



OUR PEOPLE OUR PARTNERSHIPS OUR HEALTH

2017-2018 Health Needs Assessment Summary
Western Queensland Primary Health Network

ACRONYMS

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ABS	Australian Bureau of Statistics
AICCHO	Aboriginal and Islander Community Controlled Health Organisation
AICCHS	Aboriginal and Islander Community Controlled Health Service
AEDC	Australian Early Development Census
AIHW	Australian Institute of Health and Welfare
AHPRA	Australian Health Practitioner Regulation Agency
ASR	Age Standardised Rate
ATAPS	Access to Allied Psychological Services
BAP	Better Access Program
CACH	Cunnamulla Aboriginal Health Corp
COPD	Chronic Obstructive Pulmonary Disease
CWAATSICH	Charleville and Western Areas Aboriginal and Torres Strait Islander Community Health
CWHHS	Central West Hospital and Health Service
ED	Emergency Department
EPC	Enhanced Primary Care
FTE	Full Time Equivalent
GP	General Practitioner
HNA	Health Needs Assessment
HACC	Home and Community Care
HHS	Hospital and Health Service
IRSD	Index of Relative Social-Economic Disadvantage
LGA	Local Government Area
MBS	Medicare Benefits Scheme
MHNIP	Mental Health Nurse Incentive Program
MICRRH	Mount Isa Centre for Rural and Remote Health
NDSS	National Diabetes Services Scheme
NGO	Non-Government Organisation
NHPA	National Health Performance Authority
NMHSS	Nukal Murra Health Support Service
NWHHS	North West Hospital and Health Service
NWRH	New Ways Real Health
PBS	Pharmaceutical and Benefits Scheme
PHIDU	Public Health Information Development Unit
PHN	Primary Health Network
PP	Private Practice
RACFs	Residential Aged Care Facility
RFDS	Royal Flying Doctor Service
SA2	ABS geographical Statistical Area Level 2
SD	Statistical Division
SEIFA	Socio-Economic Indexes for Areas
SMO	Senior Medical Officer
SWHHS	South West Hospital and Health Service
WQPHN	Western Queensland Primary Health Network
QLD	Queensland

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MESSAGE FROM THE CEO

The “Our People, Our Partnerships, Our Health” Health Needs Assessment (HNA) 2017–2018 has been developed using the Commonwealth guidelines and through obtaining national and state datasets (also available in the WQPHN Health Intelligence Portal), data provided by Queensland Health partners, key reports and information gathered from stakeholder consultations undertaken in both 2016 and 2017. Our health planning process is an iterative one and the document will evolve and be updated as more information emerges and feedback is gathered.

WQPHN have used the process of this HNA to look through the lens of a quadruple aim framework, that is high quality, efficient, professionally rewarding and whole of population focused health care. The purpose of the WQ HNA is to identify population health needs, gain an understanding of the service landscape and seek insight into local views and opinions of gaps and priorities. The intent is for the HNA to be used not only as a planning guide, but a catalyst for discussion about the health needs of the population within the WQPHN region. Used in conjunction with the recently developed WQPHN Health Intelligence Portal, the HNA has identified opportunities for early innovation and transformation to build greater primary health care capability, so that we can respond more directly to the significant health challenges that affect organisations and individuals alike across our vast catchment.

STUART GORDON

Chief Executive Officer



OVERVIEW

Western Queensland Primary Health Network (WQPHN) is one of 31 PHNs across Australia that are funded by the Department of Health to improve the efficiency and effectiveness of primary care services for patients, particularly those at risk of poor outcomes. Our goal is to work in partnership with key organisations to ensure that patients receive the right care, in the right place, at the right time. As a 'commissioner' of services (not a provider), we are responsible for planning and funding primary health care services. Therefore, health planning is important to our role as a commissioning agent in responding to local needs.

By integrating consumer and service need with population outcomes, the HNA identifies key priority areas which have informed the strategic plans across the organisation. Within each key priority area, various approaches and strategies can then be applied. WQPHN will continue to build its own capability and maintain engagement with partners and service provider networks to ensure transparency of intent and service maintenance, but be ever watchful for opportunities for co-commissioning and shared resolve.



WQPHN STRATEGIC PLAN 2016-2020

The WQPHN Strategic Plan provides the 'lens' through which the organisation views the future, and guides all of our organisational activity. It presents a carefully considered response to the region's health needs and current services. The Strategic Plan has six key strategies.

Firstly, it asserts our commitment to working alongside our partners to integrate the Western Queensland health system, and to co-design solutions with service providers, clinicians and consumers to deliver integrated care. Secondly, creating a new direction of travel through the Western Queensland Health Care Home *Model of Care* that secures long term sustainability, a greater emphasis on patient centeredness, seamless integration across care settings and a focus on better health outcomes for consumers. It also reinforces an undertaking to improve access to culturally safe services for our Aboriginal and Torres Strait Islander residents, identifies chronic and complex conditions and child and maternal health as its three biggest priorities. Finally, it recognises the importance of good corporate, program and clinical governance.

OUR 6 PRIORITY STRATEGIES

- 1 **Integrating Care**
- 2 **Western Queensland Health Care Home**
- 3 **Closing the Gap**
- 4 **Chronic and Complex Care**
- 5 **Child and Maternal Health**
- 6 **Good Governance**



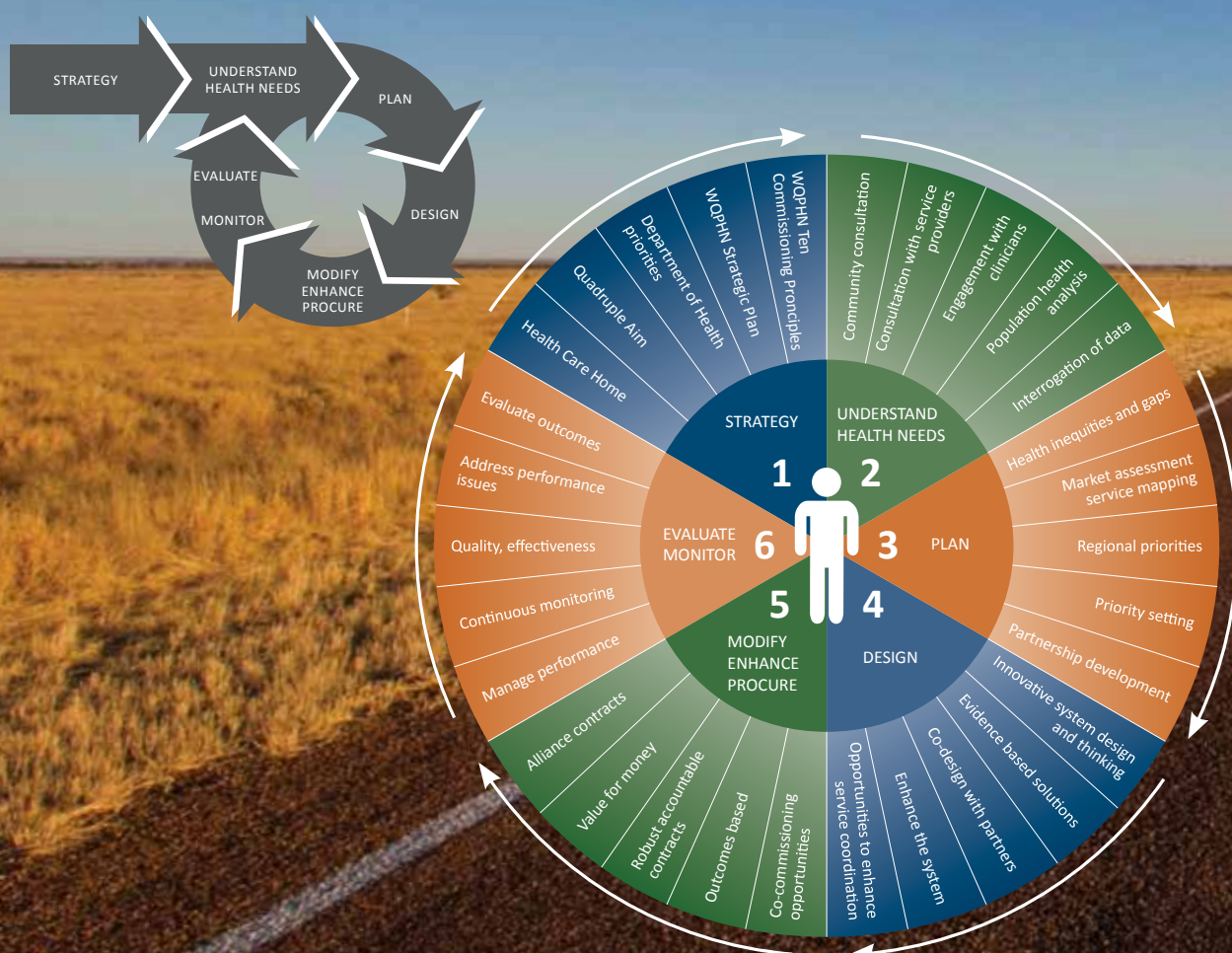
ROLE AND FUNCTION OF WQPHN

At Western Queensland Primary Health Network (WQPHN), we work towards better health outcomes for the people in our communities. Our goal is to improve the health of our population in remote Western Queensland through better access to health care services and active engagement with our communities. We aim to support health care providers in our region to deliver efficient and effective primary health care by enabling a qualified health workforce that promotes clinical leadership, teamwork and culturally informed clinical practice.

As a commissioner of services our PHN does not deliver health services, instead we fund them, and this typically involves a commissioning cycle of strategic planning – determining need and innovative solutions, procuring services, followed by monitoring and evaluation. We have developed our own unique WQPHN Commissioning for Better Health cycle informed by our strategic partners and the Department of Health (DoH) Commissioning Framework.

Commissioning provides a range of opportunities for improving the primary health care system because it delivers targeted activity and prevents a piece-meal approach, which can sometimes occur when a funder does not see a whole regional picture. Commissioning helps us establish a more systematic, population-based approach that integrates existing models of care.

WQPHN Commissioning Cycle



In our Commissioning for Better Health approach, WQPHN wants to address system-wide issues that act as barriers to quality accessible care. This includes working in 'silos', duplication, fractured and parallel service delivery, misalignment of health system performance, poor collaboration and networking across our primary care workforce, competitive organisational behaviours (even in small country towns), cultural incompetence and poor engagement with Aboriginal and Torres Strait Islander people. These features of the health system are contributing to market failure, entrenched lifestyle behaviours, and decline in patterns of health seeking behaviours for preventable illness.

Understanding health needs is therefore critical and this HNA aims to provide the foundation and baseline to identify gaps and to inform how services can be delivered more effectively to

support better health outcomes. Through our high quality health intelligence around current and future population health needs, we are able to guide priority setting and investment.

Our Commissioning for Better Health approach provides an easy to navigate, well connected system of care, close to home and part of a supportive network of providers. We want greater digitally enabled services that are activated for people with complex conditions and our children. Our services will be hard-wired into a General Practice led, multidisciplinary team-based care environment. We need to be working to ensure the whole system is more accountable, engaged with consumers and achieving whole of population health improvement. Fundamentally we seek to lift the performance of the Western Queensland primary health care system to build healthier, more independent and resilient outback communities.



WESTERN QUEENSLAND HEALTH CARE HOME

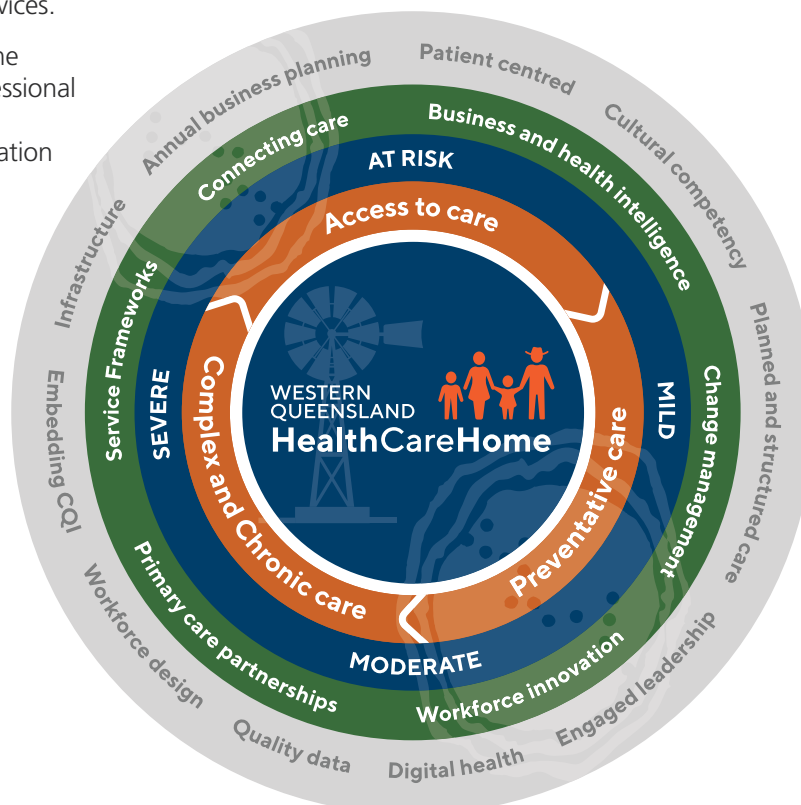
The first principle of the WQPHN Commissioning for Better Health Framework endorses the Western Queensland Health Care Home (WQ HCH) *Model of Care*. This principle informs providers of the requirements to be adopted in their commissioning approaches.

To enable a more sustainable future, we recognise a more cohesive and systematically coordinated primary care model is required. We support a Health Care Home model of care, where consumers are at the heart of their local primary care system and risk factors for poor health outcomes are identified early and people with chronic disease are looked after by a team of health professionals. We are committed to integrated care, particularly for more vulnerable parts of our population who find it hard to navigate the system, experience geographic isolation or economic disadvantage, and have complex care needs. To enable a more sustainable future, WQPHN will strive to leverage greater coordination, linking consumers to providers across networks and services.

We want to cut down the organisational and professional barriers that impact care including better coordination between social, primary and acute care settings, supporting shared approaches, shared health intelligence and adoption of eHealth solutions to enable timely information exchange. We need

a system that is easy for consumers to navigate and delivers greater self-management and independence. The WQ HCH will be the primary enabler to comprehensive primary health care and centred on strengthening and transforming general practice's role as the health care home for people and their families. In the WQ HCH, General Practice offers continuity of holistic care, delivered close to peoples' homes; and individuals, families and carers are informed and active partners in their care. General Practice provides the gateway to the wider health system through access to the community-based multi-disciplinary team, and to hospital and specialist services where these are required.

Rather than wait for people to become acutely unwell or require hospital care, the new Model will place an emphasis on those foundations for system and patient care that better support people to stay well and live in their own homes for as long as possible. The patient, the patient's family and the care team work as partners to motivate the patient to increase their knowledge, skills and confidence to manage their health.



Western Queensland
Health Care Home
Model of Care

- Domains
- Populations
- Support for uptake
- Foundations

ACKNOWLEDGEMENTS

Western Queensland Primary Health Network (WQPHN) gratefully acknowledges the valued input of people, partners and organisations, as well as the WQPHN staff for their valuable contributions and insights which have informed the Health Needs Assessment.

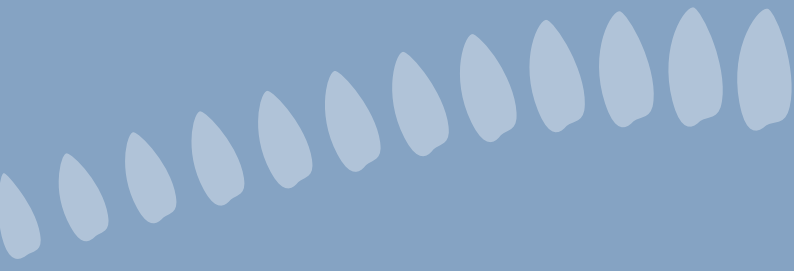
We acknowledge the contribution of our three Hospital and Health Services, the Queensland Aboriginal and Islander Health Council (QAIHC), the four Aboriginal and Islander Community Controlled Health Organisations (AICCHOs), Royal Flying Doctors Services (RFDS) and the organisations and people who work with us to provide visiting outreach services.

We would also like to thank local community members, our local workforce including General Practitioners, allied health professionals and Aboriginal health workers who contributed to on the ground discussions in both 2016 and 2017.

Finally, we thank local people across the Primary Health Network (PHN) catchment for whom we are working to improve health outcomes.

We commissioned Healthy Futures (Australia) in the research, analysis and development of the 2017-2018 Health Needs Assessment. Healthy Futures built on the work undertaken by Kristine Battye Consulting (KBC) in 2016, and worked with Aginic in the development of the WQPHN Health Intelligence Portal, which has been used extensively to extract data for use in this report.





SECTION 1:

OUR PHN REGION

GEOGRAPHY

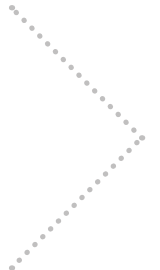
A beautiful landscape of contrasts spanning half of Queensland land mass, Western Queensland is rich in culture with iconic landscapes and thriving farming and mining industries. The WQPHN is geographically the fourth largest PHN in Australia, with a total land area of 956,438 km² – equating to 55% of the total land area of Queensland. The region covers a vast landscape where long distances are required to access services. The demography is diverse with natural and environmental impacts major challenges, as both floods and droughts are common.

OUR POPULATION

Home to approximately 62,000 people (ABS, 2016), 10,435 who are Indigenous Australians and 34 Aboriginal language groups. WQPHN population has mixed health status with pockets of high advantage which are in direct contrast to large areas of extreme disadvantage.

COMMISSIONING LOCALITIES AND HOSPITAL AND HEALTH SERVICES

WQPHN have established 7 unique Commissioning Localities (CLs) in consideration of primary care flows, funding, demographic and cultural considerations. The CLs provide a place-based regional framework to plan and provide a way for WQPHN and its partners to work together to tackle health inequality.



Map of WQPHN Commissioning Localities (CL)

Lower Gulf

- Home to 4,837 people
- 71.4% of the population are Indigenous Australians
- 4 LGAs covering a land mass of 107,591 km²

Mount Isa and Surrounds

- Home to 22,624 people
- 17.4% of the population are Indigenous Australians
- 4 LGAs (Boulia LGA split) covering a land mass of 119,107 km²

Western Corridor

- Home to 910 people
- 16.2% of the population are Indigenous Australians
- 3 LGAs (Boulia LGA split) covering a land mass of 200,624 km²

Central West

- Home to 9,526 people
- 4% of the population are Indigenous Australians
- 4 LGAs covering a land mass of 186,748 km²

Far South West

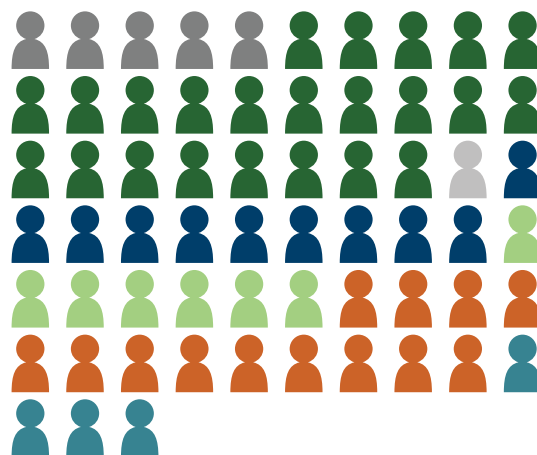
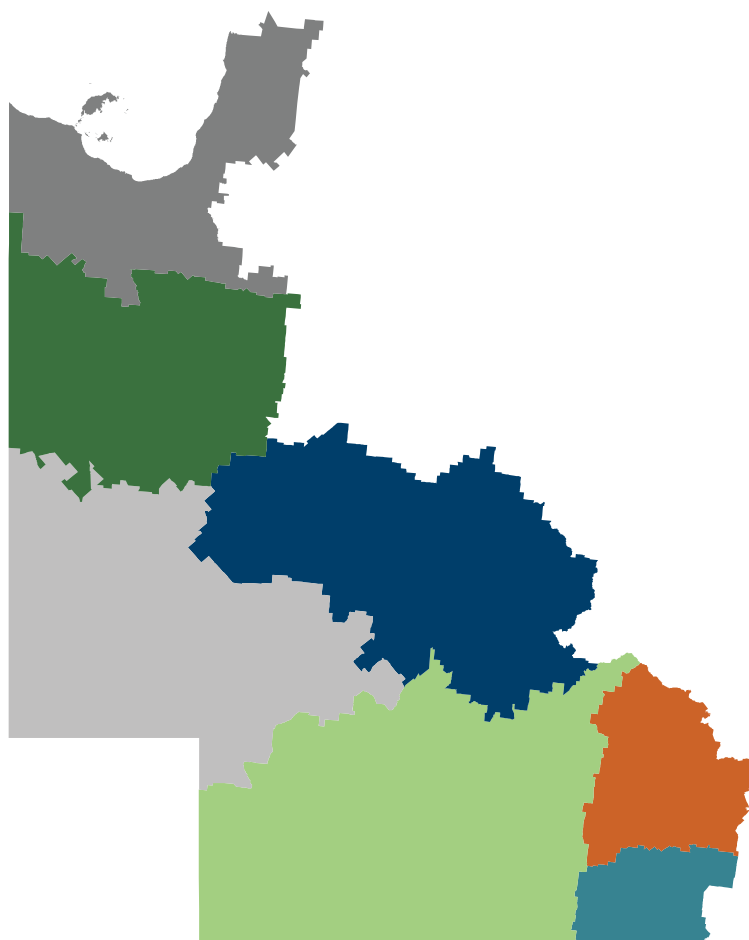
- Home to 7,095 people
- 16.2% of the population are Indigenous Australians
- 4 LGAs covering a land mass of 233,059 km²

Maranoa

- Home to 12,666 people
- 5.5% of the population are Indigenous Australians
- 1 LGA covering a land mass of 58,830 km²

Balonne

- Home to 4,380 people
- 15.3% of the population are Indigenous Australians
- 1 LGA covering a land mass of 31,150 km²

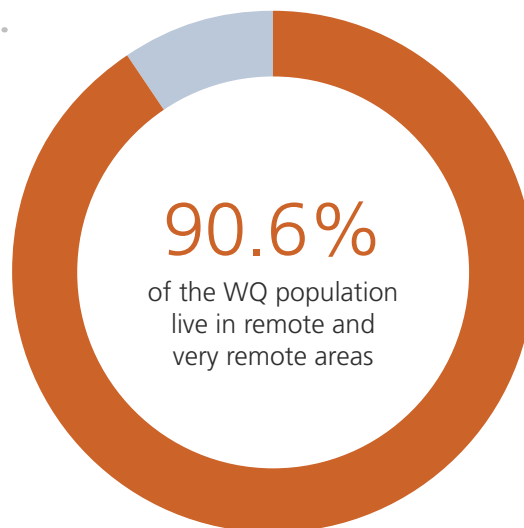


Our region has three Hospital and Health Services (HHS) within the catchment including Central West HHS (CWHHS), North West HHS (NWHHS), and South West HHS (SWHHS). Mount Isa is the largest town in NWHHS, Roma is the largest town in SWHHS, and Longreach is the largest town in CWHHS.

