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WESTERN NSW
An Australian Government Initiative

The Integrated Mental Health Atlas of Western NSW

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The report has been prepared through a consultancy process using specific methods outlined in the Framework section of this report. The Menzies Centre for Health Policy, University of Sydney and ConNetica have relied upon the information obtained through the consultancy as being accurate. Reasonable efforts have been made to obtain information from service providers across the region.

The information, statements, statistics and commentary (together the "information") contained in this report has been prepared by The Menzies Centre for Health Policy, University of Sydney and ConNetica from publicly available materials, materials provided by WNSW PHN, and various Mental Health and Alcohol and Other Drug service providers.

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Your contribution, combined experience and insights have helped build this Atlas, which we hope will be a useful reference document to guide future service planning and initiatives to best support the communities of Western New South Wales.

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Table of Contents

List of Tables

List of Figures

List of Appendices

Abbreviations and Definitions

Abbreviation	Definition
ABS	Australian Bureau of Statistics
AOD	Alcohol and Other Drugs
ARIA	Accessibility/Remoteness Index of Australia
ATAPS	Access to Applied Psychology Services
ATSI	Aboriginal and Torres Strait Islander
BSIC	Basic Stable Input of Care
CALD	Culturally and Linguistically Diverse
CCG	Clinical Commissioning Groups
CCM	Clinical Case Manager
D2DL	Day to Day Living program
DESDE-LTC	Description and Evaluation of Services and Directories in Europe for Long-Term Care
DoH	Department of Health
DSA	Disability Services Australia
ECT	Electro Convulsive Therapy
ED	Emergency Department
ERP	Estimated Residential Population
FACS	Family and Community Services
FACT	Flexible Assertive Community Treatment
GIS	Geographical Information System
GP	General Practitioner
HACC	Home and Community Care
HASI	Housing and Accommodation Support Initiative
HASI Plus	Housing and Accommodation Support Initiative Plus
ICD-10	International Statistical Classification of Diseases and Related Health Problems (10^{th} revision)
ICF	International Classification of Functioning
IRSD	Index of Relative Socio-economic Disadvantage

LGAs	Local Government Areas
LHD	Local Health District
MBS	Medicare Benefits Schedule
MHCSS	Mental Health Community Support Service
MHNIP	Mental Health Nurse Incentive Program
MHPU	Mental Health Policy Unit, Brain and Mind Centre, University of Sydney
MHSRRA	Mental Health Services in Rural and Remote Areas
MTC	Main Type of Care
NDIS	National Disability Insurance Scheme
NGO	Non-Government Organisation (or community service provider)
NSW	New South Wales
OST	Opioid Substitution Treatment
OT	Occupational Therapist
PC	Primary Care
PCLI	Pathways to Community Living Initiative
PHaMs	Personal Helpers and Mentors Program
PHN	Primary Health Network
PIR	Partners in Recovery
SA3	Statistical Area Level 3
SEIFA	Socio Economic Indexes for Areas
SEM	South Eastern Melbourne
SEMPHN	South Eastern Melbourne Primary Health Network
SMHSOP	Specialist Mental Health Services for Older People
SRS	Supported Residential Service
WHA	World Health Assembly
WHO	World Health Organisation
WNSW	Western New South Wales
Western NSW LHD	Western NSW Local Health District

WNSW PHN	Western New South Wales Primary Health Network

Executive Summary

Australians that live with serious mental illness and those struggling with drug and alcohol issues continue to grapple with a disconnected, complex and fragmented health and social service system.

The 2014 National Review of Mental Health Programmes and Services by the National Mental Health Commission drew attention to the need of local planning of care for people with a lived experience of mental illness in Australia and the relevance of a bottom-up approach to understanding “services available locally [in] the development of national policy”. It also called for responsiveness to the diverse local needs of different communities across Australia (NHMC, 2014).

The findings from the National Review were in line with the recommendations presented by the New South Wales (NSW) Mental Health Commission in the report Living Well: A Strategic Plan for Mental Health in NSW 2014-2024. Living Well identified that Local Health Districts (LHD) and primary care organisations such as Medicare Locals and their replacement Primary Health Networks (PHNs) should implement strategies to ensure that scarce clinical skills are employed to the best effect and harness new technology to support clinicians and service providers with new tools to improve care, data collection and information sharing.

The creation of this Integrated Mental Health Atlas of Western New South Wales aligns with these recommendations. The Atlas uses a standard classification system, the "Description and Evaluation of Services and Directories in Europe for long-term care" model (DESDE-LTC), to describe and classify mental health and alcohol and drug services. It builds on and extends the 2015 Integrated Atlas of The Far West (Salvador-Carulla et al, 2015) across the entirety of the WNSW PHN region.

By utilising this internationally recognised and evidence-based tool as its supporting methodology, it is possible to derive benchmarks and comparisons with other regions both within Australia and internationally, including remote and rural areas of Country Western Australia. Integrated Atlases allow policy planners and decision makers to understand the landscape in which they work (including areas of gap or over-supply). This provides a sound basis for long-term service planning and development and significantly advances efforts towards integrated care and achieving improved outcomes for all service users.

The WNSW PHN region encompasses a land area of approximately 441,000 square kms, with Broken Hill located to the far west border of the state, moving inland to the populated towns of Dubbo, Orange and Bathurst. The total population of WNSW PHN region is 310,610 (PHIDU, 2016). Density varies widely across the region, with ratios varying from 147.25 for Orange down to 0.07 in Bourke. The percentage of people identifying as Aboriginal or Torres Strait Islander in the WNSW PHN region is above the Australian average (3.1%) for most of the region.

Data collection for this Atlas took place in May and June of 2017.

The Atlas has identified some major strengths in the provision of mental health and alcohol and other drug care across the WNSW PHN region:

- Good availability of hospital based inpatient Residential and Non-Acute Outpatient mental health care,
- Good spatial distribution of Outpatient Care across the entire region, particularly Non-Mobile Outpatient mental health care (including the RFDS outpatient clinics),

- Relatively strong availability of Day Care in the Western NSW LHD area, although this is lacking in the Far West LHD Region,
- A good range of Carer specific services including respite, and
- The presence of a range of Aboriginal and Torres Strait Islander specific services.

On the other hand, the Atlas also identified some gaps for further exploration:

- A lack of specific services for older people,
- A lack of Day Care across the Far West LHD region,
- An apparent lack of mental health services specifically identified as providing Acute Outpatient Care,
- A lack of community based residential options, including residential rehabilitation and Sub-Acute Care as alternatives to hospital based care,
- A relatively high dependence on small teams of staff and reported difficulties in recruiting suitably experienced and skilled staff, and
- Relative oversupply of hospital based Non-Acute and Sub-Acute mental health care.

When considering the above gaps, it should be noted that in rural and remote areas, it is common for smaller teams to be required to multi-task across varying levels of acuity and intensity and to service different target populations. As such, many teams identified as providing Non-Acute care will also be providing Acute care. Additionally, some teams are providing care to all age groups and so are described as a generalist rather than age specific service, even though some of these teams will contain specialised youth or older adult clinicians. These nuances are more easily discerned when remote areas are compared with other remote areas.

For WNSW PHN, the creation of this Atlas provides greater awareness and understanding of the local infrastructure and the opportunity to best target its resources to meet population needs on a regional basis. This will allow it to work in partnership with service providers in its region to apply targeted, cost efficient interventions, to try new approaches and to innovate across the continuum of mental ill-health and Alcohol and Other Drugs (AOD) to best support the health and wellbeing of its community.

1. Introduction

There has been considerable reform in mental health science, treatment and care over the last four decades, both internationally and within Australia. Much of the philosophy of mental health care reform has been built on key principles of community psychiatry, with four linked areas of action (Vazquez-Bourgon et al, 2012):

i. deinstitutionalisation and the end of the old model of incarceration in mental hospitals

ii. development of alternative community services and programs

iii. integration with other health services, and

iv. integration with social and community services.

More recently this has also included a focus on recovery orientation and person-centred care (Ibrahim et al, 2014).

Australia started this journey of reform in 1983, with David Richmond's report on care for people experiencing mental ill-health and intellectual disabilities in New South Wales: Inquiry into Health Services for the Psychiatrically Ill and Developmentally Disabled. It took a further 10 years and the Human Rights Commission inquiry (The Burdekin Inquiry) to establish the first National Mental Health Strategy (Mendoza et al, 2013). Since then, there have been considerable systemic changes made, including the closure or downsizing of many large psychiatric hospitals, the development of the community Mental Health movement (NMHC, 2014), the implementation of the National Disability Insurance Scheme (NDIS) and the introduction of Primary Health Networks as commissioners of Mental Health services.

The journey is therefore still very much in progress and the application of reform has been patchy. For example, the Australian Mental Health system still has high rates of readmission to Acute Care, with at least 46% of patients hospitalised being readmitted during the year following the admission (Zhang et al, 2011). There are also high rates of compulsory community treatment orders, ranging from 30.2 per 100,000 population in Tasmania to 98.8 per 100,000 population in Victoria (Light et al, 2012) and high rates of seclusion with 10.6 seclusion events per 1,000 bed days in 2011-12 (AIHW, 2015). These features are associated with a system characterised by a fragmented, hospital-centric, incohesive provision of care. It has been argued that a clear service model is lacking, that reform has not been informed by evidence, and that quality and access to care is a lottery dependent on postcode (Mendoza et al, 2013).

There is also increasing recognition of parallels between mental health and drug and alcohol use, both at an individual and health system level. Mental health and drug and alcohol issues often cluster as comorbidities, and the historical demarcation between the mental health and drug and alcohol sectors has begun to lessen. Many of the principles around mental health reform have relevance to the delivery of drug and alcohol services also.

1.1 What are Integrated Atlases

The World Health Organisation (WHO) Mental Health Gap Action Program (mhGAP) has highlighted the need for a comprehensive and systematic description of all the mental health resources available and the utilisation of these resources (WHO, 2008). It is not only important to know the numbers of services in each health area, but also to describe what they are doing and where they are located. This information also enables an understanding of the context of health-related interventions that are essential for the development of evidence-informed policy (Health Foundation, 2014).

This is further supported by one of the key recommendations made by the National Review of Mental Health Programmes and Services by the National Mental Health Commission (NMHC, 2014), being the need for comprehensive mapping of mental health services.

The National Review drew attention to local level of mental health planning in Australia and the relevance of a bottom-up approach to understanding "services available locally [in] the development of national policy". It also called for responsiveness to the diverse local needs of different communities across Australia:

> *"Mental Health Networks, in partnership with Local Health Networks, should conduct comprehensive mapping of mental health services, programmes and supports available in regional, rural and remote areas through Commonwealth, state and territory and local governments, private and not-for-profit sectors." (NMHC, 2014, p. 84)*

The 'integrated care model' has challenged the way health-related care should be assessed and planned (Goodwin, 2016). It enables us to identify new routes for linked, consumer-centred approaches to care. Greater integration relies on a global picture of all the services available, regardless of which sector is funding them (i.e. Health, Social Welfare and Family, Employment, Criminal Justice). Such 'systems thinking' enables policy planners to capture the complexity of service provision holistically and ensures that planning of health services accounts for contextual factors that might affect its implementation and sustainability (context analysis). It offers a comprehensive way of anticipating synergies and mitigating problems and barriers, with direct relevance for creating policies that integrate the different systems of care (De Savigny & Adam, 2009; Aslanyan et al, 2010). This is particularly important in the social and disability care sector, which is characterised by increasing personalisation of services and care coordination programs such as Partners in Recovery (PIR) and the transfer of social services to the NDIS. Indeed, there are only a handful of locations across Australia to systematically develop an innovative, system wide and sustainable service model for providing coordinated and integrated care services (NSW Health, 2014).

The 'balanced care model' is also relevant to the development and application of integrated care and health atlases. Thornicroft and Tansella (2013) suggest that a balance between hospital and community care is needed for adequate mental health care, and that (i) outpatient clinics, (ii) community mental health teams (CMHTs), (iii) acute inpatient services, (iv) community residential care and (v) work/occupation, need to be developed in all countries.

The evidence between social determinants and mental disorders has also grown in the past 15 years. Poverty, and its bedfellow's unemployment and social exclusion, are all positively associated with common mental disorders (WHO & Calouste Gulbenkian Foundation 2014; Lund et al. 2011). The social determinants of health are similarly implicated in other health related behaviours such as excessive alcohol consumption and drug use (Marmot & Allen, 2014), as well as in comorbidities between mental health and substance use disorders (Salom et al, 2014).

An emerging hypothesis linking social status and mental disorders focuses on the frequency, severity and duration of stressful environments and experiences. It goes on to propose that these adverse experiences can be cushioned by, what might be termed, personal and social scaffolding – self-agency, self-regulation, emotional, informational, social connections and instrumental resources (Bell et al, 2013; ConNetica, 2015).

Within these broad social and service contexts, Integrated Atlases are powerful tools for service planning and decision-making, particularly in times of fiscal constraint. These Integrated Atlases include detailed information on social and demographic characteristics and health-related needs, as well as data on service availability and care capacity. Atlases detect gaps and benchmark areas for change. Whilst the Integrated Atlases developed around the world to date have most often focused on mental

health, the methodology and taxonomy can be applied to a range of health issues, and the coupling of mental health and alcohol and other drugs within an Integrated Atlas has now been undertaken in several Australian states, whilst homelessness services have been mapped in the South Eastern Melbourne PHN region, and chronic disease services will soon be mapped in Dubbo and Coonamble LGAs in the Western NSW LHD area. Integrated Atlases allow comparison between areas, highlighting variations, and detecting gaps in the system. The holistic service maps produced through an Integrated Atlas also allow policy planners and decision makers to build bridges between the different sectors and to better allocate services (Salvador-Carulla et al, 2013).

The Importance of Context

Evidence-informed policy combines 'global evidence' available from around the world with 'local evidence' from the specific setting in which decisions and actions will be taken. This includes a detailed analysis of the area, considering the prevalence of mental health problems and other demand driven indicators, together with the availability of resource (Oxman et al, 2009).

It is important however to highlight that evidence alone does not make decisions. An in-depth understanding of the local context is crucial to the implementation of any new strategy and local context and relevance shapes the lens through which policy makers appraise the salience of evidence (Oliver et al, 2014). Evidence has to be also valued and filtered by the policy makers and lack of perceived relevance is a frequently cited barrier to the uptake of evidence by policy makers (Oliver et al, 2014). Evidence must also be supported and supplemented by the knowledge and experience of the people working within and those using the services, provided by the system.

It is expected that the Integrated Mental Health Atlas of Western NSW will support a systems approach to planning and, consequentially, improve the provision of care through facilitating the integration and coordination of services, both in terms of service commissioning and delivery. Ultimately this will be reflected in the quality of care provided and in the longer term, better health outcomes for people with a lived experience of mental illness and/or alcohol or drug issues.

2. Framework

2.1 How was the Integrated Atlas of Mental Health Assembled?

Typically, atlases of health are formed through lists or directories of services and the inclusion of services is based on their official or everyday titles. This is particularly problematic for several reasons (Salvador-Carulla et al, 2011).

1. The wide variability in the terminology of services and programs even, in the same geographical area, and the lack of relationship between the names of services and their actual functions (e.g. day hospitals, day clinic), as the service name may not reflect the actual activity performed in the setting; and,
2. The lack of a common understanding of what a service is. The word ‘service’ is an umbrella term that is used to describe very different components of the organisation of care. It merges permanent, highly structured services, with clinical units, or even short-term programs and interventions.

DESDE-LTC

To overcome these limitations, in this project, the "Description and Evaluation of Services and Directories in Europe for Long-Term Care" (DESDE-LTC) has been used (Salvador-Carulla et al, 2013). This is an open-access, validated, international instrument for the standardised description and classification of services for Long Term Care (LTC). Whilst originally developed around health issues requiring long term care, the application of the DESDE-LTC across Mental Health (and AOD) in Australia necessarily includes services across a spectrum of care intensity and duration.

The DESDE-LTC includes a taxonomy tree and coding system that allows the classification of services in a defined catchment area according to the main care structure/activity offered, as well as the level of availability and utilisation. It is based on the activities, not the name of the service provider. The classification of services based on the actual activity of the service therefore reflects the real provision of care in a defined catchment area.

It is important to note that in research on health and social services there are typically different units of analysis and that the Integrated Atlas requires that comparisons must be made across a single and common ‘unit of analysis’ group. Different units of analysis include: Macro-organisations (e.g. Local Health Networks), Meso-organisations (e.g. Hospitals), and Micro-organisations (e.g. Services). It could also include smaller units within a service: Main Types of Care, Care Modalities, Care Units, Care Intervention Programs, Care Packages, Interventions, Activities, Micro Activities or Philosophy of Care.

Analysis based on DESDE-LTC is focused on the evaluation of the service delivery teams or Basic Stable Inputs of Care (BSIC).

2.2 Basic Stable Inputs of Care

A Basic Stable Input of Care (BSIC) is best described as a discrete team of staff working together to provide care for a group of people. It could also be described as a service delivery team.

These teams must have time stability (typically they have been funded for more than three years or have funding secured for three years) and structural stability. Structural stability means that they have administrative support, and two of the following: their own space (which can be in a shared office), their own finances (for instance a specific cost centre) and their own forms of documentation (i.e. they collect data and produce reports on their service activities). There are several criteria that help to define a BSIC (Table 1).

TABLE 1 BASIC STABLE INPUT OF CARE CRITERIA

Criterion		
A	Has its own professional staff	
B	All activities are used by the same clients	
C	Time continuity	
D	Organisational stability	
	D.1	The service is registered as an independent legal organisation (with its own company tax code or an official register). IF NOT:
	D.2	The service has its own administrative unit and/or secretary's office and fulfils two additional descriptors (see below) -> If NOT:
	D.3	The service fulfils three additional descriptors
		D3.1 It has its own premises and not as part of other facility (e.g. a hospital)
		D3.2 It has separate financing and specific accountability (e.g. the unit has its own cost centre)
		D3.3 It has separated documentation when in a meso-organisation (e.g. end of year reports)

Classification of BSIC

Once BSIC are identified using the above criteria the Main Types of Care (MTC) they provide are examined and classified.

Each BSIC is classified by using one or more codes based on the MTC they deliver. Some services might include a principal structure or activity (for example a 'Residential' code) and an additional one (for example, a 'Day Care' code).

There are six main classifications of care within the DESDE-LTC, as described below (Figure 1).

Residential Care - Used to classify facilities which provide beds overnight for clients for a purpose related to the clinical and social management of their health condition. These include Inpatient hospital wards, crisis shelters, residential rehabilitation services and inpatient withdrawal units. Residential Care is divided into Acute and Non-Acute branches (Figure 2).

Day Care - Used to classify facilities which: (i) are normally available to several clients at a time (rather than delivering services to individuals one at a time); (ii) provide some combination of treatment for problems related to long-term care needs (e.g. providing structured activities or social contact/and or support); (iii) have regular opening hours during which they are normally available; and (iv) expect clients to stay at the facility beyond the periods during which they have face to face contact with staff, these include the more traditional long-stay day programs (Figure 3).

Outpatient Care - Used to code care provided by service delivery teams which: (i) involve contact between staff and clients for some purpose related to the management of their condition and associated clinical and social needs; and (ii) are not provided as a part of delivery of residential or day services, these include outreach services (Figure 4). Quite often Outpatient Care also involves the provision of information and support to access other types of care.

Accessibility to Care - Classifies service delivery teams whose **main function** is to facilitate access to care for clients with long-term care needs. These services do not provide any therapeutic care and include care co-ordination services (Figure 5).

Information for Care - Used for service delivery teams whose **main function** is to provide clients with information and/or assessment of their needs. Services providing information are not involved in subsequent monitoring/follow-up or direct provision of care, these include many telephone information and triage type services (Figure 6).

Self-help and Voluntary Care - Used for BSIC which aim to provide clients with support, self-help or contact, with un-paid staff that offer any type of care as described above (i.e. Residential, Day, Outpatient, Accessibility or Information) (Figure 7).

