Murchison.

The population of Country WA PHN is 530,725 people compared to the state's population of 2,621,509 people (ERP 2019). In the Midwest region, there are 52,941 people living in Mid West SA3 and 9,308 people in Gascoyne SA3.

Figure 1 - Population (ERP 2019) in Country WA PHN by SA3 (Public Health Information Development Unit, 2021)





Coronary heart disease, COPD and lung cancer are among the leading causes of disease burden



**37**% of adults aged 16+ years are **obese** 



**34**% of adults aged 16+ years are at high risk of long-term harm from **alcohol consumption** 



Mental ill-health is the second leading cause of disease burden



6% of the population in Mid West SA3 and 2% in Gascoyne SA3 accessed a GP mental health treatment plan



Less than 1% of the population accessed a clinical psychologist through Medicare



17% of people in Mid West SA3 and 15% in Gascoyne SA3 are aged 65 years and over



Gascoyne SA3 has the lowest ratio of residential aged care beds to population in the state



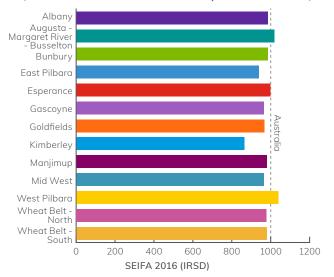
There are an estimated **8,865 Aboriginal people** residing in the region



37% of Aboriginal people in Mid West SA3 and 25% in Gascoyne SA3 received an Indigenous-specific health check through Medicare in 2019-20

The Midwest region has higher levels of socioeconomic disadvantage (IRSD=963) compared to the state (IRSD=1016). About 18% of people in Gascoyne SA3 and 13% in Mid West SA3 are Aboriginal (ERP 2016).

Figure 2 - SEIFA 2016 Index of Relative Socioeconomic Disadvantage (IRSD) score in Country WA PHN by SA3 (Public Health Information Development Unit, 2021)



### **Vulnerable Population Groups**

People in vulnerable groups are more likely than the general population to experience poor health outcomes due to physical, social, and economic factors. Vulnerable groups include people who are: culturally and linguistically diverse (CALD); lesbian, gay, bisexual, transgender, intersex, or queer (LGBTIQ+); homeless; living with a severe disability or caring for someone with a disability; developmentally vulnerable; and victims of family, domestic or sexual violence.

- About 9.2% of people in Gascoyne SA3 and 5.4% of people in Mid West SA3 were born in a non-English speaking country compared to 17% across the state (Public Health Information Development Unit, 2021b).
- About 3.6% of people in Gascoyne SA3 and 4.5% of people in Mid West SA3 have a profound or severe disability compared to 4.1% across the state (Public Health Information Development Unit, 2021b).
- About 7.7% of people in Gascoyne SA3 and 10% of people in Mid West SA3 provide unpaid assistance to people with a disability compared to 9.8% across the state (Public Health Information Development Unit, 2021b).
- About 24% of children in Gascoyne SA3 and 27% of children in Mid West SA3 were developmentally vulnerable on one or more domains compared to 19% across the state (Public Health Information Development Unit, 2021b).
- In 2016, it was estimated that 331 people in Mid West SA3 and 122 people in Gascoyne SA3 experienced homelessness (Australian Bureau of Statistics, 2018a). About 35% of homeless people in Mid West SA3 and 16% in Gascoyne SA3 were living in 'severely' crowded' dwellings, requiring at least four extra bedrooms to accommodate the people usually living there.

#### **LGBTIQ+** populations

LGBTIQ+ is an acronym commonly used to describe lesbian, aav. bisexual, trans/transaender, intersex. queer and other sexuality, gender, and bodily diverse people and communities. Many LGBTIQ+ people face discrimination and disparities connected to their gender identification and/or sexuality that impact their physical and mental health and access to healthcare and other services (Equality Australia. 2020)A. LGBTIQ+ people are known to have a higher risk of certain chronic diseases such as cancers, asthma, obesity, and cardiovascular disease (Conron et al., 2010; McKay, 2011; Simoni et al., 2017). Moreover, some members of LGBTIQ+ communities, particularly lesbian and bisexual women, have higher rates of smoking compared to the general population (Praeger et al., 2019), which increases their risk of developing a chronic disease.

Family violence is a significant concern and is compounded by isolation and reduced access to services (Rainbow Health Victoria, 2020). Studies indicate that the LGBTIQ+ people experience intimate partner violence at similar or higher rates compared to heterosexual people (Rollè et al., 2018). There is evidence that LGBTIQ+ people are more likely to experience homelessness (McNair et al., 2017) and that discrimination can lead to adverse outcomes in terms of employment and income, particularly for trans and gender diverse people (Mizock & Mueser, 2014).

#### Chronic Disease

Chronic diseases are long-term, non-communicable conditions and play a significant part in mental and physical ill health, disability, and premature death. Moreover, people with chronic disease often have two or more conditions (multi-morbidity) such as a mental health condition as well as a physical condition, creating complex health needs and presenting challenges for treatment. In Australia, national surveillance focuses on 10 types of chronic conditions: arthritis, asthma, back problems, cancer, cardiovascular diseases, chronic

obstructive pulmonary disease (COPD), diabetes, chronic kidney disease, mental and behavioural conditions, and osteoporosis (Australian Institute of Health and Welfare, 2020b). In 2017-18, almost half of all Australians (47%) were estimated to have at least one of the above conditions and 20% were estimated to have at least two conditions (Australian Bureau of Statistics, 2018b). Age is an important determinant of health and people aged 65 years and over are more likely to be diagnosed with a chronic condition.

This section focuses on chronic conditions other than mental and behavioral conditions, which are discussed in the Mental Health section.