REMOTENESS

Remoteness of the Primary Health Network is an important factor in assessing the health needs of its population. Based on the Australian Statistical Geography Standard – Remoteness Area (ASGS-RA) classification system of five remoteness categories, Western Queensland, along with the Northern Territory, are the most remote PHNs.

- 4 Commissioning Localities have people living mostly in very remote areas
- 2 Commissioning Localities have people living mostly in remote areas
- 1 Commissioning Locality has half the people living in outer regional areas, with the other half in remote and very remote areas



CRITICAL CONSIDERATIONS

Remoteness has implications for users of health services, in terms of a general reduction in access to necessary services. The people living in WQPHN face a unique set of challenges in maintaining and accessing good health care with poor regional public transport, limited patient and family accommodation, telecommunication constraints and impacts of extreme weather events. Further, services in remote and very remote areas tend to experience difficulty in attracting and retaining the necessary health care staff to service the needs of the population. Hence, as one of the most remote PHNs in the country WQPHN faces unique challenges in meeting the health needs of its people.



HEALTH SERVICE PROFILE

Due largely to the remoteness of the region, and the population profile of the people in the region, WQPHN has a unique and complex health service structure set up to address the needs of the people it serves.

The health service system is funded through multiple Commonwealth and State sources resulting in a very complex service system. Hospital and Health Services deliver acute care, procedural services, community health, mental health and alcohol and other drug services, visiting medical specialist services, as well as aged care services in Multipurpose Health Services.

Service organisations operating in Western Queensland (see maps attached). This includes:

4 AICCHS*:

NORTH WEST REGION

- Gidgee Healing Clinics (x5)

SOUTH WEST REGION

- Charleville and Western Areas Aboriginal and Torres Strait Islander Community Health (CWAATSICH) Limited (x4)
- Cunnamulla Aboriginal Health Corp (CACH) (x1)
- Goondir Health Service (x1)

* Note – there is no AICCHS in Central West region

44 GENERAL PRACTICES of which 63% are operated by the Hospital and Health Services and the others are private practices and RFDS bases

41 HHS PUBLIC HOSPITALS AND PRIMARY HEALTH CENTRES with a combination of nurse-led clinics with visiting SMOs or RFDS doctors, Primary Health Centres with DONs in place, and a few clinics with FTE GPs. Some of these particularly in the CW are accredited.

11 PRIVATELY OWNED GENERAL PRACTICES with some GPs and rural generalists also working in the HHS

2 RFDS BASES, one in the South West in Charleville and one in the North West in Mount Isa and the Central West towns are shared between both bases

27 COMMUNITY AND HHS/AICCHS PHARMACIES

Aboriginal and Islander Community Controlled Health Services (AICCHS) offer holistic models of care provided by GPs, nurses, Aboriginal Health Workers and allied health professionals. Nukal Murra Health Support Service (NMHSS) is an alliance of six bodies established in 2017 including:



- Western Queensland Primary Health Network (WQPHN)
- Queensland Aboriginal and Islander Health Council (QAIHC)
- Charleville and Western Areas Aboriginal and Torres Strait Islander Community Health (CWAATSICH) Cunnamulla Aboriginal Corporation for Health (CACH)
- Goondir Health Services (Goondir) and
- Mount Isa Aboriginal and Islander Community Controlled Health Services Limited trading as Gidgee Healing.

Nukal Murra Health Support Service (NMHSS) is responsible for:

- delivering Integrated Team Care (ITC) services throughout Western Queensland
- overseeing the NMHSS
- contributing to greater clinical and cultural leadership by the Western Queensland Aboriginal and Islander Community Controlled Health Service (AICCHS) sector to enable greater quality and capability in services for Aboriginal and Torres Strait Islander people of the catchment
- maximising the pool of funds available to support supplementary services for Aboriginal and Torres Strait Islander peoples with complex chronic conditions. Allied health and mental health services are delivered by private providers, NGOs, AICCHS and the HHSs, often provided under hub and spoke arrangements.

Domiciliary nursing services and Home and Community Care services are provided by NGOs, local government as well as HHSs in some locations.

Residential aged care facilities are operated by a range of providers including local government, NGOs, and for profit providers, in addition to Multipurpose Health Services operated by Hospital and Health Services in some regions. Home and Aged Care providers include local government, HHSs and NGOs.

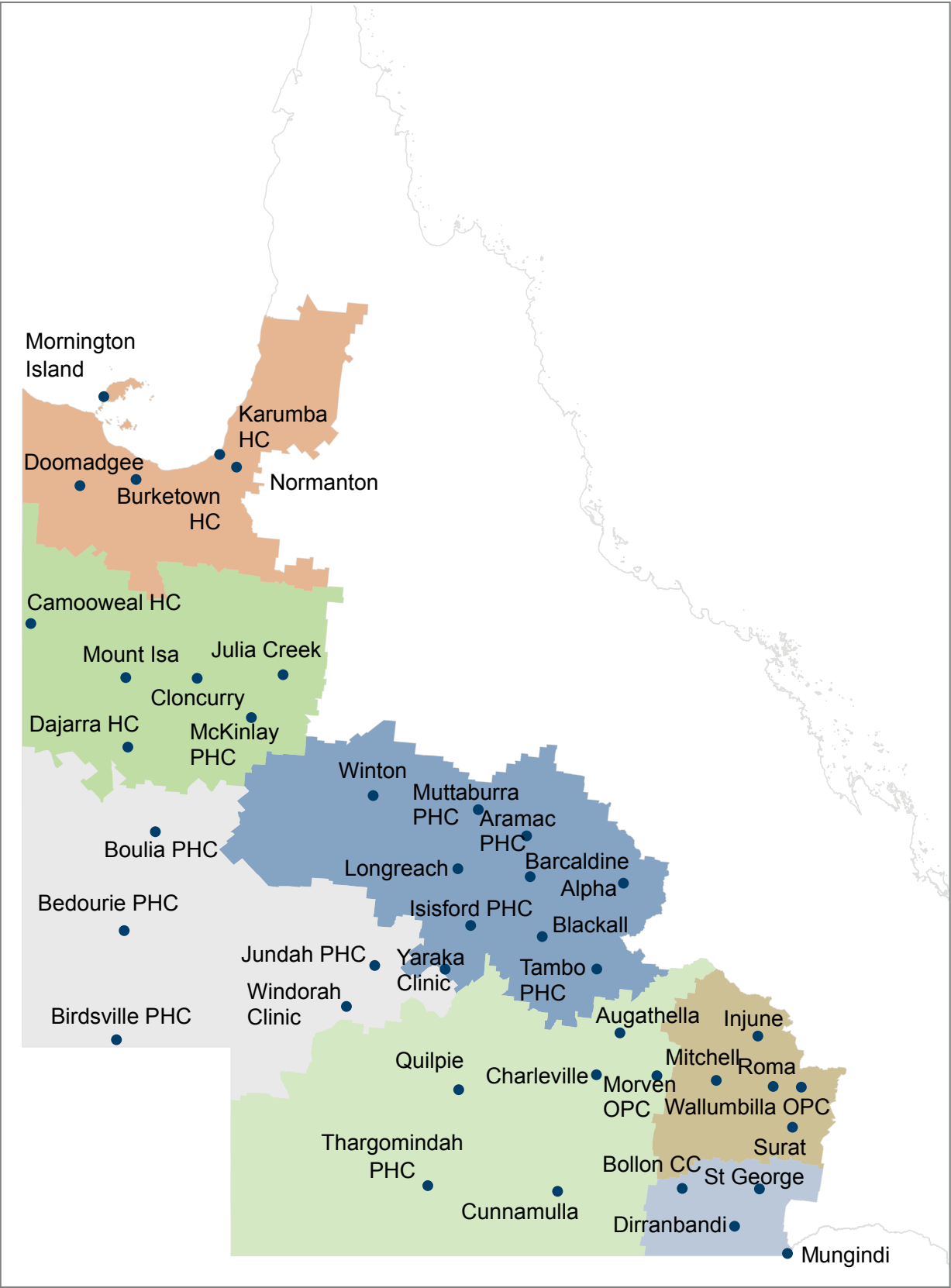
There is a substantial outreach workforce that delivers services across the PHN catchment (services provided and funded by HHSs, CheckUP, Queensland Aboriginal and Islander Health Council (QAIHC), New Ways Real Health (NWRH) and private providers).

Remote towns are serviced by RFDS from the Mount Isa base in the North West and Charleville base in the South West and the Central West towns are shared between both bases. Clinics have a focus on Chronic Disease Management to support continuity of care for patients. RFDS have also commenced a telehealth trial in Yowah which provides consultations in between visiting clinics. The trial also allows for telehealth consults to be undertaken when poor weather limits visits or if there are mechanical issues with the plane. Plans to expand the trial are in the planning stage.

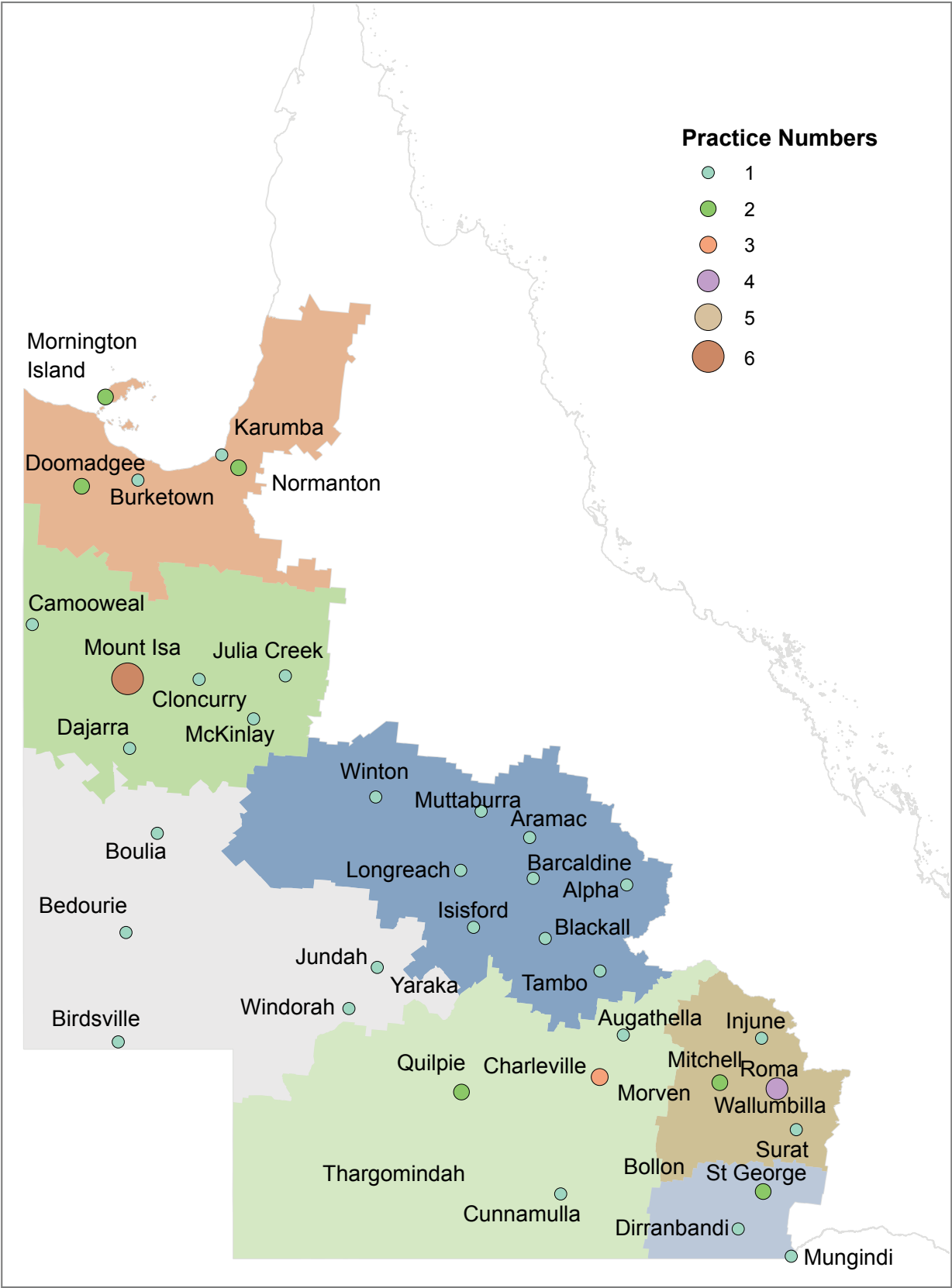
There are multiple allied health service providers based in the main city centres of Mount Isa and Roma and to a lesser extent, Longreach. Some provide outreach from these hub communities to more remote communities but not to the same extent as the NGOs.

Recent six-month service activity reports to the WQPHN by contracted providers, indicated up to 65% vacancies in allied health positions at June 2017, attributed to uncertainty of funding and continuity of contracts. Whilst there may appear to be an adequate workforce supply based on established positions, high turnover and/or long term vacancies, significantly impact on service capacity and continuity.

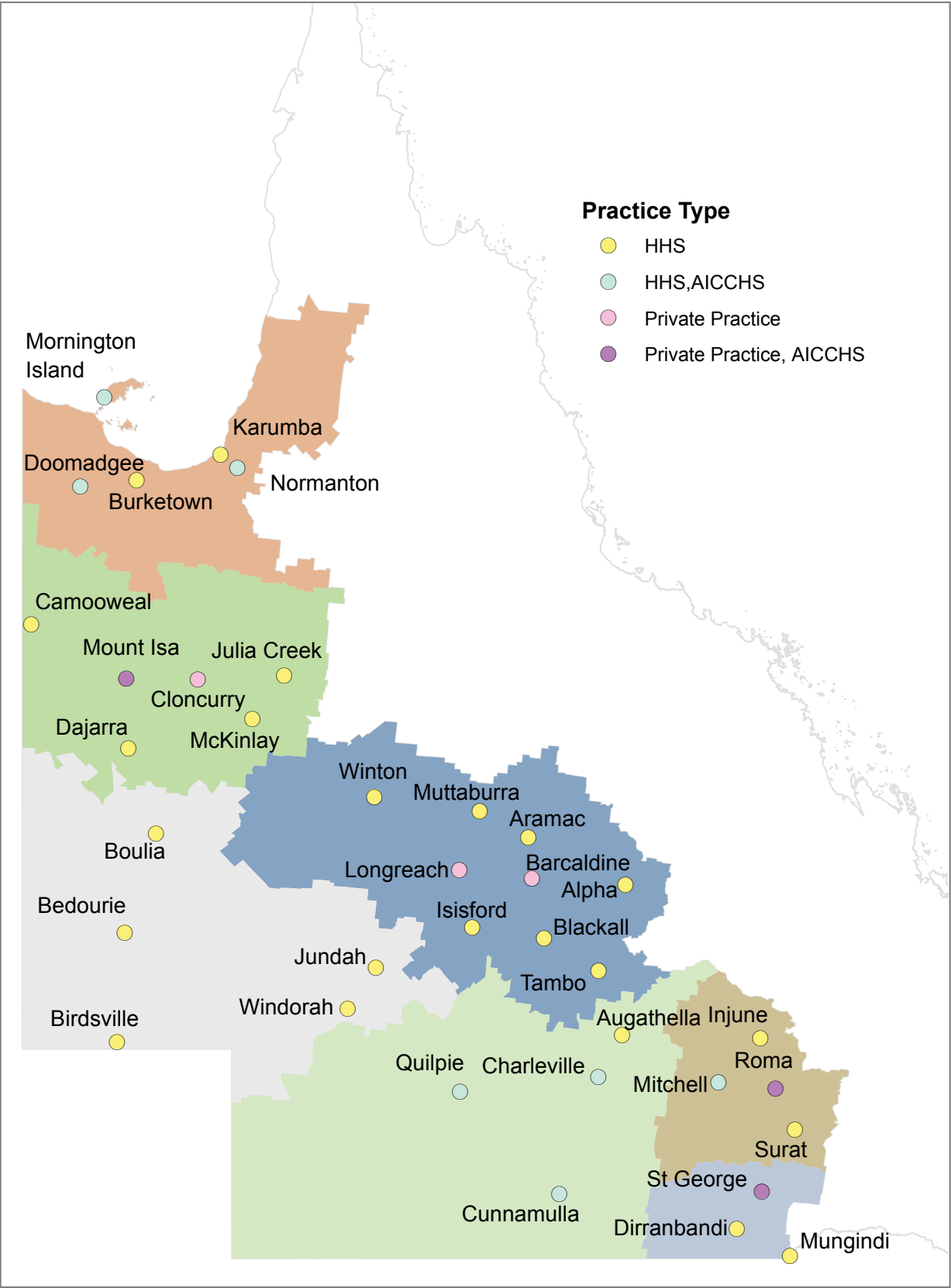
Public Hospitals and Health Services Map
(North West HHS, Central West HHS and South West HHS span the WQPHN footprint)



WQPHN – Primary Health Care Practice Numbers Map



WQPHN – Primary Health Care Practice Type Map





2

SECTION 2: SOCIAL DETERMINANTS OF HEALTH

The social determinants of health are the conditions in which people are born, grow, live, work and age. An individual's socio-economic status is shaped by their personal circumstances and can strengthen or undermine the health of individuals and communities. For example, "in general, people from poorer social or economic circumstances are at greater risk of poor health than people who are more advantaged" (p.128). (AIHW, 2016)

The links between the social determinants of health and the development of disease such as chronic disease are complex, although the evidence is clear that health and illness are not distributed equally within the Australian population. Differences in health status tend to follow a gradient, with overall health improvement associated with access to opportunities and resources linked to improved socioeconomic position.

In general, people from poorer social or economic circumstances are at greater risk of poor health, have higher rates of illness, disability and death, and live shorter lives than those who are more advantaged.

(Mackenbach, 2015)



AREAS OF DISADVANTAGE

The Socio-Economic Indexes for Areas (SEIFA) Index of Relative Disadvantage ranks geographical areas in terms of their relative socio-economic disadvantage in Australia.

WQPHN experiences high socio-economic deprivation.

61%

of WQPHN population are in the two most disadvantaged quintiles

100%

of Lower Gulf CL population are in the two most disadvantaged quintiles

100%

of Western Corridor CL population are in the two most disadvantaged quintiles

70%

of Balonne CL and Far South West CL population are in the two most disadvantaged quintiles

44%

of Maranoa CL population are in the two least disadvantaged quintiles

OVER 50%

of WQPHN population are in the two most disadvantaged quintiles and six out of the 20 LGAs within WQPHN have 100% of their population located in the two most disadvantaged quintiles. Overall 6.7% of WQPHN's population are in the least disadvantaged quintile.