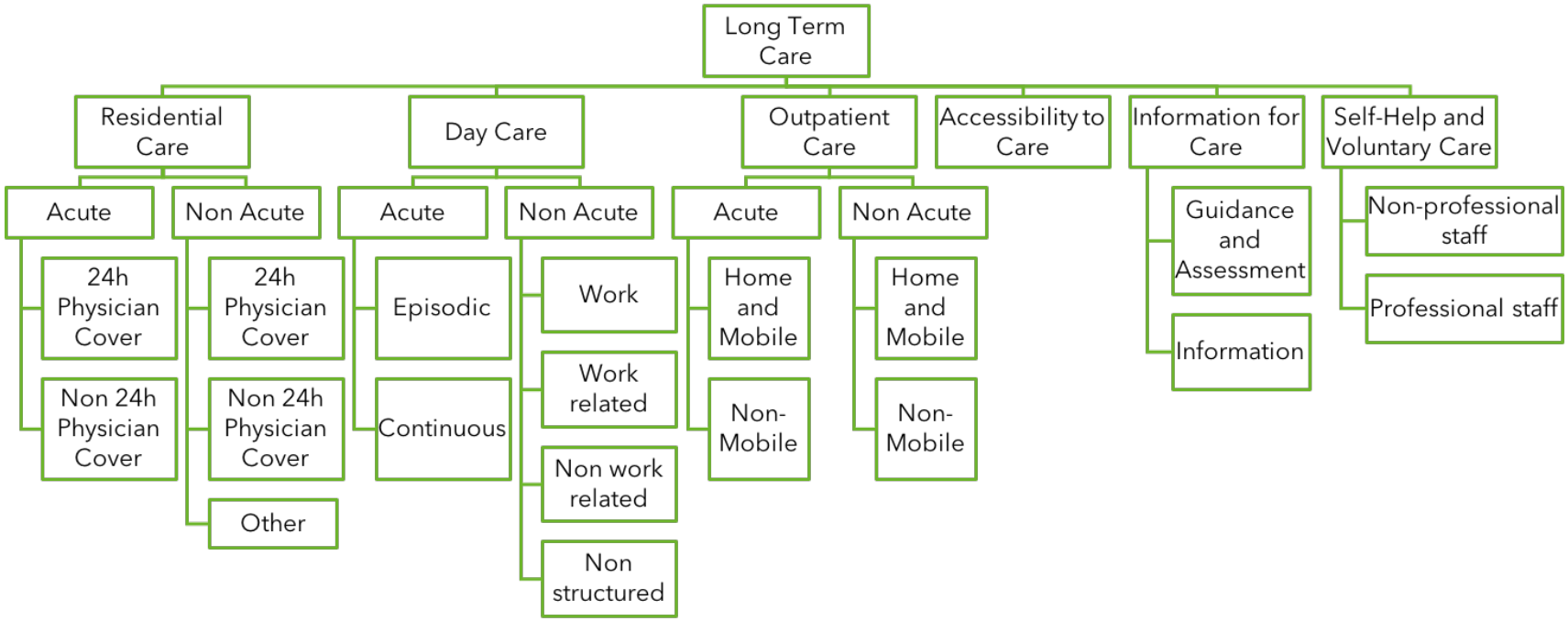


FIGURE 1 MAIN TYPE OF CARE - CORE VALUES

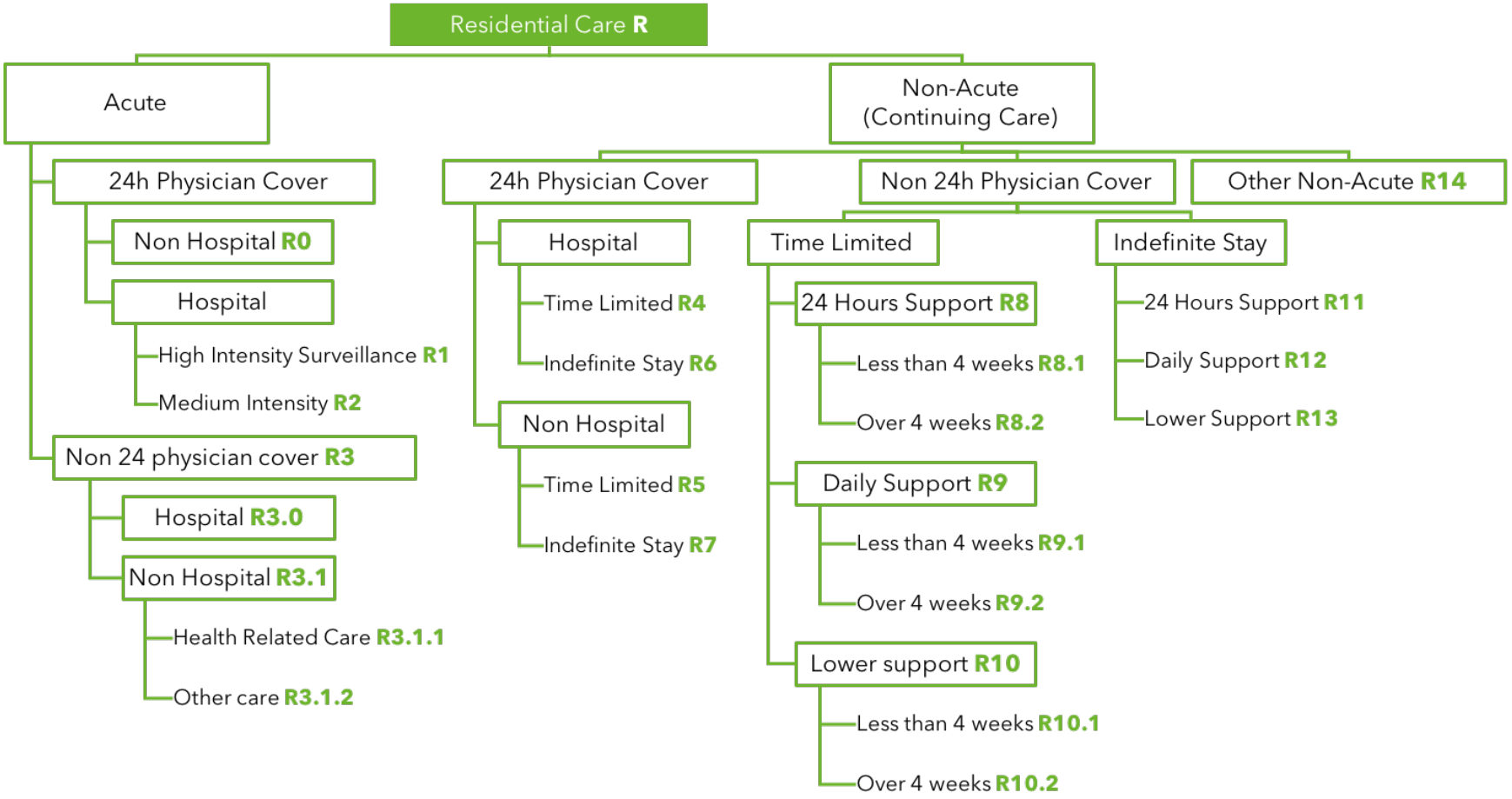


FIGURE 2 RESIDENTIAL CARE CODING BRANCH

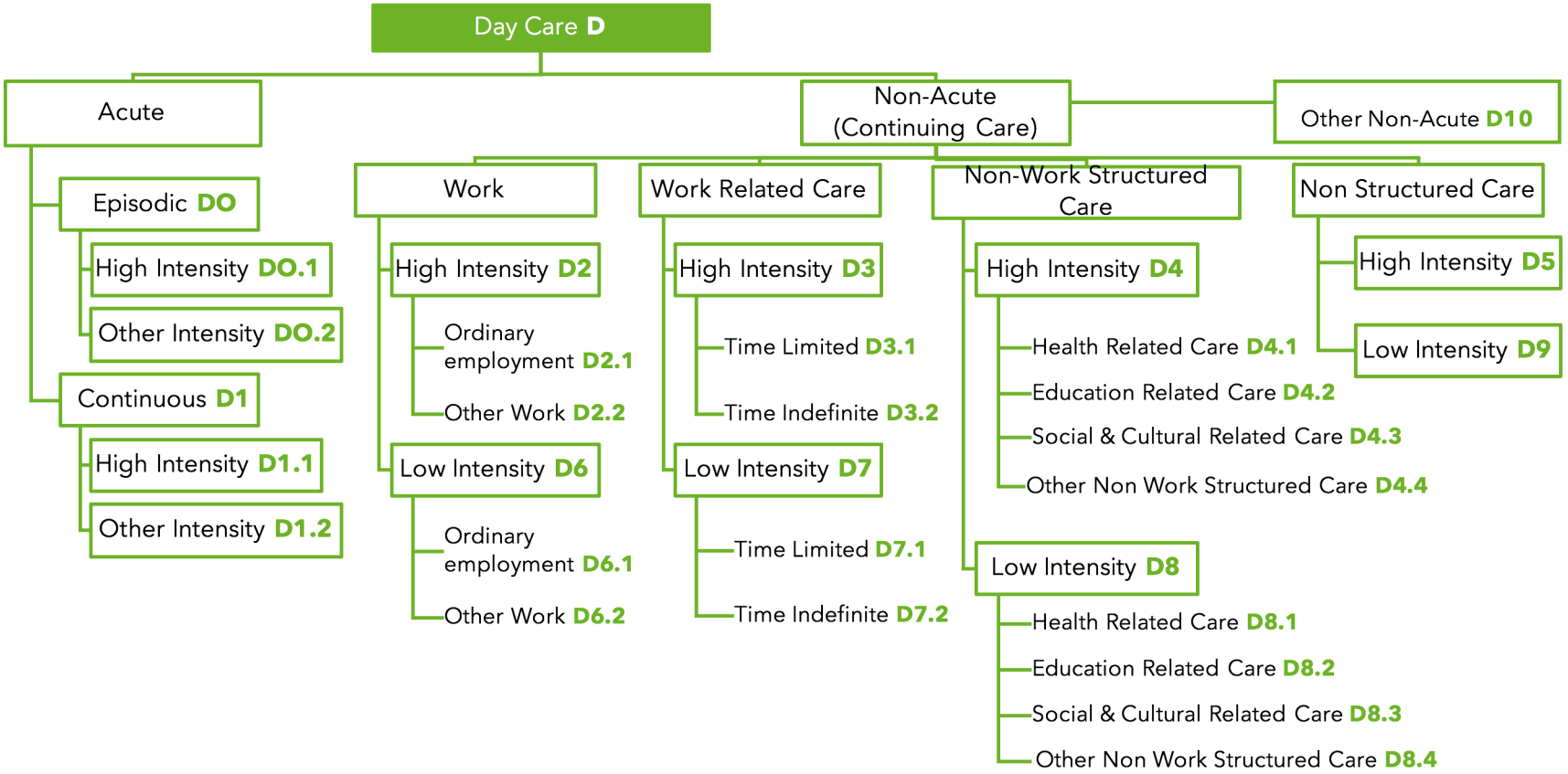


FIGURE 3 DAY CARE CODING BRANCH

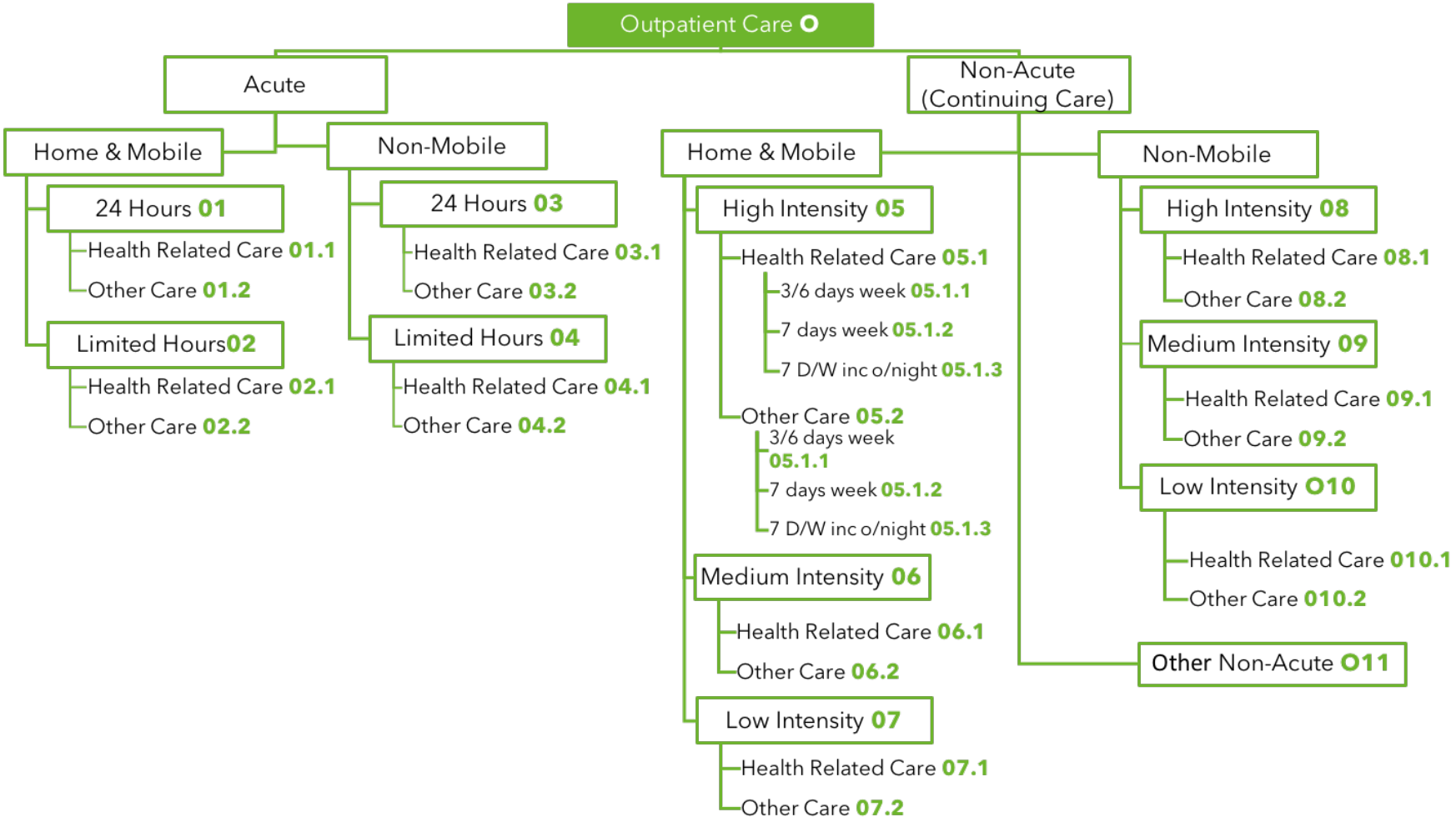


FIGURE 4 OUTPATIENT CARE CODING BRANCH

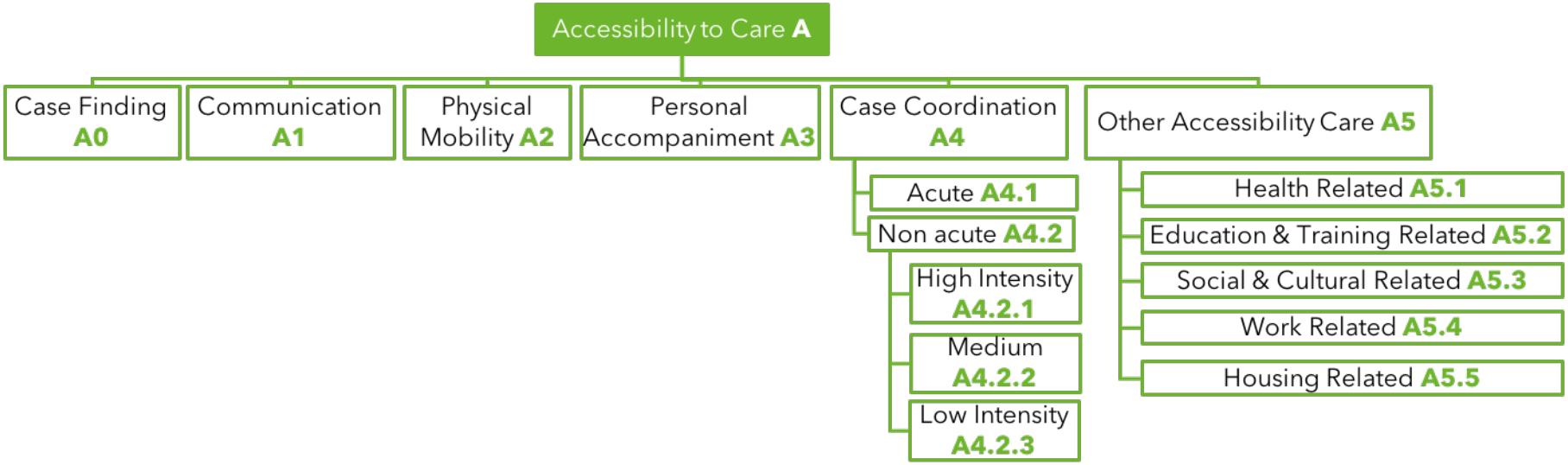


FIGURE 5 ACCESSIBILITY TO CARE CODING BRANCH

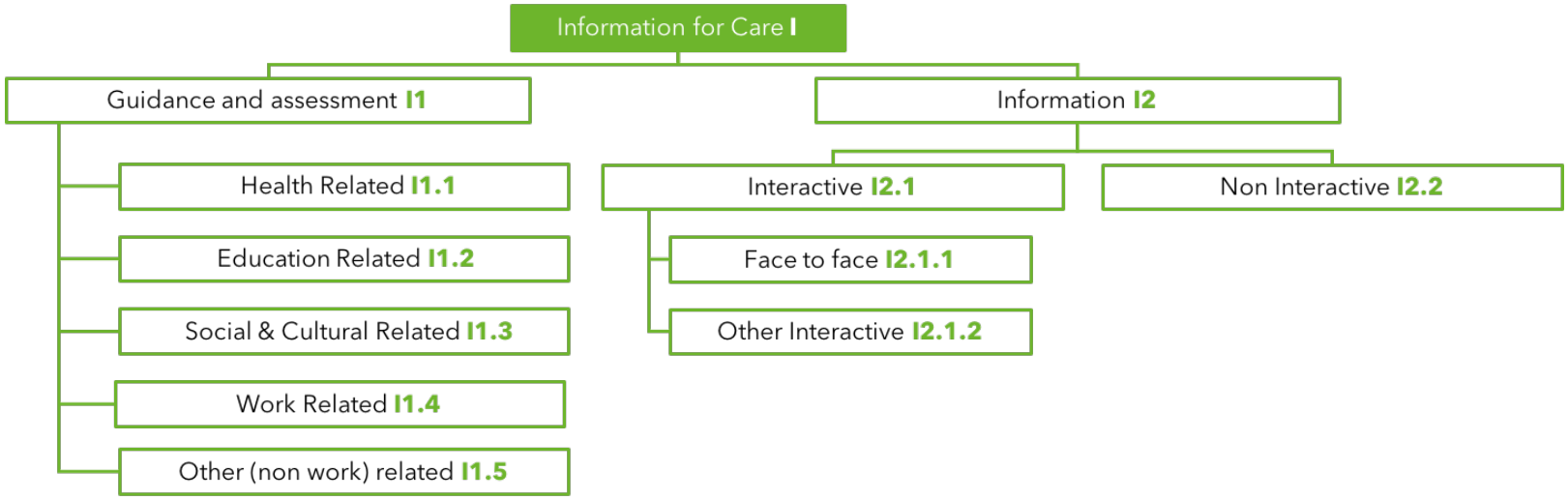


FIGURE 6 INFORMATION FOR CARE CODING BRANCH

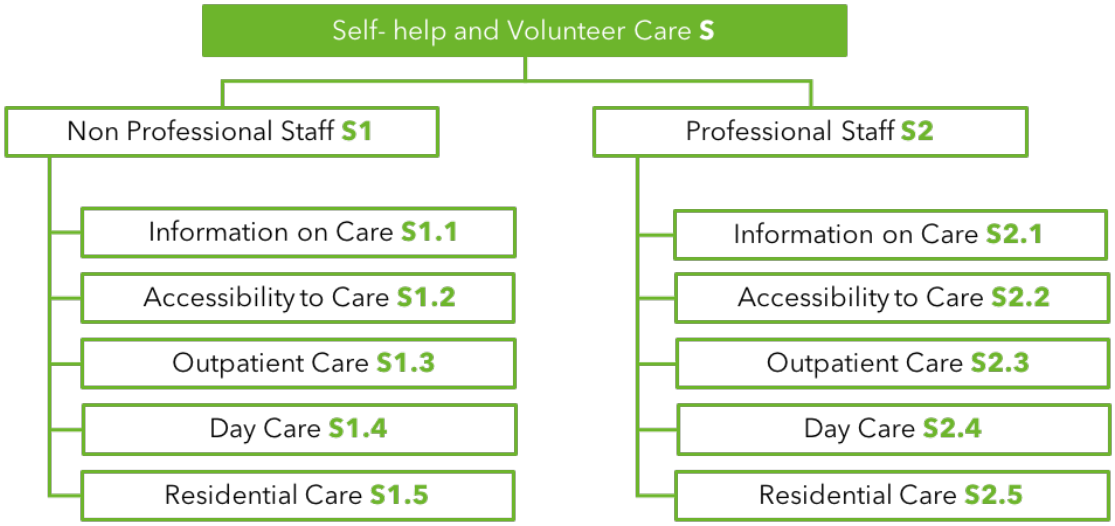


FIGURE 7 SELF-HELP AND VOLUNTEER CARE CODING BRANCH

2.3 Inclusion Criteria

The Integrated Atlas has clear inclusion criteria to ensure consistency and comparability across Atlases created using the DESDE methodology, both internationally and across Australia.

To be included in the Atlas a service has to meet certain inclusion criteria:

The service is specialised - The service must specifically target people with a lived experience of mental ill-health, or AOD. That is, the primary reason for using the service is for treatment of mental ill-health or AOD related issue. This excludes generalist services that may lack staff with specialised mental health or AOD training and experience.

The service is universally accessible - The Atlas focuses on services that are universally accessible, regardless of whether they are publicly or privately funded. Only services that do not have a significant out-of-pocket cost are included. Despite the availability of Medicare-subsidised mental health-related services, access to most private mental health services in Australia requires an individual to have private health insurance coverage, higher income or savings. The inclusion of private providers would give a misleading picture of the resources available to most people living with mental health issues and obscures the data for evidence informed planning of the public health system.

Most private services have some level of public funding, for example, Medicare provides some subsidies for private hospitals or community-based psychiatric specialist services. Details in relation to this subsidisation is outlined further in the section on Access to Allied Psychological Services (ATAPs) and Medicare Benefits Schedule (MBS). Within the WNSW PHN catchment there are several private hospital services that work closely with public mental health service providers. However, these were not within the scope of this Atlas and have not been mapped. It is possible and would be useful in future mapping exercises to include an additional layer of private service mapping to inform those who can afford private health care and for planning and to support integration between the public and private sector. However, as a baseline the importance of establishing the nature of universal and equitably accessible health care necessitates that these maps remain distinct.

The service is 'stable' that is, it has or will receive funding for more than three years - The inclusion of stable services guarantees that the mapping reflects the robustness of the system as a basis for evidence informed planning. As such services that are pilot projects or are provided through short term grants are excluded. However, there is an appreciation that the current environment is one where there is significant uncertainty around the continuation of funding streams at both State and Federal level. As such, some flexibility has been applied with this criterion. For example, services were included where they were considered to be ongoing, or had been delivered over a long period of time, even when their ongoing funding may not be secured beyond one year.

The service is within the boundaries of WNSW PHN region - The inclusion of services that are within the boundaries of the WNSW PHN region is essential to have a clear picture of the local availability of resources.

The service provides direct care or support to clients - Services that were only concerned with the coordination of other services or system improvement, without any type of direct contact with people with a lived experience of mental ill-health, AOD issues were excluded.

2.4 Atlas Development Process

There were five key steps involved in the creation of the Integrated Mental Health and AOD Atlas for WNSW PHN (Figure 8).