#### Risk factors

Established risk factors for chronic disease include having high blood pressure, being overweight or obese, smoking, doing little or no exercise and having high levels of stress. Psychosocial factors such as social isolation and loneliness also contribute to chronic ill health (Royal Australian College of General Practitioners, 2020). Risk factors tend to be more prevalent in the lowest socioeconomic areas and in regional and remote areas (Australian Institute of Health and Welfare, 2020b). The Midwest region had prevalence rates of risk factors that were significantly higher than state rates. In 2017-18. children gaed 2-17 vegrs in Mid West SA3 were significantly more likely to be obese (ASR=11%) compared to the state (ASR=7.9%) (data were unavailable for Gascoyne SA3 and its constituent population health areas Exmouth PHA and Carnarvon PHA) (Public Health Information Development Unit, 2021b). Moreover, data from the Health and Wellbeing Surveillance System (HWSS) survey 2015-19 indicated that estimated prevalence rates of obesity among adults aged 16 years and over were significantly higher at 37% in Mid West SA3 compared to 30% across the state (Epidemiology Branch, 2021a). Mid West SA3 also had significantly higher rates of high blood pressure (24%) and people who did no leisure time physical activity (21%) (prevalence rates were not statistically

significant in Gascoyne SA3).

WAPHA is a steward of the WA Healthy Weight Action Plan 2019-24, which focuses on early intervention of people identified as at-risk of becoming overweight and management of people who currently live with obesity. This involves multicomponent, multi-levelled strategies delivered as part of an integrated shared care model. Through the Healthy Weight GP project, WAPHA has committed to supporting GPs to provide options for patients who want to improve their health. Key deliverables include the development of a weight management 'hub' (website) with links to Health Pathways and local services for weight management, training for general practice staff, and tools to assist general practices in implementing weight management services as a quality improvement activity. The website is due for launch in the third quarter of 2021.

General Practice Incentives Program Quality Improvement Incentive (PIP QI)

The Practice Incentives Program Quality Improvement incentive (PIP QI) is a payment to encourage practices to participate in quality improvement activities, aimed at improving patient outcomes through the delivery of quality care. Improvement measures include the proportion of patients with their weight classification recorded within the last 12 months, the proportion of patients with information available to calculate risk of cardiovascular disease (CVD), and the proportion of patients with diabetes that have a HbA1c measurement recorded. PIP QI data indicated the following for the Midwest region (18 practices) compared to the state (497 practices).

- The percentage of general practice records for clients aged 15 years and over that did not have a weight classification recorded within the last 12 months was 66% across the region compared to 76% across the state.
- The percentage of general practice records for clients aged between 45-74 years that did not have information available to calculate their

- absolute risk of cardiovascular disease (CVD) was 26% across the region compared to 43% across the state.
- The percentage of general practice records for clients with a diagnosis of diabetes that did not have a HbA1c measurement result recorded within the last 12 months was 25% across the region compared to 28% across the state.

We note that PIP QI data include private general practices only and do not include GP services provided by non-government organisations.

#### Burden and prevalence of disease

Burden of disease measures the impact of different diseases or injuries on a population. It combines the years of healthy life lost due to living with ill-health (non-fatal burden) with the years of life lost due to dying prematurely (fatal burden) to give a total burden reported using the disability-adjusted life years (DALYs) measure. The Western Australian Burden of Disease Study 2015 (Department of Health Western Australia, 2021) indicated that the Midwest region had a 1.3 times higher rate of fatal burden, but the same rate of non-fatal burden compared to the metropolitan regions. Chronic disease accounted for a substantial proportion of the burden of disease. Coronary heart disease, COPD and lung cancer were among the leading five causes of burden for males and females, while back pain/ problems were the second leading cause for females.

In 2017-18, Mid West SA3 was estimated to have a significantly higher rate of people with asthma (ASR=13%) and diabetes (ASR=5.8%) compared to the state (ASR=10% and 4.5% respectively) (Public Health Information Development Unit, 2021b). Data were unavailable for Gascoyne SA3 and its constituent population health areas Exmouth PHA and Carnarvon PHA.

# Potentially preventable hospitalisations (PPHs) for chronic conditions

Potentially preventable hospitalisations (PPHs) are

certain hospital admissions (both public and private) that potentially could have been prevented by timely and adequate health care in the community. There are 10 chronic conditions that are classified as potentially preventable through behaviour modification, lifestyle change and timely care: angina, asthma, bronchiectasis, COPD, congestive cardiac failure, diabetes complications, hypertension, iron deficiency anaemia, nutritional deficiencies, and rheumatic heart diseases.

Across the state in 2017-18, the age-standardised rate of PPHs per 100,000 for total chronic conditions was 1109 and the highest rates were for COPD (232), congestive cardiac failure (220), and iron deficiency anaemia (188) (Australian Institute of Health and Welfare, 2019). Compared to the state, PPHs for total chronic conditions were higher in Mid West SA3 (1438) and Gascoyne SA3 (1511) and the top three conditions in both areas were COPD, congestive cardiac failure, and diabetes complications, which were above state rates.

In this report, we regard a PPH 'hotspot' as an area with a hospitalisation rate that is more than 50% above the Australian rate for at least four out of five consecutive years (Public Health Information Development Unit, 2020). In the five years from 2012-13 to 2016-17, there were three population health areas (PHAs) in the region that were hotspots for chronic conditions, as follows.

- Carnarvon PHA: diabetes complications
- Geraldton/Geraldton East PHA: angina, congestive cardiac failure, COPD, diabetes complications, and rheumatic heart diseases
- Meekatharra PHA: total chronic conditions, angina, COPD, diabetes complications, and rheumatic heart diseases.

# Management of chronic disease in primary care

From 2013-14 to 2018-19, percentage of population utilisation of GP chronic disease management plans (CDMPs) increased in the region from 15% to 19% in

Mid West SA3 and from 6.1% to 7.5% in Gascoyne SA3 (Australian Institute of Health and Welfare, 2020c). However, utilisation in the Gascoyne SA3 was still considerably below the national rate for SA3s in remote areas, which increased from 8.8% to 12% over the same period.