POPULATION CHARACTERISTICS

People

62,038

The WQPHN population has mixed health status with small pockets of high advantage contrasted with areas of extreme disadvantage.

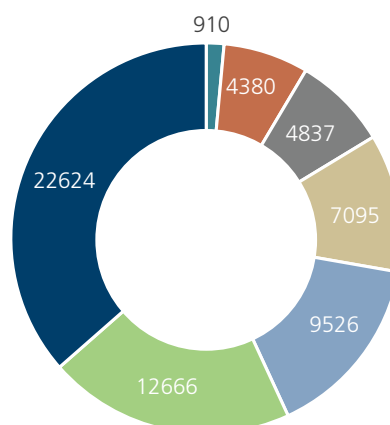
Aboriginal and Torres Strait Islander Peoples

10,435

17% of the population

The total population of WQPHN currently stands at 62,038 (as per 2016 Census data), which accounts for approximately 1.3% of the Queensland population. Seventeen percent of the population are Indigenous Australians (compared to 3% for Queensland) (see Figure 1).

Figure 1: Proportion of population by Commissioning Locality in WQPHN*



- Western Corridor
- Balonne
- Lower Gulf
- Far South West
- Central West
- Maranoa
- Mount Isa and surrounds

* (ABS, 2016)

The Mount Isa and Surrounds Commissioning Locality is the most densely populated, servicing 36% of WQPHN, followed by Maranoa servicing 20% of WQPHN. In contrast, the Western Corridor CL has only 1.5% of the population of WQPHN.

Table 1: Percent change in ERP, 2016-2036, by Commissioning Locality

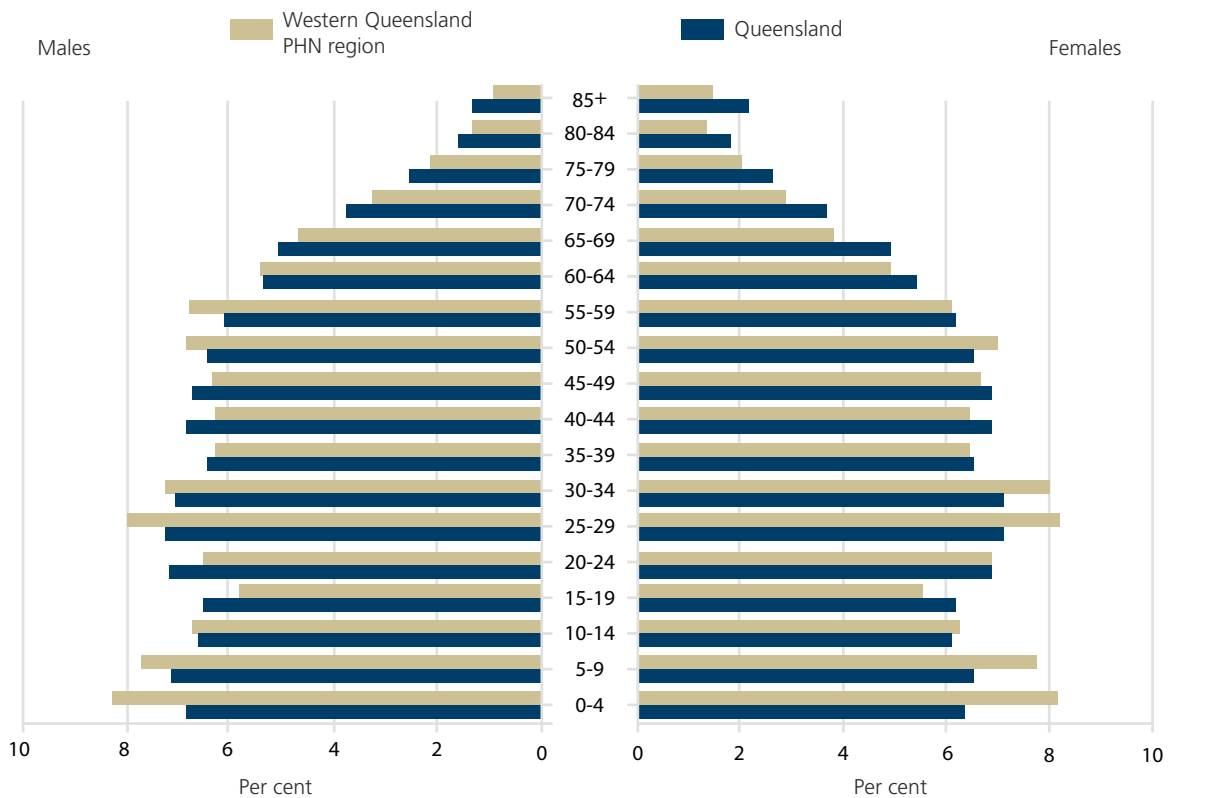
Commissioning Locality	% Change
Balonne	-3%
Central West	-4%
Far South West	-10%
Lower Gulf	17%
Maranoa	15%
Mount Isa and Surrounds	13%
Western Corridor	-10%

Approximately half the Commissioning Localities have an expected decrease in population by 2036, with the Far South West and Western Corridor expected to have the greatest decline in population growth at -10%. Conversely, the Lower Gulf Commissioning Location has the highest expected growth at 17% between 2016 and 2036. (QGSO, 2018)

AGE STRUCTURES AND GENDER

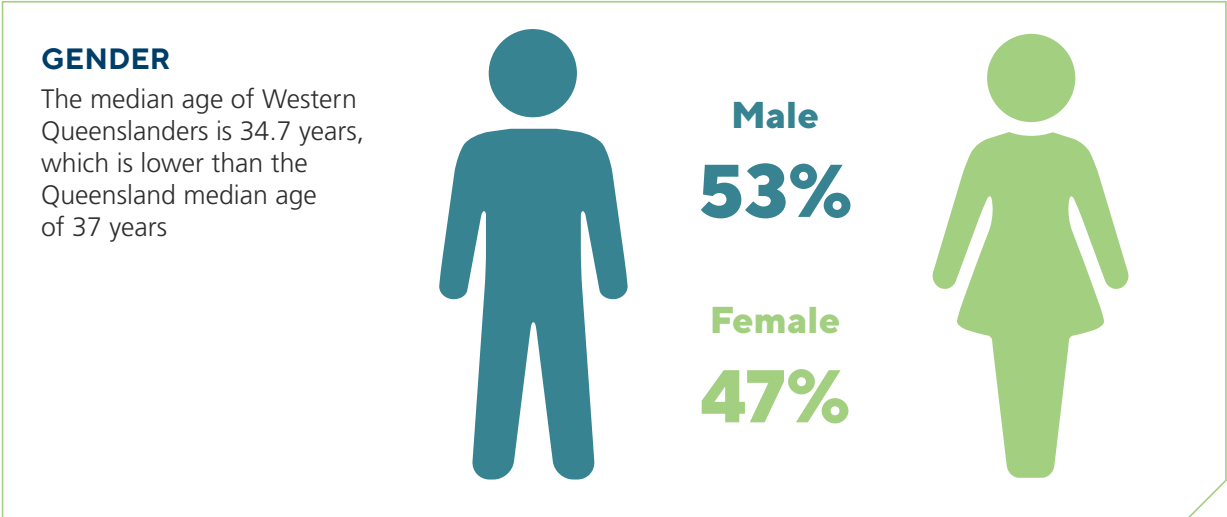
The age distribution of a population can have a major impact on the demand for health services. Health needs of different age groups vary with many diseases and illnesses only prevalent at certain ages. Whilst nationally there is a growing proportion of elderly people, WQPHN have a younger population when compared to Queensland.

Figure 2: WQPHN age distribution ERP 2016



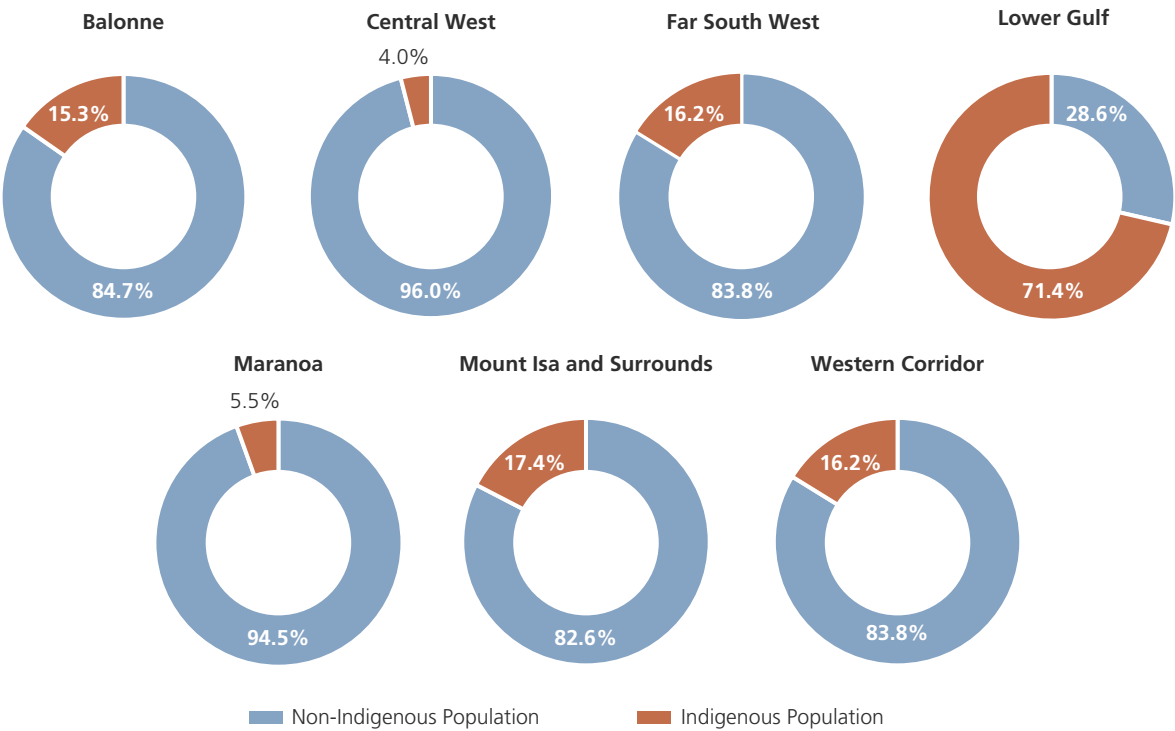
The age and gender distribution of WQPHN for the most part follows that of Queensland, apart from the higher proportion of infants and children (0-14 years). There are also a smaller percentage of people over 65 years.

Every CL apart from Western Corridor CL have a higher proportion of 0-14 year olds (22.4%) when compared to the Queensland average (19.7%). Nearly one in every three people in the Lower Gulf CL are under the age of 15 years. Doomadgee LGA had the largest percentage of persons aged 0-14 years with 38%, followed by Mornington LGA with 31%.



INDIGENOUS AUSTRALIANS

Based on the 2016 Census of Population and Housing, 17% of the population of WQPHN identify as Aboriginal and/or Torres Strait Islander, which is higher than the State average of 3%. The proportion of Aboriginal and Torres Strait Islander population by Commissioning Locality is shown in figures below. (ABS, 2016)



The Lower Gulf Commissioning Locality has the highest proportion of Aboriginal and Torres Strait Islander people in WQPHN, while the lowest percent is in the Central West CL (4%) and Maranoa CL (5.5%), although this is still greater than the average proportion of Aboriginal and Torres Strait Islander people for Queensland.

ECONOMY AND INDUSTRY

Economy and health are known to be closely dependent on each other. (Bloom & Canning, 2008) This is a two-way process, in which the health of the population impacts the economy and the economy impacts the health of the population. Strengthening the productive capacity of all sectors of WQPHN will have positive impacts on the economy and health of the region.

EMPLOYMENT BY INDUSTRY

28.6% of people in the Central and South West regions are working in the agricultural industry

26.8% of people in Mount Isa and Surrounds work in the mining industry, particularly metal ore mining

INCOME

Persistent socio-economic disadvantage has a negative impact on the life outcomes of individuals, particularly a lack of occupation and income. Low-income workers are less likely to access health care simply because they cannot afford it. Low income is also associated with increased stress, low self-esteem, and a greater tendency to engage in unhealthy behaviors like smoking. (Queensland Health, 2016)

TOTAL FAMILY INCOME

\$92,862 per year is the median total family income in WQPHN. However, there are stark variations with 1,586 (10.7%) of families who had an income of less than \$33,800 per year.

10.7% < \$33,800 per year

LOW INCOME FAMILIES

Table 2: Percent of low income families by Commissioning Locality, 2016 (combined family income of less than \$33,800)

	Commissioning Locality							WQPHN	QLD
	Balonne	Central West	Far South West	Lower Gulf	Maranoa	Mount Isa and Surrounds	Western Corridor		
Percent of low income families	145 (13.1%)	265 (11.0%)	215 (12.1%)	247 (23.0%)	309 (9.9%)	393 (7.6%)	12 (5.7%)	1,586 (10.5%)	115,233 (9.4%)

The median total family income in Western Queensland was \$92,862 per year. However, there are 1,586 (10.7%) families with an income of less than \$33,800 per year. Families in the Lower Gulf CL are under the greatest financial hardship with nearly a quarter of families (23%) low income families. In contrast, Mount Isa and Surrounds (7.6%) and the Western Corridor (5.7%) are well below the state comparison (9.4%), suggesting that there is a lower percentage of low income families in those CLs.

INCOME SUPPORT

Welfare and social security programs are primarily demand-driven, so understanding the proportion of people receiving payments helps develop an understanding of the disadvantage across the population.

Table 3: Proportion of residents receiving social security benefits, 2016*

	WQPHN (%)	QLD (%)
Persons aged 65 years and over on an aged pension	59.6%	69.5%
Persons aged 16 to 64 years on a disability support pension	3.7%	5.1%
Persons aged 0 to 64 years holding health concession cards	7.7%	7.7%
Persons aged 16 to 64 years on unemployment benefits long-term	5.3%	4.9%
Low income, welfare dependent families (with children)	13.2%	11%
Female sole parent pensioners	6.2%	4.6%
Youth unemployment beneficiaries, 16 to 24 years	5.4%	4.7%

* (PHIDU, 2016)

Low income, welfare dependent families, female sole parent pensioners and youth unemployment beneficiaries (16-24 years) are higher in WQPHN when compared to Queensland.

EDUCATION AND EMPLOYMENT

Education increases opportunities for choice of occupation and for income and job security and equips people with the skills and ability to control many aspects of their lives. These are key factors that influence wellbeing throughout the life course.

Level of schooling	47.3%	of people in WQPHN highest level of schooling of year 11 or 12 (or equivalent), compared to Queensland 58.9%. Within the region, Mornington (S) LGA and Doomadgee (S) LGA had the largest percentage whose highest level of schooling was year 8 or below (or did not go to school) with 13.0%.
Childhood education development	21%	of children are developmentally vulnerable on 2 or more domains of the Australian Early Development Census (AEDC) (vs QLD 14%). Carpentaria, Burke, Balonne and Paroo statistical areas had the worst results in the WQPHN.
Earning and Learning	80.6%	of young people aged 15 to 19 years in the Western Corridor CL are earning and learning. However, in contrast only 38.5% of 15 to 19 year old's in the Lower Gulf CL are earning and learning (compared to 66.4% for WQPHN as a whole, and 66% for Queensland).
Unemployment	7.8%	of people are unemployed in WQPHN (March 2018 quarter) which is slightly higher than the Queensland rate of 6%. Within the PHN, Burke LGA had the highest unemployment rate of 35.5%. When comparing over the five year period between the 2011 and 2016 Census, the unemployment rate has more than doubled.

CRITICAL CONSIDERATIONS

Higher unemployment and lower educational attainment is strongly associated with poverty and dependence on government welfare benefits. This is also linked to poor social and emotional wellbeing which is highly associated with mental illness. These socio-economic indicators help to identify the most vulnerable members of the PHN population who are often stuck in a sliding poverty cycle.

Lower completion of schooling rates, lower earning and learning capacity for youth and lower early childhood development indicates that there may be reduced health literacy levels in some regions of the PHN. This means that education and health promotion activities need to be tailored to the local needs and contextual environment.

FAMILY AND COMMUNITY

Family and community strength provides an indicator of how people feel about aspects of their life and community in which they live, and their participation in opportunities to shape their community.

Families	42.2%	of families in WQPHN were couple families with children
	15.8%	are single parent families with children under the age of 15 in WQPHN. Mornington LGA had the highest proportion of one-parent families with 37.7%
Housing	40.7%	of occupied private dwellings in WQPHN were rented (QLD 34.2%), rather than being purchased (25.7%) or fully owned (28.3%). Mornington LGA has the highest proportion of rented dwellings (93.9%).
Overcrowding	14.3%	of households with Aboriginal and/or Torres Strait Islander peoples were overcrowded
Jobless families	40.7%	of families with children under 15 years of age in the Lower Gulf CL have no parent employed (QLD 13.5%)
Access to internet	73.1%	of people had access to the internet (QLD 83.7%)
Motor vehicle	7.4%	of households had no motor vehicle (QLD 6%). Lower Gulf CL had the highest percentage of dwellings which had no motor vehicles with 25.7% (note Doomadgee (S) LGA had 47.4%).
Disability	3.6%	of persons in need of assistance with a profound or severe disability (QLD 5.2%)
Crime	1,421	offences against another person

CRITICAL CONSIDERATIONS

The combination of remoteness and social disadvantage can result in worse health outcomes for people living in rural and remote areas. Determining practical ways to address social determinants of health will be critical in improving equity of access to services.





SECTION 3: OUR HEALTH

The presence of lifestyle risk factors, high incidence of chronic disease and lower life expectancy and high Indigenous population, create health challenges which are compounded by extreme disadvantage of some communities, rurality and remoteness. Furthermore, attracting and retaining a stable health workforce along with the influx of mobile and transient populations during the tourist season adds significant pressure on already stretched health services.

LIFE EXPECTANCY BY COMMISSIONING LOCALITY

Our region has a lower estimated life expectancy (78.7 years) across all Commissioning Localities when compared to Queensland (82.4 years).

Life expectancy in years

Commissioning Locality*	Life expectancy (yrs)
Balonne	81
Central West	78
Far South West	78
Lower Gulf	78**
Maranoa	81
Mount Isa and Surrounds	78
Western Corridor	78
WQPHN	78
QLD	82

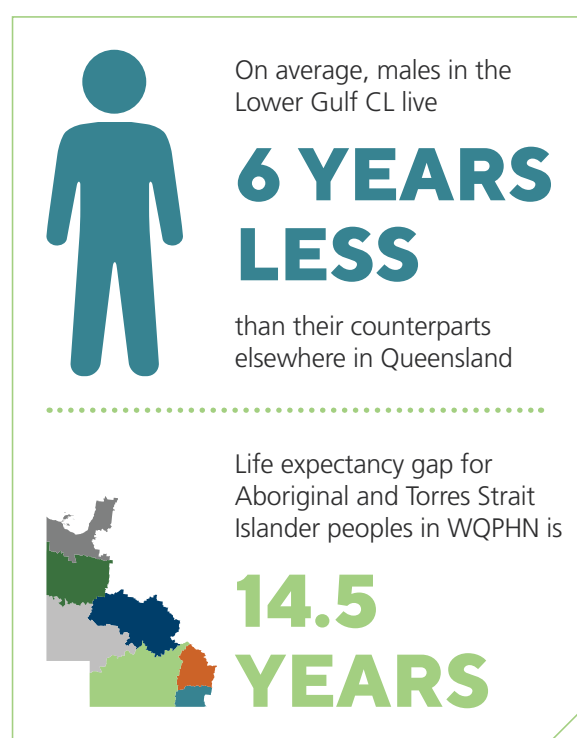
* (ABS, 2016)

** Note that data has been aggregated for the region and therefore does not represent the true estimates of life expectancy in the Lower Gulf CL

Queensland's Aboriginal and Torres Strait Islander peoples experience worse health and poorer life expectancy than non-Indigenous Queenslanders. While there have been some improvements in the gap in life expectancy when compared to non-Indigenous Queenslanders, Aboriginal and Torres Strait Islander peoples are still dying prematurely and living with more disease and injury from an earlier age.