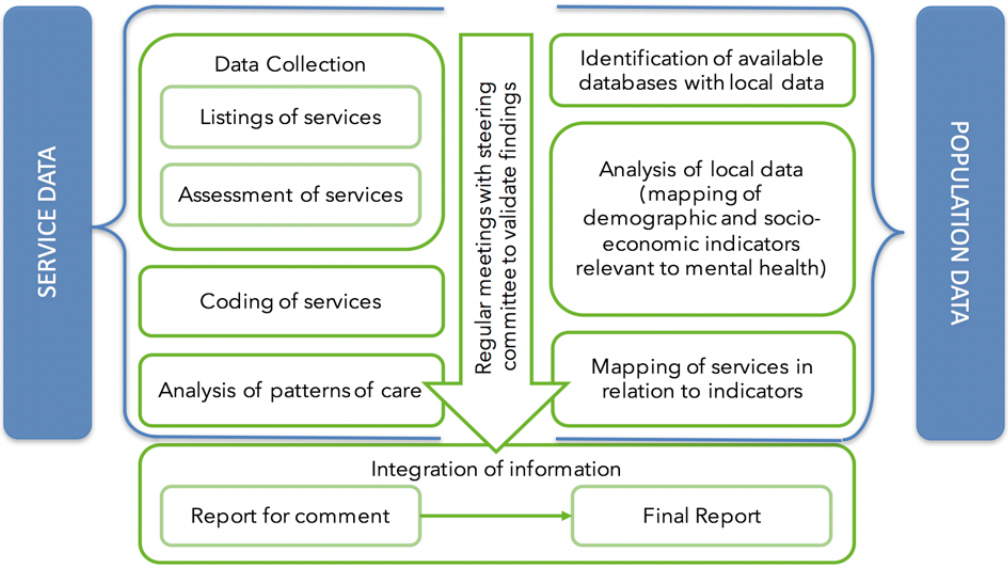


FIGURE 8 INTEGRATED MENTAL HEALTH AND AOD ATLAS DEVELOPMENT PROCESS

Step 1 – Ethics and Governance Approval

The Greater Western Human Research Ethics Committee (HREC) granted approval for the Integrated Mental Health Atlas of the Western NSW PHN Region as Project No. LNR/17/GWAHS/19 (GWAHS 2017-018). Site specific authorisation to conduct research within the Western NSW and Far West NSW Local Health Districts was granted on May 10, 2017.

Step 2 - Data Collection

The first step in the development of the Atlas was to undertake a range of meetings with the teams at WNSW PHN, the Commission, Department of Health, peak bodies and sector representatives to build a list of all services providing mental health and/or AOD care across the WNSW PHN area.

A preliminary examination of organisations on the list was undertaken to verify and pre-qualify where possible their appropriateness for inclusion in the Atlas. Following pre-qualification, a determination was made on how best to contact each organisation for the purposes of gathering the information necessary to create the Atlas.

The Integrated Atlas methodology provides the framework and template for the information that needed to be gathered. This included:

- basic service information (e.g. name, type of service, description of governance),
- location and geographical information about the service (e.g. service of reference, service area),
- service data (e.g. opening days and hours, staffing, management, economic information, legal system, user profile, number of clients, number of contacts or admissions, number of days in hospital or residential accommodation, number of available beds or places, links with other services), and
- additional information (e.g. name of coder, date, number of observations and problems with data collection).

This information was gathered through a range of means, including face to face interviews, telephone interviews and through an online survey tool. Direct contact is usually required at some point during the process to seek additional information and answer questions in order to support and verify classification decisions

Step 3 – Codification

Information gathered in step one was entered into a master spreadsheet, analysed and allocated a DESDE code (where the service delivery team meets the inclusion criteria). The work of each service delivery team was coded following the criteria defined in the DESDE-LTC, according to the MTC provided. Codes can be split into four different components and follow a standard format.

Client age group: This represents the main target group for which the service is intended or currently accessed by, using capital letters.

GX**	All age groups
CC	Only children (0-11 years)
CA	Only adolescent (12-17 years)
CX*	Child & Adolescents (0-17 years)
CY*	Adolescents and Young Adults (12-25 years)
TA	Period from adolescent to adult (16-25 years)
AX	Adults (18-65 years)
OX	Older adults (> 65 years)

*CX and CY are DRAFT codes utilised in this Atlas.

** Services frequently straddle multiple age ranges. For example, there is a large number of services that describe their target age groups as ‘8 years plus’, or ‘12 years plus’. In these cases, the services have been coded as General, unless it was apparent they did not include adults. Where it is evident these services mainly deal with adults, they were classified as AX.

An additional letter is added to the age code where a service is gender specific; for example, AXF is used to indicate a service is specifically targeted at females 18-64 years of age.

In the analysis section of this report, for simplification, the age codes are grouped as follows:

- Children and Adolescents (including young adults) – CC, CA, CX, CY and TA
- Adults (Including services with no age specification) – AX and GX
- Older Adults – TO and OX

ICD-10 Code: ICD-10 codes appear in brackets after the age group code but before DESDE-LTC code in order to describe the main diagnostic group covered by the service. For generalist mental health services, the code [F00-F99] is used, which means that the service includes all types of mental disorders rather than a specific disorder. If the service is not targeting Mental ill-health, but psychosocial problems (for instance with some child and adolescent services) the code [Z56-Z65] is used. Homelessness services use the code [Z59] and Alcohol and Other Drug services use [F10-F19]. If the client of the service is a child, but the professional is working with the family, the code [e310] (immediate family or carers) from the International Classification of Functioning (ICF) is used.

The key diagnostic codes used in this Atlas, with the two main codes used shown in bold, are:

F00-F99	**All types of Mental disorders**
F10-F19	**Alcohol and Other Drug disorders**
Z59	Problems related to housing and economic circumstances
F5	Delirium due to known physiological condition
F20-F29	Schizophrenia, schizotypal, delusional and other non-mood psychotic disorders
F50	Eating Disorders
F59	Unspec' behav' syndromes assoc' with physiological disturb' & physical factors
F63	Impulse Disorders
F64	Gender identity disorders
B20-B24	Human immunodeficiency virus [HIV] disease
e310	Services for immediate family or carers
Z04.71/2	Encounter for examination and observation following alleged physical abuse
Z20-Z29	Persons with potential health hazards related to communicable diseases
Z65	Problems related to other psychosocial circumstances
Z69	Encounter for mental health services for victim and perpetrator of abuse
Z70	Counselling related to sexual attitude, behaviour and orientation
Z72	Problems related to lifestyle
ICD – T	Used where there is not a specific diagnostic group for this service

DESDE-LTC code: The third component of the code is the core DESDE-LTC code which signifies the MTC. The services are classified according to their main type of care. The six main types of care are:

R Residential Care

D Day Care

O Outpatient Care

A Accessibility to Care

I Information for Care

S Self-Help and Voluntary Care

Qualifiers: In some cases, a 4th component may be incorporated to facilitate a quick appraisal of those characteristics of the services which may be relevant to local policy. The qualifiers used in these Atlas are:

a **Acute care (complimentary) –** Used where Acute care is provided within a Non-Acute, non-Residential setting but does not fit the criteria for the addition of a second MTC

c **Closed care –** Denotes secluded MTC with a high level of security (e.g. locked doors)

d **Domiciliary care** - Denotes this service is provided wholly at the home of the service user. Used for Hospital in the Home services for example.

e **eCare** - Includes all care services relying on telephone, modern information and communication technologies (ICTs) (e.g. tele-care/tele-medicine, tele-consultation, tele-radiology, tele-monitoring).

g* **Group -** This DRAFT qualifier is applied to Outpatient services that provide predominantly group activities and do not meet the criteria for a Day Care service (Typically 80% of their activity is through the provision of groups).

h **Hospital (care provided in a hospital setting) -** Describes non-Residential MTC ("O" or "D") provided within the hospital setting.

j **Justice care** - Describes BSIC whose main aim is to provide care to individuals in contact with crime and justice services.

l **Liaison care** - Describes liaison BSIC where specific consultation for a subgroup of clients from another area within the facility, e.g. mental health care to a cancer ward of a hospital.

m **Management –** Describes an MTC where management, planning, coordination or navigation of care a core part the provision of their Outpatient Care

r **Reference –** describes a MTC which operates as the main intake or referral point for the local area

s **Specialised care** - Describes BSIC for a specific subgroup within the target population of the catchment area (e.g. eating disorders service)

t **Tributary** – Describes an MTC that is a satellite team dependant on another main care team.

u **Unitary –** Describes an MTC that consists of only one team member.

*Draft qualifiers have been added to tailor the Atlas more precisely to the local environment. These will be formally processed for inclusion into the international DESDE-LTC tool at its next revision.

Example:

A Sub-Acute mental health forensic unit in a hospital for adults with lived experience of mental illness will receive the following code: AX[F00-F99] - R4j (Figure 9).

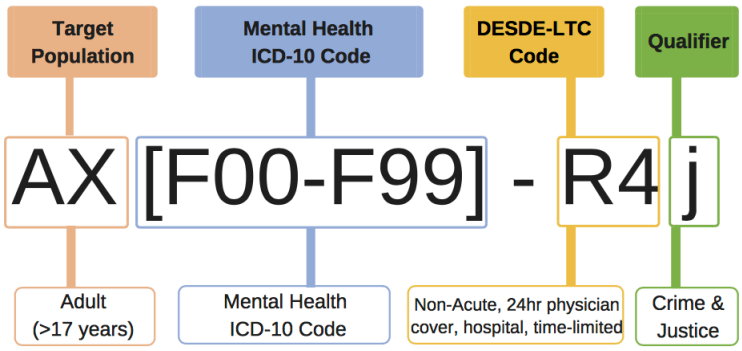


FIGURE 9 CODE COMPONENTS EXAMPLE

To assist the reader, a DESDE-LTC Quick Reference Guide has been included See Appendix A. This can be removed and laminated to use as an interpretation guide whilst reading the Atlas.

Step 4 - Mapping the BSIC

The next step in the construction of the Atlas was to map the supply of mental health and AOD services in relation to indicators of potential demand within the WNSW PHN area. To achieve this step, the BSIC data was exported into a Geographic Information System (GIS) for visualisation.

Step 5 - Description of the Pattern of Care - Service Availability and Capacity

The availability of services was analysed according to their MTC as well as their capacity.

Availability - Defined as the presence, location and readiness for use of service delivery teams in a catchment area at a given time. A service is available when it is operable or usable upon demand to perform its designated or required function. The availability rate for the MTC is calculated per 100,000 of the target population. For example, for services for children and adolescents the estimated residential population of children and adolescents is used.

Placement Capacity – This is the maximum number of beds in Residential Care and places in Day Care in a care delivery organisation or a catchment area at a given time. Rates are also calculated per 100,000 of the target population.

Spider Diagrams –To understand the balance between the different types of care offered in an area a radar chart tool, also referred to as a spider diagram is used. The spider diagram is essentially a tool to visually depict the pattern of care in an area. Each of the 21 points on the radius of the diagram represents the number of MTC for a particular type of care per 100,000 population.

This analysis allows for comparisons of the availability and capacity rates with other areas and to estimate whether the provision of services is adequate with regard to the populations' needs. The WNSW PHN region has been compared with Western Australia, Western Sydney PHN, North Brisbane PHN and Central and Eastern Sydney PHN within Australia and with Barcelona and Finland internationally.

Information on European countries has been developed as part of the Refinement Project, funded by the European Commission (The Refinement Project Research Consortium, 2013).

3. Western NSW PHN Catchment

The WNSW PHN region encompasses a land area of approximately 441,000 square kms, with Broken Hill located to the far west border of the state, moving inland to the populated towns of Dubbo, Orange and Bathurst. The geographical boundaries for the WNSW PHN region are displayed in Figure 10.

The Far West Local Health District (LHD) borders three states and covers 194,949 square kilometres in remote NSW. This LHD is the most sparsely populated LHD in NSW and has the highest proportion of Aboriginal residents (9.6%). Approximately 62% of its 28,510 inhabitants live in the Silver City of Broken Hill. The remainder of the population live in agricultural towns along the Murray River, in small remote communities of 80-800 people or on stations throughout the LHD. The population is decreasing, ageing and experiencing significant morbidity related to lifestyle factors and chronic illness.

The Western NSW LHD covers around 250,000 square kilometres. This LHD is diverse with cities, inner regional, outer regional and remote communities. It has a population of 282,100 (as of the 2011 Census) which is projected to increase by 8% between 2011 and 2031, although this varies between its communities.

The Local Government Areas (LGAs) that are included in each LHD are listed in Table 2 and Figure 10 below.

TABLE 2 PLANNING AREAS WITHIN THE WNSW PHN REGION

LHD (Area)	LGAs	
Far West NSW	Broken Hill	Wentworth
	Central Darling	Unincorp. NSW
Western NSW	Bathurst	Lachlan (a)
	Blayney	Mid-Western
	Bogan	Narromine
	Bourke	Oberon
	Brewarrina	Orange
	Cabonne	Parkes
	Cobar	Walgett
	Coonamble	Warren
	Cowra	Warrumbungle
	Dubbo	Weddin
	Forbes	Wellington
	Gilgandra	

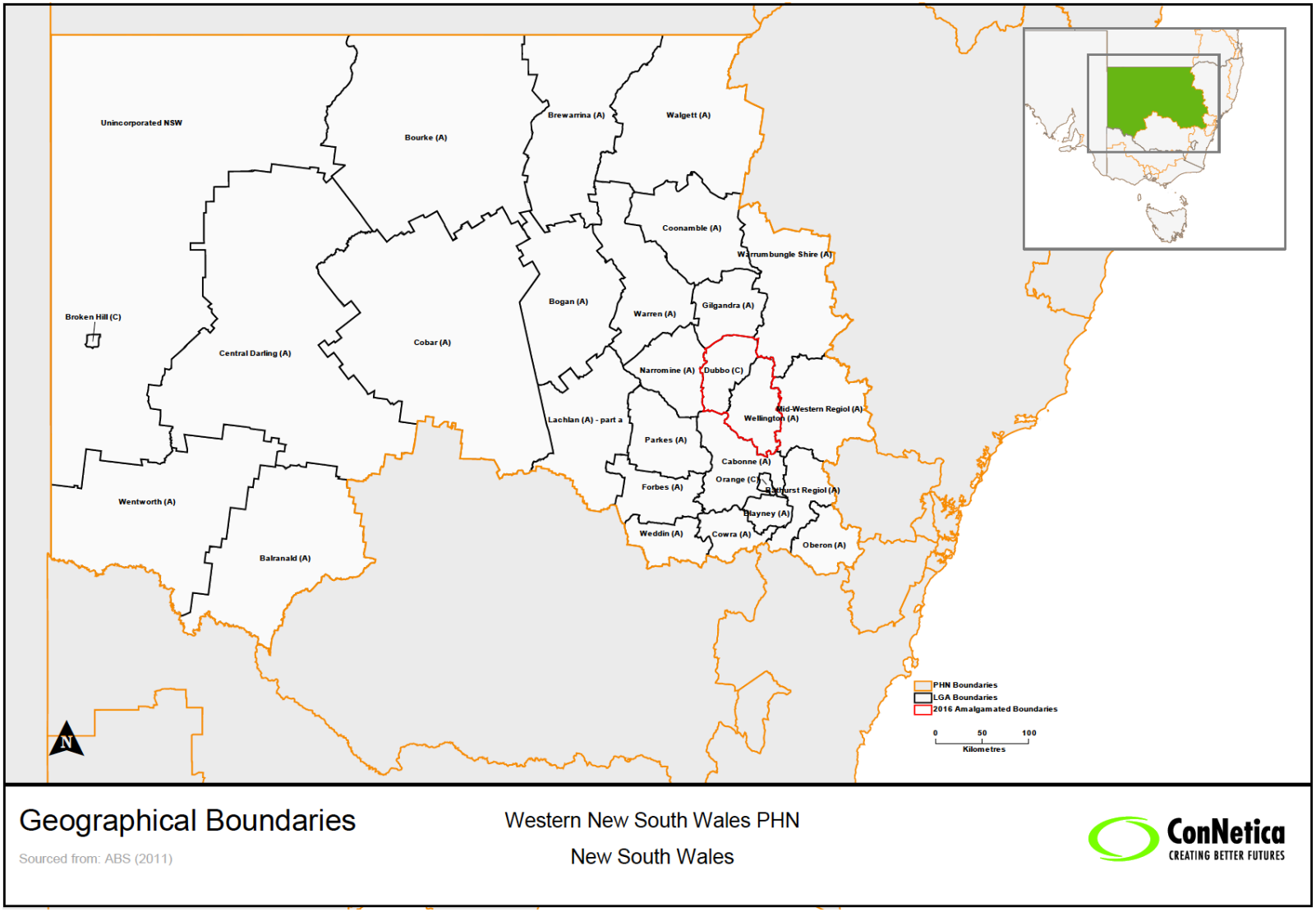


FIGURE 10 GEOGRAPHICAL BOUNDARIES OF THE WNSW PHN REGION

3.1 Population Health and Sociodemographic Indicators

The most recent publicly available data sources have been examined in relation to social, economic and demographic indicators for the WNSW PHN region. The primary data sources for this information were:

- 2011 Census of Population and Housing (ABS, 2011)
- Social Health Atlases of Australia (PHIDU, 2016), and
- Small Area Labour Market Data (Department of Employment, 2017).

Where data permitted, indicators have been reported at the level of LGA with comparison to the state and national averages. Geo-spatial mapping of data has been provided as within-catchment comparisons of each LGA contained within the WNSW PHN region, with the exception of socio-economic disadvantage which is presented as deciles, ranked nationally.

Throughout the Atlas the population is divided into discrete age groups to report rates of services per 100,000 target population. These age groups and respective populations are shown in Table 3.

TABLE 3 ATLAS POPULATION GROUPING

Target Population (Age in years)	N
Children and Adolescents (0-19)	84,212
Adults (20-65)	171,049
Older Adults (65 and above)	55,349
Total	**310,610**

Demographic Factors

For the purposes of this Atlas, a selection of indicators is provided to examine key at risk groups and create a demographic profile for the region (Table 4). Data related to these demographic indicators can be found in Table 5 and are mapped geographically in Figure 11 through Figure 13.

TABLE 4 DEMOGRAPHIC FACTORS EXAMINED

Indicator	Description	Calculation
Dependency Ratio	Portion of dependants (people who are too young or too old to work) in a population	Population aged 0-14 and >64 years / Population 15-64 years per 100 persons
Ageing Index	Indicator of age structure of population - elder-child ratio	Population >64 years / Population 0-14 years per 100 persons
Indigenous Status	People who identify as being of Aboriginal or Torres Strait Islander origin	Aboriginal population as per cent of total population (ERP - non-ABS)
Overseas Born	Proportion of the Australian population born overseas	Total people who stated an overseas country of birth as per cent of total population (ERP)

These indicators are examined for Australia and New South Wales as well as separately for the WNSW PHN region and associated LGAs.

TABLE 5 DEMOGRAPHIC FACTORS IN WNSW PHN

LGA	Area * (sq. km)	Total Population †	Density Ratio	Dependency Ratio	Ageing Index	Indigenous Status (%)‡	Overseas Born (%)*
Balranald	21,693	2422	0.11	0.53	98.9	8.3	7.2
Bathurst	3,816	42231	11.07	0.54	75.9	5.3	8.3
Blayney	1,525	7380	4.84	0.67	78.2	3.7	6.0
Bogan	14,601	3059	0.21	0.67	81.9	18.0	3.7
Bourke	41,605	2876	0.07	0.60	51.4	38.1	3.3
Brewarrina	19,165	1917	0.10	0.64	41.3	67.4	2.5
Broken Hill	170	18856	110.73	0.63	121.7	9.5	4.5
Cabonne	6,024	13860	2.30	0.69	92.0	3.8	6.2
Central Darling	53,494	2088	0.04	0.58	64.6	43.7	5.9
Cobar	45,571	4975	0.11	0.55	52.4	16.3	6.8
Coonamble	9,916	4262	0.43	0.59	97.3	35.7	2.3
Cowra	2,809	12476	4.44	0.69	132.4	8.0	5.9
Dubbo	3,426	41934	12.24	0.59	68.5	15.6	5.5
Forbes	4,718	9754	2.07	0.66	100.5	11.9	4.0
Gilgandra	4,832	4368	0.90	0.76	131.0	14.5	3.5
Lachlan (a)	11,664	4923	0.42	0.70	89.4	20.9	3.5§
Mid-Western	8,753	24191	2.76	0.64	93.1	4.9	8.1
Narromine	5,260	6822	1.30	0.77	80.9	23.0	3.8
Oberon	3,627	5318	1.47	0.64	114.8	3.8	9.7
Orange	284	41809	147.25	0.57	69.0	6.6	8.5
Parkes	5,955	15337	2.58	0.66	89.5	10.1	4.8
Walgett	22,309	6791	0.30	0.63	99.0	33.8	10.6
Warren	10,754	2901	0.27	0.65	88.6	16.5	4.1
Warrumbungle	12,371	9728	0.79	0.76	126.8	11.2	5.5
Weddin	3,409	3701	1.09	0.78	149.7	2.3	5.0
Wellington	4,110	9073	2.21	0.68	99.5	24.3	5.5
Wentworth	26,257	6883	0.26	0.62	94.4	12.6	5.3
Unincorp. NSW	93,109	716	0.01	0.55	85.3	7.3	11.1
WNSW PHN	**441,225**	**310,610**	**0.70**	**0.62**	**86.8**	**11.6**	**6.3**
NSW	809,444	7.62 million	9.4	0.53	83.8	3.0	25.7
Australia	7.7 million	23.78 million	3.1	0.51	79.7	3.1	24.6

Sourced from: * ABS, 2011c Census; † ERP 2015 (PHIDU, 2016); ‡ ERP (non ABS) 2015 (PHIDU, 2016); §reflects entire LGA

Population Profile

The population in the WNSW PHN region is most concentrated around the towns of Broken Hill and Orange, with Density Ratios of 110.73 and 147.25 respectively. Dubbo's population is comparable to Bathurst and Orange, but is a geographically more dispersed LGA. The Ageing Index is highest in Weddin (149.7) and lowest in Brewarrina (41.3) (Table 5).

Cultural Diversity

The percentage of people identifying as Aboriginal or Torres Strait Islander in the WNSW PHN region is above the Australian average (3.1%) for all but one LGA within the WNSW PHN region, Weddin (2.3%). It is pertinent to note however that there is considerable suburb variability within LGAs in relation to the proportion of Aboriginal or Torres Strait Islander residents, and this has implications for the location of some of the Indigenous specific mental health and or AOD related services. The Brewarrina LGA has the highest proportion of Aboriginal or Torres Strait Islander population at 67.4% (Table 5).

All LGAs within the WNSW PHN region have lower proportions of overseas born populations compared to the Australian average of 24.6%. The LGA with the highest proportion of overseas born people was the Unincorporated area at 11.1%, and the lowest was Coonamble at 2.3%. Data pertaining to the Unincorporated area of the Far West LHD should be viewed with caution, however, as the population makes up less than .2% of the total WNSW PHN region population (n = 716).