#### Childhood immunisation rates

The National Immunisation Program (NIP) aims to increase national immunisation coverage to reduce the number of vaccine-preventable diseases in Australia. A key priority of the program is to work towards achieving immunisation coverage rates of at least 95% for children aged 1, 2 and 5 years. Data from the Australia Immunisation Register from 1st April 2020 to 31st March 2021 indicated that in Country WA PHN, immunisation coverage was relatively low for children aged 2 years. About 94.1% of children were fully immunised at 1 year and 94.5% at 5 years compared to only 90.3% at 2 years (Department of Health, 2021b).

In the Midwest region, childhood immunisation rates in Mid West SA3 were below target, except for children at 5 years (Department of Health, 2021b). About 94.5% of children were fully immunised at 1 year, 91.1% at 2 years, and 96.2% at 5 years. In Gascoyne SA3, corresponding rates were 95.4% at 1 year, 93.5% at 2 years, and 95.5% at 5 years. The lower rate at 2 years in both SA3s suggests that interventions should be targeted to increase immunisation coverage for this age group.

#### Cancer screening

There are three national cancer screening programs in Australia: BreastScreen Australia, National Cervical Cancer Screening Program (NCSP), and National Bowel Cancer Screening Program (NBCSP). In 2018-19, cancer screening participation rates across WA were 46% for bowel cancer (people aged 50-74 years), 55% for breast cancer (women aged 25-74 years) and 48% for cervical cancer (women aged 25-74 years) (Australian Institute of Health and Welfare, 2021a). The data indicate that compared

to the state, cancer screening participation rates were low in Gascoyne SA3. Participation rates were 45% in Mid West SA3 and 38% in Gascoyne SA3 for bowel cancer screening, 55% in Mid West SA3 and 42% in Gascoyne SA3 for breast cancer screening, and 44% in Mid West SA3 and 38% in Gascoyne SA3 for cervical cancer screening. We note that participation in the new five-year program for cervical cancer screening cannot be accurately reported until there are 5 years of data available (2018-22).

#### **Avoidable mortality**

In 2013-17, the median age of death was only 68 years in Gascoyne SA3 (50% of people who died were younger than 68 years) and 76 years in Mid West SA3 compared to 80 years across the state (Public Health Information Development Unit, 2021b).

Avoidable mortality refers to deaths of people under 75 years that are potentially avoidable under the current health care system (primary or hospital care). In 2013-17, age-standardised death rates per 100,000 from avoidable causes in Gascoyne SA3 (179) and Mid West SA3 (172) were significantly higher than the state rate (122) (Public Health Information Development Unit, 2021b). Mid West SA3 had significantly higher rates for the following selected causes (ASR per 100.000); respiratory system diseases (14), COPD (14), circulatory system diseases (48) and ischaemic heart disease (32). Data were unavailable or not statistically significant for Gascoyne SA3 and its constituent population health areas Exmouth PHA and Carnarvon PHA due to small sample sizes and high levels of variability around estimates.

#### **Emergency department presentations**

Country regions had a higher rate of lower urgency emergency department (ED) presentations compared to the state as well as a higher percentage of total presentations that were classified as lower urgency. Between 2018 and 2020, about 52% of

ED presentations across Country WA PHN were lower urgency compared to 40% across the state (Department of Health Western Australia, 2021a). Country WA PHN also had a lower percentage of presentations occurring after hours, at 36% compared to 42% across the state. This may indicate difficulties accessing primary care services in Country areas.

Between 2018 and 2020, Gascoyne SA3 had the highest percentage of lower urgency presentations in the state (67%) as well as the second highest rate of lower urgency presentations per 1000 population per year (886), substantially above the rate for Mid West SA3 (375), Country WA PHN (379), and the state rate (160) (Department of Health Western Australia, 2021a). Only 24% of lower urgency presentations in Gascoyne SA3 occurred after hours - the lowest in the state. In contrast, only 48% of presentations in Mid West SA3 were classified as lower urgency and of these, 37% occurred after hours, similar to Country WA PHN.

#### Utilisation of primary care services

Between 2013-14 and 2018-19, visits to GPs increased from 73% to 77% of the population in Gascovne SA3 and from 80% to 88% in Mid West SA3, above the national rate for SA3s in remote areas (76%) (Australian Institute of Health and Welfare, 2020c). The percentage utilising after-hours GP services in Gascoyne SA3 increased substantially from 9.3% to 17%; however, Mid West SA3 had a very low rate, increasing from only 3.6% to 4.3% over the same period, well below the national rate for remote areas (11%). In 2018-19, utilisation of GP health assessments was 10% in Gascovne SA3 and 8.1% in Mid West SA3 compared to 11% nationally for remote areas. We note that these data include Medicare-subsidised services only and may represent an under-estimate because ACCHOs and WACHS provide primary care services in this region.

In 2018-19, percentage of population utilisation of Medicare-subsidised allied health services was relatively low in Gascoyne SA3 (20%) and high

in Mid West SA3 (34%) compared to the national rate for SA3s in remote areas (25%) (Australian Institute of Health and Welfare, 2020c). About 18% of the population in Gascoyne SA3 and 28% of the population in Mid West SA3 utilised optometry (21% nationally in remote areas). We note that optometry services are more likely to be subsidised by Medicare compared to other types of allied health services. These figures do not include allied health care provided by Aboriginal health services and other non-government organisations.

The region had a relatively low percentage of population utilisation of practice nurses/Aboriginal Health Workers at 9.2% in Gascoyne SA3 and 9.6% in Mid West SA3 compared to 13% nationally in remote areas (Australian Institute of Health and Welfare, 2020c). Data on utilisation of nurse practitioners in the region was unavailable in 2018-19.

Interviews with local stakeholders indicated that access to bulk billing GPs was limited and that this may be contributing to high rates of emergency department presentations in the region.