	CWHHS	NWHHS	SWHHS
Gap between Indigenous and non-Indigenous population*	↓ 15 years	↓ 16.5 years	↓ 12 years

* (Queensland Health, 2016)



LEADING CAUSE OF DEATH AND MORTALITY

The leading underlying causes of death are different at different ages and provide insight into main health conditions affecting the population. In general, chronic disease causes of death feature more prominently among people aged 45 and over while the leading causes of death among people aged 1-44 are external causes, such as land transport accidents and suicides. (ABS, 2016)

Underlying cause of death in WQPHN

1. coronary heart disease
2. lung cancer
3. chronic obstructive pulmonary disease (COPD)
4. dementia and alzheimer disease
5. suicide

Premature death rates in WQPHN (PHIDU, 2016) were highest for:

- cancer
- circulatory system diseases
- ischaemic heart disease
- lung cancer is the fourth most common cancer, but the leading cause of cancer mortality

Avoidable death rates in WQPHN (PHIDU, 2016) were highest for:

- circulatory system diseases
- ischaemic heart disease
- cancer

BURDEN OF DISEASE

(Queensland Health, 2016) (Queensland Health, 2017) (Queensland Health, 2016)

- Highest estimate disease burden by broad causes (in 2011) were cancer (18.5%), cardiovascular disease (14.6%) and mental and substance use disorders (12.1%)
- The rate of disease burden in remote communities is 1.5 times higher than major cities with Indigenous disease and injury burden 2.1 times that of non-Indigenous Queenslanders
- Thirty-one percent (31%) of the burden experienced by the population could be prevented by reducing exposure to modifiable risk factors
- The risk factors causing the most burden was tobacco smoking, dietary factors combined, high body mass, risky alcohol consumption and physical inactivity
- The largest broad cause contributors to the Indigenous disease and injury burden were mental disorders, cardiovascular disease and diabetes

HEALTH BEHAVIOURS

Our lifestyle choices, including the amount of exercise we undertake and food we eat, along with the extent to which we smoke and drink alcohol all impact on our health. These modifiable lifestyle risk factors can increase the likelihood of developing chronic diseases or impact on the management of existing conditions.

ALCOHOL USE

Excessive consumption of alcohol is associated with health and social problems and is linked to social and emotional wellbeing, mental health and other drug issues. High intakes can contribute to the development of chronic diseases such as liver disease, some cancers, oral health problems and cardiovascular disease and plays a part in excess energy intake, contributing to excess body weight. (NHMRC, 2009) Mothers who consume alcohol during pregnancy, have a risk of babies being born with Fetal Alcohol Spectrum Disorders (FASD).

30%

of people (1 in 3) have a risky lifetime of alcohol consumption (more than two standard drinks per day on average)



43%

of the males (nearly half) in WQPHN reported excessive alcohol consumption (QLD 32%), compared to 16% of females (QLD 11%)

PHYSICAL INACTIVITY

Low levels of physical activity are a major risk factor for ill health and individuals have a greater risk of cardiovascular disease, type 2 diabetes and osteoporosis. Being physically active improves mental and musculoskeletal health and reduces other risk factors such as overweight and obesity, high blood pressure and high blood cholesterol. (AIHW, 2017)

43%

of people (1 in 2 nearly) in WQPHN do not participate in sufficient levels of exercise (40% QLD)



OVERWEIGHT OR OBESE

Excess weight is a major risk factor for cardiovascular disease, type 2 diabetes, high blood pressure, sleep apnoea, psychological issues, some musculoskeletal conditions and some cancers. People who are overweight or obese also have higher rates of death. (AIHW, 2017)

67%

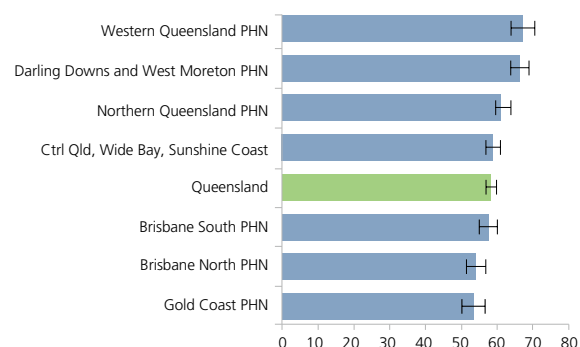
of people (2 in 3) in WQPHN are overweight and obese (males 73%)

Males 18+ **73%**

Females 18+ **60%**



Figure 3: Percentage of overweight and obese 18+ by persons and PHN, 2015-2016



Our PHN has the highest proportion of overweight and obese persons 18+, compared to every other PHN in Queensland

SUNBURNT

56%

of people (just over 1 in 2) were burnt in the last 12 months



SMOKING

Smoking is the single most preventable cause of ill health and death in Australia. Smoking is linked to a range of conditions including various cancers, cardiovascular diseases, type 2 diabetes, lung diseases including COPD, and stroke. Inhaling second-hand smoke is also associated with harmful effects. (AIHW, 2012)

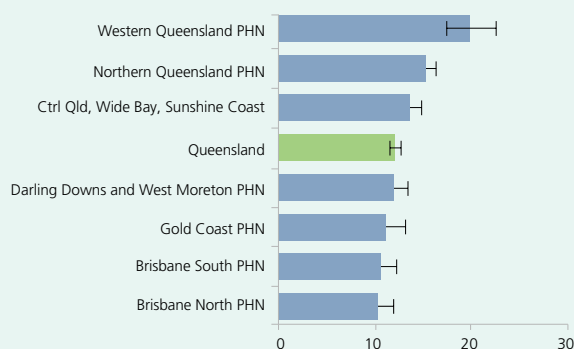
20%

of people (1 in 5) in WQPHN smoke daily

Lung cancer is the leading cause of premature mortality in WQPHN.



Figure 4: Proportion (percentage) of daily smokers 18+ by persons and PHN, 2015-2016



Our PHN has the highest proportion of daily smokers, compared to every other PHN in Queensland.

The NWHHS has the highest proportion of female smokers (20.1%) and SWHHS has the highest proportion of male smokers (25.4%).

Large disparities remain, with smoking rates for Indigenous Queenslanders double that of non-Indigenous Queenslanders and maternal smoking rates more than triple.

CRITICAL CONSIDERATIONS

We need to do more to address smoking rates and its debilitating outcomes such as lung cancer and chronic respiratory disease along with addressing risky alcohol consumption to curb social problems and impacts of long-term use.

NUTRITION

The food and beverages we eat and drink provide the energy, nutrients and other components that contribute to our health and wellbeing. If our diet is insufficient or excessive there is greater risk of developing conditions including coronary heart disease, stroke, high blood pressure, atherosclerosis, some forms of cancer, type 2 diabetes, dental caries, gall bladder disease and nutritional anaemias. (AIHW, 2017)

92%

of people in WQPHN have insufficient daily vegetable intake



50%

of people in WQPHN have insufficient daily fruit intake



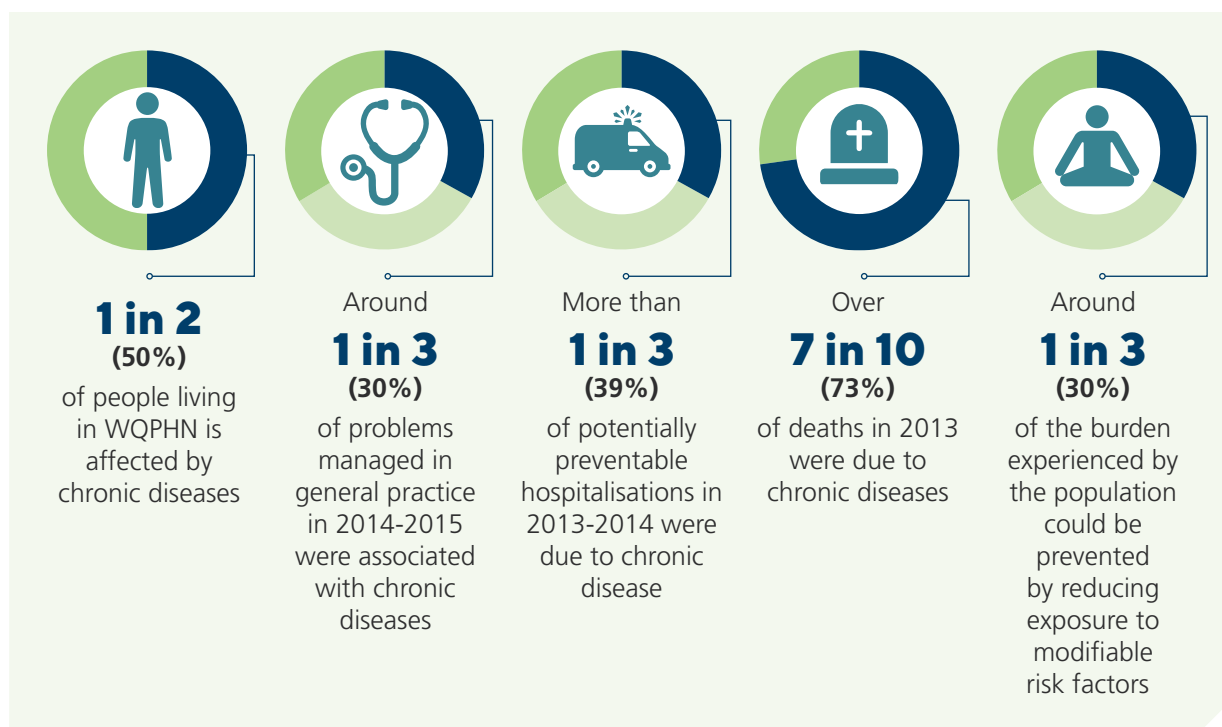
CRITICAL CONSIDERATIONS

Our region reports very high numbers of overweight and obese adults, along with insufficient diet and insufficient levels of physical activity. With the increase in chronic diseases across the PHN, demand for services will likely continue to increase. Targeted healthy eating and exercise campaigns and programs are required to address the escalating modifiable health risk behaviours.

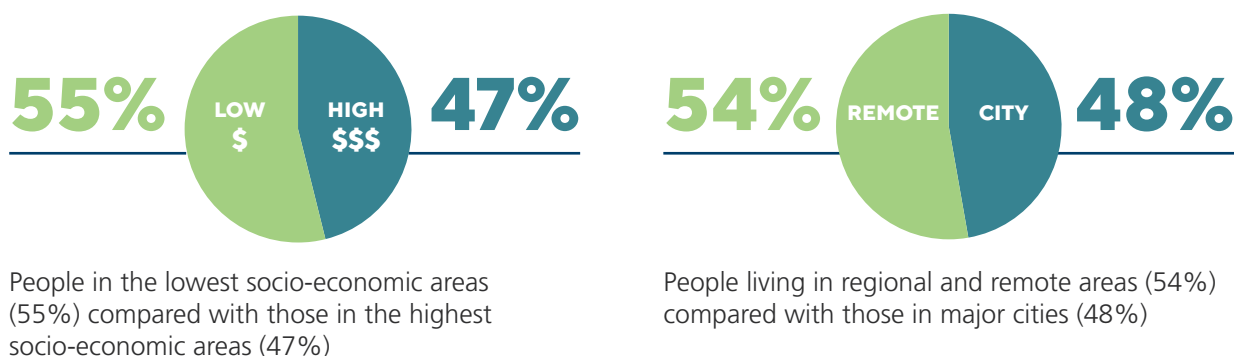
CHRONIC DISEASE

Chronic disease refers to a wide group of conditions, illnesses and diseases that are generally characterised by their long-lasting and persistent effects. They are mostly associated with unhealthy behaviours such as smoking and poor diet. Half of the Australian population (50%) reported having one chronic condition and one in five Australians (20%) is affected by multiple chronic diseases. Forty percent (40%) of Australian's over 45 years have two or more chronic conditions which is associated with poor health outcomes and more complex disease management. (AIHW, 2016)

Chronic diseases accounted for 90% of all deaths in Australia in 2011. (AIHW, 2016) In our PHN the estimated leading causes of death from chronic conditions includes coronary heart disease, cancer and COPD



Chronic disease rates were higher for:

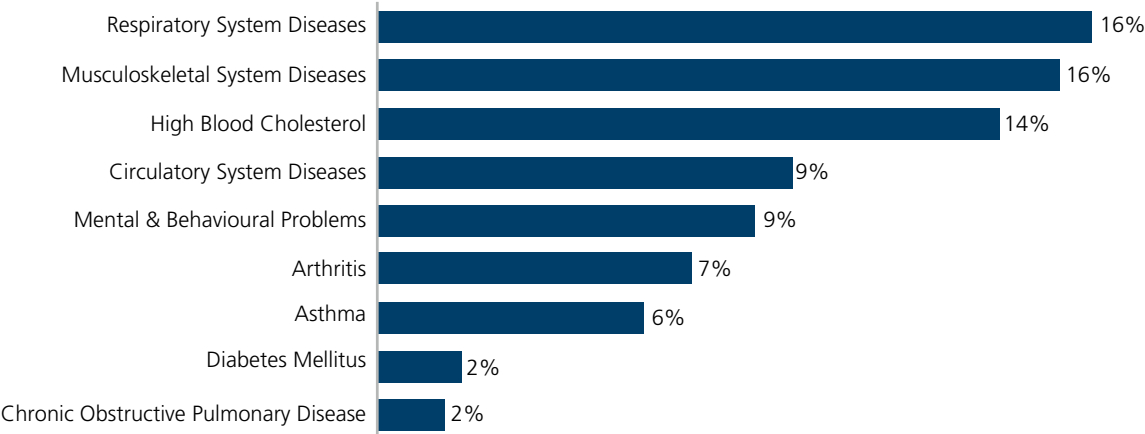


The risk factors that caused the most burden were tobacco use, high body mass, high alcohol use, physical inactivity and high blood pressure

CHRONIC CONDITIONS PREVALENCE

The modelled estimates of the prevalence of chronic disease and associated risk factors have been developed from the National Health Survey (NHS) 2011-12 conducted by the ABS in 2011-12. They provide an indicator of long term chronic conditions self-reported by respondents. (ABS, 2013)

Figure 5: Chronic Conditions Prevalence, PHIDU 2011-2012, by PHN



Only conditions with prevalence greater than 0% are displayed in this chart – data missing or unreported in many areas

The combined high chronic conditions prevalence of respiratory, circulatory disease and high blood cholesterol indicates a need for increased access to primary health care chronic disease services and programs. All of these disease conditions are highly associated with preventable risk factors which can be improved with changes to health behaviours.





CARDIOVASCULAR DISEASES

Cardiovascular disease (CVD) refers to all diseases and conditions involving the heart and blood vessels. The main types of CVD in Australia are coronary heart disease, stroke and heart failure. (Heart Foundation, 2017) CVD has a greater impact on males, the elderly, Indigenous Australians and people living in remote and socio-economically disadvantaged areas.



- CVD is the leading cause of avoidable deaths in WQPHN
- Premature death from ischemic heart disease (58.5 per 100,000 vs 25.9 per 100,000) and circulatory system disease (89.1 per 100,000 vs 47.3 per 100,000) is nearly double in WQPHN when compared to Queensland (PHIDU, 2016)
- Coronary heart disease hospitalisation rates (2012-12 to 2013-14) in WQPHN were high when compared to the state average (1,013 per 100,000 vs 667 per 100,000), with the NWHHS double the Queensland average (1,263 per 100,000) (Queensland Health, 2016)

Indigenous Australians have CVD hospitalisation and death rates that are twice as high as non-Indigenous Australians

The lowest socio-economic group has CVD hospitalisation and death rates that are 43% higher than the highest socio-economic group

CANCER

Cancer is a major cause of illness in Australia and has a major impact on individuals, families and the community. The most common types of newly diagnosed cancers in WQPHN were lung, colorectal, melanoma, male prostate and female cervical and breast cancer. (AIHW, 2017)

Lung cancer is the fourth most common cancer in WQPHN, but is the leading cause of cancer mortality accounting for a quarter of all cancer deaths (27%). Males in WQPHN are 3 times more likely to suffer from lung cancer compared to females. (Queensland Health, 2017)

.....

WQPHN has the highest incidence rate across the country for all cancers combined and lung cancer compared to all other PHNs in Australia

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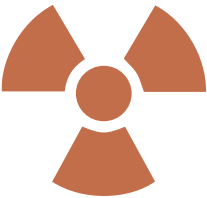


1 in 4 cancer deaths in WQPHN are from lung cancer

.....

Prevention and Screening

Cancer screening can help protect the health of individuals by detecting abnormal tissue or cancer early, and hopefully make it easier to treat.



Screening participation

↑	↓	=
Higher female participation rates	Lower female participation rates	Similar participation rates
for breast screening (58.6% vs QLD 55%)	for cervical screening (51% vs QLD 55.3%)	for bowel screening (31% vs QLD 31.2%)

CRITICAL CONSIDERATIONS

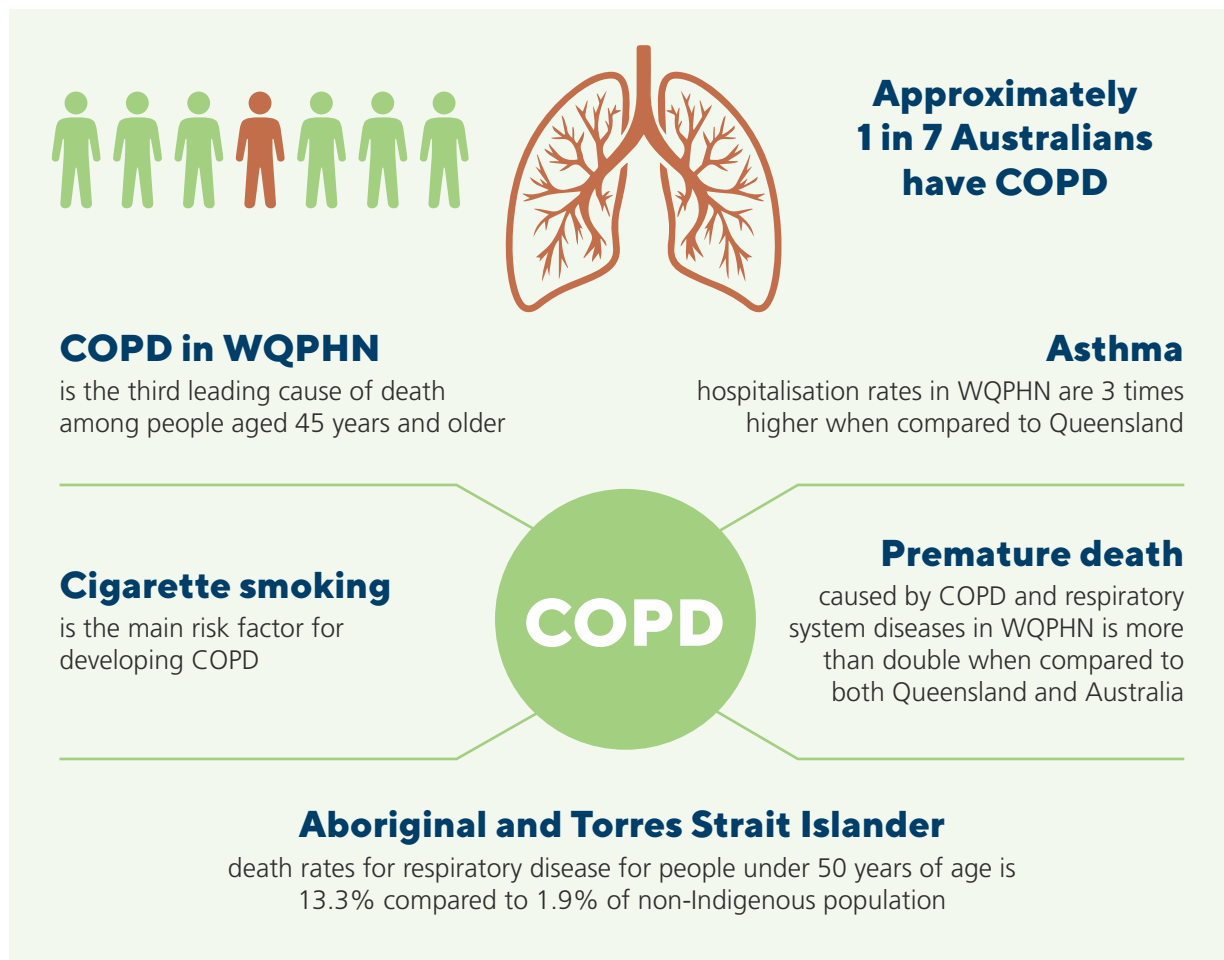
With high smoking rates and the highest incident rate and premature mortality for lung cancer across the country, more needs to be done to address smoking rates, particularly in males and Indigenous women who are pregnant.



RESPIRATORY ILLNESS – CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) AND ASTHMA

Respiratory conditions affect the airways, including the lungs as well as the passages that transfer air from the mouth and nose into the lungs. They can be long lasting (chronic) or short term (acute) and can cause ill health, disability and death. (AIHW, 2017) COPD includes emphysema, chronic bronchitis and chronic asthma and affects approximately 1.45 million Australians. (Lung Foundation Australia, 2016) People with asthma experience episodes of wheezing, breathlessness and chest tightness due to widespread narrowing of the airways.