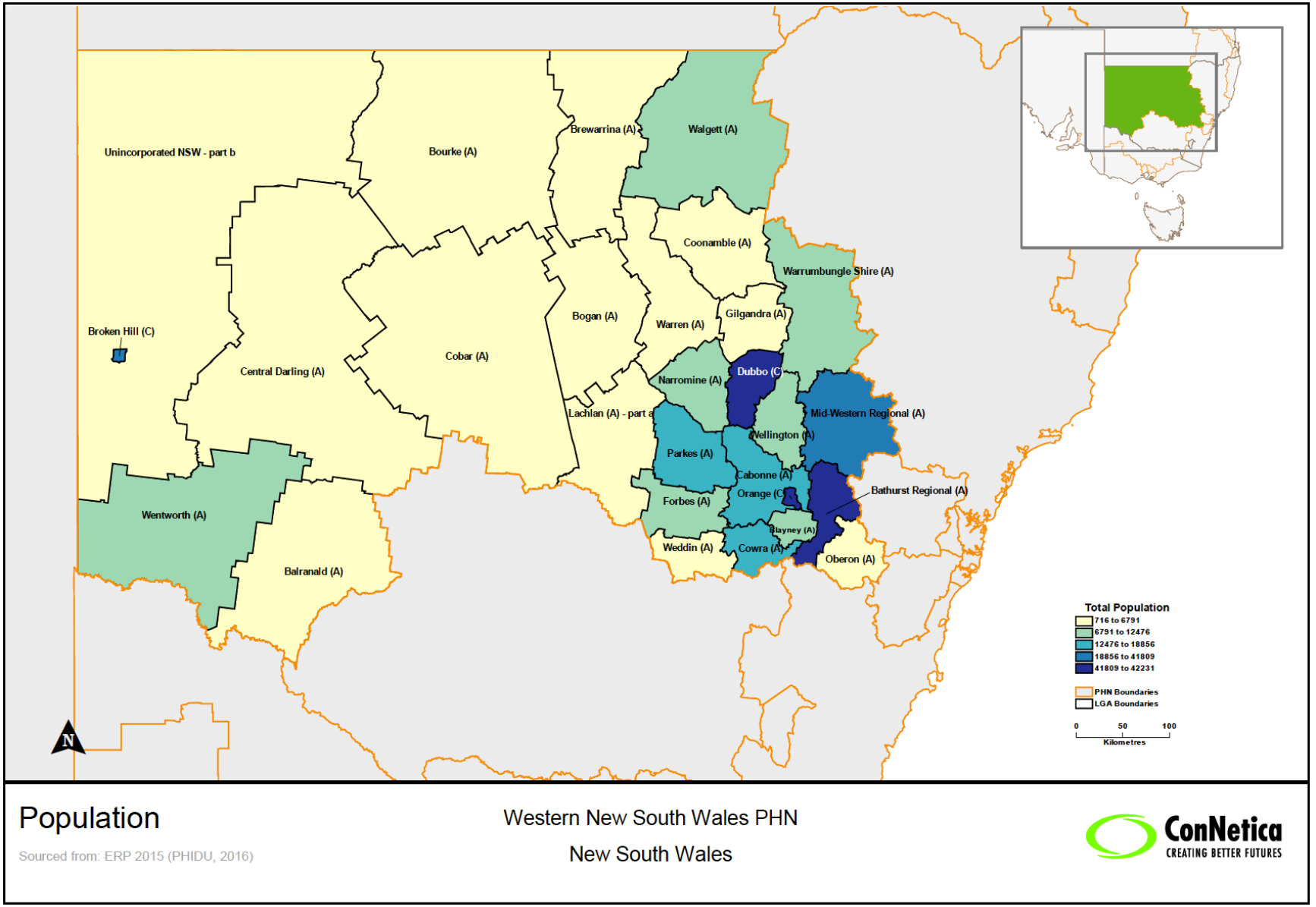


FIGURE 11 POPULATION FOR THE WNSW PHN REGION

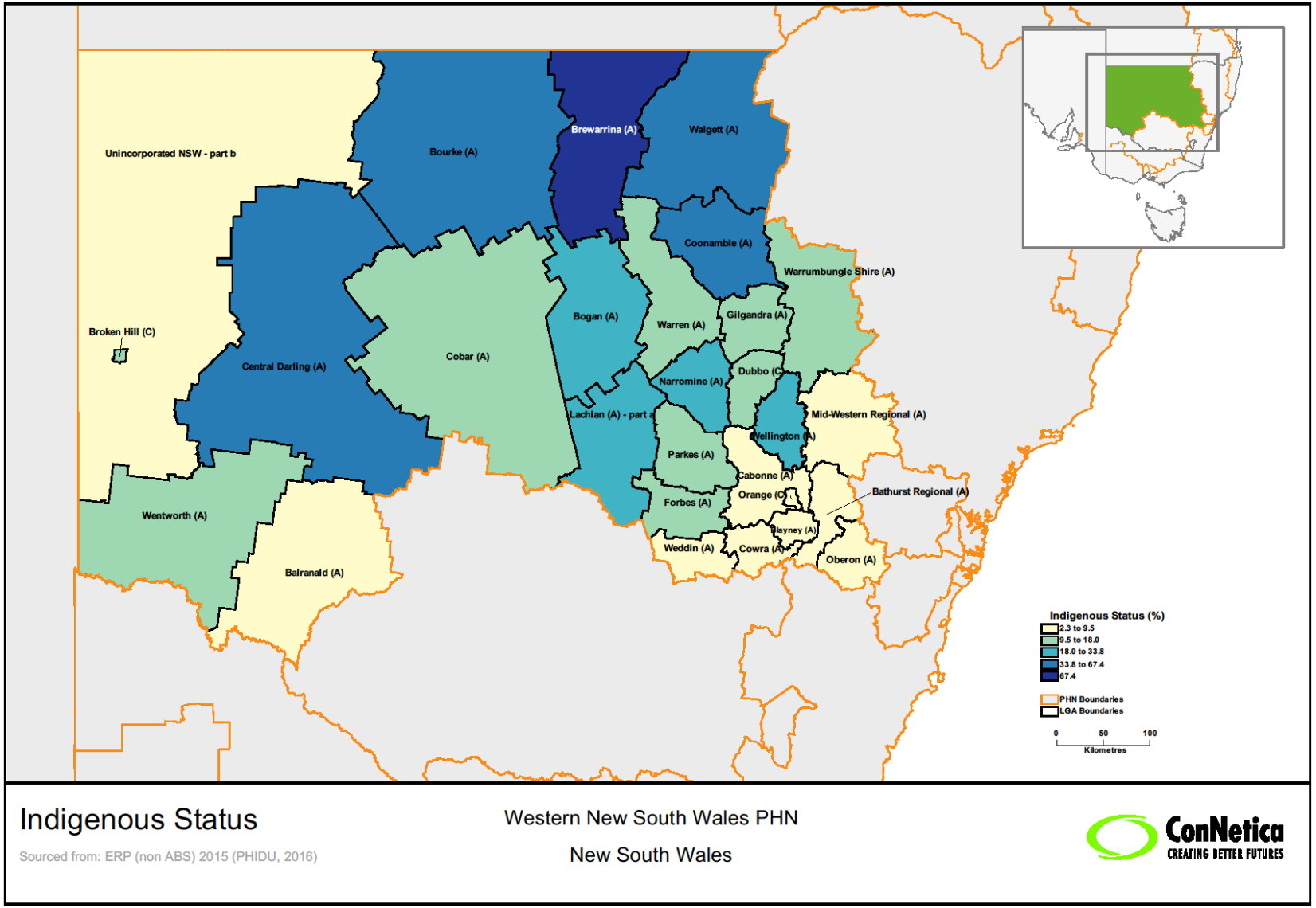


FIGURE 12 INDIGENOUS STATUS FOR THE WNSW PHN REGION

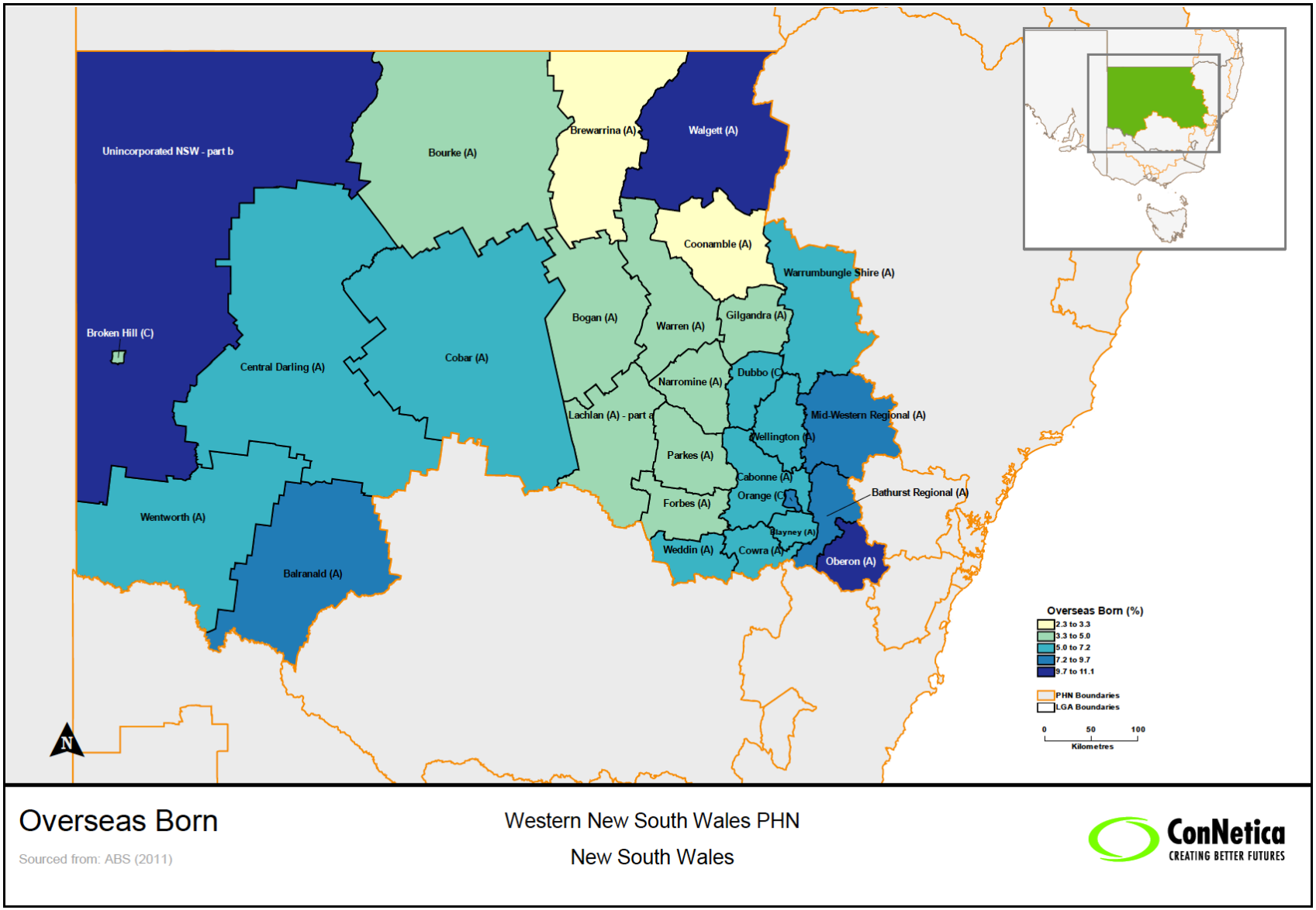


FIGURE 13 BORN OVERSEAS FOR THE WNSW PHN REGION

Social Determinants

The concept of social determinants of health acknowledges the importance of employment, housing, education and other social resources (such as isolation and community connectedness) to wellbeing. Social determinants are increasingly recognised as playing a major role in a raft of health related behaviours and health disparities, including mental illness, suicide, excessive alcohol use and substance use (WHO & Calouste Gulbenkian Foundation 2014; Lund et al, 2011). Risk factors that have been shown to influence mental health and/or AOD and/or contribute to an increased risk of suicide and self-harm have been presented in this Atlas (Table 6).

Disadvantaged Australians have higher rates of almost all disease risk factors, use preventative health services less and have poorer access to primary care health services than Australians in average or higher socio-economic condition areas. One of the key measures of disadvantage is the Socio Economic Indexes for Areas (SEIFA) which compares the relative socio economic advantage and disadvantage across geographic areas. Based on the Census data it incorporates four measures – income, education, occupation and economic resources (ABS, 2011c). The Index of Relative Socio-Economic Disadvantage (IRSD) score is a measure of the relative disadvantage in a given geographic area. The IRSD scores are based on standardised distribution across all areas and are an important measure for health service planning. The average IRSD score across Australia is 1,000 and nationally two thirds of all areas lie between an index score of 900 and 1,100. For this Atlas, areas are shown in deciles with the lower the score representing a greater level of relative disadvantage (e.g. 1 represents the most disadvantaged areas).

TABLE 6 SOCIOECONOMIC FACTORS EXAMINED

Indicator	Description	Calculation
Single Parent Families	Proportion of single parent families with children aged less than 15 years	Single parent families with children under 15 years / Total families with children under 15 years per 100
Homelessness	Estimated number of homeless people per 1,000 population on Census night by LGA, derived from the Census of Population and Housing using the ABS definition of homelessness	Estimated number of homeless persons per 1,000 population
Needing Assistance	Proportion of the population with a profound or severe disability – defined as people needing help or assistance in one or more of the three core activity areas of self-care, mobility and communication, because of a disability, long term health condition (lasting six months or more) or old age	Number of people who need assistance with core activity / Total population per 100
Early School Leavers	The data comprise people who left school at Year 10 or below, or did not go to school, expressed as an indirectly standardised rate per 100 people aged 15 years and over (Usual Resident Population), based on the Australian standard	People who left school at Year 10 or below, or did not go to school, ASR per 100 persons
Unemployment	The level of unemployment as a proportion of the labour force	Number of unemployed people / Population >15 years per 100
Low income	Proportion of individuals in a population earning less than $400 per week, including those on	Number of Individuals with income <$400 week / Total number of individuals per 100

	negative incomes	
IRSD (Index of Relative Social Disadvantage)	One of four SEIFA indexes, IRSD identifies the geographic distribution of potential disadvantage based on factors including employment, education, income and social resources	Please refer to the following technical paper: http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/22CEDA8038AF7A0DCA257B3B00116E34/$File/2033.0.55.001%20seifa%202011%20technical%20paper.pdf

Table 7 displays key socio-demographic statistics for the WNSW PHN region. Apricot shading indicates LGAs with the worst performing score for that indicator, green shading represents the best performing score. A green arrow designates an indicator which is lower than the state average, whilst a red arrow designates an indicator higher than the state average. Data is represented geographically by LGA in Figure 14 through Figure 19.

TABLE 7 SOCIOECONOMIC FACTORS IN THE WNSW PHN REGION

LGA	Single parent families* (%)	Needing Assistance† (%)	Early School Leavers* (ASR per 100)	Un employment‡ (%)	Income <$400/wk† (%)	IRSD Score (Decile)†
Balranald	19.1⇩	5.3⇧	44.3⇧	2.7⇩	44.9⇧	946 (3)
Bathurst	25.2⇧	4.7⇩	42.7⇧	4.2⇩	40.2⇧	991 (7)
Blayney	20.0⇩	5.2⇧	49.2⇧	4.0⇩	40.1⇧	982 (6)
Bogan	24.9⇧	4.0⇩	49.9⇧	3.9⇩	44.7⇧	946 (3)
Bourke	29.6⇧	4.1⇩	52.6⇧	7.7⇧	36.8⇩	933 (3)
Brewarrina	42.1⇧	4.6⇩	51.6⇧	7.8⇧	54.9⇧	788 (1)
Broken Hill	37.2⇧	8.1	53.4⇧	6.2⇧	49.0⇧	900 (2)
Cabonne	17.6⇩	5.1⇩	47.2⇧	2.9⇩	41.2⇧	1000 (7)
Central Darling	34.7⇧	3.7⇩	55.7⇧	6.5⇧	52.0⇧	824 (1)
Cobar	20.6⇩	3.6⇩	54.8⇧	2.0⇩	39.7⇩	957 (4)
Coonamble	37.4⇧	6.9⇧	49.5⇧	6.3⇧	47.0⇧	880 (1)
Cowra	24.3⇧	7.1⇧	50.6⇧	6.7⇧	49.0⇧	928 (2)
Dubbo	28.8⇧	5.4⇧	48.8⇧	3.7⇩¶	36.9⇩	977 (5)
Forbes	27.8⇧	6.1⇧	50.5⇧	4.4⇩	45.0⇧	947 (3)
Gilgandra	30.2⇧	6.4⇧	51.5⇧	4.2⇩	48.5⇧	911 (2)
Lachlan (a)	25.5⇧	5.6§⇧	50.5⇧	5.5§⇧	46.4§⇧	938 (3) §
Mid-Western	23.9⇧	6.0⇧	48.6⇧	5.4⇧	46.5⇧	962 (5)
Narromine	33.1⇧	4.4⇩	49.1⇧	4.1⇩	42.3⇧	927 (2)
Oberon	20.9⇩	4.7⇩	50.1⇧	4.0⇩	40.5⇧	976 (5)
Orange	26.0⇧	5.3⇧	47.3⇧	4.7⇩	37.9⇩	977 (5)
Parkes	28.0⇧	6.7⇧	50.7⇧	6.9⇧	46.0⇧	944 (3)
Walgett	36.5⇧	6.9⇧	47.8⇧	8.6⇧	52.4⇧	856 (1)
Warren	26.7⇧	5.1⇩	49.9⇧	4.2⇩	42.5⇧	941 (3)
Warrumbungle	26.7⇧	7.5⇧	48.7⇧	4.4⇩	53.5⇧	911 (2)

Weddin	23.3⇧	7.4⇧	48.8⇧	4.1⇩	53.0⇧	945 (3)
Wellington	33.1⇧	7.0⇧	48.4⇧	3.7⇩¶	49.1⇧	893 (1)
Wentworth	22.8⇧	5.6⇧	44.3⇧	7.7⇧	44.3⇧	957 (4)
Unincorp. NSW	13.1⇩	2.9⇩	48.0⇧	4.4⇩	36.1⇩	1022 (8)
WNSW PHN	**27.0**	**5.7**	**48.5**	**4.8**	**43.2**	**953**
NSW	21.2	5.2	37.6	5.1	39.9	996
Australia	21.3	4.6	34.3	5.7	38.9	1000

Sourced from: *2011 (PHIDU, 2016); †ABS, 2011 Census; ‡ March Quarter 2017 (Department of Employment, 2016); §reflects entire LGA; ¶In 2017, Dubbo and Wellington amalgamated to Western Plains Regional

Single Parent Families

The WNSW PHN region has a higher percentage of single parent families than the state (21.2%) and national averages (21.3%), with Brewarrina (42.1%) and Coonamble (37.4%) indicating high levels of single parent families. Excluding Unincorporated NSW, Cabonne has the lowest percentage of single parent families (17.6%).

Human function

The majority of LGAs within the WNSW PHN region had higher proportions of the population needing assistance than the national average of 4.6%. The Far West LHD town of Broken Hill had the highest proportion of the population needing assistance at 8.1%, followed by Warrumbungle at 7.5%.

Education

Early school leavers per 100 population were considerably higher than NSW (37.6) and Australian rates (34.3). No LGA had a rate lower than the state or the nation, with Bathurst recording the lowest rate at 42.7 per 100 population, and Central Darling faring poorly at 55.7 per 100 population.

Unemployment

Unemployment levels at the PHN level mirrored the state proportion of 5.1% which is lower than the national rate at 5.7%. However, there is considerable variation within the WNSW PHN region with Walgett recording an 8.6% unemployment rate. The Cobar LGA, conversely, had a relatively low unemployment rate (2.0%).

Income

The majority of LGAs within the WNSW PHN catchment reported higher proportions of low individual income per week compared to the Australian average (38.9%). Unincorporated NSW (36.1%), Orange (37.9%), Dubbo (36.9%) and Bourke (36.8%) all had a lower proportion of the population earning less than $400 per week when compared with the state (39.9%) and national average (38.9%).

Index of Relative Socio-economic Disadvantage

The majority of LGAs in the WNSW PHN region had IRSD scores lower than 1000, with Unincorporated NSW and Cabonne the only LGAs with a score of 1000 or above. Brewarrina has the highest level of disadvantage with an IRSD score of 788. It is pertinent to note however that at the suburb level there is considerable variability in IRSD scores within and between LGAs, and that there are suburbs within a number of the WNSW PHN catchment LGAs that may have relative disadvantage scores greater than 1000 (ABS, 2011c).