#### Access Relative to Need (ARN) Index

The Access Relative to Need (ARN) Index measures access to primary health care relative to predicted need and is based on methodology developed by the Australian Institute of Health and Welfare in 2014. The ARN index is based on the following information:

- The location of health services and the populations they serve
- The number of GP (FTE) working at each location (estimated using data at SA2 level – demand weighted distribution)
- The demographic and socioeconomic characteristics of the population.

In early 2021, WAPHA updated the ARN Index for SA2s in Western Australia to identify areas with a low access to GPs relative to need. Irwin SA2 and Northampton – Mullewa – Greenough SA2 in Mid

West SA3 were in the first decile (access relative to need was lower than 90% of SA2s in the state) for access to any GP as well as bulk billing GPs, while Morawa SA2 in Mid West SA3 was in the first decile for access to any GP. Geraldton – South SA2, Geraldton – North SA2, and Geraldton – East SA2 were in the fourth decile in terms of access to bulk billing GPs. Although Exmouth SA2 in Gascoyne SA3 had a relatively high access to any GP, it was in the first decile for access to bulk billing GPs, indicating that access may be limited by the ability to make a co-payment.

#### Workforce

#### General practitioners (GPs)

In 2020, Mid West SA3 had 50 GP full-time equivalent (FTE) or 0.9 FTE per 1000 residents and Gascoyne SA3 had 8.9 GP FTE or 1.0 FTE per 1000 residents compared to 1.1 FTE per 1000 across the state<sup>2</sup>. The ratio of vocationally registered (VR) to non-VR GPs was very high in Mid West SA3 (40) compared to the state (12), in contrast to Gascoyne SA3 (3.8), which had one of the lowest ratios in the state.

#### Primary care nurses

The Midwest region had a higher relative supply of primary care nurses compared to the state. In 2019, Gascoyne SA3 had 23 primary care nurse full-time equivalent (FTE) or 2.4 FTE per 1000 residents and Mid West SA3 had 123 FTE or 2.3 FTE per 1000 residents compared to 1.7 FTE per 1000 across the state<sup>2</sup>.

### **Aged Care**

In 2019, there were 1424 people aged 65 years and over in Gascoyne SA3 and 8962 in Mid West SA3 representing 15% and 17% of the population, respectively. This is projected to increase to 19% of the population in Gascoyne SA3 and 23% in Mid West SA3 by 2030 compared to 18% across the state and 20% across Country WA PHN (Public Health Information Development Unit, 2021b).

Age is an important determinant of health and people aged 65 years and over are more likely to have complex and/or chronic conditions as well as comorbidities. Moreover, geriatric syndromes later in life (usually after the age of 85 years) including pressure ulcers, incontinence, falls, and delirium have substantial implications for quality of life as well as health care utilisation (Brown-O'Hara, 2013). The Western Australian Burden of Disease Study 2015 (Department of Health Western Australia, 2021) indicated that in the Midwest health region, coronary heart disease, COPD and dementia were among the leading causes of disease burden for people aged 65 and over.

General practice data indicated that the percentage of clients aged 65 years and over diagnosed with a chronic condition that had two or more conditions was 64% across the region (19 practices) compared to 54% across the state (481 practices). We note that these data include private general practices only and do not include GP services provided by non-government organisations.

#### Utilisation of health services

In Country WA PHN, 41% of people aged 80 years and over had a GP Health Assessment in 2018-19, just above the rate for regional PHNs (40%) and higher than the national rate (37%) (Australian Institute of Health and Welfare, 2020c). The number of GP attendances in residential aged care facilities (RACFs) was 15.7 per patient compared to 15.8 for regional PHNs and 17.8 nationally. Data were not available at the SA3 or regional level.

Medicare items are available for in-depth assessment of a patient 75 years and over. This provides a structured way of identifying health issues and conditions that are potentially preventable or amenable to interventions to improve health and quality of life. Data for participating general practices (18 in total) indicate that Mid West SA3 has a similar rate of people over 75 accessing health assessments as the Country WA PHN, at 19%.

#### Aged care services

The aged care system in Australia offers three main types of service: the Commonwealth Home Support Program, Home Care Packages, and residential care. Across Australia, more than two-thirds of people using aged care services access support from home (Royal Commission into Aged Care Quality and Safety, 2021).

The Home Care Packages (HCP) program provides support to older people with complex needs to help them live independently in their own home. Support provided includes help with household tasks, equipment, minor home modifications, personal care, and clinical care such as nursing and allied health services. There are four levels of HCPs from level 1 (basic care needs) to level 4 (high care needs). Across Australia, wait times for approved HCPs range from 3-6 months for level 1 to at least 12 months for level 2 and above (Department of Health, 2021a).

In Mid West SA3, home care services are provided by religious and charitable organizations. There were no organizations providing home care in the Gascoyne SA3. As at December 2020, there were 194 people in a HCP in the Midwest Aged Care Planning Region (ACPR) (Department of Health, 2021a). An additional 133 people were waiting for a HCP with 26 people (20%) requiring the highest level of care (level 4).

Gascoyne SA3 had a very low residential (RACF) beds-to-population ratio. The number of residential beds to 1000 people aged 70 years and over was only 23 in Gascoyne SA3 and 68 in Mid West SA3 compared to 63 in Country WA PHN and 72 across the state (Australian Institute of Health and Welfare, 2021b). There were only two residential aged care facilities in the Gascoyne but eight in the Mid West SA3.

In 2019, Mid West SA3 had 86 aged care nurse full-time equivalent (FTE) or 14 FTE per 1000 people aged 70 years and over and Gascoyne SA3 had 9.3 FTE or 11 FTE per 1000 compared to 12 FTE per 1000 across the state<sup>2</sup>.