COPD and asthma accounts for the majority of burden of respiratory illness. Despite falling death rates, COPD is still a leading cause of death and disease burden after coronary heart disease, dementia and alzheimer disease, cerebrovascular disease and lung cancer. (AIHW, 2016)



DIABETES

Diabetes mellitus (also referred to as type 2 diabetes) is a chronic metabolic condition where glucose levels are too high within the bloodstream. This is due to insulin, a hormone that controls blood glucose levels, no longer being produced or not being produced in sufficient amounts by the body. (Diabetes Australia, 2017)

Diabetes can be managed well but the potential complications can have negative health outcomes and can have a major impact on a person's quality of life including blindness and eye disease, kidney failure, limb amputations and can affect mental health with depression and anxiety reported in 30% of people with diabetes. (Diabetes Australia, 2017)

Type 2 diabetes is largely preventable by maintaining a healthy lifestyle. Modifiable risk factors that can lead to type 2 diabetes include insufficient physical activity, saturated fat intake, obesity, and tobacco smoking. (AIHW, 2016)

According to the National Diabetes Service Scheme (NDSS) estimates suggest that 6% of people within WQPHN have type 2 diabetes (June 2017). Although caution should be used when interpreting the data as registration is optional, and the true prevalence of diabetes is markedly underestimated (particularly for Indigenous populations).

WQPHN, PATCAT practice data which captures diabetes prevalence estimates found that 6.9% of the population in 2017 had type 2 diabetes.

Across the PHN the number of completed diabetic Cycles of Care claims by GPs was 673. (MBS, 2017)

Diabetes is the second leading cause of death behind ischaemic heart diseases among Aboriginal and Torres Strait Islander people. In 2016 diabetes deaths occurred among Aboriginal and Torres Strait Islander people at a rate 4.9 times that of non-Indigenous Australians. (ABS, 2016)

Type 2 diabetes is increasing at the fastest rate



1 person every 5 minutes

develop diabetes every day (that is 280 Australians every day)

Type 2 diabetes is largely preventable

Compared with non-Indigenous Australians, Indigenous Australians were:

3.5 X

as likely to **HAVE** diabetes

4.0 X

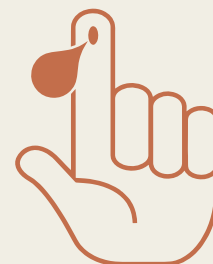
as likely as to be **HOSPITALISED** for diabetes

4.9 X

as likely to **DIE** from diabetes

Mortality rates

and hospitalisation rates in WQPHN for diabetes are triple that of other Queenslanders



CRITICAL CONSIDERATIONS

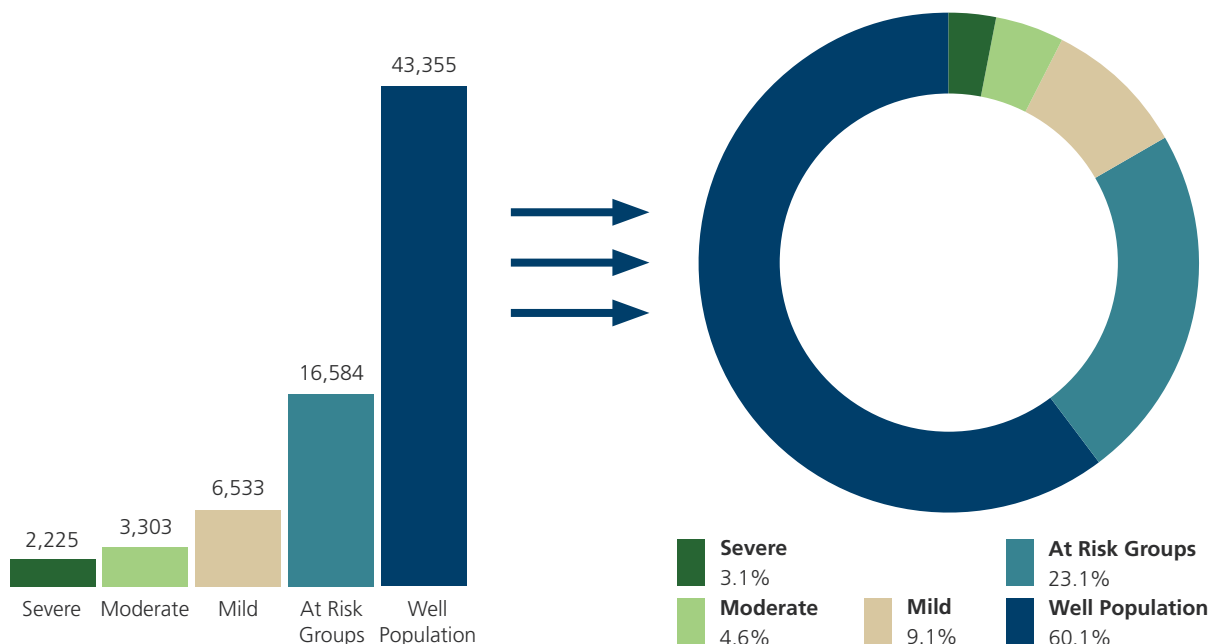
The high number of chronic conditions, illnesses and diseases such as cardiovascular disease, cancer, COPD and diabetes across the PHN along with higher rates of hospitalisation associated with chronic disease, particularly in Indigenous communities, suggests that behavior modification programs along with increasing supports for community management of chronic disease are needed.

MENTAL HEALTH

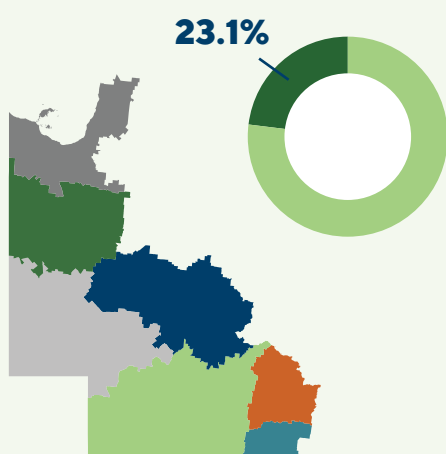
Mental health is fundamental to the wellbeing of individuals, their families and the population. Mental illness can vary in severity and be episodic or persistent in nature. Social problems commonly associated with mental illness include poverty, unemployment or reduced productivity and homelessness. Those with mental illness often experience problems such as isolation, discrimination and stigma. (AIHW, 2017)



Figure 6: Estimated prevalence of mental disorder in the Western Queensland population*

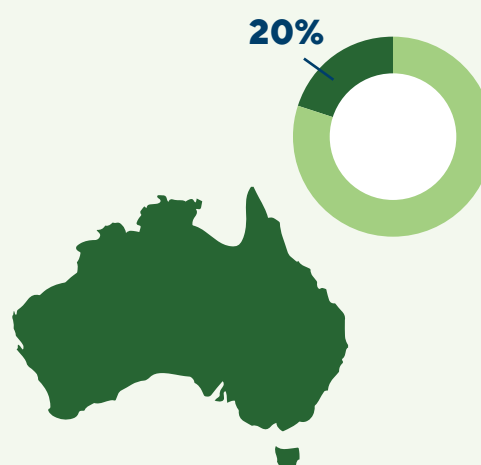


* (WQPHN, 2017)



**Nearly 1 in 4
(23.1%)**

people living in WQPHN are
at risk of developing
a mental health disorder



**1 in 5
(20%)**

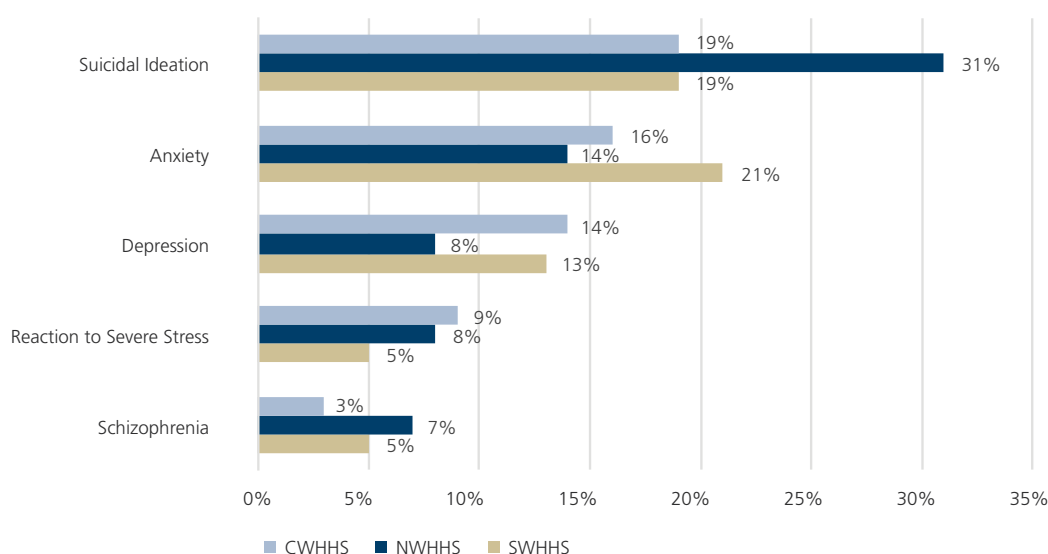
of Australians **will experience**
a mental health disorder
in a 12 month period

SUICIDE

Suicide is the leading cause of death for Australians aged between 15 to 44 years (31% of deaths) and persons aged 25 to 44 (20% of deaths), with around 3,000 people dying by suicide every year. That's an average of eight people every day. (ABS, 2016) Aboriginal and Torres Strait Islander people are nearly three times more likely to be psychologically distressed than other Australians and twice as likely to die by suicide. (ABS, 2015) For every suicide, there are tragic effects for friends, families, colleagues and the broader community.

In 2016, suicidal ideation was the leading mental health public hospital Emergency Department presentation, followed by anxiety and depression. Suicidal ideation as a percentage of mental health admissions was more than one third the rate for the NWHHS (32%) when compared to CWHHS (19%) and South West region (19%) (Figure 7).

Figure 7: Top 5 Mental Health ED Presentations 2016 (as a percentage of all Mental Health ED presentations for that HHS)*



* (Health, 2017)

- **WQPHN has the highest suicide rate nationally**
- **WQPHN suicide and self-inflicted injuries**
are double the state and national averages
- **15-24 age group WQPHN suicide rate**
is 4.7 times higher than the Queensland rate for the same age group
- **Males experienced the highest mortality rates**
- **Aboriginal and Torres Strait Islander people**
are twice as likely to die by suicide than non-Indigenous Australians

CRITICAL CONSIDERATIONS

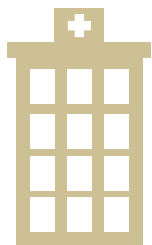
Continued investment through the Western Queensland Mental Health and Suicide Prevention Regional Framework to ensure greater program innovation, whole of population approaches, integration across provider settings and within stepped care approaches. Building and developing a culturally competent multidisciplinary mental health workforce and programs along with suicide prevention and awareness is a PHN priority. A sustained focus on suicide prevention and early intervention in the health, education, employment and welfare sectors are priorities moving forward.

ALCOHOL AND OTHER DRUGS

Comorbid physical disorders and comorbid drug and alcohol disorders add significant complexity of care provision in WQPHN. In 2016, adults living in outer regional, remote and very remote areas were more likely to exceed the lifetime risky alcohol guidelines than those in major cities (about 40% higher prevalence).



WQPHN has nearly double the number of alcohol-related road traffic deaths compared to Queensland averages



WQPHN has the highest rate of mental health overnight hospitalisations for drug and alcohol use in the country



WQPHN has double the number of AOD treatment episodes compared to Queensland averages



1 in 4

People in WQPHN will access AOD services outside the PHN catchment

ORAL HEALTH

Poor oral hygiene as well as environmental factors and limited access to dental services contribute to poor oral health. In remote Indigenous communities, national data indicate that less than one fifth of children brush their teeth at home and gingivitis is evident in 60% of children. There is also a high rate of dental caries (cavities) in both deciduous and permanent dentition. (Jamieson, Armfield, & Roberts-Thompson, 2007)



In WQPHN, NWHHS has the highest rate of child hospitalisations for dental caries (0 to 9 years), followed by Torres Strait and Cape York HHS and SWHHS (note no data available for CWHHS)





SECTION 4:

AT RISK POPULATIONS

MATERNAL, CHILD AND YOUTH HEALTH

Maternal, child and youth health and wellbeing outcomes are dependent on individual factors such as biological (e.g. genes) and environmental (e.g. family, housing, community). These factors influence a child both in positive ways that can enhance their development and in negative ways that can compromise developmental outcomes.

Pregnancy, birth, childhood and adolescence are important life stages that set the foundation for adulthood. Different health issues may be more relevant to people's lives at varying life stages and are opportunities to target interventions and health promotion to support healthy behaviours.

4,259 0 TO 14 YEAR OLDS

WQPHN has 4,259 children aged 0 to 14 years, 22% of the total population (QLD 20%), with the Lower Gulf CL (29%) nearly 1 in 3 children

HIGHER FERTILITY RATES

WQPHN have higher fertility rates (2.5) compared to Queensland (1.9)

HIGHER NEONATAL & INFANT DEATH RATES

Neonatal and infant death rates higher in WQPHN compared to Queensland

21%

of children developmentally vulnerable on two or more domains (QLD 14%)

20%

(1 in 5) of women in WQPHN smoke during pregnancy

53%

(1 in 2) of Indigenous women in WQPHN smoke during pregnancy

90%+

immunisation coverage rates for registered 5 year olds

7,896

youth and young adults aged 15 to 24 years, 12% of total population (QLD 13%)

66%

learning or earning at 15 to 19 years (QLD 65%)
Lower Gulf CL only 39% learning or earning

ANTENATAL VISITS

Effective and timely antenatal care is important as it provides expectant mothers with information and early screening that can identify and manage issues that may affect birth outcomes. For Aboriginal and Torres Strait Islander women, timely access to antenatal care is particularly important as they are at higher risk of giving birth to babies of low birthweight, and have greater exposure to other risk factors such as anaemia, poor nutrition, hypertension, diabetes, genital and urinary tract infections and smoking.

Clinical practice guidelines recommend women present for antenatal care within the first 10 weeks of pregnancy, and depending on need, attend a schedule of 10 visits for the first pregnancy and seven for subsequent uncomplicated pregnancies. A minimum of 5 or more antenatal visits is used as an indicator for antenatal minimum standards.

In 2014-15, 3.2% of women who gave birth in WQPHN attended less than 5 antenatal visits,

89% HPV IMMUNISATION

aged 15 fully immunised against HPV (QLD 71%)

39% CHILDREN OVERWEIGHT

(over 1 in 3 children) aged 5 to 17 years in WQPHN are overweight and obese (QLD 24%)

WQPHN suicide mortality rate is double the state average for 15 to 24 years (leading cause of death)

In WQPHN, a higher proportion of Indigenous mothers smoked during pregnancy, were less than 20 years old and had babies that were pre-term and of low birthweight compared to non-Indigenous mothers

Greater number of young children developmentally vulnerable on two or more domains of the Australian Early Development Census (AEDC) particularly in the statistical (SA2) areas of Carpentaria, Burke, Balonne and Paroo

compared to 5% of Queensland women. In 2015-16 in Queensland 12.2% of Aboriginal and Torres Strait Islander women attended less than five or more antenatal visits, which is more than double the state average. (Queensland Health, 2016)

LOW BIRTHWEIGHT BABIES

Low birthweight babies (newborns weighing less than 2,500 grams) are at a greater risk of dying in their first year of life, experiencing ill-health during childhood, and developing chronic disease in adulthood. Often related with premature birth or restricted fetal growth, low birthweight risk factors include poor antenatal care, maternal smoking, socio-economic disadvantage, inadequate nutrition of the mother or overweight and obesity and alcohol consumption during pregnancy.

In 2014-15, the rate of low birthweight in WQPHN was 7.6%, compared to 5% of Queensland women. The Lower Gulf CL and Mount Isa and Surrounds CL both have a low birthweight rate of 10%, which is double the state average. In 2015, the rate of low birthweight babies for Aboriginal

and Torres Strait Islander women was 1.8 times the non-Indigenous rate. (Australian Institute of Health and Welfare, 2015)

SMOKING IN PREGNANCY

Smoking in pregnancy increases the risk of miscarriage and complications during pregnancy. It is associated with low birthweight, fetal growth restriction, pre-term birth, congenital anomalies, and perinatal death. Passive smoking during pregnancy has also been found to have the same risks.

In 2014-15, women who gave birth and reported smoking at some stage during pregnancy in WQPHN was 20%, compared to 12% of Queensland women. This is nearly double the state average for the PHN catchment. In 2015-16, 53% of Aboriginal and Torres Strait Islander women who gave birth reported smoking at some stage during pregnancy. This is more than four times the rate of non-Indigenous women and suggests that nearly one in every two Aboriginal and Torres Strait Islander women smoked at some stage during pregnancy. (Queensland Health, 2016)

CRITICAL CONSIDERATIONS

Having a strategic focus on child and maternal health through the newly developed Child and Maternal Health Framework will provide a clear direction to tackle health disadvantage and gaps in service needs.

With improved and integrated antenatal care, there are opportunities to address the key early life determinants of child health.

Education and prevention programs such as smoking cessation programs, can help reduce risks associated with antenatal care and low birthweight babies.

With high population of children and high fertility and death rates, providing midwifery, obstetrics and paediatric services will be particularly important if we are to improve infant and child health outcomes including addressing the long-term risks associated with maternal smoking rates. This is particularly important for Aboriginal and Torres Strait Islander children who have higher needs.

FERTILITY RATE

Higher fertility rates have implications for local communities and the resources available to manage investments such as health and education. In WQPHN there were 1,284 births in 2015 and the Total Fertility Rate (TFR) was 2.5 (QLD 1.9), with highest TFR in the Lower Gulf CL (2.8) and Balonne CL (2.7). (ABS, 2016) The TFR in WQPHN is higher than the Queensland rate and significantly higher in some CLs across the catchment.

NEONATAL, INFANT AND CHILD MORTALITY RATE

Neonatal (birth to 1 month) and infant mortality (under 1 years of age)

The neonatal and infant mortality rate within a population is considered a strong predictor for the overall health status of the population. The neonatal death rate in WQPHN is 4.2 per 1,000 live births (QLD 3.0 per 1,000) and the infant mortality rate in WQPHN is 3.83 per 1,000 live births of children under one year of age (QLD 3.6 per 1,000).

Child mortality rate (1-4 years)

Deaths of children aged 1 to 4 years in WQPHN, 2010 to 2014 was 34.1 per 100,000 children, compared with the Queensland rate of 19 per 100,000 children. The leading cause of death nationally among children was ill-defined and unknown, malignant neoplasms and cerebral palsy and other paralytic syndromes. (PHIDU, 2016)

Youth and young adult mortality rate (15-24 years)

Deaths of youth and young adults aged 15 to 24 years in WQPHN, 2010 to 2014 was 288.6 per 100,000, compared with the Queensland rate of 114.2 per 100,000. The mortality rate in WQPHN for this age group is 2.2 times that of Queensland. (PHIDU, 2016) The leading cause of death (nationally) among youth and young people was suicide with age-specific rate of suicide for 15-19 year age group was 4.8 per 100,000 and 20-24 year age group was 8.1 per 100,000. Road transport accidents (78% were males) was the second leading cause of death followed by accidental poisoning from a noxious substance (alcohol or drugs). (ABS, 2016) Given the higher suicide rate in WQPHN, it is likely these rates are underestimated.

IMMUNISATION

Immunisation is a safe and effective way of reducing deaths by vaccine-preventable diseases. It is a front line defence against disease and death and helps protect the community against potentially serious health problems.

Overall, immunisation coverage rates for Indigenous and non-Indigenous children are relatively high, with all HHSs registering vaccination coverage rates of greater than 90% at age five.

Immunisation rates of children aged 1, 2 and 5 years for Indigenous and non-Indigenous 5 year old children, 2015-2016*

	Central West (%)	North West (%)	South West (%)	WQPHN	QLD (%)
5-year-old non-Indigenous children fully immunised	96%	93%	92%	93%	94.0
5-year-old Indigenous children fully immunised	92%	93%	95%	93%	93%

* (Queensland Health, 2016)

CRITICAL CONSIDERATIONS

Immunisation of children helps protect the community and leads to fewer potentially preventable hospitalisations. Ongoing efforts need to continue to support vaccination coverage levels.



HEALTH ISSUES – CHILDREN

The leading burden of disease by broad cause in 2011 for children aged 0-14 years (years lost due to disability-YLD) are mental (39%), respiratory (18.1%) and skin (8.9%).

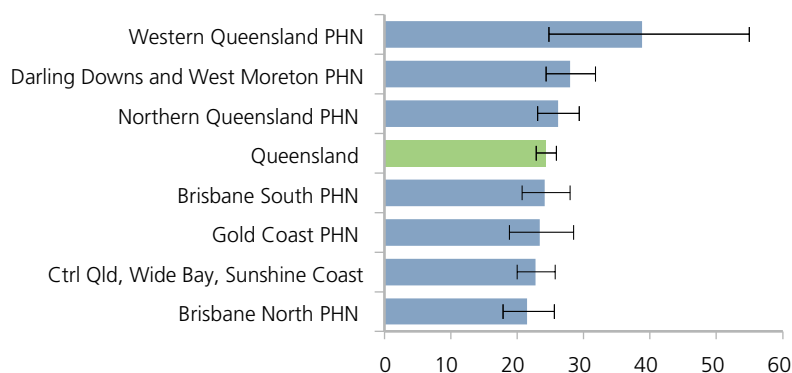
Top five specific broad causes were asthma, anxiety disorders, depressive disorders, conduct disorders and autism spectrum disorders. The distribution was higher in males (55.1%) than females (44.9%).