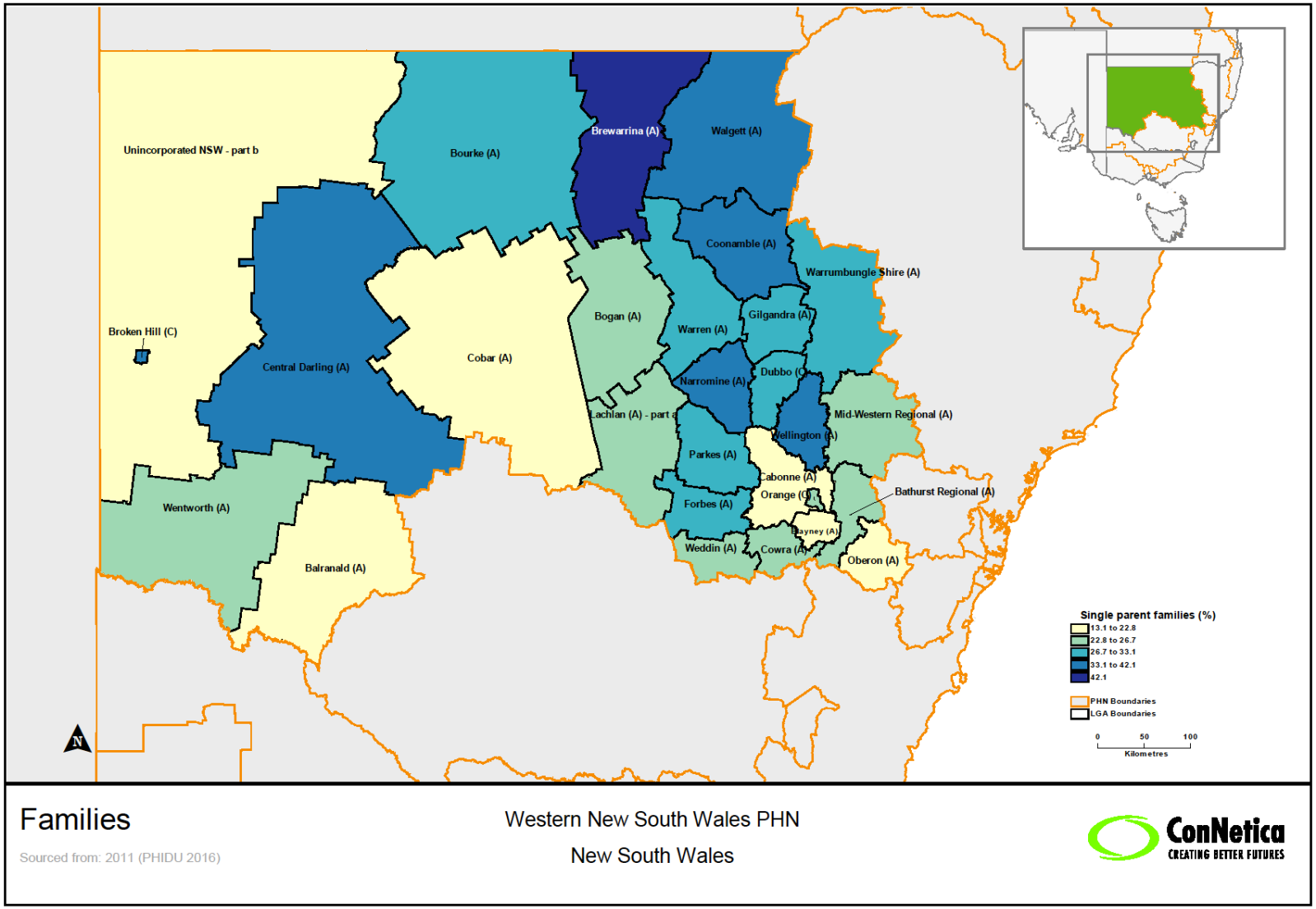


FIGURE 14 FAMILY STATUS FOR THE WNSW PHN REGION

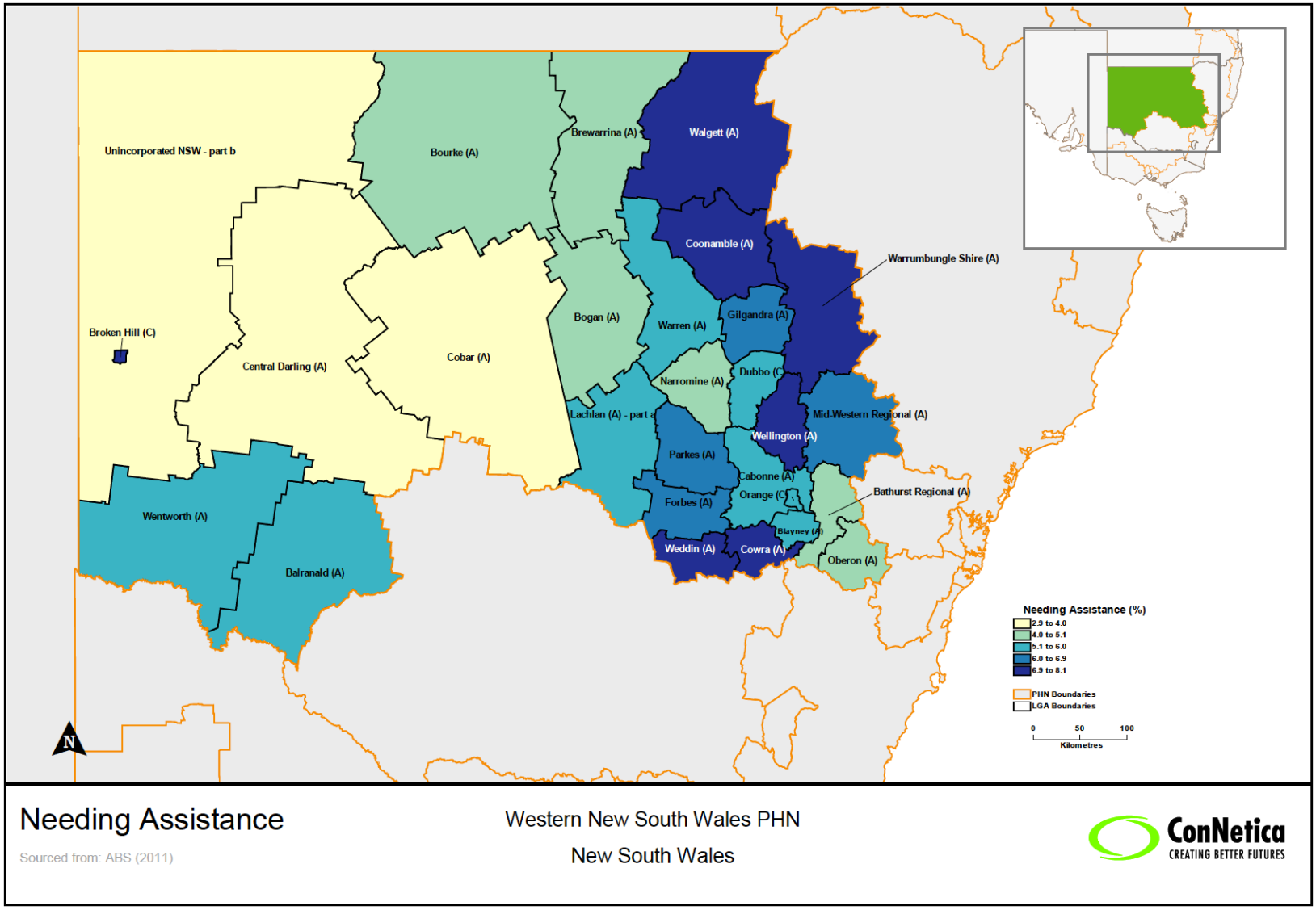


FIGURE 15 NEEDING ASSISTANCE FOR THE WNSW PHN REGION

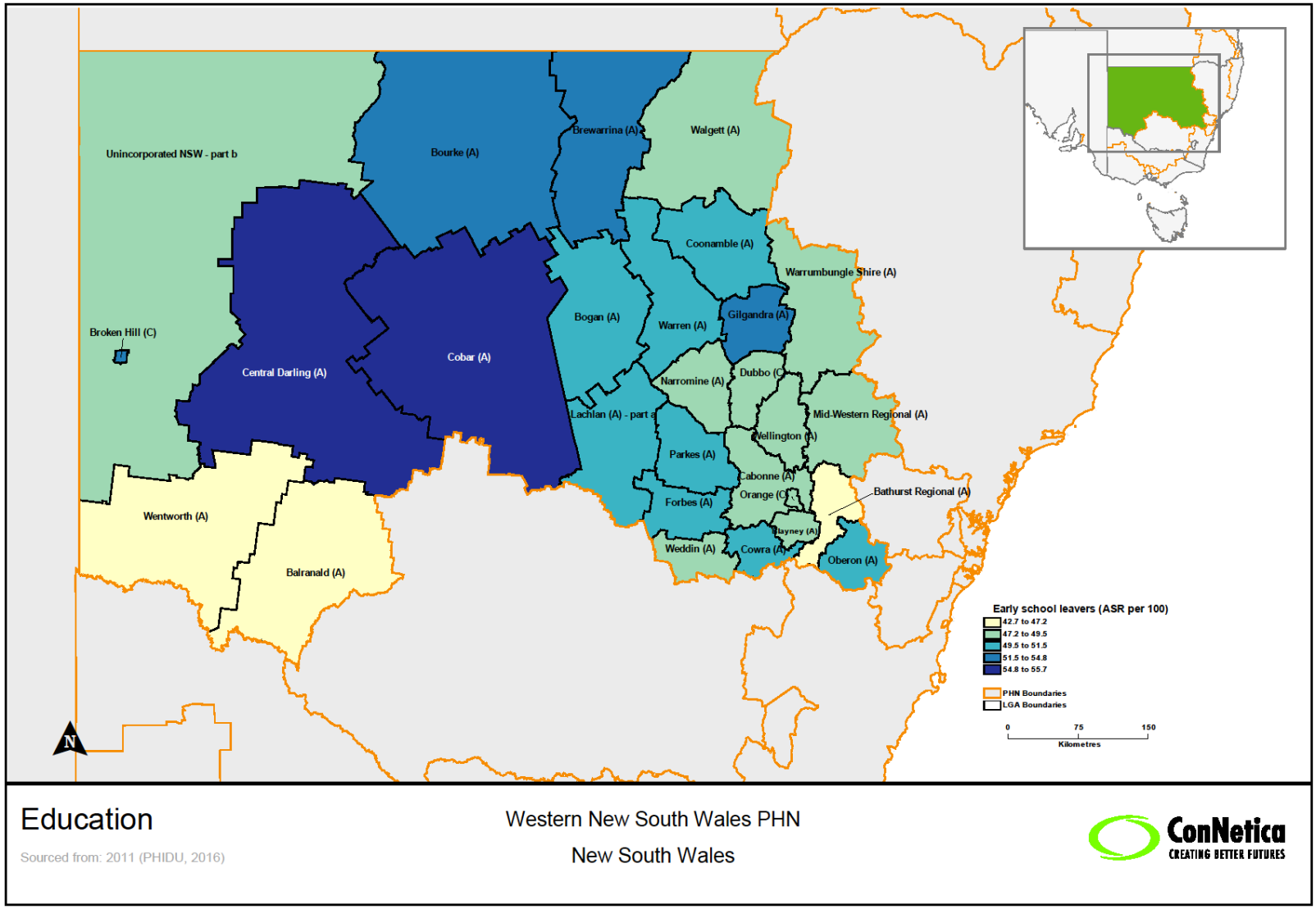


FIGURE 16 EDUCATION FOR THE WNSW PHN REGION

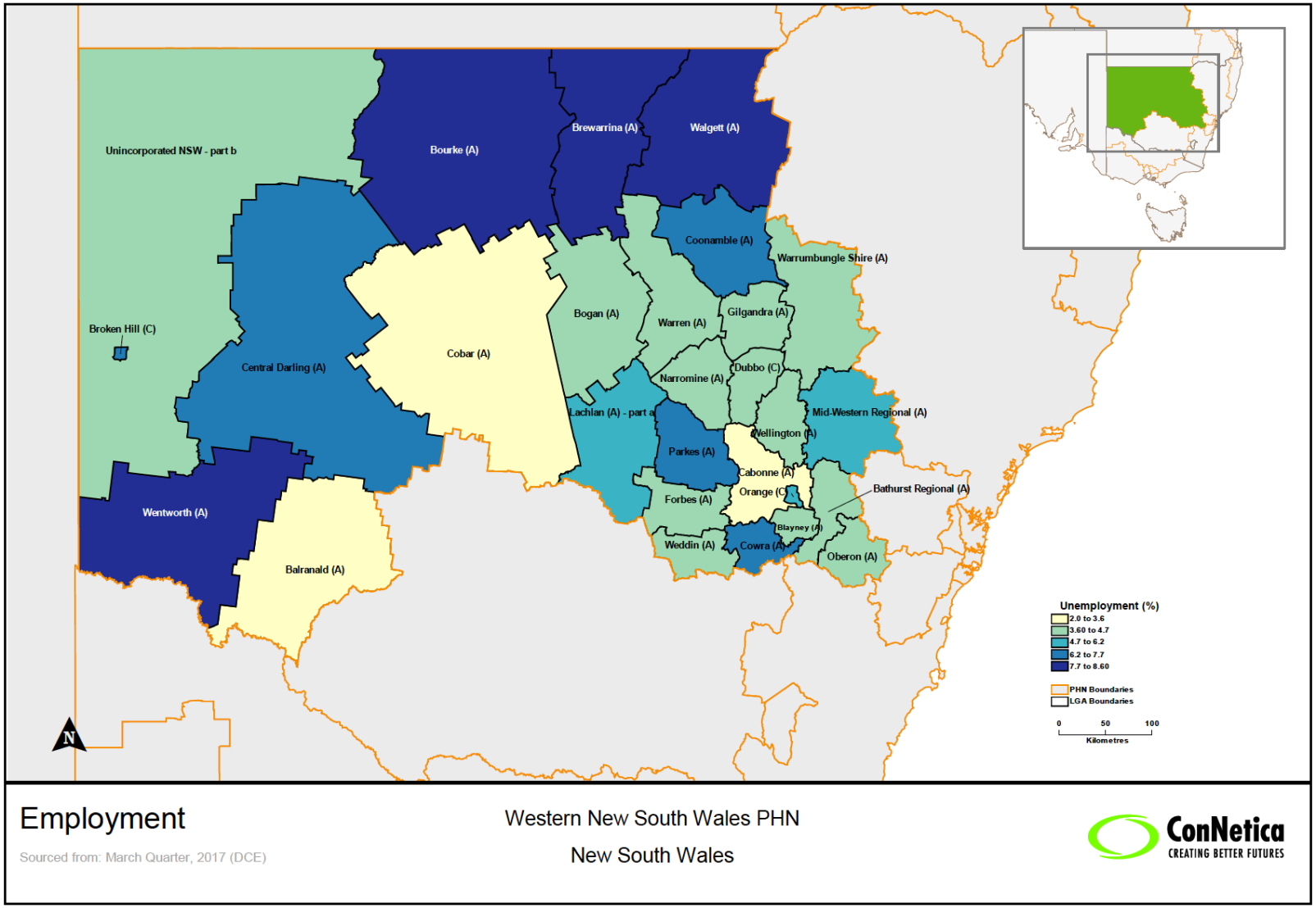


FIGURE 17 EMPLOYMENT STATUS FOR THE WNSW PHN REGION

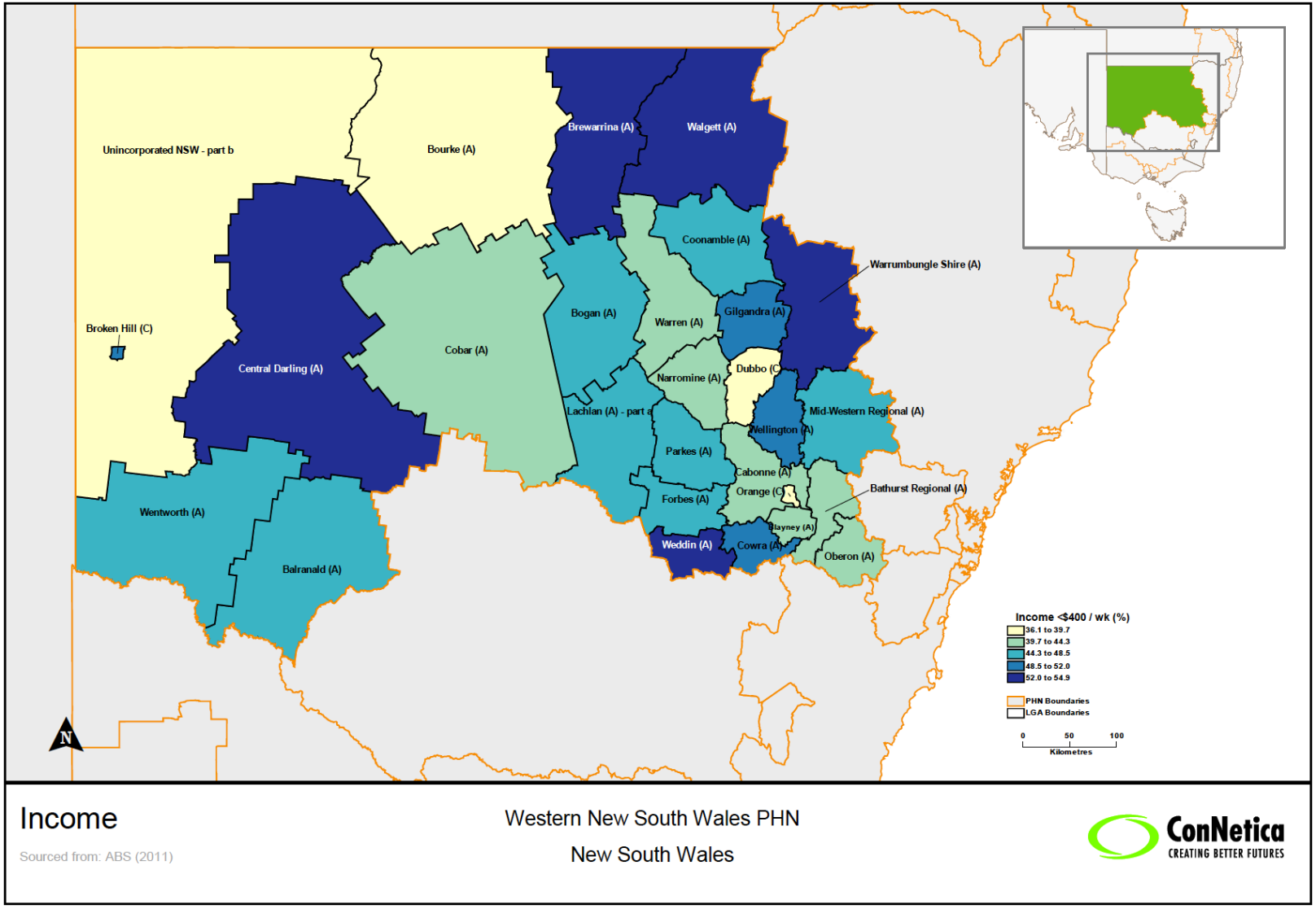


FIGURE 18 INCOME STATUS FOR THE WNSW PHN REGION

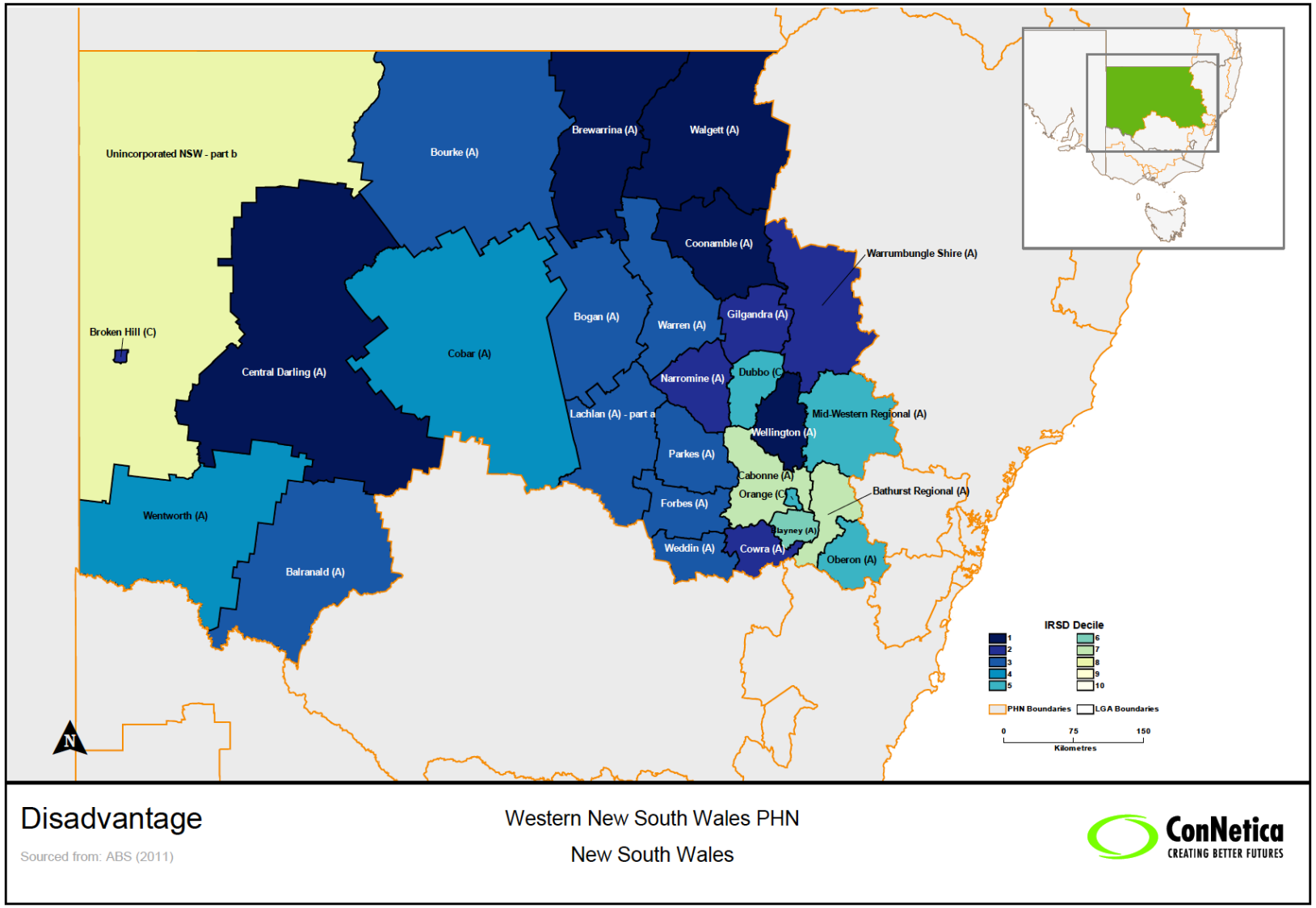


FIGURE 19 DISADVANTAGE STATUS FOR THE WNSW PHN REGION

Health and Mortality

As health usually deteriorates with age and the majority of deaths occur at older ages, it is reasonable to expect areas with older populations to show lower self-assessed health and higher mortality rates. Therefore, to allow fair comparisons of rates amongst LGAs within the WNSW PHN region, with different age profiles, the age standardised rate (ASR) is used for the three selected health outcome indicators related to mental health and suicide and self-harm as well as for the comparison indicator of Road Toll (Table 8).

Self-assessed health status is a commonly used measure of overall health. It captures a person's perception of their own health and has been found to be a good predictor of morbidity and mortality (Makenbach, Simon, Looman & Joung, 2013). Psychological distress is an indicator of the mental health of a community and is the best population wide measure currently available. This indicator is used as an indicative measure of the mental health needs of a population rather than measuring rates of mental illness (Statistics Solutions, 2016).

Premature mortality data between 2010 and 2014 for both suicide and self-harm as well as road traffic injuries are the key mortality indicators in this Atlas. This suicide and self-harm measure is the only one currently available at a lower geographical region than state level data so is utilised for the purpose of the Atlas as the best available data. It should be noted that the most recent national data on suicide shows a significant increase in the overall rate from 11.2 to 12.6 ASR.