## Alcohol and Other Drugs

In Country WA, residents in Gascoyne (39.3%) and Mid West (33.1%) SA3s were at a statistically significantly greater long-term risk from alcohol consumption, with the second and fifth highest rates recorded in WA respectively (Epidemiology Branch, 2021b). Current smoking rates in Gascoyne and Mid West SA3s were 11.5% and 13.7% respectively, compared to 11.2% in WA (Epidemiology Branch, 2021b).

The Practice Incentives Program Quality Improvement incentive (PIP QI) is a payment to encourage practices to participate in quality improvement activities, aimed at improving patient outcomes through the delivery of quality care. Improvement measures include the proportion of patients with a smoking status and proportion of patients with an alcohol consumption status. Across the region (18 practices), 29% of GP patient records did not have a smoking status recorded (37% across the state) and 45% did not have an alcohol consumption status recorded (46% across the state). We note that these data include only private general practices and do not include health services provided by non-government organisations.

#### Accidental overdose

Australia's Annual Overdose Report, produced by the Penington Institute, reported 2,070 drug-related deaths in Australia in 2018 of which 1,556 were unintentional (Penington Institute, 2020). Of this, males were more than three times as likely than females to suffer an unintentional drug-induced death (71.5% of deaths) (Penington Institute, 2020). Middle-aged people were found to be most at risk of overdose (Penington Institute, 2020).

Opioids continued to be the largest overall drug group identified in drug-induced deaths (Penington Institute, 2020). In recent years, the greatest increase of unintentional drug-induced deaths has occurred in WA, increasing from 6.4 per 100,000 in 2012 to become the highest rate Australia-wide in 2018 at 8.8 per 100,000 (Penington Institute, 2020).

From 2014-2018, the rate of unintentional druginduced deaths in Country WA was 8.3 per 100,000. In 2014-2018 Mid West and Gascoyne SA3s recorded a rate of more than 10.0 deaths per 100,000 unintentional drug-induced deaths. (Penington Institute, 2020).

#### **Emergency department presentations**

Country regions had higher rates of emergency department (ED) presentations related to alcohol and other drugs (AOD) compared to the state. Between 2018 and 2020, around 0.7% of ED presentations across the region were AOD-related (Department of Health Western Australia, 2021a). About 59% of AOD-related presentations were made after hours. Presentation rates per 100k population per year in Gascoyne SA3 (738) were higher than in Mid West SA3 (612) and both were above the state rate (369). We note that some ED presentations may be related to alcohol and other drugs but primarily diagnosed as an injury (or other condition), so the data are likely to underestimate the rate of AOD-related ED presentations in the region.

#### Services

Drug and Alcohol services are provided by the WA Country Health Service and the not-for-profit organisations. The WA Country Health Service manages the Midwest Community Alcohol and Drug Service which is based in Geraldton. The service provides a fortnightly outreach service to Kalbarri, Dongara, Northampton, Mullewa, Morawa, Three Springs and Eneabba. Once a month the team travels to Yalgoo, Cue, Mt Magnet, Meekatharra and Wiluna.

The not-for-profit service provider Hope Community Services provides residential drug and alcohol services and transitional housing in Geraldton. Aboriginal Community Controlled Health Services provide alcohol and other drug counselling services in Geraldton and Wiluna.

#### Mental Health

Mental health was the second leading cause of disease burden in the Midwest region contributing 13% to the total disease burden for the region (Department of Health Western Australia, 2021).

In WA, 8% of people have been diagnosed with depression, 9% with anxiety and 8% experienced high psychological distress. The Mid West and Gascoyne SA3s have similar rates, at 7% for depression, 8% for anxiety and 9% for psychological distress in Mid West and 5% for anxiety and 5% for distress in Gascoyne. Prevalence of depression was suppressed for the Gascoyne region due to a small sample size (Epidemiology Branch, 2021b).

#### Suicide and self-harm

Suicide impacts the community in the Midwest, with farmers, fishers, men and the Aboriginal population identified as at-risk populations (Midwest Suicide Prevention Trial). Sixty-eight people died from suicide in the Midwest between 2014 to 2018 representing 3.4% of all deaths in the region. In the Gascoyne SA3, 11 people died from suicide in the Gascoyne between 2014 to 2018 representing 4.5% of all deaths. Deaths from suicide were above state rates (15 per 100,000) in the Midwest (24 per 100,000) (Australian Institute of Health and Welfare, 2020d).

The Health and Wellbeing Surveillance Survey collects data on suicidal ideation among adults aged 16 years and over. In the Midwest 6% of the population reported that they thought seriously about ending their own lives. In the Gascoyne this was 4%. Across WA, 5% of people experienced suicidal ideation (Epidemiology Branch, 2021b).

Self-harm is a strong risk factor for suicide. Self-harm hospitalisations in the Midwest were above state rates. Self-harm hospitalisations were higher for females and for people aged 0-24 years (Australian Institute of Health and Welfare, 2020d).

The Midwest was identified as one of twelve locations across Australia to participate in the

National Suicide Prevention Trial. The Midwest Suicide Prevention Trial is focusing on the Aboriginal community and men aged 25 to 54, specifically farmers, fishers and fly in, fly out (FIFO) workers.

#### Youth mental health

Suicide and self-inflicted injuries were the second leading cause of disease burden for 15 to 24-year-olds, contributing to 14% of the disease burden for this age group (Department of Health Western Australia, 2021).

Stakeholders have indicated that access to early intervention mental health services is an issue in the Midwest particularly for youth.

The 'missing middle' is a term used to describe clients who are too unwell to be effectively treated in the primary mental health system but are not unwell enough to be treated in the state-based mental health system (headspace, 2019). Stakeholders in the Mid-west have identified the 'missing middle' as a particular issue for youth mental health services in the Mid-west.

Hospital admissions for self-harm may indicate a lack of access to mental health services. In the Midwest people aged between 0-24 were hospitalized for self-harm at rates above the State rate (Australian Institute of Health and Welfare, 2020d).