Children in remote areas and disadvantaged areas also have poorer health outcomes.

CHILDHOOD OVERWEIGHT AND OBESITY

Lack of physical activity, poor nutrition and obesity are known risk factors that impact on children in later life. In 2015-16, 39% of children aged 5 to 17 years in WQPHN were overweight and obese (QLD 24%). (Queensland Health, 2016) This is creeping up to nearly double the rate when compared to other Queensland children. Childhood obesity in children and adolescents increases the risk of poor health including asthma, type 2 diabetes, depression and social isolation.

Figure 8: WQPHN percentage of overweight and obese children (5-17 years) by PHN, 2015-2016



Our PHN has the highest proportion of overweight and obese children 5 to 17 years, compared to every other PHN in Queensland. (Queensland Health, 2016) Overweight and obese children are likely to stay obese into adulthood and more likely to develop diseases like diabetes and cardiovascular diseases at a younger age.

CRITICAL CONSIDERATIONS

Overweight and obese children are more likely to be obese as adults, hence they are at increased risk for several diseases. Whole of community approaches are required to address modifiable risk behaviours of poor diet and insufficient levels of physical activity, including targeted programs involving family members.

EARLY CHILDHOOD DEVELOPMENT

The Australian Early Development Census (AEDC) is a nationwide measure that looks at how well children are developing by the time they reach school. The AEDC looks at five different domains of early childhood development including physical health and wellbeing, social competence, emotional maturity, language and cognitive skill (school-based), communication skills and general knowledge.

The results for WQPHN children are poorer compared to Queensland and Australia with 21% of children at risk or developmentally vulnerable on two or more domains, compared to 14% of Queensland children. Carpentaria (45.5%), Burke (42.2%), Balonne (35.8%) and Paroo (27.3%) statistical areas (SA2) had the highest proportion of at risk or vulnerable children on two or more domains. (AEDC, 2015)

When comparing all five early childhood indicators, children in WQPHN have the lowest proportion on track for all five domains when compared to state and national averages. The early childhood indicator with the greatest variation between WQPHN and Queensland is language and cognitive skills, with a 10.8% difference.

.....

Indigenous children are twice as likely to be developmentally vulnerable than non-Indigenous children, however, it is encouraging to see that the gap has reduced over time

.....

CHILDHOOD ASTHMA

Asthma hospitalisation in WQPHN for children aged 0-14 years, 2012-2013 to 2014-15 were highest for NWHHS (544 per 100,000), followed closely by SWHHS (540 per 100,000) (CWHHS data not available). (Queensland Health, 2016)

Patients with moderate to severe asthma are eligible for Asthma Cycle of Care plans which are completed by a GP. In WQPHN there has been major increase (157%) in asthma care plan uptake between 2013-14 to 2015-16. The asthma action plan helps the person with asthma and/or their carer take early action to prevent or reduce the severity of an asthma attack.

HEARING HEALTH

The prevalence of ear disease and hearing loss in Indigenous communities is significantly higher than in the general Australian population, with almost three times more common in Indigenous communities than in non-Indigenous communities. (Simpson, Enticott, & Douglas, 2016) This is consistent with findings from the Chief Health Officers report (2016) which found that otitis media hospitalisation rates for children aged 0-14 years, 2012-2013 to 2014-15 was highest in Torres Strait and Cape York HHS (1,188 per 100,000), followed by NWHHS (883 per 100,000) and SWHHS (612 per 100,000) (CWHHS data not available). (Queensland Health, 2016)

CRITICAL CONSIDERATIONS

There is an urgent need to ensure a comprehensive and universally applied Child and Maternal Health Service Framework across the whole of Western Queensland. Ensuring critical screening, developmental milestones and strong families is a priority so that we can improve their intellectual, language and social development skills and in turn build their confidence and long-term life opportunities.

HEALTH ISSUES – ADOLESCENTS AND YOUNG ADULTS

Characterised by major changes in the body and brain, the adolescent years leading into young adulthood are a highly dynamic period of human development and a time of changing health needs. This is especially in relation to the onset of new health risk behaviours (e.g. smoking, alcohol and other drug use), the emergence of mental health disorders (75% of adult mental disorder onsets before 25 years), new sexual and reproductive health needs (e.g. contraception, pregnancy, sexually transmitted infections (STIs), gender orientation), and greater risks from injury (e.g. road traffic injuries). (RACP, 2017)

The leading burden of disease by broad cause in 2011 for adolescents and young people aged 15-29 years (years lost due to disability-YLD) are mental (44.7%), respiratory (11.8%) and musculoskeletal (11.8%) disease. Top five specific broad causes were anxiety disorders, depressive disorders, alcohol use disorder, asthma and back pain. The distribution was higher in females (51%) than males (49%). (AIHW, 2014)

BEHAVIOURAL RISK FACTORS

Behavioural risk factors in adolescence and young people can hinder adolescent development and limit coping abilities, which increases susceptibility to social, behavioural and health problems. Adolescents are more likely to engage in risky and impulsive behaviour such as reckless driving, sexting, binge drinking and drug taking.

CRITICAL CONSIDERATIONS

We need to work with young people to develop the protective factors that enhance their coping abilities. We also need to build their resilience so that they are able to respond in positive ways to the risks, stresses and adversities of life so that they do not develop problem/risk behaviours. Analysing the factors that contribute to the development of health problems in teenagers will also help to prioritise and target interventions. Education of safe sex practices is also important to pass on knowledge in reducing risk-taking behavior and unplanned teenager pregnancies.

MENTAL HEALTH

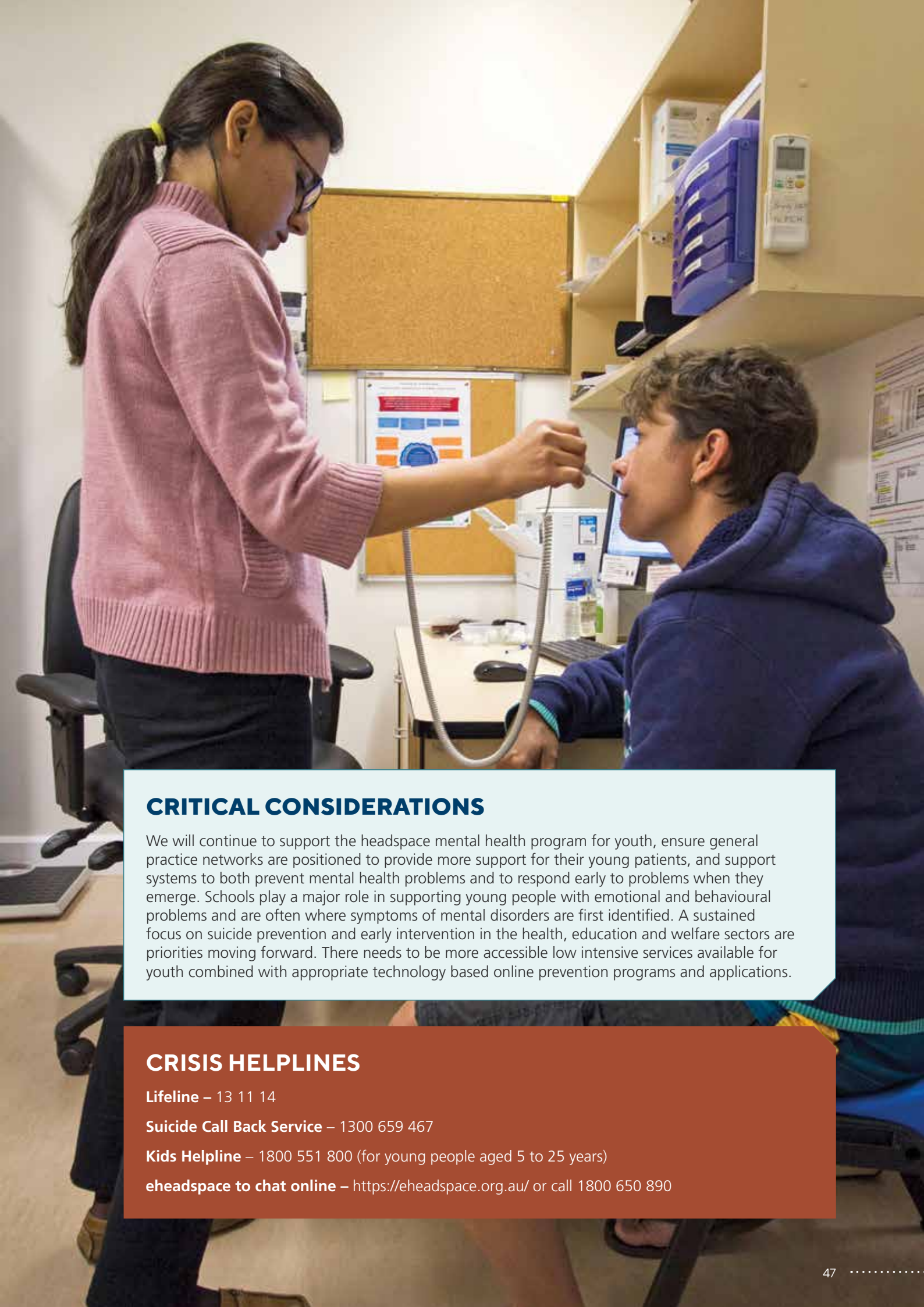
The social, emotional and psychological health of teenagers and young adults are critical to the experience of wellbeing and lifetime resilience. A teenage brain continues to develop during adolescence and young adulthood and engagement in risky behavior such as alcohol and illicit drug use increases the risk of developing mental health issues in later life.

According to the second Australian Child and Adolescent Survey of Mental Health and Wellbeing almost one in seven (14.3%) 12-17 year-olds were assessed as having mental disorders in the previous 12 months, with males experiencing higher levels (15.9%) compared to females (12.8%). (Lawrence, et al., 2016)

Mental illness is a major contributing factor for suicide with more young Australians in 2015 aged 15-24 years died by suicide than any other means. A third of all deaths among young men aged 15-24 years are due to suicide, and double as many young women aged 15-19 years died by suicide in 2015 compared to 2005. This has mirrored high rates of self-harm among young women aged 16-17 years with one in four having self-harmed in their lifetime. (Robinson, McCutcheon, Browne, & Witt, 2016)

In WQPHN suicidal ideation was the top mental health presentation to public hospital Emergency Departments during the 2016 period, followed by anxiety and depression. Suicidal ideation was more than one third the rate for the NWHHS (32%) when compared to CWHHS (19%) and South West region (19%).

Whilst access to youth mental health services such as headspace in Mount Isa have increased access over the past decade, help-seeking rates are low among all young people experiencing suicidal thoughts or behaviours, but in particular for young men, with many citing stigma, fear and embarrassment as barriers to seeking support. Recent research identified that young men expressed a desire to remain anonymous. The research team also identified the value and importance of technology based prevention programs including TeleWeb services, directed online self-help, mobile apps, and online counselling. However, realising the potential of digital technologies must be informed by what is effective and acceptable and engages young men in other digital fields, such as gaming. (Robinson, McCutcheon, Browne, & Witt, 2016)



CRITICAL CONSIDERATIONS

We will continue to support the headspace mental health program for youth, ensure general practice networks are positioned to provide more support for their young patients, and support systems to both prevent mental health problems and to respond early to problems when they emerge. Schools play a major role in supporting young people with emotional and behavioural problems and are often where symptoms of mental disorders are first identified. A sustained focus on suicide prevention and early intervention in the health, education and welfare sectors are priorities moving forward. There needs to be more accessible low intensive services available for youth combined with appropriate technology based online prevention programs and applications.

CRISIS HELPLINES

Lifeline – 13 11 14

Suicide Call Back Service – 1300 659 467

Kids Helpline – 1800 551 800 (for young people aged 5 to 25 years)

eheadspace to chat online – <https://eheadspace.org.au/> or call 1800 650 890

ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLES

There are distinctive ethnic and cultural differences within Aboriginal and Torres Strait Islander societies, each having their own language and traditions. Aboriginal and Torres Strait Islander people are the original custodians of many identified places in Australia (WQPHN has 34 Indigenous language groups). According to their cultural beliefs, the physical environment of each local area was created by the actions of spiritual ancestors as they travelled across the landscape. (Australian Indigenous Health Info Net, 2017)

The health status of Australia's Aboriginal and Torres Strait Islander peoples is poor in comparison to the rest of the Australian population and there remains a large inequality gap in Australia across all health determinants. Despite this, Aboriginal and Torres Strait Islander people have made advances towards taking control of their futures and their health outcomes. Through self-determination and strong community leadership, there is now momentum for culturally endorsed strategies, programs and policies. WQPHN have in partnership with the Queensland Aboriginal and Islander Health Council (QAIHC) and four Aboriginal and Islander Community Controlled Health Services (AICCHS) established the Nukal Murra Alliance to enable greater quality and capability of services for Aboriginal and Torres Strait Islander people living in the catchment.

SOCIAL AND ENVIRONMENTAL DETERMINANTS



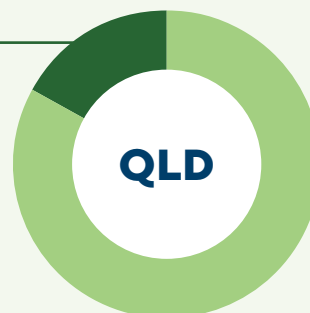
10,435

Aboriginal and Torres Strait Islander peoples live in WQPHN



17%

of total population
(QLD 3%)



71%

of people living in the Lower Gulf CL are
Aboriginal and Torres Strait Islander

26%

of Aboriginal and Torres Strait Islander peoples
aged 15 years and over had completed year
12 or equivalent (compared to 48% of non-
Indigenous)

14%

of households with Aboriginal and Torres Strait
Islander peoples were overcrowded (compared
to 2% of non-Indigenous)

39%

of dependent children in families with
Aboriginal and Torres Strait Islander peoples
were from jobless families (compared to 6%
of non-Indigenous)

42%

(6 in 10) of Aboriginal and
Torres Strait Islander children
(nationally) are developmentally
vulnerable on one or more
domains (compared to 22% AUS)



39%

of 15 to 19 year olds in
Lower Gulf CL are earning
or learning (QLD 65%)



HEALTH

LIFE EXPECTANCY GAP

for Aboriginal and Torres Strait Islander peoples in WQPHN is 14.5 years

25 YEAR GAP

in median age of death for people living in the Lower Gulf CL

13.3%

Indigenous deaths <50yrs

1.9%

non-Indigenous deaths <50yrs

13.3% of deaths for the Aboriginal and Torres Strait Islander population who are below 50 compared to the non-Indigenous population (1.9%)

MENTAL DISORDERS

were the leading contributor to the Indigenous burden of disease

ISCHAEMIC HEART DISEASES

the leading cause of death among Aboriginal and Torres Strait Islander people, followed by diabetes

DIABETES

prevalence is 3.5 times higher for Indigenous Australians

CARDIOVASCULAR DISEASE

hospitalisation and death rates are twice as high for Indigenous as compared to non-Indigenous Australians

SMOKING RATES

are double for Indigenous Queenslanders

SUICIDE RATES

are double that of Queensland and Australia with estimates that Aboriginal and Torres Strait Islander populations are twice that again

15-24 YEARS AGE GROUP

in WQPHN have 4.7 times higher suicide rate compared to Queensland

NEONATAL AND INFANT

deaths are higher in WQPHN compared to Queensland

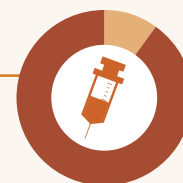
53%

(1 in 2) of Indigenous women in WQPHN smoke during pregnancy



90%+

immunisation coverage in WQPHN for 5 year old Indigenous and non-Indigenous children



OTITIS MEDIA

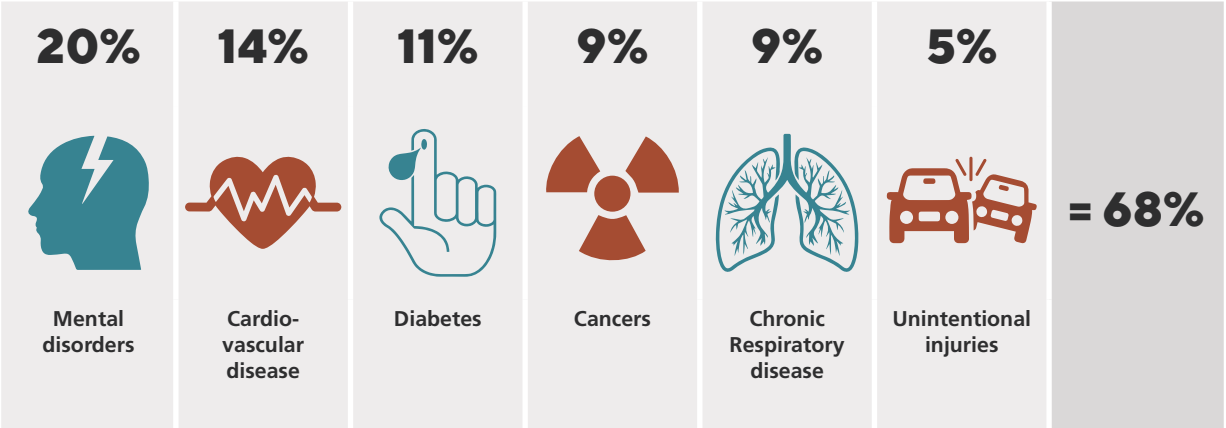
3 times more common in Indigenous communities than in non-Indigenous communities

MENTAL DISORDERS

were the leading contributor to Indigenous burden of disease, responsible for around one-fifth of the total disease burden. Cardiovascular diseases were the second leading contributor to the burden of disease and the leading cause of mortality for Aboriginal and Torres Strait Islander peoples in Queensland.



Leading six contributors to burden of disease and injury in Queensland Aboriginal and Torres Strait Island people*

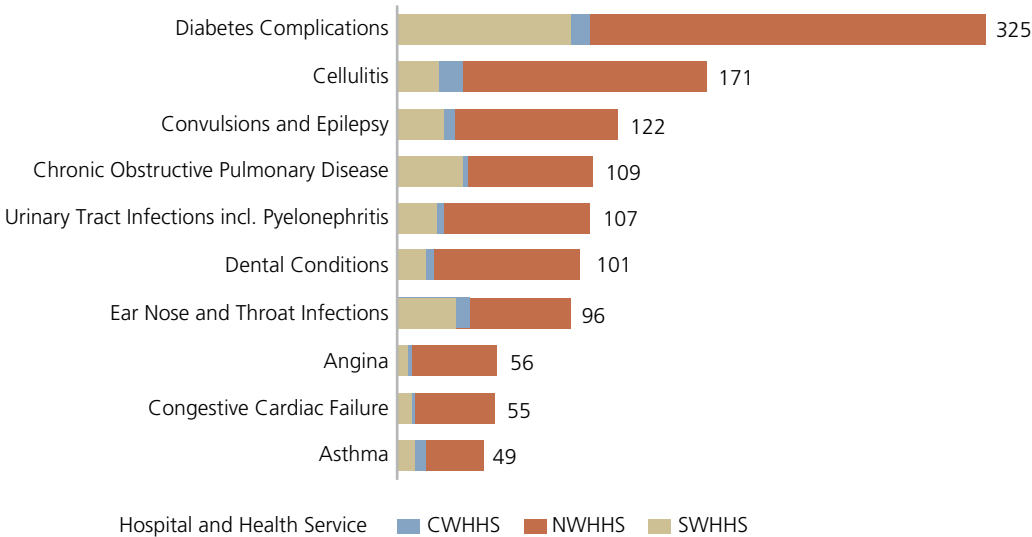


* (Queensland Health, 2017, p. 30)

POTENTIALLY PREVENTABLE HOSPITALISATIONS

Chronic conditions were the most common potentially preventable hospitalisations (PPH) for Indigenous people with diabetes complications, cellulitis, convulsions and epilepsy, COPD and urinary tract infection the top five contributors (Figure 9).

Figure 9: Indigenous PPH by admitted patients across WQPHN*



* (Queensland Health, 2017)

CRITICAL CONSIDERATIONS

The Indigenous population living in WQPHN are the most vulnerable group within the catchment. The WQPHN will build engagement with the Community Controlled Sector through the Nukal Murra Alliance and continue investment and planning to improve health outcomes and culturally appropriate access to health services for the Indigenous population is required. This approach will ensure we integrate important cultural intelligence, enable Indigenous engagement through their health institutions, and harmonise investment and program development with State and Commonwealth partners to address the issues that affect poor health and social outcomes of the Indigenous population.