TABLE 8 HEALTH AND MORTALITY INDICATORS EXAMINED

Indicator	Description	Calculation
Fair/Poor Health	Modelled estimate based on self-reported and assessed health on a scale from 'poor' to 'excellent' – this measure is the sum of responses categorised as 'poor' or 'fair'.	Estimated population, aged 15 years and over, with fair or poor self-assessed health, ASR per 100
Psychological distress	The proportion of adults with very high levels of psychological distress as measured by the Kessler Psychological Distress Scale—10 items (K10). (The K10 is a scale of non-specific psychological distress based on 10 questions about negative emotional states in the 4 weeks before being interviewed).	Estimated population, aged 18 years and over, with high or very high psychological distress based on the Kessler-10 Scale (K10), ASR per 100
Suicide	Data compiled from deaths data based on Cause of Death Unit Record Files - ICD-10 codes: X60-X84, Y87.0	Deaths from suicide and self-inflicted injuries, persons aged 0 to 74 years, ASR per 100,000

The indicators of health status for the WNSW PHN region's population which have been examined, are presented in Table 9. Figure 20 through Figure 22 illustrate the health status, psychological distress and suicide rate by LGA in geographic maps.

TABLE 9 HEALTH AND MORTALITY IN THE WNSW PHN REGION

LGA	Fair/poor health* (ASR per 100)	Psychological Distress* (ASR per 100)	Suicide† (n)	Suicide Rate† (ASR per 100,000)
Balranald	15.3⇧	11.0⇩	NP	NP
Bathurst	16.4⇧	12.3⇧	15	8.1⇩
Blayney	17.9⇧	12.3⇧	NP	NP
Bogan	14.1⇩	12.8⇧	NP	NP
Bourke	NP	NP	NP	NP
Brewarrina	NP	NP	NP	NP
Broken Hill	19.3⇧	13.6⇧	8	9.4
Cabonne	15.2⇧	10.5⇩	8	13.2⇧
Central Darling	19.3⇧	13.6⇧	NP	NP
Cobar	14.1⇩	12.8⇧	6	26.7⇧
Coonamble	14.1⇩	12.7⇧	NP	NP
Cowra	15.4⇧	13.0⇧	8	13.9⇧
Dubbo	15.2⇧	12.9⇧	11	6.0⇩
Forbes	17.6⇧	10.5⇩	NP	NP
Gilgandra	13.3	10.0⇩	NP	NP
Lachlan (a)	17.7⇧	10.5⇩	6	29.1⇧
Mid-Western	16.3⇧	10.8⇩	13	12.1⇧
Narromine	13.3	10.0⇩	5	16.9⇧
Oberon	17.6⇧	11.6⇧	NP	NP
Orange	16.3⇧	12.6⇧	17	9.5⇧
Parkes	15.7⇧	10.9⇩	5	8.4⇩
Walgett	NP	NP	7	21.2⇧
Warren	14.1⇩	12.6⇧	NP	NP
Warrumbungle	13.7⇩	10.1⇩	6	14.6⇧
Weddin	16.2⇧	8.9⇩	6	30.9⇧
Wellington	16.0⇧	11.0⇩	NP	NP
Wentworth	15.3⇧	11.0⇩	5	15.1⇧
Unincorp. NSW	NP	NP	NP	NP
WNSW PHN	**16.0**	**11.9**	**142**	**10.5**
NSW	14.3	11.0	3,193	9.4
Australia	14.8	11.7	11,874	11.2

Sourced from: *2011-13 (PHIDU, 2016); †2009-2013 (PHIDU, 2016)

Health Status

Estimates of self-reported health in the WNSW PHN catchment indicate that people in the Broken Hill (19.3 per 100) and Central Darling (19.3 per 100) LGAs reported the highest rates of fair or poor health across the region. Gilgandra and Narromine were the only two LGAs with rates below the state and national averages, with 13.3 per 100 persons respectively. In addition to high levels of fair or poor self-reported health, the Broken Hill and Central Darling LGAs also had a higher rate of psychological distress (13.6 per 100) compared to both the NSW and Australian rates of 11 and 11.7 respectively.

According to the New South Wales Mental Health Commission Living Well Report (NSW Mental Health Commission, 2014), about 20% of Aboriginal adults experience high or very high psychological distress, twice the rate of non-Aboriginal adults. As discussed, the percentage of people identifying as Aboriginal or Torres Strait Islander in the WNSW PHN region is above the Australian average (3.1%) for all but one LGA within the region. The Brewarrina LGA has the highest proportion of Aboriginal or Torres Strait Islander population at 67.4%.

Mortality

In Australia, deaths from suicide are well in excess of transport-related mortality with the latest data released indicating that there were 2,864 registered suicide deaths in Australia in 2014, representing an age standardized rate of 12.2 per 100,000 (ABS, 2016). Despite the estimated mortality, the prevalence of suicide, and self-harming behaviour in particular, remains difficult to gauge due to the challenges associated with obtaining reliable data.

The majority of LGAs in the WNSW PHN catchment have significantly higher rates of suicide compared to the state average of 9.4 per 100,000. Broken Hill (9.4 per 100,000), Dubbo (6.0 per 100,000), Bathurst (8.1 per 100,000) and Parkes (8.4 per 100,000) are the only LGAs to meet or fall below the state average. The highest suicide rate is across the LGA of Weddin (30.9 per 100,000), Lachlan (29.1 per 100,000) and Cobar (26.7 per 100,000).

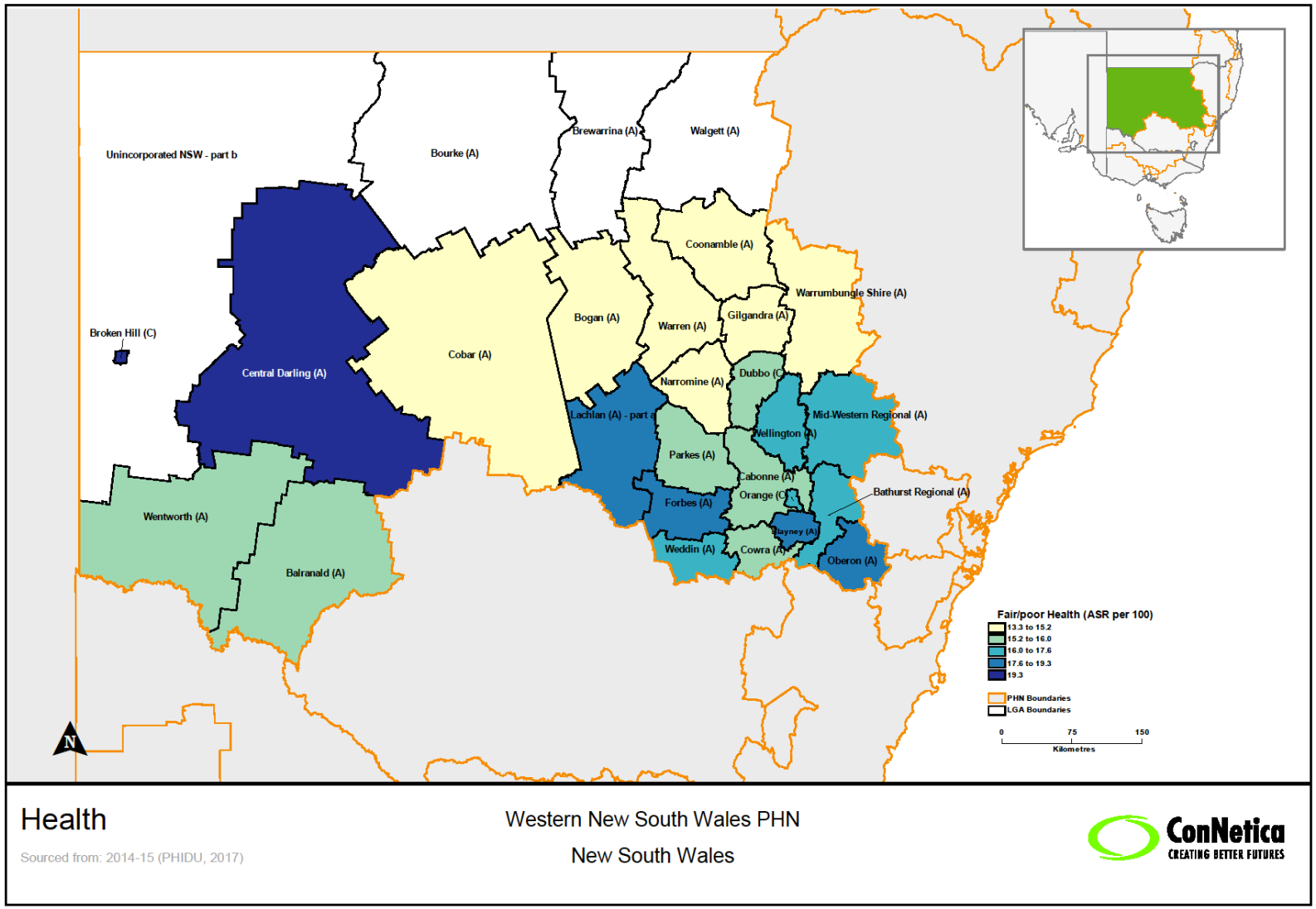


FIGURE 20 HEALTH STATUS FOR THE WNSW PHN REGION

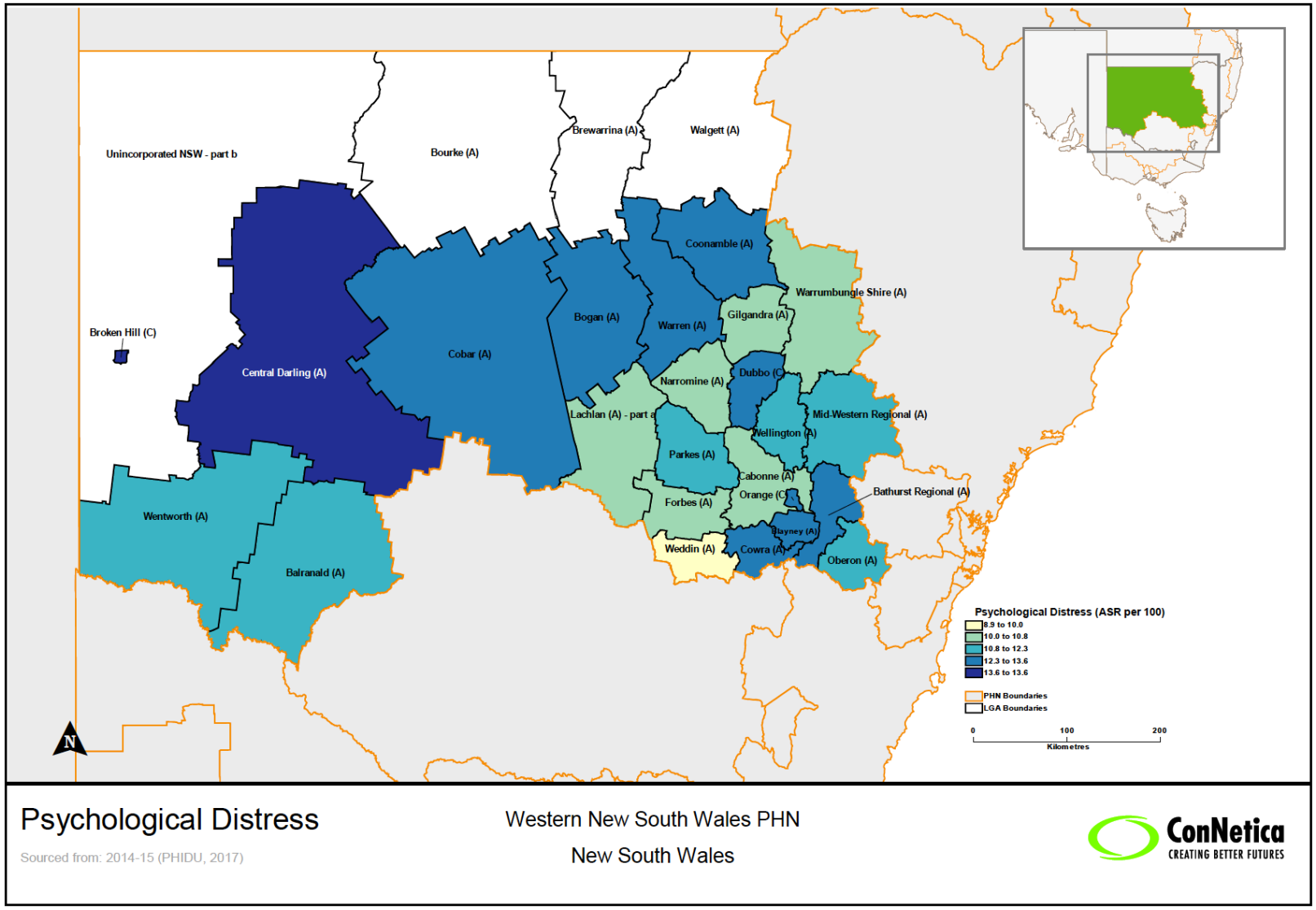


FIGURE 21 PSYCHOLOGICAL DISTRESS FOR THE WNSW PHN REGION

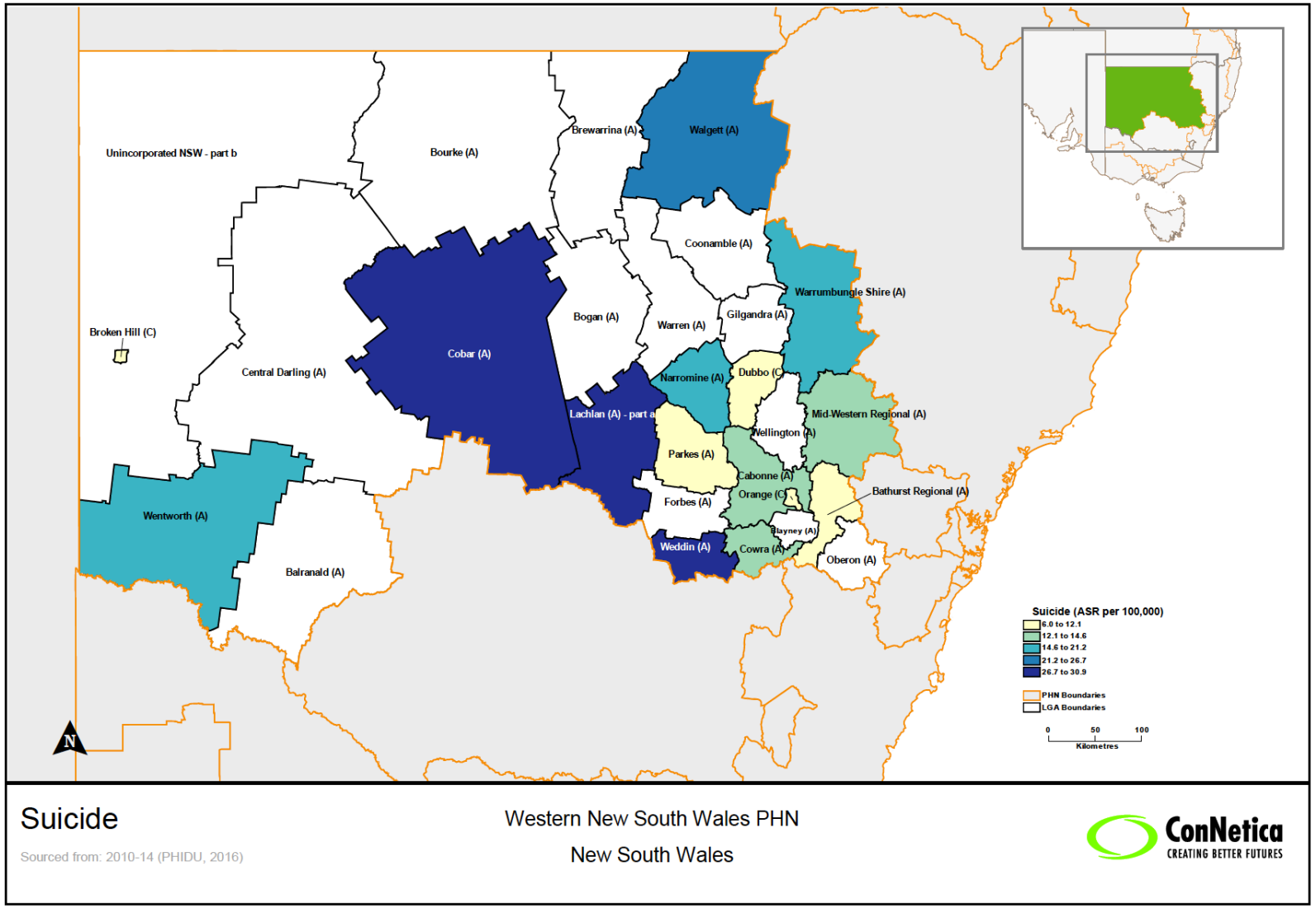


FIGURE 22 SUICIDE RATE FOR THE WNSW PHN REGION

4. Mental Health Data for the WNSW PHN Region

Publicly available population mental health and mental health service data is included in this section to help 'complete the picture' of the region. For comparative purposes, a brief overview of Australian and New South Wales prevalence and service data is given.

Australian Prevalence

In Australia, in any given year approximately 20% of the population experience some form of mental illness (Jorm et al, 2017). The National Mental Health Commission report in 2014 estimated more than 3.6 million people aged 16-85 years experience mental ill-health each year. The most recent national survey of Australian children and adolescents (4-17 years) found 560,000 individuals (13.9%), had a mental health disorder in the previous 12 months (Lawrence et al, 2015). The NMHC report identifies some 625,000 Australian adults as experiencing "severe episodic or severe and persistent mental illness". A further 65,000 people are identified as having "severe and persistent illness with complex multi-agency needs". These two groups represent 3.1% of the adult population. For those aged between 4 and 17 years, approximately 82,000 (2.1%) had a severe disorder (3.3% for 12-17 year olds).

Over a lifetime, nearly half of the Australian adult population will experience mental illness at some point - equating to nearly 7.3 million Australians aged 16-85 (AIHW, 2016a). It is estimated that the community prevalence of mental and substance use disorders in Australia in 2011-2012 was 19.9% (Diminic et al, 2013). The prevalence was highest in the adult (25-64 years) age group (22.6%), followed closely by the youth (15-24 years) population (19.8%), which is partially due to much higher rates of substance use disorders in these age groups compared to children (0-14 years) (15.4%) and older adults (65+ years) (15.5%).

Mental Health in Western NSW

It is estimated that at any one time, approximately 1.7 million or 23% of people in NSW have an underlying or undiagnosed mental health problem. Approximately 670,000 (9%) have a mild mental illness, 340,000 (5%) a moderate mental illness and 230,000 (3%) a severe mental illness (NSW Mental Health Commission, 2014b) (Figure 23).

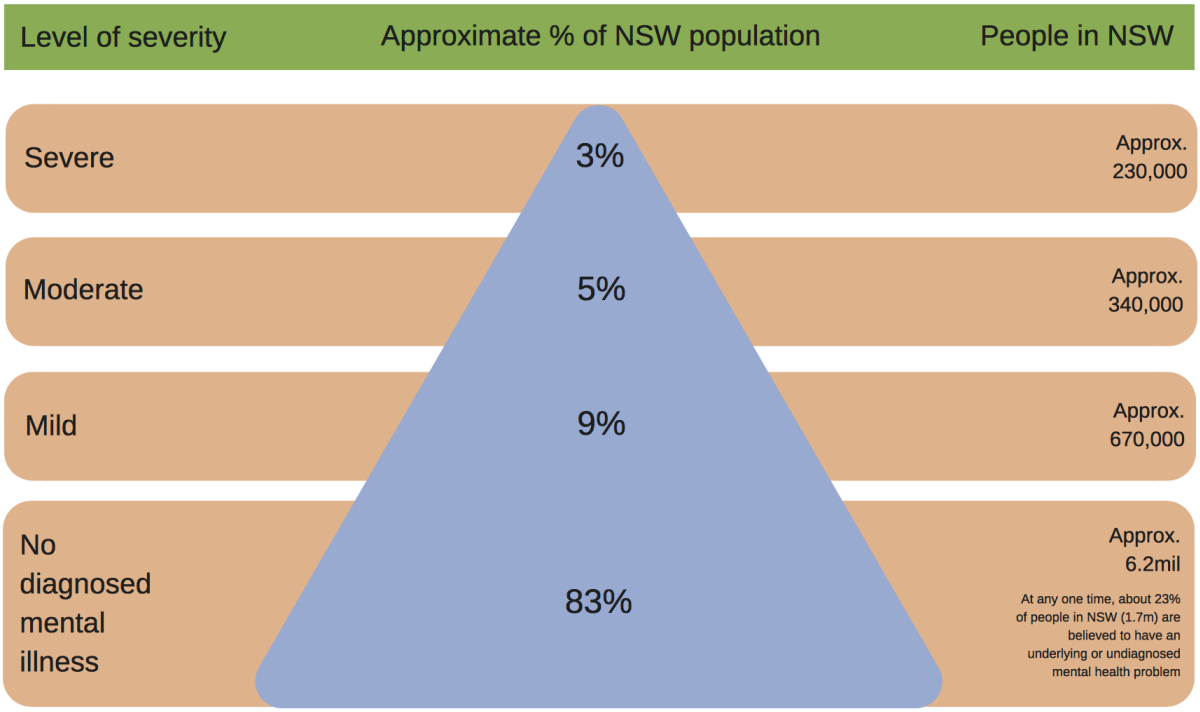


FIGURE 23 ESTIMATED PREVALENCE OF ADULT MENTAL ILLNESS IN NSW

(Sourced from Living Well: A Strategic Plan for Mental Health in NSW 2014-2024)

The prevalence of mental disorders and illness is likely to be an underestimation for a variety of reasons: reluctance to seek treatment, lack of access to treatment, inconsistencies in diagnosis among providers, confidentiality of diagnosis/treatments, and poor data capture. In addition, there are wide discrepancies in treatment and prescribing patterns which are conflicting. Improved data capture and consistency of data would provide a more in-depth insight into current and future trends.

In NSW, approximately 20% of Aboriginal adults experience high to very high psychological distress, and rates for depression and anxiety are evident at twice the rate of the non-Indigenous population (NSW Mental Health Commission, 2014). Furthermore, the suicide rate for Aboriginal people in NSW is 1.4 times higher than non-Indigenous populations, whilst the rate of hospitalisation as a result of self-harm was greater than three times the non-Indigenous population (NSW Mental Health Commission, 2014).