#### **Emergency department presentations**

Country regions had higher rates of mental health-related emergency department (ED) presentations compared to the state. Between 2018 and 2020, around 2.4% of ED presentations across the region were primarily mental health-related, excluding those related to alcohol and other drugs (Department of Health Western Australia, 2021a). The presentation rate per 100k population per year was much higher in Gascoyne SA3 (2780) compared to Mid West SA3 (1904) and was over 2.5 times the state rate (1083). Moreover, Gascoyne SA3 had a lower rate of after-hours mental health presentations

(33%) compared to Mid West SA3 (44%) and the state (46%). The relatively high percentage of presentations occurring during business hours in Gascoyne SA3 may indicate difficulties accessing primary care mental health services. We note that some ED presentations may be related to mental health but primarily diagnosed as an injury (or other condition), so the data are likely to underestimate the rate of mental health ED presentations in the region.

#### **Services**

The Midwest has a low supply of mental health professionals. Less than 1% of the population in the Midwest accessed a clinical psychologist through the Better Access MBS Program; however, 6% of people in Mid West SA3 and 2% of people in Gascoyne SA3 had a GP Mental Health Treatment Plan (Australian Institute of Health and Welfare, 2020c). These figures indicate insufficient access to rebated psychological services and a reliance on services provided by the State and not-for-profit sector.

Mental health services in the Midwest are provided by the WA Country Health Service and not-for-profit organisations. The WA Country Health Service provides adult community mental health services and child and adolescent mental health services in Geraldton, Carnarvon and Meekatharra with the option of outreach visits by appointment.

In Geraldton, not-for-profit services include Helping Minds, 360 Health & Community providing psychological services and suicide prevention programs, Ruah Community Services providing mental health support and recovery services, headspace providing services for youth and Fusion Australia providing residential rehabilitation services. Centacare provides counselling services and emergency relief. Private psychology services are available in Geraldton; however, access is limited in other areas.

Stakeholders have indicated that demand for mental health services in Geraldton is high with private providers and the not-for-profit sector reporting large client waitlists.

# **Aboriginal Health**

In 2016, it was estimated that there were 8,865 Aboriginal people residing in the Midwest region (ERP 2016). Yamatji is the name used to identify Aboriginal people living in the Midwest region of Western Australia. Approximately 10% of the total population are Yamatji people who live mostly in Geraldton and Carnarvon (Australian Bureau of Statistics, 2016). Many Yamatji people also live in the smaller towns of Mt Magnet, Shark Bay, Mullewa, Cue and Gascoyne Junction, as well as in remote communities such as Meekatharra, Burringurrah, Yulga Jinna, Barrell Well, Wandanooka, Mungullah, Buttah Windee and Pia Wadjarri (Telethon Kids Institute, 2021).

The Yamatji people experience high levels of disadvantage in the Midwest with high levels of unemployment, welfare dependence, lower levels of education and poorer housing suitability. The Indigenous Relative Socioeconomic Outcome Index score (IRSEO) in the region ranges from 65 in Irwin – Morawa (the least disadvantaged area) to 84 in Carnegie South – Mount Magnet and Meekatharra – Karalundi (the most disadvantaged areas). In Meekatharra – Karalundi, 48% of dwellings were rented from the government housing authority, 19% required extra bedrooms and 65% had no internet connection (Public Health Information Development Unit, 2021a).

Yamatji children in the Midwest are also impacted by disadvantage. Sixty one percent of Yamatji children in Carnarvon - Mungullah and 54% of Yamatji children living in Geraldton were developmentally vulnerable on one or more domains according to the Australian Early Development Census (Public Health Information Development Unit, 2021a). Fifty three percent of Aboriginal mothers smoked during pregnancy in Carnarvon and 49% in Geraldton. Fourteen percent of babies born to Aboriginal mothers residing in Geraldton were born with a low birth weight. This was 12% for babies born to Aboriginal mothers in Carnarvon (Public Health Information Development Unit, 2021a).

The Practice Incentives Program Quality Improvement incentive (PIP QI) is a payment to encourage practices to participate in quality improvement activities, aimed at improving patient outcomes through the delivery of quality care. PIP QI data indicated that the proportion of general practice records for Indigenous clients aged between 35-44 years that did not have information available to calculate their absolute risk of cardiovascular disease (CVD) was 45% across the region (18 practices) compared to 62% across the state (497 practices). We note that these data include only private general practices and do not include health services provided by non-government organisations. The percentage of GP patient records with Aboriginal status not recorded was 28% across the region compared to 33% across the state.

#### Housing

Regions with the highest proportion of Aboriginal persons living in crowded dwellings were within the IAREs of Meekatharra-Karalundi (38%), Shark Bay-Coral Bay-Upper Gascoyne (32%) and Carnarvon-Mungullah (28%) (Public Health Information Development Unit, 2021a).

#### Child immunisation

A key priority of the National Immunisation Program Schedule is to work towards achieving immunisation coverage rates of at least 95% for children aged 1, 2 and 5 years. In the Midwest region, childhood immunisation rates below target for children aged 2 years were 74% in Carnarvon-Mungullah, 76% in Exmouth-Ashburton, 81% in Geraldton and 83% in Carnegie South – Mount Magnet IAREs. This suggests that interventions should be targeted to increase immunisation coverage for this age group (Public Health Information Development Unit, 2021a).

# Lower urgency emergency department presentations

High rates of non-urgent ED attendances indicate there may be a gap in primary care services (Public Health Information Development Unit, 2021a).

Aboriginal people in Country WA PHN had a higher rate of non-urgent ED presentations (10,742 ASR per 100,000 people per year) compared to WA rates (7,742). In Country WA, top major diagnosis chapters included factors influencing health status (3,626 ASR per 100,000) and injury and poisoning (2,763 ASR per 100,000) (Public Health Information Development Unit, 2021a).

Non-urgent ED presentations for Aboriginal people in Geraldton in 2017/18 were statistically significantly higher for the diagnostic category of factors influencing health status and contact with health services. This usually indicates that these presentations were attributed to psychosocial and economic factors.