5

SECTION 5: HEALTH SYSTEM PERFORMANCE— ACCESS AND UTILISATION OF SERVICES

HOSPITAL AND HEALTH SERVICE USE

Hospital activity data for April, May and June 2017 shows that Mount Isa Hospital (50%) accounted for half of the total hospital admissions, followed by Roma Hospital (20%), Charleville Hospital (7%) and Longreach Hospital (6%).

ADMISSIONS BY DIAGNOSIS

Digestive system diseases, followed by injury, poisoning and other external causes and pregnancy and childbirth were the most common hospital admission by diagnosis for Western Queensland residents.

POTENTIALLY PREVENTABLE HOSPITALISATIONS

Potentially Preventable Hospitalisations (PPHs) are admissions where hospitalisation is believed to be avoidable through the provision of timely and appropriate non-hospital care (usually delivered in an ambulatory setting—primary health care, GPs or community health centres). (Queensland Health, 2016)

There were 3,201 admitted patient episodes of care for PPHs in the 2015-2016 FY.

- 49.9% PPHs were for chronic conditions
- 47.6% PPHs were for acute episodes of care
- 2.8% PPHs were for vaccine preventable admissions

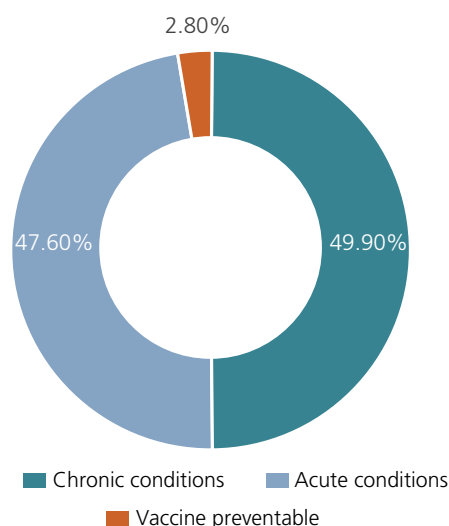
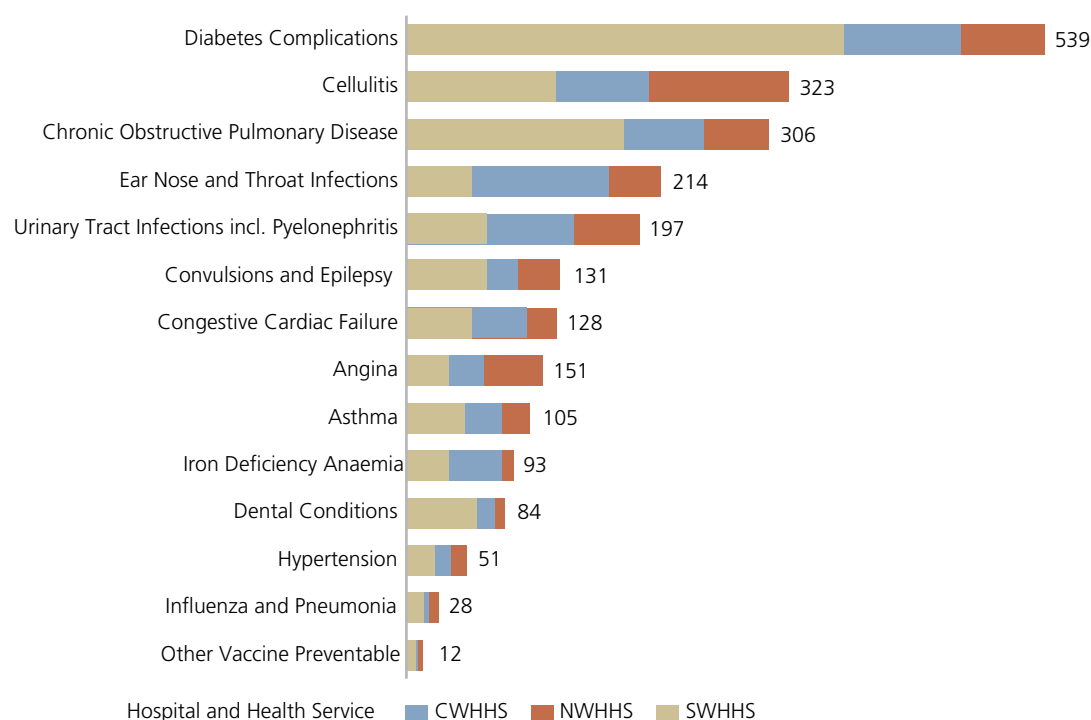


Figure 10: PPH by Admitted Patients by Type across WQPHN, FY 2016/17*



* (Queensland Health, 2017)

The top five contributors to PPH for WQPHN population were diabetes complications (accounting for 24%), cellulitis, COPD, ear nose and throat and urinary tract infection. When analysing PPHs in 2015-16 for kidney and urinary tract infections (including pyelonephritis) the age standardised rate was nearly double the national average.

According to the Grattan Institute report into potentially preventable hot spots, Carpentaria and Mount Isa region in the North West, Charleville region in the Central West, Far South West regions and Balonne were persistent hot spots for chronic preventable conditions. (Duckett & Griffiths, 2016)

CRITICAL CONSIDERATIONS

Our PHN will continue to build the data architecture for more precise needs-based targeting, including sourcing and linking data to enable identification of individuals most at risk of preventable hospitalisation. This includes adapting solutions as better information becomes available and working together with local HHSs, general practice networks and AICCHS's to address inequalities in priority locations.

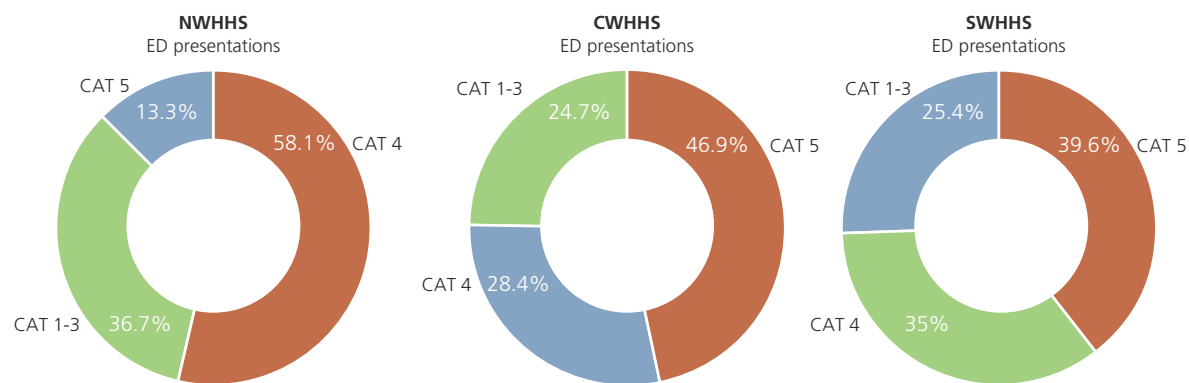
EMERGENCY DEPARTMENT (ED) PRESENTATIONS

The availability and accessibility of community-based general practice and primary health care have a significant impact on the utilisation of surrounding hospitals across the WQPHN catchment. Literature evidence shows that when people cannot access appropriate primary care, they will often choose hospitals, specifically emergency departments to meet their immediate health care needs. (Masso, Bezzina, Siminski, Middleton, & Eagar, 2007)

PROPORTION OF ALL ED ATTENDANCES

The proportion of ED presentations below indicate higher percentage of patients attending ED when compared to national ED presentations rates. A large percentage of ED presentations are for low acuity triage categories 4 and 5 (NWHHS 63.4%, CWHHS 75.3%, SWHHS 74.6%). A proportion of these category 4 and 5 presentations may be treatable within the community by a GP, allied health or nurse practitioner.

Figures 11: Proportion of ALL ED Attendances across the three HHS's



Figures 11 provide proportion of all Emergency Department admissions by HHS over the six month period from March to August 2017. NWHHS had the highest proportion of Category 1-3 ED admissions (36.7%) and Category 4 admissions (50.1%). CWHHS had the highest proportion of Category 5 admissions (46.9%). (Queensland Health, 2017)

CRITICAL CONSIDERATIONS

There is a very high utilisation of emergency department outpatient support in hours and out of hours for non-urgent presentations that would be better managed in a primary care setting with better access to planned care and where appropriate, team care arrangements. Monitoring of Hospital and Health Services can provide a greater emphasis on those patients who are managing their (and their families) primary care needs outside general practice and need to be repatriated into a general practice environment with better access to more comprehensive care and self management.



PRIMARY HEALTH CARE

Primary health care services provide the first level of contact individuals, families and communities have with the health care system. Across WQPHN there are many services and providers including (but not limited to) General Practices, allied health services, pharmacies, dental services, Aboriginal and Islander Community Controlled Health Services (AICCHS) and community health. A hub and spoke model of outreach service delivery is provided in WQPHN to communities that have limited access to health services.

41 HHS PUBLIC HOSPITALS AND PRIMARY HEALTH CENTRES

44 GENERAL PRACTICES (63% OPERATED BY HHS AND OTHERS ARE PRIVATE PRACTICES AND RFDS BASES)

11 PRIVATELY OWNED GENERAL PRACTICES

4 ABORIGINAL AND ISLANDER COMMUNITY CONTROLLED HEALTH SERVICES (AICCHS)

2 RFDS BASES

27 PHARMACIES

HEALTH ASSESSMENTS AND CARE PLANS (2013-14 TO 2015-16)

Having an understanding of Medical Benefits Scheme (MBS) (MBS, 2016) services provides an indication of consumer access to services via a GP. The greatest increase in service use between 2013-14 and 2015-16 was for asthma care plans (157% increase) and greatest decrease in service use was for home medication reviews (72% decrease).

Health assessments and care plans (2013-14 to 2015-16)

	Asthma care plans (level B consultation) MBS Item 2546	Diabetes care plans (level B consultation) MBS Item 2517	Mental health treatment plans MBS Item 2715 + 2717	Aboriginal and Torres Strait Islander health assessments MBS Item 715	Residential Medication Management Reviews MBS Item 903	Home Medicines Reviews MBS Item 900
2013-14	23	119	298 + 350 = 648	3,288	94	316
2015-16	59	104	468 + 516 = 984	3,504	92	90
% change	157% increase	12% decrease	50% increase	7% increase	2% decrease	72% decrease

The number of MBS items billed to Medicare does not give a complete picture of all health services provided in WQPHN and to Indigenous people. Situations where care that is equivalent or similar to MBS items may be provided but is not billed as such include:

- where the care is provided by health care providers not eligible to bill Medicare (such as some health services provided by the Royal Flying Doctor Service and by state-and territory-funded services)
- where the care is provided by a MBS-billing service but for some reason is not billed—for example, if the patient does not have a valid Medicare number (as items cannot be billed without a Medicare number)
- where the care is billed as another MBS item, such as a standard consultation.

Variability exists in planned care items across the WQPHN region which highlights limitations of a time-poor workforce, high locum medical workforce turn-over, variability of general practice systems, lack of infrastructure, and help seeking behaviours of remote patients including high ED access, all highlight the complexity of why more planned care items have not been utilised.

CONSUMER USE FAST FACTS

- 4.7 average number of GP visits per person per year (vs QLD 5.9)
- Annual GP expenditure per person \$243 (vs QLD \$300)
- 83% of GP attendances are bulk billed (vs QLD 81%)
- Annual specialist expenditure per person \$38 (vs QLD \$62)
- WQPHN had the highest patient contribution and lowest government benefit paid per script (under PBS scheme) compared to every other PHN in Queensland

Figure 12: WQPHN MBS Billing 2016-2017

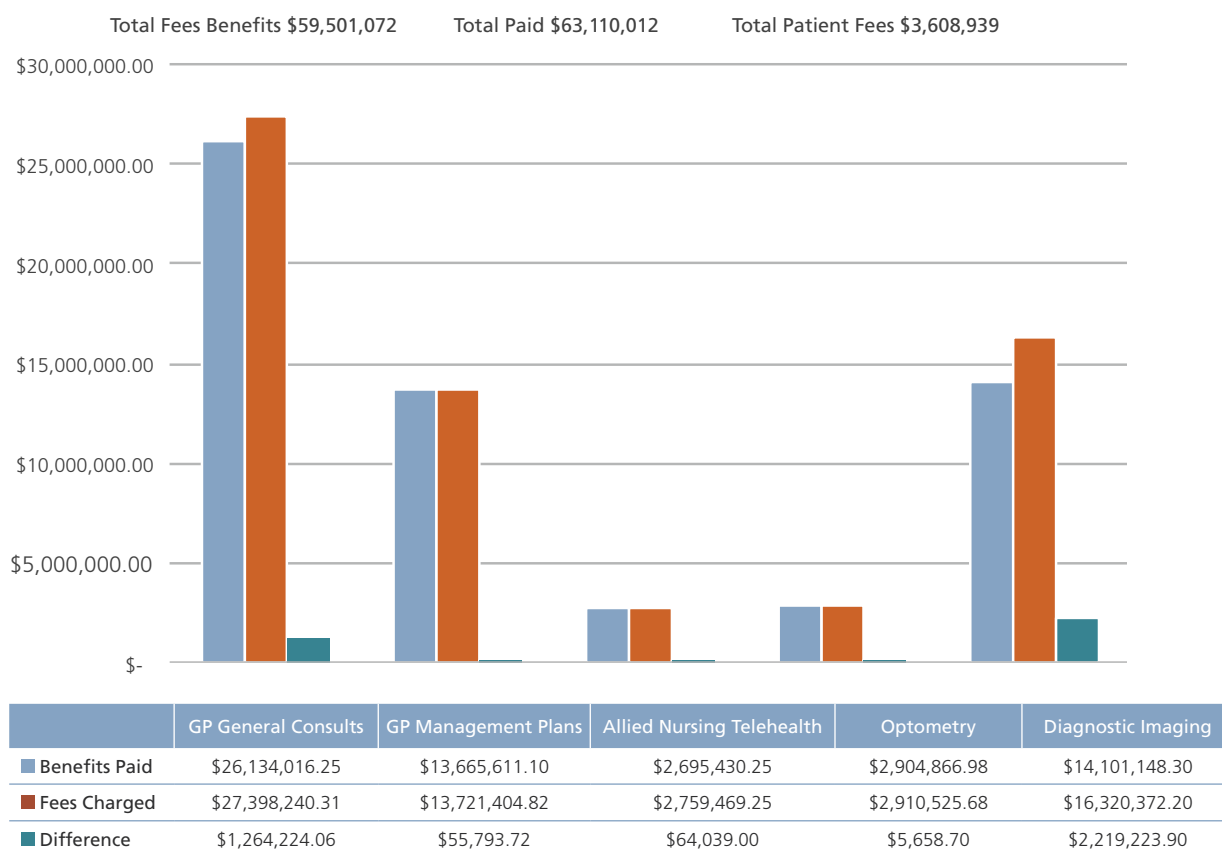


Figure 12 shows that GP general consults were the highest total MBS billing over the 2016-2017 period followed by diagnostic imaging. The billing indicates very limited income from mixed billing (that is high Bulk Billing rates) but also potentially reflects the capacity for some individuals to pay for services in remote areas. The most significant out of pocket expense for patients was for diagnostic imaging.

Figure 13: GP Health Assessments 2012 to 2017

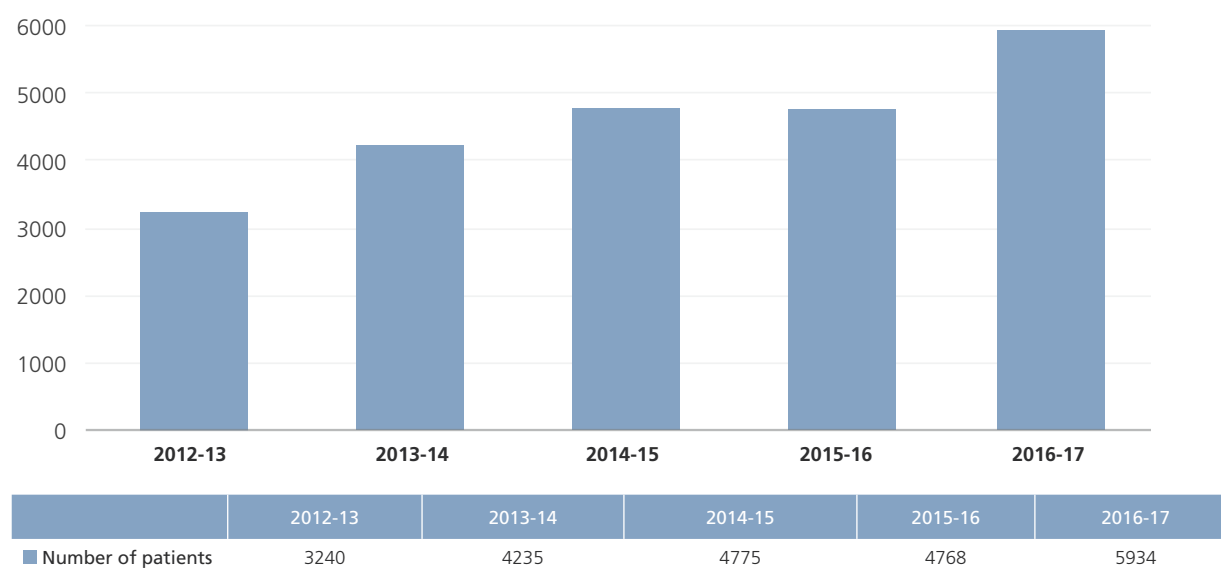
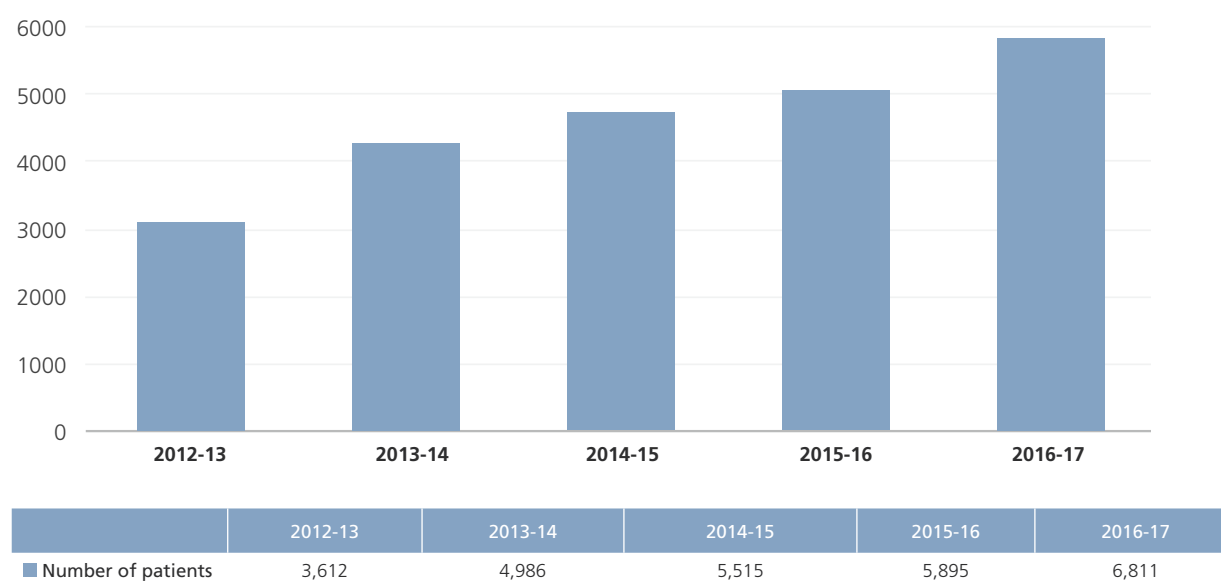


Figure 14: GP Chronic Disease Plans 2012 to 2017



Figures 13 and 14 provide a yearly overview of the number of patients in the WQPHN who have had a GP Health Assessment and a GP Chronic Disease Plan. Both graphs show an increased positive trend in the number of patients who have had a GP Health Assessment or been put on a GP Chronic Disease Plan. The greatest increase has occurred in the previous 12-month period from 2016-2017 which could potentially be contributed to the WQPHN practice support activities that are supporting more planned and structured care.