Mental Health Nurse Incentive Program (MHNIP)

The Mental Health Nurse Incentive Program (MHNIP) provides a non-MBS incentive payment to community based general practices, private psychiatrist services and Aboriginal and Torres Strait Islander Primary Health Care Services who engage mental health nurses to assist in the provision of coordinated clinical care for people with severe mental disorders. Mental health nurses provide an accessible service in a non-stigmatised setting. They can provide services to children and young people, women in the peri-natal period and seniors, who are more likely to be in contact with their General Practitioner than with other health or community services. Data extracted from the MHNIP data tables (Department of Health, 2017) indicate that the number of patients serviced by MHNIP in the WNSW PHN catchment declined during the period from 2011/12 to 2014/15 (Figure 24).

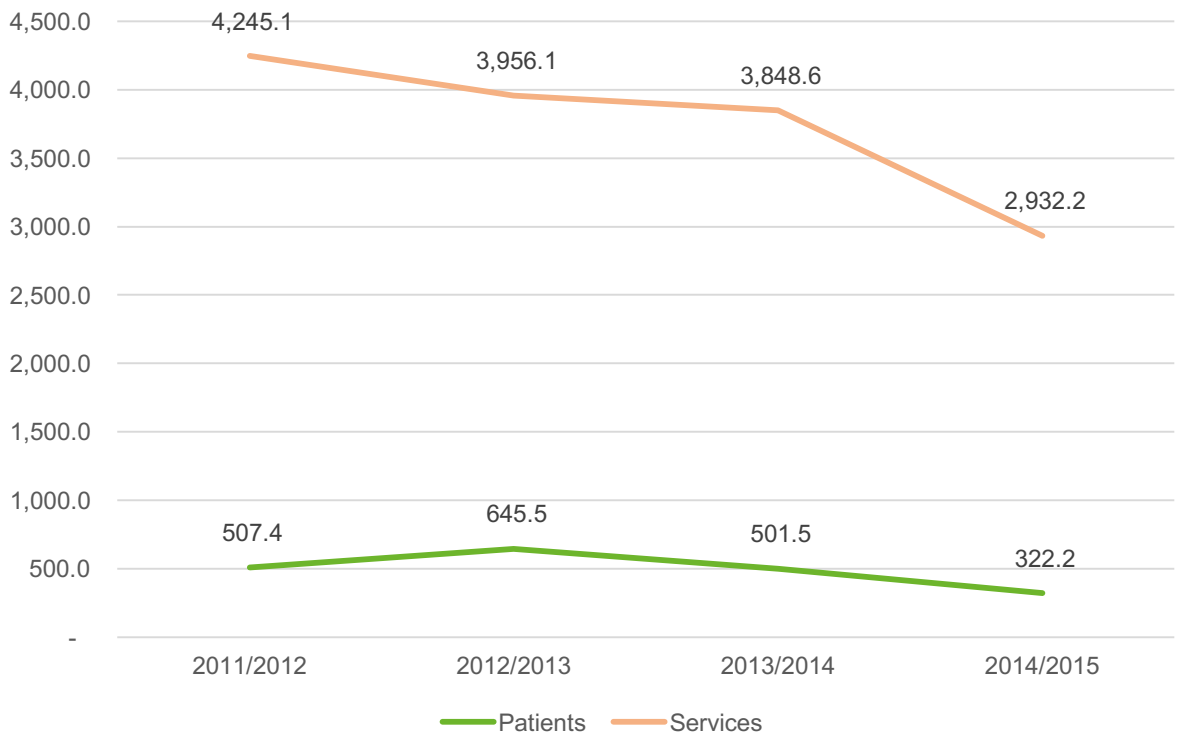


FIGURE 24 MHNIP CLIENTS AND SERVICES, WNSW PHN REGION 2011/12 – 2014/15

MHNIP access by age is displayed in Table 10. Most MHNIP services are accessed by those aged between 45 and 54 years of age (21.1%).

TABLE 10 DISTRIBUTION OF MHNIP BY AGE GROUP

Age Group (years)	Patients WNSW PHN Area	
	Number	Percent %
0-4	1	0.3
5-11	2	0.6
12-17	29	9.0
18-24	50	15.5
25-34	57	17.6
35-44	58	18.0
45-54	68	21.1
55-64	42	13.0
65-74	10	3.1
75-84	6	1.8
85+	0	0.0
Total	**322**	**100.0**

Medical Benefits or Medicare Funded Services

Across Australia in 2014-15, almost 10 million services were delivered to over two million patients (AIHW, 2016b). This represented an average of five services per patient over the year with GPs providing more services to more patients than the other provider types (AIHW, 2016b).

Overall, NSW had the third highest rate of services provided (410 per 1,000 population), and third highest rate of patients (88 per 1,000 population) (Figure 25). NSW figures closely mirrored the national rates in 2014-15 (88 patients and 414 services per 1,000 population) (Department of Health, 2016).

FIGURE 25 MEDICARE SUBSIDISED MENTAL HEALTH RELATED SERVICES AND PATIENT RATES BY JURISDICTION 2014-15

Across Australia, the highest number of services were provided by General Practitioners (2.91 million or 29.8%) followed by other psychologist services (2.38 million or 24.3%) and psychiatrists (2.30 million or 23.5%) (Figure 26).

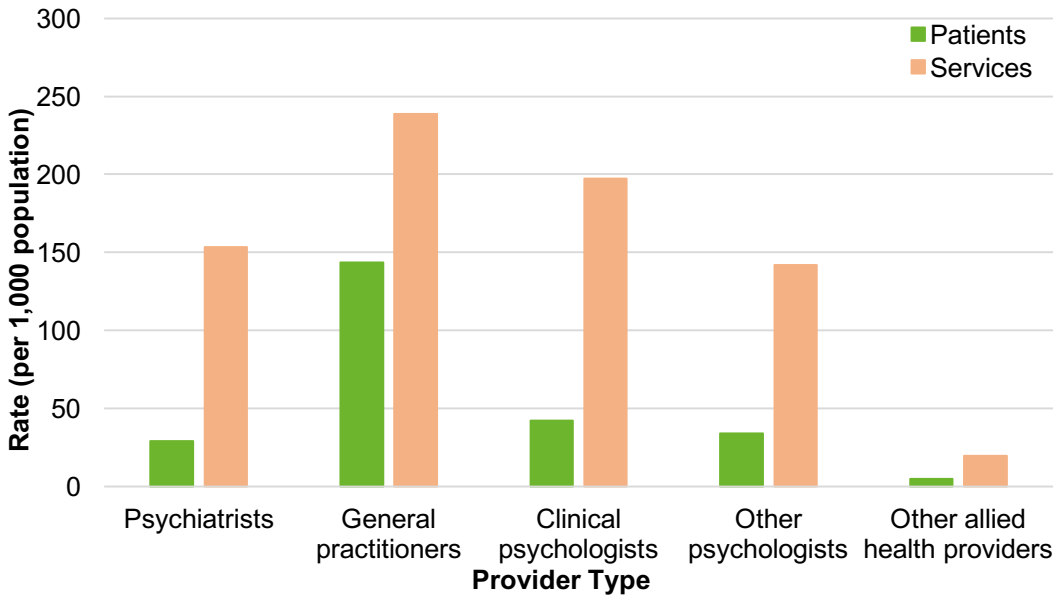


FIGURE 26 AUSTRALIAN MEDICARE SUBSIDISED MENTAL HEALTH RELATED RATES BY PROVIDER TYPE 2014-15

Within the WNSW PHN region, the highest number of services were provided by General Practitioners (36,765) with allied health providers accounting for close to the same number of services during 2014-15 (Table 11). Women accessed services more so than men, with over 60% of services being delivered to women across all provider types.

TABLE 11 WNSW PHN REGION MBS UTILISATION BY PROVIDER TYPE 2014-15

Provider Type	Gender	Patients (n)	%	Services (n)	%	Benefits Paid	Fees Charged
Psychiatrists	Male	1488	46%	5272	37%	$797,783	$999,840
	Female	1764	54%	9144	63%	$1,410,509	$1,759,358
	Total	**3252**		**14416**		**$2,208,292**	**$2,759,198**
General Practitioners	Male	8712	39%	13767	37%	$1,152,043	$1,174,578
	Female	13752	61%	22998	63%	$1,915,541	$1,958,784
	Total	**22464**		**36765**		**$3,067,584**	**$3,133,362**
Clinical Psychologists	Male	989	37%	4088	37%	$512,019	$571,547
	Female	1677	63%	7008	63%	$878,839	$985,987
	Total	**2666**		**11096**		**$1,390,857**	**$1,557,534**
Other Allied Health Providers	Male	3334	40%	13151	39%	$1,138,330	$1,372,887
	Female	5040	60%	20248	61%	$1,740,218	$2,092,975
	Total	**8374**		**33399**		**$2,878,548**	**$3,465,862**
	Total	**36756**		**95676**		**$9,545,281**	**$10,915,956**

Access to Allied Psychological Services (ATAPS)

ATAPS is provided under the Better Access to Services strategy to enable people with a clinically diagnosed mental health disorder to access assistance for short-term mental health interventions and services through psychiatrists, psychologists, GPs and other eligible allied health providers. ATAPS is targeted at improving access to support and treatment for people who have mild to moderate mental illness.

The profile of the WNSW PHN region's ATAPS clients in 2014/15 demonstrates that the largest cohort accessing ATAPS services were those aged 25-34 years (16.2%), followed by people aged 35-44 years (15.6%) and 12-17 years (14.3%) (Table 12).

TABLE 12 DISTRIBUTION OF ATAPS BY AGE GROUP

Age Group (years)	Number	Percent %
0-4	10	0.5
5-11	254	13.8
12-17	263	14.3
18-24	201	10.9
25-34	296	16.2
35-44	286	15.6
45-54	235	12.7
55-64	173	9.4
65-74	81	4.4
75-84	31	1.6
85+	9	0.6
Total	**1839***	**100.0**

* 2 patients of unknown age not included in total (Department of Health, 2016)

A total of 6,449 clients accessed the ATAPS program in the WNSW PHN area over the period 2011/12 – 2014/15 (Figure 27). The number of clients steadily increases from 2011/12 at 1,100 to 1,841 in 2014/15. Similarly, the number of sessions also increased over the same period albeit at a slightly higher rate from 3,929 services in 2011/12 to 7,818 in 2014/15 (Department of Health, 2016).

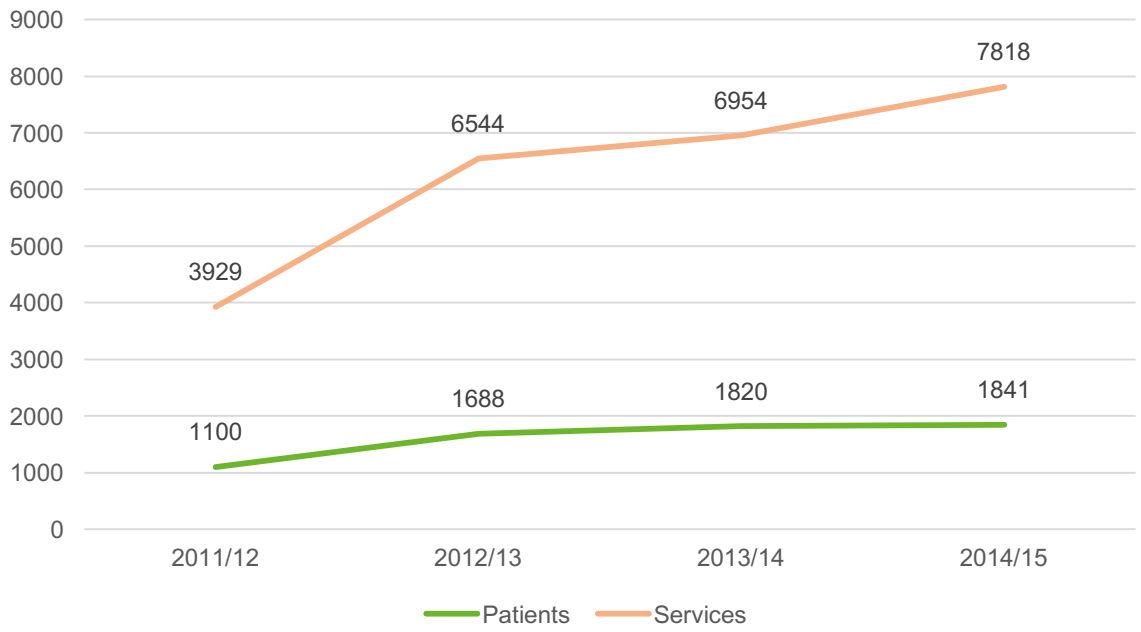


FIGURE 27 ATAPS MDS TOTAL PATIENTS AND SESSIONS 2011/12 - 2014/15

5. Mental Health Services in the WNSW PHN Region

5.1 Overview

In this section of the Atlas the type, availability and location of BSIC delivering mental health care in the WNSW PHN region are described.

Note this section does not include services where the primary presentation is not for mental health or alcohol and other drug issues, for example: domestic violence; sexual abuse and trauma services; intellectual disability or homelessness.

There was a total of 131 BSIC identified that deliver mental health care in the WNSW PHN region. These teams deliver 135 Main Types of Care (MTC) across 26 different DESDE classifications (Figure 28 and Table 13). 89% of these are services for adults, 10% are for children and adolescents and 1% are for older adults. As per Figure 29 below, 70% of service teams are delivering Outpatient type services, 14% Residential and 7% Day Care (Day Programs).

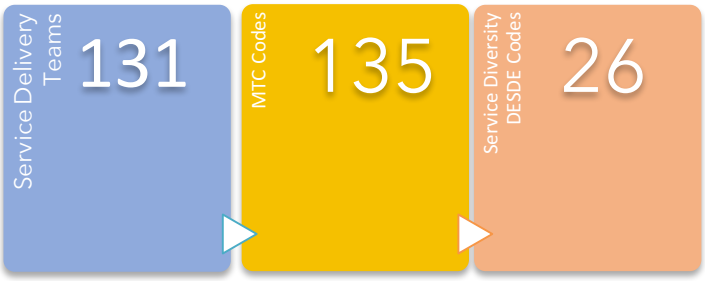


FIGURE 28 SUMMARY OF SERVICES PROVIDING CARE FOR MENTAL HEALTH

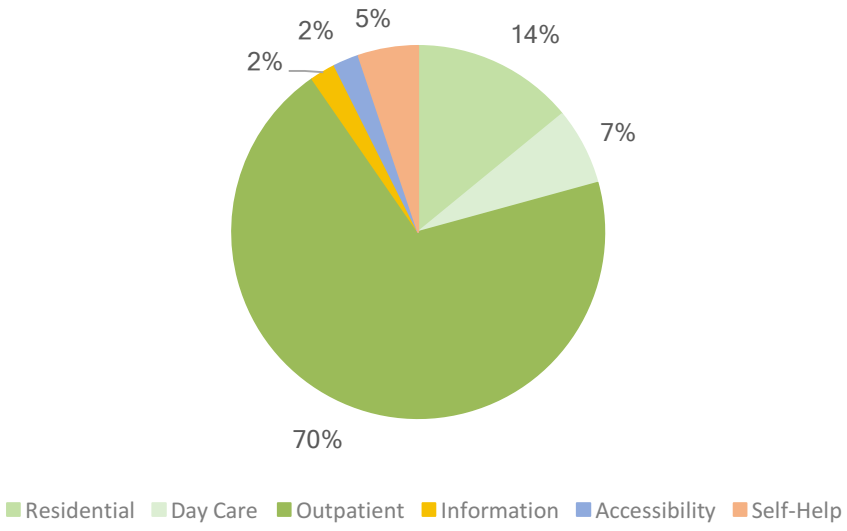
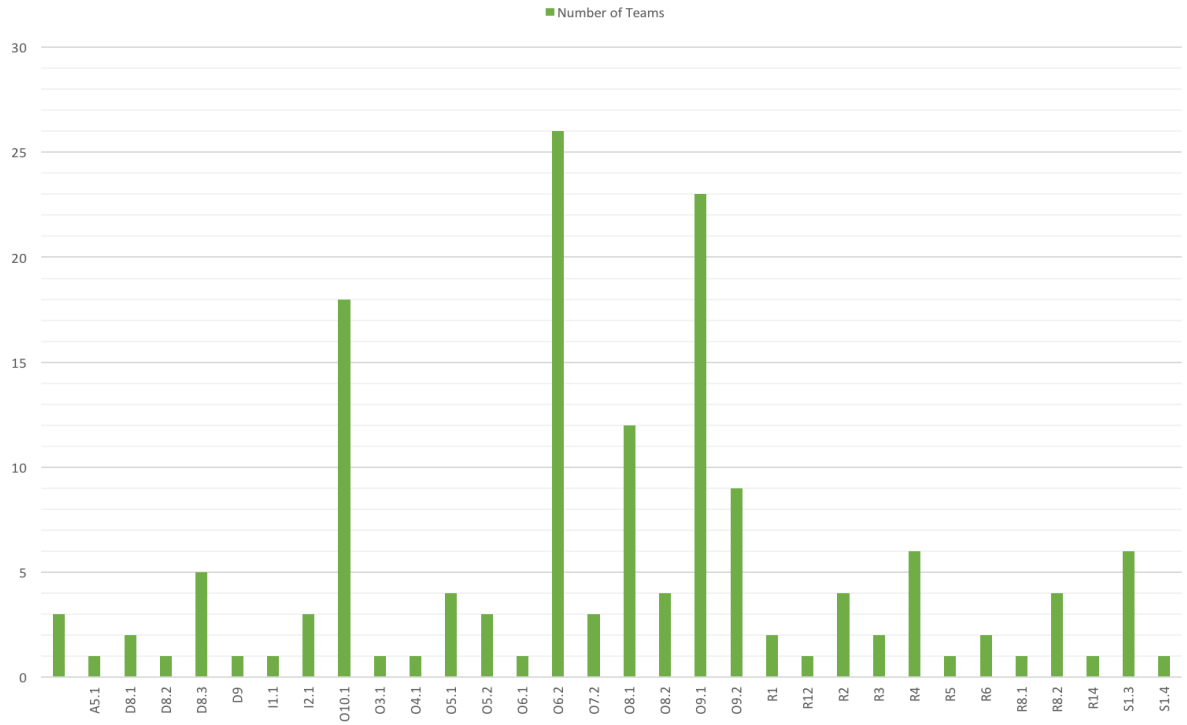


FIGURE 29 MENTAL HEALTH MTC BY CATEGORY IN THE WNSW PHN REGION

Within the WNSW PHN region the balance is almost even between services provided by the health sector and those provided by others such as NGOs, with 53% provided by NGOs and 47% by the health sector. There were 32 different service classifications across mental health and AOD combined. The distribution of these is shown in Figure 30.

TABLE 13 NUMBER OF MAIN TYPES OF MENTAL HEALTH CARE IN THE WNSW PHN REGION

Population Group	Service Type	R	D	O	A	I	S	TOTAL
Child & Adolescent	Health	1	1	3	0	0	0	5
	NGO/Other	0	0	5	0	3	0	8
	Sub-total	1	1	8	0	3	0	13
Adult	Health	14	0	40	0	0	3	57
	NGO/Other	3	8	45	3	0	4	63
	Sub-total	17	8	85	3	0	7	120
Older Adult	Health	1	0	1	0	0	0	2
	NGO/Other	0	0	0	0	0	0	0
	Sub-total	1	0	1	0	0	0	2
Total	Health	16	1	44	0	0	3	64
	NGO/Other	3	8	50	3	3	4	71
	Total	**19**	**9**	**94**	**3**	**3**	**7**	**135**
	%	**14**	**7**	**70**	**2**	**2**	**5**	**100**



R - Residential; D – Day Care; O – Outpatient; A – Accessibility; I – Information and Guidance; S – Self-Help and voluntary

FIGURE 30 NUMBER OF MENTAL HEALTH AND AOD TEAMS AND TYPES OF SERVICES IN THE WNSW PHN REGION

5.2 Regional Mental Health Helplines

The Mental Health Line – 1800 011 511 (known within WNSW as Mental Health Emergency Care - MHEC) is a Statewide 24-hour Emergency Helpline and Mental Health Information Service. This service provides assessment and referral for mental health clients across WNSW as well as providing advice to service partners by telephone and by videoconference 24hrs a day, 365 days a year.

The telehealth aspect of this service is run from the hub and spoke health service sites such as the regional hospitals, Multi Purpose Services (MPS) and community mental health and drug and alcohol teams.

The service is run from Orange, out of the Bloomfield Hospital Campus. There are approximately 52 emergency departments across the region and this service allows mental health assessments to be done online by clinicians into these EDs, reducing the need for care transfers from smaller regional MPS to larger towns with mental health inpatient wards or community mental health teams.

The service currently takes approximately 2,000 inbound calls a month. In addition, it makes a substantial number of outbound calls (approximately 6,000 per month). These calls include follow-ups at nights and on weekends on behalf of the community mental health teams that do not operate out of business hours. This service also receives referrals for assessments from GPs and private psychiatrists. It is considered an acute service and an important support to the community mental health teams across the region.

MHEC has a team of approximately 13 equivalent full time staff with a minimum two staff on each shift. A psychiatrist is available three days a week and a registrar Monday through Thursday. Staff also include full time AOD and Mental Health clinicians and a nurse unit manager. Approximately 80% of the work of this team involves dual diagnosis AOD/mental health issues. The bulk of the work of this team is triage & assessment and with brief follow-up.

This service is classified as an Outpatient service and can be found in the Outpatient section below.

5.3 Child and Adolescent Mental Health Services

There were 13 teams identified as providing services exclusively to children and adolescents across the WNSW PHN region (Table 14). Five of these teams are provided by the health sector and eight are provided by NGOs. One of these services is an inpatient service, nine are outpatient services and three are providing information and referrals. There are five headspace services in the area, including the new Broken Hill headspace, which is about to open.

In addition to these child specific teams, the Bathurst and Dubbo Special Programs Teams provide specialised staff for both older adults and children in the blended team approach. These can be found in the adult service section as they are classified with a GX or general age code. This is also the case for the blended community mental health and drug and alcohol service teams at Mudgee, Bourke, Lightening Ridge, Cowra, Parkes, Forbes and Condobolin. These teams are part way through a redesign process but in their current configuration include youth, infant or children's clinicians.

It should be noted that there are many generalist mental health teams that provide services to children and adults, including the Royal Flying Doctors Clinics, Mental Health Emergency Care (MHEC) and some MNIP nurses.

TABLE 14 CHILD AND ADOLESCENT SPECIFIC MENTAL HEALTH MTC ACROSS THE WNSW PHN REGION

Population Group	Service Type	R	D	O	A	I	S	TOTAL
Child & Adolescent	Health	1	1	3	0	0	0	5
	NGO/Other	0	0	5	0	3	0	8
	Total	**1**	**1**	**8**	**0**	**3**	**0**	**13**
	%	8	8	61	0	23	0	100

Residential Care for Children and Adolescents

There were no Sub-Acute or Other Inpatient services identified for children and adolescents in the region.