#### Avoidable deaths by selected causes

Avoidable deaths by selected conditions for Aboriginal persons aged 0 to 74 years were statistically significantly higher in the following regions (ASR per 100,000 Aboriginal persons) (Public Health Information Development Unit, 2021a):

- Selected external causes (falls, fires, burns, suicide and self-inflicted injuries): Geraldton (61 per 100,000).
- External causes (transport accidents, accidental drowning and submersion): Exmouth Ashburton (87 per 100,000).

# Potentially preventable hospitalisations (PPHs)

Between 2015-16 and 2017-18 the following PPHs were statistically significantly higher in the IAREs of the Midwest region (Public Health Information Development Unit, 2020).

PPHs for chronic disease:

- Chronic angina: Carnegie South Mount Magnet (513 per 100,000) and Geraldton (283)
- Asthma: Carnarvon Mungullah (634 per 100,000) and Meekatharra Karalundi (566)
- Congestive cardiac failure in Carnegie South Mount Magnet (809 per 100,000), Meekatharra – Karalundi (794) and Exmouth – Ashburton (785)
- Diabetes: Carnegie South Mount Magnet (1,564 per 100,000), Meekatharra Karalundi (1,168) and Central West Coast (965)
- COPD: Geraldton (731 per 100,000).

PPHs for acute conditions:

- Acute cellulitis: Carnegie South Mount Magnet (2,086 per 100,000), Carnarvon - Mungullah (1,869) and Meekatharra – Karalundi (1,316)
- Acute dental: Carnarvon Mungullah (696 per 100,000) and Geraldton (596)
- Acute ear, nose and throat infections: Meekatharra
   Karalundi (1,384 per 100,000) and Carnegie
   South Mount Magnet (1,019)
- Acute urinary tract infections (including pyelonephritis): Carnegie South – Mount Magnet (989 per 100,000), Carnarvon - Mungullah (631) and Geraldton (600) (Public Health Information Development Unit, 2020).

There were no vaccine-preventable conditions with statistically significantly elevated rates in the Midwest region.

#### **General Practice**

Chronic disease contributes significantly to the differences in life expectancy between Aboriginal and non-Aboriginal people. Aboriginal people experience 2.3 times the rate of disease burden, with an age standardised death rate for chronic disease 3.8 times the rate among non-Aboriginal people (Australian Institute of Health and Welfare, 2017). In WA, 60% of Aboriginal people have been diagnosed with at least one chronic condition (Australian

Institute of Health and Welfare, 2017).

Aboriginal and Torres Strait Islander people can access specific services aimed at Closing the Gap in health outcomes. It is important that General Practices ask all patients if they identify as Aboriginal and/or Torres Strait Islander. This assists with ensuring patients are provided with the option of accessing information and services specifically designed to meet their needs.

Through Medicare, Aboriginal and Torres Strait Islander people can receive Indigenous-specific health checks from their doctor, as well as referrals for Indiaenous-specific follow-up services. In March 2020, telehealth items for Indigenous health checks were introduced in response to COVID-19 and associated restrictions (Australian Institute of Health and Welfare, 2021c). In 2019-20, the proportion of the Aboriginal population who received an Indigenous Health Check was 24.5% in Gascovne and 37.4% in Mid West SA3s compared to 25.1% in Country WA PHN. Face-to-face was the preferred method compared to telehealth, which had a low uptake of only 0.2% in Mid West, 0.5% in Gascoyne, and 0.6% across the state. During 2018-19, the proportion of patients who received follow-up services was lower in Mid West (34.5%) and Gascoyne (43.9%) compared to the state (46.8%) (Australian Institute of Health and Welfare, 2021c). We note that differences in follow-up rates may partly reflect differences in health status and need for follow-up care.

#### Services

Aboriginal people living in the Midwest region can access primary care services through general practice, Aboriginal Community Controlled Health Services, mainstream primary care services and the hospital sector. There are three Aboriginal Medical Services in the Midwest.

## Digital Health

Digital health includes a broad range of innovative technologies for the purposes of providing care and sharing information to enhance patient outcomes. Telehealth can deliver health services and facilitate communication between specialists and patients, whilst electronic medical records such as the national My Health Record can facilitate communication and coordinated care across multiple practitioners. In 2018, every Australian established a 'My Health Record' unless they choose to opt out. Information available through My Health Record can include a patient's health summary, medication prescribing and dispensing history, pathology reports, diagnostic imaging reports and discharge summaries.

Given the large geographical size of WA, COVID-19 saw a very rapid adoption of virtual methods of consultation of WA's hospital-based outpatient clinics. Rates that were previously in low 10 to 15% rapidly moved to the 60 to 80% across a range of clinics and hospitals (Koh, 2020). It appears that the focus on digital health including telehealth consultations during COVID-19 is helping fast track the adoption of technology and more providers are seeing the My Health Record as a valuable repository of health data as it is accessible to all healthcare providers without the need for fax machines or postal services. As of March 2021, there are now 22.93 million My Health Records Australiawide and more than 20.4 million or 89 per cent of them contain health data (My Health Record, 2021).

A survey by The Royal Australian College of General Practitioners (RACGP) revealed more than 99% of surveyed GPs were offering patients consultation via telehealth, including phone and video options (The Royal Australian College of General Practitioners, 2020). More than 4.3 million health and medical services have been delivered to a total of more than three million patients through the telehealth items introduced by the Australian Government for the COVID-19 pandemic (Department of Health Western Australia, 2020).

According to a Household Impacts of COVID-19 Survey results conducted from 16-25 April 2021, 14% of Australians used a Telehealth service in the previous four weeks, with the most common reasons being for convenience (68%), saving time (42%) and not needing to travel (38%) (Australian Bureau of Statistics, 2021). The April 2021 Telehealth usage (14%) was a decrease from November 2020 (18%), June 2020 (20%) and May 2020 (17%) (Australian Bureau of Statistics, 2021). The survey also revealed that 30% of Australians now preferred to access telehealth services more compared to before COVID-19, particularly family households with children (39%), people aged 18 to 34 years (38%), women (34%) and men (26%) (Australian Bureau of Statistics, 2021).