Consumer experiences of health services (AIHW, 2018)

Percentage of adults who had a preferred GP	44%
Percentage of adults who could not access their preferred GP in the preceding 12 months	28%
Percentage of adults who felt they waited longer than acceptable to get an appointment with a GP	25%
Percentage of adults who saw a medical specialist	23%
Percentage of adults who were admitted to any hospital	12%
Percentage of adults who went to any ED for their health	17%

Note – as WQPHN had a small sample size, the percentages could be potentially misleading

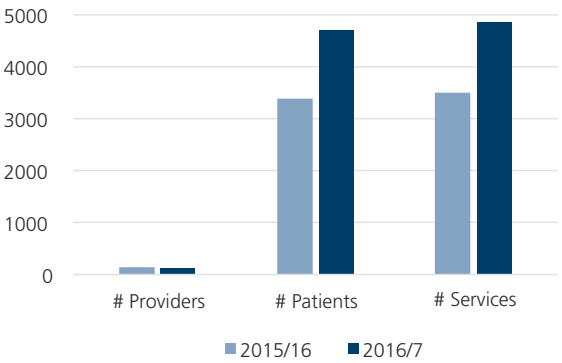
WQPHN FAST FACTS

- In 2015-16, the number of after-hours GP attendances per person was 0.22, which is less than half the national average
- In 2015-16, the Medicare benefits expenditure on after-hours GP attendances was \$16.50 per person, which is half the national average \$32.22

INDIGENOUS HEALTH CHECKS

All Indigenous people are eligible for an annual Aboriginal and Torres Strait Islander health check: MBS item 715 which covers all aspects of health from measuring blood pressure, and sugar levels to mental and emotional wellbeing.

Figure 15: Uptake of Aboriginal and Torres Strait Islander health checks (MBS 715) in WQPHN, 2015/2016 to 2016/17*



* (AIHW, 2017)

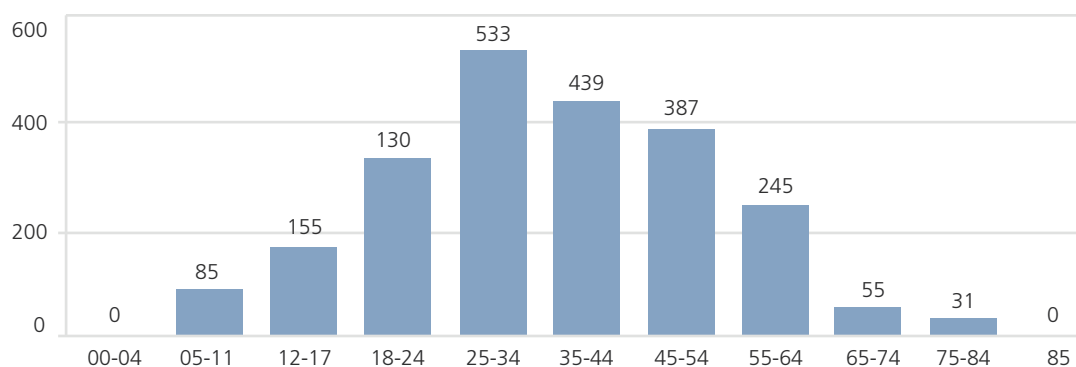
AIHW data shows that there were 3,504 Aboriginal and Torres Strait Islander health checks conducted in WQPHN for 2015/2016 and 4,854 conducted in 2016/2017. This equates to an increased uptake of 38.5%. The number of new patients also increased 38.9% from 3,385 to 4,702 (Figure 12). Interestingly despite the large increase in the number of services offered, the number of providers decreased slightly from 142 to 132 (a decrease of -7%) between 2015/16 to 2016/17.

Over one third increase in the number of MBS 715 Aboriginal and Torres Strait Islander health checks conducted between 2015/16 to 2016/17

MENTAL HEALTH SERVICE USAGE

Service usage provides insight into characteristics of people using mental health services. Mental health services in WQPHN are provided through a mixed model across public, private and non-government organisations (NGOs) such as AICCHS, RFDS and headspace. MBS occasions of service include private medical, primary health nurses in general practice, allied health services and Queensland Health public services. Outreach services are also funded through NGOs and organisations such as CheckUP, QAIHC and New Ways, Real Health (NWRH).

Figure 16: Overview of MBS Mental Health Patients in WQPHN, 2014/15*



* (Queensland Health, 2017)

According to MBS Mental Health usage data, 2,271 patients in 2014/15 (Figure 13) received mental health services, with the 25 to 35 age group the highest users (533 patients). Of these, 4,943 mental health services were provided by mental health professionals with over half provided by general practitioners (2,770 services).

It is interesting to note that hospitalisation data for mental and behaviour disorders are lower for WQPHN compared to other state rates (1275 per 100,00 vs 1891 per 100,00), which is a reflection of the absence of designated mental health beds in the regional hospitals in Western Queensland. Additional reasons can include:

- MBS subsidised services may not be as readily available in Western Queensland.
- alternative sources of services may be preferred (e.g. community based treatment programs).
- block funding of AICCHS and provision of drugs under options such as Section 100 of the *National Health Act, 1953* lead to a gap in MBS and PBS data.
- a large proportion of Western Queensland population resides in remote or very remote areas, which decreases reliability of the data.



Figure 17: GP Mental Health Plans 2012 to 2017

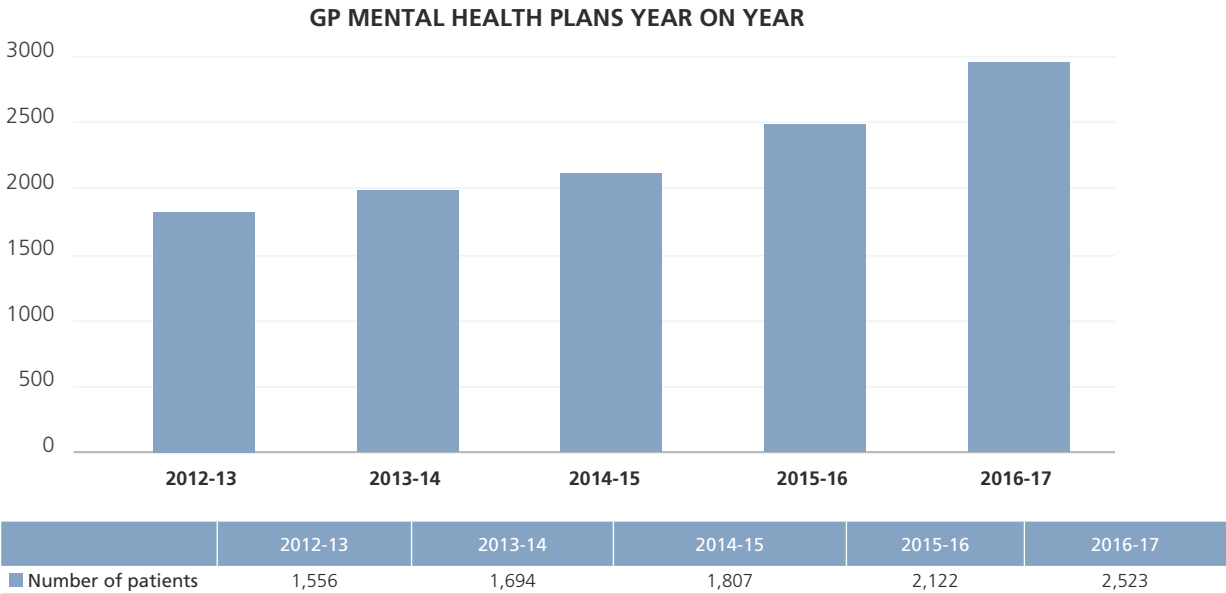


Figure 17 provides a yearly overview of the number of patients in the WQPHN who have had a GP Mental Health Plan. The graph shows a positive trend upwards with the greatest increase in the previous 12-month period from 2016-2017.

The high level of self-harm presentations and high rates of substance misuse, suggests an underlying need for increased access to mental health services both in acute and primary care setting

CRITICAL CONSIDERATIONS

Addressing barriers and tailoring services to the local setting and population needs will help support more effective disease management and ultimately lead to improved patient experience, improved health outcomes for the patient along with avoiding unnecessary hospital admissions.

Monitoring of primary health care service use can provide an indication of access to services and be used to monitor access and improvements.

To enable a more sustainable future and increased access to services for local people, WQPHN will strive through the Health Care Home model to leverage greater coordination, linking consumers to providers across networks and services whether they’re positioned in private General Practice, AICCHOs or NGOs.

The Western Queensland Health Care Home will provide fully integrated GP-led multidisciplinary team based care for the health and wellbeing of an enrolled population.

A Health Care Home will prioritise patients and improve access to care through contemporary appointment systems to optimise patient flow and demand.

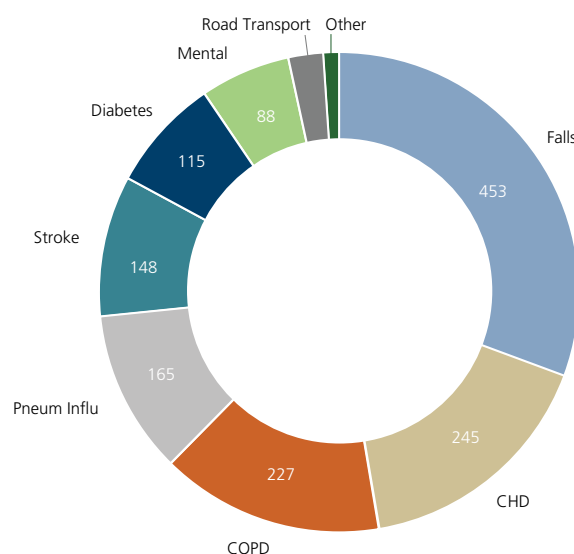
AGED CARE SERVICES

Healthy ageing is about enhancing opportunities for good health, so that older people can take an active part in society and enjoy an independent and high quality of life.

WQPHN FAST FACTS

- 7,531 people (11.8%) aged 65+ years (2016)
- There are 4,583 aged care pensioners (2015)
- There were 6,476 professional attendances at Residential Aged Care Facilities (RACF) (2016-17 FY)
- 177 MBS Health Assessments for people aged 65+ (2016-17 FY)
- Falls, followed by COPD, coronary heart disease (CHD), stroke and pneumonia/ influenza are the top 5 PPH (see Figure 18)

Figure 18: PPH, acute and chronic hospitalisations for people aged 65+ by cause



The Australian Government funds and regulates the provision of residential care, home care and flexible care to those approved to receive it. This care can be provided either at home or in a residential facility.

Table below shows the total number of home care and residential places in each of the HHS areas (Department of Health, 2015). Multi-purpose services are funded to provide both residential and home care services.

Number of approved aged care places, 30 June 2015

Provider		Central West	North West	South West
Home care		48	132	115
Residential care (non-flexible)		59	114	185
Multi-purpose service	Home care	17	5	16
	Residential care	57	18	60
National Aboriginal and Torres Strait Islander Aged Care		–	20	–
Total		181	289	376

AFTER HOURS SERVICES

The provision of after hours primary health care services across the WQPHN is challenging due to the dispersed geographical proximity of health services for residents, workforce challenges including General Practice (GP) shortages, limited public transport infrastructure and a significant Indigenous population. People with chronic and complex health conditions such as diabetes and respiratory conditions, also often become high users of hospital care in the absence of well-coordinated community-based care that prevents avoidable illness and deterioration of their condition. (MICRRH, 2017)

GENERAL PRACTICE AFTER HOURS

A number of the State health services in Mount Isa, Cloncurry, Julia Creek, Winton, Barcaldine, Longreach, Blackall, Charleville, Cunamulla and St George communities, have medical practitioners work in both the hospital and GP practices. There are GPs, Senior Medical Officers (SMOs) and rural generalists who provide services through AICCHS (Gidgee Healing, CWAATSICH, CACH and Goondir Health Service), Royal Flying Doctors Service (RFDS) and the three HHSs (North West, Central West and South West).

WQPHN FAST FACTS

- In 2015-16, the number of after-hours GP attendances per person was 0.22, which is less than half the national average
- In 2015-16, the Medicare benefits expenditure on after-hours GP attendances was \$16.50 per person, which is half the national average \$32.22

Despite the lower number of after hours GP attendances and expenditure when compared to national averages, substantial increases in occasions of service have occurred for GP After Hours MBS services, based on a comparison of MBS service data between 2012-2013 and 2015-2016. Urgent GP After Hours MBS services have increased 34% and Urgent GP After Hours during unsociable hours has increased 200% (see table below). The number of patients also increased for both MBS item numbers across the time periods, suggesting an increase in access to services for residents.

GP After Hours MBS Services by PHN between 2012 to 2016

GP After Hours MBS Services by PHN between 2012 to 2016			
MBS Item Number	2012-2013	2015-2016	Percentage Increase
Item 597			
Urgent After Hours	1,446	1,938	34% increase
Item 599			
Urgent After Hours (unsociable hours 11pm-7am)	166	499	200% increase

STATE HOSPITAL AND HEALTH AFTER HOURS SERVICES

Communities with no resident doctor rely on the State funded remote nurse clinics which are available 24 hours a day, seven days a week. Patients who present to the smaller hospitals in regional areas after hours, are triaged by the nurse and the doctor is called in as required.

RFDS

During the day GP services are provided to very remote regions by RFDS, however, there is no After Hours service apart from emergency medical retrieval services. The RFDS provide a telephone service and medical evacuations and transfers 24 hours a day, seven days a week from Mount Isa and Charleville bases. Medical chests enable emergency and non-emergency treatment to be given to people living in remote areas. RFDS Medical Officers prescribe contents remotely and on site.

OTHER

The police and ambulance service are often front-line services involved in directing patient access. Pharmacies in larger communities are open regular business hours and are often the first point of contact for non-urgent after hours care.

In RACF settings, the registered nurses use their discretionary skills to decide if a resident requires after hours treatment, who should be contacted (e.g. GP) or whether the matter is urgent or severe enough to require QAS transport to ED.

CRITICAL CONSIDERATIONS

Challenges exist across the WQPHN to increase access to primary health care services during the after hours period. Working with general practitioners, three HHSs and Mount Isa Centre for Rural and Remote Health (MICRRH) to understand the most effective models and workforce support needs will enable WQPHN to deliver appropriate services, whilst taking pressure off the hospital EDs.



DIGITAL HEALTH SERVICES

Currently WQPHN general practice services use a range of electronic practice management and record keeping systems. However, there is a lack of consistency and connection between these systems. For example, there may be different systems between the ED and general practice/primary health services in the same locations, even if the services are staffed by the same doctors. In at least one other case, a fly in GP keeps records on a PC and scans records to be sent back some time after the visit, creating significant challenges for continuity of care. The inconsistency of electronic health records currently creates significant barriers to the provision of comprehensive primary health care across WQPHN. These include:

- lack of coordinated care between service providers
- poor follow up of patients
- poor practice level data for efficient and effective management of patients' health
- poor data for local and regional planning.

The lack of connection between services and different service providers is exemplified in the challenges posed for consumers with no shared health records. The My Health Record offers potential for improving coordination and continuity of care for consumers. As of August 2017, 8,428 people in WQPHN had registered for the My Health Record. (Department of Health, 2016)

The rate has steadily been increasing with almost double the number of registered consumers since October 2015 (Figure 15). In August 2017, 48 providers have registered across the region.

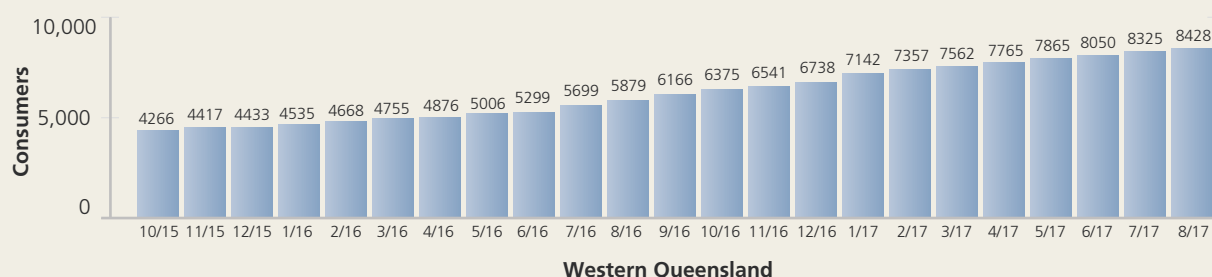
TELEHEALTH

Telehealth services use information and communications technologies (ICTs) to deliver health services and transmit health information over both long and short distances. Video-conferencing is one of the main ways in which telehealth is improving access to health care services for patients who live in WQPHN. Instead of having to travel to the nearest major city to see a specialist, an increasing number of patients are using video-conferencing. This facility might be offered by their local GP or another local health care venue. (Department of Health, 2015)

The Telehealth MBS items enable patients in remote, regional and outer metropolitan areas of Australia to have easier access to specialists without the time and expense involved in travelling to major cities. During 2015-16 there were 758 patients in WQPHN who accessed telehealth services provided at consulting rooms or at an Aboriginal Medical Service using MBS items numbers 2100, 2126, 2143, 2195 (this includes 1,311 occasions of services). (MBS, 2016)

Figure 19: Number of registered consumers in PHN over time

MY HEALTH RECORD – CONSUMERS REGISTERED IN PHN OVER TIME



KEY RECOMMENDATIONS FROM THE WESTERN QUEENSLAND ARCHITECTURE ANALYSIS PROJECT

In early 2018 the Western Queensland Architecture Analysis project was undertaken to better understand the application and technology architecture across the Western Queensland healthcare ecosystem (PwC, 2018). Stakeholders included the three Hospital and Health Services in Western Queensland, as well as a sample of AICCHS, general practice clinics, and allied health practices operating in the region. Each stakeholder organisation interviewed, was assessed for alignment with the 'digital health foundations' and recommendations advised under these criteria.

Data collected and products analysed, focused on three key areas:

- The management of referrals
- Information sharing, and
- Care planning for patients with chronic disease and complex conditions.

A number of initial steps and recommendations were suggested to adopt the digital health foundations and advance existing capabilities across all stakeholders. In addition to the digital health foundation recommendations, further options and additional next steps were highlighted under each of the key focus areas.

The outcomes and recommendations regarding these focus areas have been justified based on the Phase 3 Market Analysis activities. Key outcomes from the report (PwC, 2018, p. 9) are captured below.

Key outcomes of the Western Queensland Architecture Analysis project

Referral Management	Shared Care Plans	Information Sharing
<p>The target eReferral solution will need to support the PHN's reporting requirement that is currently being delivered by the referRHEALTH application.</p> <p>Adopt the Queensland Health GP Smart Referrals project, as the cost to implement will be significantly less than procuring a separate product within Western Queensland, and will provide consistency in referrals throughout all of Queensland.</p> <p>The product selected for the GP Smart Referrals project will have a high level of capability, and alignment to the Queensland Health environment and interoperability with GP Practice management solutions.</p> <p>While waiting for the GP Smart Referrals solutions the WQPHN's referRHEALTH solution could be enhanced to support additional specialty referral types and enhanced usability e.g. pre-population through integration with practice management software.</p>	<p>There are a number of products that could deliver a Shared Care Plan capability for the health organisations in Western Queensland.</p> <p>Three main recommendations should be considered when pursuing activities for deliver a Shared Care Plan capability in Western Queensland.</p> <ol style="list-style-type: none"> 1. Detailed requirements for assessment and evaluation are required. Alternatively high level requirements could be provided and allow the market to respond with options for delivery. 2. The Shared Care Plan should use a risk stratification tool to target the chronic disease cohort to be managed in the solution. 3. All organisations need to discuss and align on a method to gain patient consent. 	<p>There are a variety of products and deployment models that can support information sharing across organisational boundaries.</p> <p>Five recommendations for next steps have been suggested.</p> <ol style="list-style-type: none"> 1. Gather business requirements and needs from all participating healthcare organisations in Western Queensland. 2. A working group should be established to identify the key patient clinical information that is considered of importance for Western Queensland providers. 3. Stakeholders should support the South West HHS trial of the Whiteboard product, in order to determine its fit for purpose. 4. Keep a watching brief of the dbMotion implementation in South West Sydney PHN, which is not due to go live until August 2018. 5. External Healthcare providers across Western Queensland should consider approaching Queensland Health about access to 'The Viewer'.



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Limitations The HNA has relied on national and state-level data, HHS, LGA, some community level data which have been drawn from multiple data sources, which can vary from source to source. This can generate differences between data sets, which can result in slight variations in data outcomes. The geographical boundary of the WQPHN was defined by the geographical boundaries of the three HHSs. In turn, the HHSs boundaries are defined by LGAs which enabled data in most instances to be grouped under each CLs, HHS and the PHN where appropriate. However, the PHN and HHS boundaries are not as well aligned with SA2 and statistical division level boundaries which has impacted on some of the analyses. Synthetic (modelled) data estimates have also been used with some datasets and should be used with caution and treated only as indicative. Care has been taken in the WQPHN health intelligence portal to concord each data source across the geographic area for which it was recorded. This means that in some instances, data may be viewed for a much smaller area than it was published at. Therefore, caution should be exercised in drawing strong conclusions from the data, particularly in relation to small geographic areas.

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Western Queensland PHN acknowledges the traditional owners of the country on which we work and live and recognises their continuing connection to land, waters and community. We pay our respect to them and their cultures and to elders past and present.

Western Queensland PHN
07 45731900
admin@wqphn.com.au
www.wqphn.com.au
11 Barkly Hwy (PO Box 2791)
Mount Isa QLD 4825