Pre-COVID (2018-19) rates of MBS utilisation of telehealth were very low across Australia, at 0.21 per 100 people. However, the Midwest appears to have been an early adopter of telehealth services with the second highest pre-COVID-19 MBS utilisation rate for telehealth services (1.07 per 100 resident population). Temporary COVID-19 MBS telehealth items have been made available to GPs and other health professionals since March 2020 to help reduce the risk of community transmission of COVID-19. Although the COVID-19 MBS utilisation data is currently unavailable, we expect to see a significant increase in telehealth utilisation nationwide as a result of the pandemic.

## **Summary**

The Midwest is located in the western middle section of WA and makes up one quarter of the state's total land mass. Over half of the population resides in Geraldton with other population hubs dispersed throughout the region. The Midwest has high levels of socioeconomic disadvantage compared to the rest of WA, indicating the region is at greater risk of having poor health outcomes.

The dominant health concerns in the Midwest are mental health, chronic disease and alcohol consumption. Mental ill-health is the second leading cause of disease burden in the Midwest and is a continuing priority for the region. Stakeholders have indicated that access to early intervention mental health services is a key issue in the Midwest, particularly for youth. Stakeholders have also indicated a lack of services for clients who are too unwell to be effectively treated in the primary mental health system but are not unwell enough to be treated in the state-based mental health system the "missing middle".

The population in the Midwest has high prevalence rates of risk factors for chronic disease, particularly obesity and high blood pressure where both rates were significantly greater compared to the state. Chronic disease accounted for a substantial proportion of the burden of disease in the Midwest with PPH rates that were above state rates for COPD, congestive cardiac failure and diabetes complications.

Alcohol consumption is another key concern, with the Gascoyne and Midwest recording the second and fifth highest rates of residents at greater long-term risk from alcohol consumption in the state. This is reflected in the region's higher rates of ED presentations related to AOD when compared to the state.

Workforce and access to services is a continuing issue for all rural communities and the Midwest is similarly impacted. Many towns have limited access

to General Practitioners and allied health despite high needs in the community. The flow on effect has resulted in significant wait times to see a GP, which is a deterrent for people requiring regular or timely access to a GP. More specifically, in Geraldton there are currently no bulk billing GPs and only one afterhours service, which could be a contributing factor to the high number of lower urgency ED presentations in the region.

# **Priorities**

| Health Need   | Service Need  | Priority  | Priority Area           | Priority sub-category                        |
|---|---|---|-------------------------|--|
| Mental Health is the second leading cause of disease burden in the Midwest.   | Access to mental health services is impacted by workforce shortages and service models that are not adaptable to regional and rural areas.  | Improve access to mental health services in the Midwest.  | Mental Health           | Workforce                                    |
| Mental Health is the second leading cause of disease burden in the Midwest.   | Access to mental health services is impacted by the "missing middle" (people whose mental health needs are not being met in either primary care or the state funded mental health system). A lack of moderate to severe services. | Ensure integrated and stepped care services are available for people experiencing mental health issues across the spectrum. | Mental Health           | System integration                           |
| Chronic disease accounted for a substantial proportion of the burden of disease.                                      | PPH rates that were above state rates for COPD, congestive cardiac failure and diabetes complications.  | Support primary health care providers to manage chronic disease populations and build capacity for patient self-management. | Population Health       | Chronic conditions                           |
| Regions in the Midwest have a high<br>need but low access to GPs and<br>bulk billing GPs (Access Relative to<br>Need) | The Mid west has high rates of non-<br>urgent ED presentations.   | Investigate successful alternatives to the provision of primary care in Emergency Departments in country regions.           | Population Health       | Appropriate care (including cultural safety) |
| People living in the Midwest are at risk of long-term harm from alcohol consumption.                                  | There are high rates of ED presentations related to AOD consumption.  | Improve access to screening and AOD treatment services  | Alcohol and other drugs | Access                                       |

# Opportunities and Options

| Priority  | Expected Outcome  | Potential lead agency and/or opportunities for collaboration and partnership                              |
|---|---|---|
| Improve access to mental health services in the Midwest.  | MH1 Rate of regional population receiving PHN commissioned low intensity psychological interventions.  MH2 Rate of regional population receiving PHN commissioned psychological therapies delivered by mental health professionals.   | Non-Government Organisations  Community Mental Health Services  General Practice                          |
| Ensure integrated and stepped care services are available for people experience mental health across the spectrum.          | MH4 Formalised partnerships with other regional service providers to support integrated regional planning and service delivery.   | Non-Government Organisations  Community Mental Health Services  General Practice  Local Hospital Networks |
| Support primary health care providers to manage chronic disease populations and build capacity for patient self-management. | P9 Increase in the rate of people diagnosed with chronic conditions who receive GP team care arrangement and case conferences.  P12 Decrease in PPH rates. Where the rate has been stable for at least three years, the performance criteria is to maintain the existing rate of PPH. | General Practice Allied Health Providers  |
| Investigate successful alternatives to the provision of primary care in Emergency Departments in country regions.           | P8 Decrease in GP not available or waiting time too long as reasons for why patient attended ED.  | General Practice Local Hospital Networks  |
| Improve access to screening and AOD treatment services  | AOD1 Rate of drug and alcohol commissioned providers actively delivering services.  | General Practice  Mental Health Commission  WANADA  |



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#### Acknowledgement

WA Primary Health Alliance acknowledges and pays respect to the Traditional Owners and Elders of this country and recognises the significant importance of their cultural heritage, values and beliefs and how these contribute to the positive health and wellbeing of the whole community.

#### Disclaimer

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