Acute Inpatient Services (R0, R1, R2 and R3 DESDE Codes)

There was one team identified as providing Residential Acute Inpatient services for children and adolescents in the WNSW PHN catchment (Table 15).

This facility is a 10 bed Child and Adolescent Mental Health (CAMHS) inpatient ward at Bloomfield Hospital in Orange, managed by the Western NSW Local Health District. Not all LHDs across NSW have acute CAMHS inpatient units. The catchment for this unit is Statewide, although anecdotally it is understood most admissions are from within the WNSW PHN area or the Murrumbidgee PHN regions.

With few specialist CAMHS beds across the State, most of the children and adolescents admitted to this unit will have problems of high complexity and severity.

The number of Acute Inpatient beds per 100,000 children and adolescents is 11.87 and the number of MTC per 100,000 children and adolescents is 1.19.

TABLE 15 ACUTE RESIDENTIAL MENTAL HEALTH CARE FOR CHILDREN AND ADOLESCENTS IN THE WNSW PHN REGION

Provider	Name	Suburb	DESDE – 1 (beds)	Area
Western NSW LHD: Mental Health Inpatient Services	Orange Health Service Bloomfield - Child & Adolescent Acute Mental	Orange	CA[F00-F99] - R2c (10)	Statewide

(Hospital Psychiatric Unit) - requires referral	Health Inpatient Service (CAMHS)

Placement of Child and Adolescent Residential Mental Health Services

For the location of Child and Adolescent Residential Mental Health Service please refer to the Residential service location map presented in the adult mental health services section of this report.

Day Care for Children and Adolescents

The Orange Community Mental Health - Child Youth and Family Services team runs the Pinelodge Youth Day Program, which is provided by the same team as the Outpatient service and is included in the Outpatient section and Table 17 below. This is a variable day program based on patient needs. It supports children to stay at school, or links them to tutoring and other school supports. It runs more than three days per week.

There were no other mental health Day Care services identified for children and adolescents in the region.

Outpatient Care for Children and Adolescents

Outpatient Care is by far the most common type of mental health care offered across the WNSW PHN region. There are four key types of Outpatient mental health care; Acute Mobile, Acute Non-Mobile, Non-Acute Mobile and Non-Acute Non-Mobile Outpatient Care.

There were no Acute Outpatient mental health services specifically for children and adolescents identified across the WNSW PHN region, however, many of the blended community mental health teams have specialist CAMHS clinicians and will handle some acute cases, as will the MHEC.

Non-Acute Mobile Outpatient Care (O5, O6 and O7 DESDE Codes)

There was one team identified as providing Non-Acute Mobile Outpatient services for children and adolescents in the WNSW PHN catchment (Table 16). The Safe Start Integrated Perinatal and Infant Care service aims to ensure newborns and young children have a safe environment conducive to optimal wellbeing in the early years of development. It provides support for mothers who may be at risk of mental illness.

The number of MTC per 100,000 children and adolescents is 1.19.

TABLE 16 NON-ACUTE MOBILE MENTAL HEALTH OUTPATIENT CARE FOR CHILDREN AND ADOLESCENTS IN THE WNSW PHN REGION

Provider	Name	Suburb	DESDE - 1	Area
Western NSW LHD: CMHDAS Orange	Orange 'Safe Start' Integrated Perinatal and Infant Care - Community Mental Health Service	Orange	CC[F00-F99] - O6.1	WNSW PHN Region

Non-Acute Non-Mobile Outpatient Care (O8, O9 and O10 DESDE Codes)

There were six teams identified as providing Non-Acute Non-Mobile Outpatient services for children and adolescents in the WNSW PHN catchment (Table 17).

The Community Mental Health and Drug and Alcohol Service Teams (CMHDAS) run by the Western NSW LHD are moving towards a model of care that combines the teams providing older adult mental health care with the infant, child, youth and family mental health services. This new combined Special Programs Team (SPT) operates in Dubbo and Bathurst and provides specialist assessment, intervention and treatment for children and young people who are experiencing mental health issues. It also plays a significant role in supporting families. The Bathurst and Dubbo CMHDAS Special Programs Teams are included in the adult section of this report. The Mudgee, Bourke, Lightning Ridge, Cowra, Parkes, Forbes and Condobolin CMHDAS teams, whilst still in a process of redesign, also include specialist child/adolescent clinicians and are also included in the adult section of this report as they are not stand-alone CAMHS teams.

There are five headspace centres in the WNSW PHN region catering for youth aged between 12 and 25 years. These are located in Broken Hill, Dubbo, Orange and Bathurst, the last of which provides satellite services to Cowra.

The Orange Community Mental Health - Child Youth and Family Services team runs the Pinelodge Youth Day Program, which is included in Table 17 below. This is a variable day program based on patient needs. It supports children to stay at school, or links them to tutoring and other school supports. It runs more than three days per week.

Happy Healthy Minds is a family mental health support service run by Mission Australia that provides an early intervention and prevention program for children and young people between the ages of 0 to 18

years who are affected by mental health issues. Priority is given to people who are the most disadvantaged in the community and families can self-refer. The program includes case management support (short or long term), group work and de-stigmatisation of mental health.

The number of MTC per 100,000 children and adolescents is 8.31.

TABLE 17 NON-ACUTE NON-MOBILE OUTPATIENT MENTAL HEALTH CARE FOR CHILDREN AND ADOLESCENTS IN THE WNSW PHN REGION

Provider	Name	Suburb	DESDE - 1 / 2	Area
Western NSW LHD: CMHDAS Orange	Orange Community Mental Health - Child Youth and Family Services	Orange	CX[F00-F99] – O9.1 CX[F00-F99] - D8.2	N/S
Far West LHD	Child and Adolescent Mental Health Team (CAMHS)	Broken Hill	CX[F00-F99] - O8.1b	Far West
Flourish - RichmondPRA	headspace	Broken Hill	CY[F00-F99] - O9.1	Broken Hill
Marathon Health	headspace	Dubbo	CY[F00-F99] - O9.1	Dubbo and surrounds
	headspace	Orange	CY[F00-F99] - O9.1	Orange
	headspace	Bathurst	CY[F00-F99] - O9.1	Bathurst
	headspace Cowra (satellite of Bathurst)	Cowra	CY[F00-F99] - O9.1t	Cowra
Mission Australia	Happy Healthy Minds	Dubbo	CA[F00-F99] - 09.2	Dubbo

Placement of Child and Adolescent Outpatient Mental Health Services

For the location of Child and Adolescent Outpatient Mental Health Service please refer to the Outpatient service location map presented in the adult mental health services section of this report.

Accessibility Services

There were no accessibility services identified for children and adolescents in the region.

Information and Guidance

There were three teams identified as providing Information and Guidance services for children and adolescents in the WNSW PHN catchment (Table 18). The Family Mental Health Support Service provides information and support to families who have children aged 0-18 who may be at risk of or experiencing mental health issues.

The Interrelate Family Centre providing FMHSS out of Cobar often outreaches into schools in Coonamble and Bourke. The program runs groups with children to provide information on mental health, bullying and wellbeing.

The number of MTC per 100,000 children and adolescents is 3.56.

TABLE 18 INFORMATION AND GUIDANCE FOR CHILDREN AND ADOLESCENTS IN THE WNSW PHN REGION

Provider	Name	Suburb	DESDE - 1	Area
Interrelate Family Centres	Family Mental Health Support Service	Cobar	CX[e310][F00-F99] - I2.1.1	N/S
CentaCare Wilcannia Forbes	Family Mental Health Support Service	Broken Hill	CX[e310][F00-F99] - I2.1.1	Far West
	Family Mental Health Support Service	Wilcannia	CX[e310][F00-F99] - I2.1.1	Far West

Self-help and Voluntary Support

There were no teams identified as providing Self-Help and Voluntary services for children and adolescents in the WNSW PHN catchment.

5.4 Adult Mental Health Services

There were a total of 135 mental health MTC identified across WNSW with 120 or 89% of these delivering services for adults (including those that are not providing age specific services). As shown in Table 19 below, Outpatient services are the most common service type (71%), followed by Residential services (14%) and Day Care services (7%).

TABLE 19 ADULT MENTAL HEALTH CARE MTC ACROSS WNSW

Population Group	Service Type	R	D	O	A	I	S	TOTAL
Adults and General Services	Health	14	0	40	0	0	3	57
	NGO/Other	3	8	45	3	0	4	63
	Total	**17**	**8**	**85**	**3**	**0**	**7**	**120**
	%	14	7	71	2	0	6	100

Residential Care

Residential Care services account for 14% of the MTC identified across the WNSW PHN region. Fourteen of these are provided by the health sector and three by NGOs. Residential Care is classified as Acute, Sub-Acute or Non-Acute.

Acute Residential (Inpatient) Care (R0, R1, R2 and R3 DESDE Codes)

There were five teams identified as providing Acute Residential Care for adults in the WNSW PHN catchment (Table 20).

Western NSW LHD provides core adult acute inpatient units at Bloomfield Hospital in Orange and at Dubbo Base Hospital in Dubbo. At Bloomfield, the Lachlan Adult Acute Unit officially has 20 beds, although its capacity is currently sitting at 16 beds. This is a locked ward for people from the Orange region. People may be admitted here after transition from the Mental Health Intensive Care Unit (MICU - 8 beds) and may in turn transition from here to the Sub-Acute Amaroo ward.

The Lachlan MICU is an 8-bed short-stay unit with high intensity surveillance. Patients may transition from here to the Lachlan Adult Acute Unit.

In Dubbo, there is an 18 bed Adult Acute Unit at Dubbo Base Hospital. Currently this is going through a period of service re-design and has 14 beds operational. The length of stay here is generally less than four weeks' duration.

In Broken Hill, there is an acute mental health inpatient unit with a six bed ward (2 x 2 bed and 2 x single bed) providing short term care. It is managed by the Far West LHD and primarily services the Far West area. It is a 'declared' facility accepting voluntary and involuntary admissions.

Ramsey Health Care offers an acute inpatient unit in Mildura which has also been included in the table, although it is located outside the boundary of the Far West LHD. This unit is geographically quite close to Dareton (approximately 25 minutes by car) and it is acknowledged it takes in patients from other areas within the Far West LHD area. It has 12 beds.

The number of Acute Inpatient beds per 100,000 adults is 37.42 and the number of MTC per 100,000 adults is 2.92.

TABLE 20 ACUTE RESIDENTIAL MENTAL HEALTH CARE FOR ADULTS IN THE WNSW PHN REGION

Provider	Name	Suburb	DESDE – 1 (beds)	Area
Western NSW LHD: Mental Health Inpatient Services (Hospital Psychiatric Unit) - requires referral	Orange Health Service Bloomfield - Lachlan Adult MH Intensive Care Service	Orange	AX[F00-F99] - R1 (8)	Orange and Region
	Dubbo Health Service Adult Acute Inpatient	Dubbo	AX[F00-F99] - R2c (18)	Dubbo
	Orange Health Service Bloomfield - Lachlan Adult Acute Mental Health Inpatient Service	Orange	AX[F00-F99] - R2 (20)	Orange and Region
Ramsay Health Care	Acute Ward	Mildura	AX[F00-F99] - R3.0o (12)	Far West
Far West LHD	Acute Mental Health Inpatient Unit (MHIPU)	Broken Hill	AX[F00-F99] - R3.0o (6)	Far West

Sub-Acute Residential Care (R4, R5, R6, R7 DESDE Codes)

There were eight teams identified as providing Sub-Acute Residential Care for adults in the WNSW PHN catchment (Table 21).

The Western NSW LHD provides the Amaroo 16-bed Sub-Acute unit located on the Bloomfield Hospital campus in Orange. This service provides 24 hours staffing and stays are generally less than four weeks. The Western NSW LHD also provides the 10 bed Sub-Acute Dubbo Recovery and Rehabilitation Service managed by NEAMI National on the Dubbo Base Hospital site. This management contract is in the process of being re-tendered. Within the Recovery and Rehabilitation Unit inpatients engage in the 'Optimal Health Program' focussing on understanding symptoms of mental illness and working toward optimal wellbeing. This is added as a second MTC code.

The number of Acute Inpatient beds per 100,000 adults is 74.85 and the number of MTC per 100,000 adults is 4.68.

TABLE 21 SUB-ACUTE RESIDENTIAL MENTAL HEALTH CARE FOR ADULTS IN THE WNSW PHN REGION

Provider	Name	Suburb	DESDE – 1 (beds)	Area
Western NSW LHD: CMHDAS Bathurst	Bathurst Panorama Unit Adult Mental Health Inpatient Service	Bathurst	AX[F00-F99] - R4 (10)	Bathurst and Region
NEAMI/ Western NSW LHD: Dubbo Recovery and Rehabilitation Unit	Dubbo Recovery and Rehabilitation Unit	Dubbo	AX[F00-F99] - R4 (10) AX[F00-F99] - D8.1	Dubbo and Region
Western NSW LHD: Mental Health Inpatient Services (Hospital Psychiatric Unit) - requires referral	Orange Health Service Bloomfield - Manara State Wide Rehabilitation Mental Health Inpatient Service	Orange	AXM[F00-F99] - R4 (16)	Statewide
	Orange Health Service Bloomfield - Canobolas Extended Care Mental Health	Orange	GX[F00-F99] – R6c (20)	Orange and Region

	Inpatient Service			
	Orange Health Service Bloomfield - Amaroo Adult Rehabilitation Mental Health Inpatient Service	Orange	AX[F00-F99] - R4 (16)	Orange and Region
	Orange Health Service Bloomfield - Turon State Wide Rehabilitation Mental Health Inpatient Service	Orange	AXF[F00-F99] – R4 (16)	Statewide
	Orange Health Service - Castlereagh, Windamere, Mental Health Inpatient (State Wide) Rehabilitation Services	Orange	AXM[F00-F99] – R6c (20)	Statewide
	Orange Health Service Bloomfield - Windamere - Macquarie Forensic Mental Health Inpatient Service	Orange	AX[F00-F99] – R4jc (20)	Statewide

Other Residential Care (R8, R9, R10, R11, R12 and R13 DESDE Code)

There were four teams identified as providing Other Residential Care for adults in the WNSW PHN catchment (Table 22).

The Mental Health Recovery Centre is a 10-bed unit designed to help people recover from conditions that affect their mental health. This unit is not declared under the NSW Mental Health Act, so cannot accept involuntary inpatients. The Recovery Centre is operated by NEAMI National, a Community Managed Organisation (CMO) in partnership with the Far West MHDA Service. Staff will work with guests of the unit to encourage self-sufficiency and community participation. Day programs are run for inpatients at the unit, who partake in the Optimal Health Program (focussing on wellbeing), the Flourish Program (a peer facilitated self-development program) and the Understanding and Managing Anxiety Group, another peer led group program.

For carers, there is a Mental Health Respite service run by One Door Mental Health which organises respite and retreats in a house on the outskirts of Dubbo.

The number of Acute Inpatient beds per 100,000 adults is 25.14 and the number of MTC per 100,000 adults is 2.34.

TABLE 22 OTHER RESIDENTIAL MENTAL HEALTH CARE FOR ADULTS IN THE WNSW PHN REGION

Provider	Name	Suburb	DESDE – 1 / 2 (beds)	Area
Western NSW LHD: Mental Health Residential Rehabilitation/Community Care Unit	Orange Housing Integrated Programmed Support (SHIPS) Endeavour House CCU (i)	Orange	AX[F00-F99] – R8.2 (9) AX[F00-F99] – O10.1	Orange and region
NEAMI/Far West LHD	Mental Health Recovery and Rehabilitation Centre	Broken Hill	AX[F00-F99] - R8.2 (10) AX[F00-F99] - D8.1	Far West
One Door Mental Health (formerly schizophrenia fellowship of NSW)	Mental Health Respite: Carer Support	Dubbo	AX[e310][F00-F99] - R14 (10)	N/S

Mental Health residential rehabilitation/community care unit	Orange SHIPS satellite Tallowwood Hostel (ii)	Orange	AX[F00-F99] – R12t (14)	Orange and region

Placement of Adult Residential Mental Health Services

Residential (inpatient) mental health services were identified in the most populated parts of the region, Broken Hill, Dubbo, Orange and Bathurst as shown in Figure 31. There are no inpatient beds to the very North of the area (Bourke) or to the very South, however there are beds available in Mildura which is relatively closer to towns within the LGAs of Wentworth and Balranald.

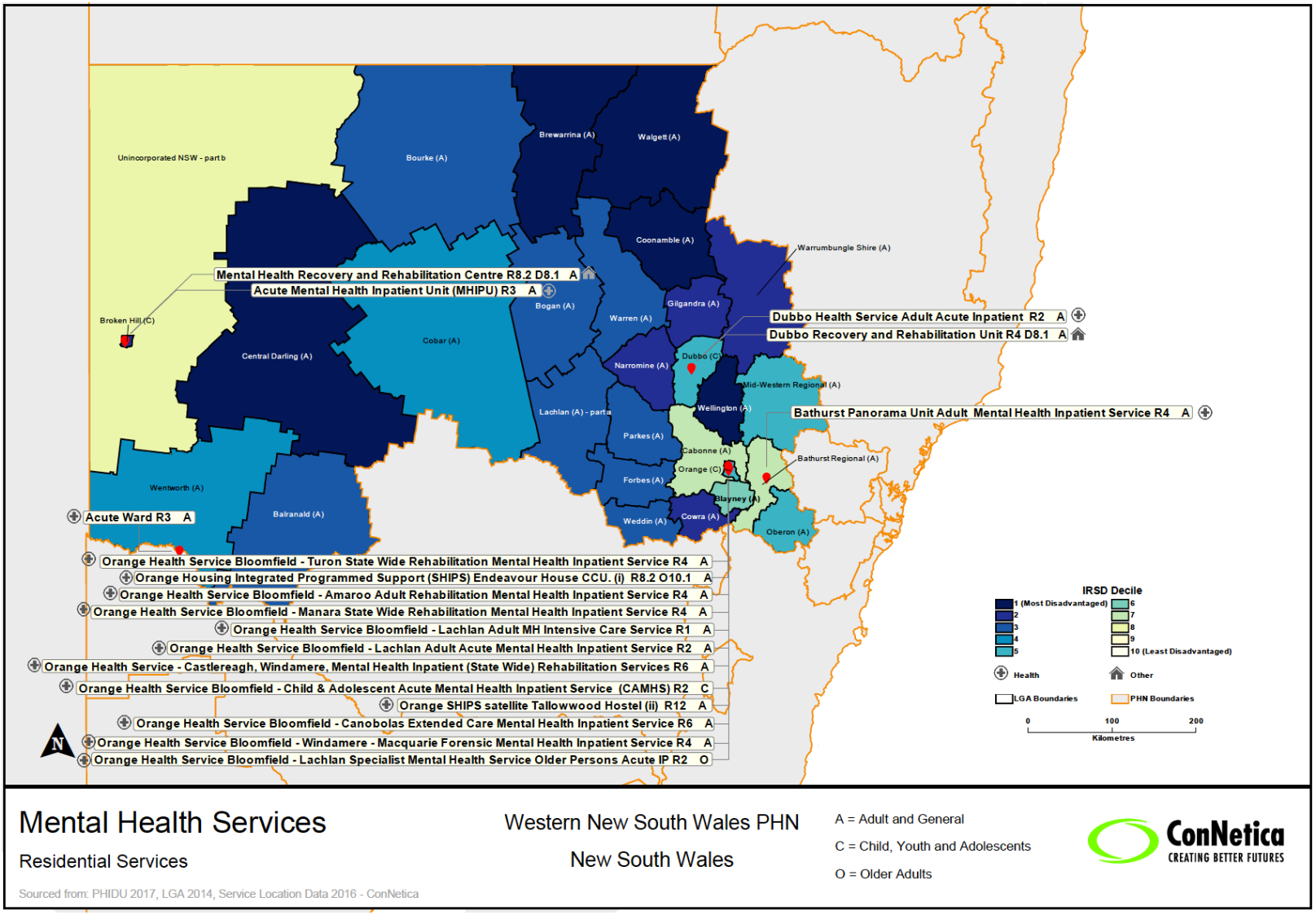


FIGURE 31 PLACEMENT OF RESIDENTIAL MENTAL HEALTH SERVICES IN THE WNSW PHN REGION

Day Care

There were six teams identified as providing mental health Day Care for adults in the WNSW PHN region (Table 23). Catholic Healthcare Ltd provide a Day 2 Day Living program in Orange. This team delivers group based activities throughout the week, including field trips on Fridays. Generally, attendance numbers will fluctuate throughout the week with between 10-20 individuals attending. Due to spaced limitations, field trips generally cater for up to six people at any one time.

There are several day programs that run for inpatients of the NEAMI managed Dubbo and Broken Hill Recovery and Rehabilitation Services. These include the Optimal Health Program (focussing on wellbeing), the Flourish program (a peer facilitated self-development program) and the Understanding and Managing Anxiety Group, another peer led group program. As these programs are run for the inpatient clients by the staff of the inpatient facility, these are included in the Residential Care section above.

The Mission Australia Resource and Recovery Programs run five days a week in a variety of locations and offer a range of group activities such as mindfulness meditation and arts and crafts.

The number of MTC per 100,000 adults is 3.51.

TABLE 23 DAY CARE MENTAL HEALTH SERVICES FOR ADULTS IN THE WNSW PHN REGION

Provider	Name	Suburb	DESDE – 1	Area
Catholic Healthcare Ltd	Day 2 Day Living - Orange	Orange	AX[F00-F99] - D9	N/S
Mission Australia	Resource and Recovery Program	Dubbo	AX[F00-F99] – D9	Dubbo
	Resource and Recovery Program	Forbes	AX[F00-F99] - D9	Forbes and surrounds
	Resource and Recovery Program	Parkes	AX[F00-F99] - D9	Parkes and Surrounds
	Resource and Recovery Program	Cowra	AX[F00-F99] - D9	Parkes and Surrounds
	Resource and Recovery Program	Bathurst	AX[F00-F99] - D9	Bathurst and Region

Placement of Adult Day Care Services

Mental Health Day Care services were concentrated around the highly populated towns of Dubbo, Orange and Bathurst (Figure 32). The Mission Australia Resource and Recovery Programs are also run in the less populated locations of Parkes, Forbes and Cowra. There were no dedicated Day Care programs identified in the Far West LHD. There were also no Day Care programs identified in the far north of the region, across Bourke, Brewarrina and Walgett.

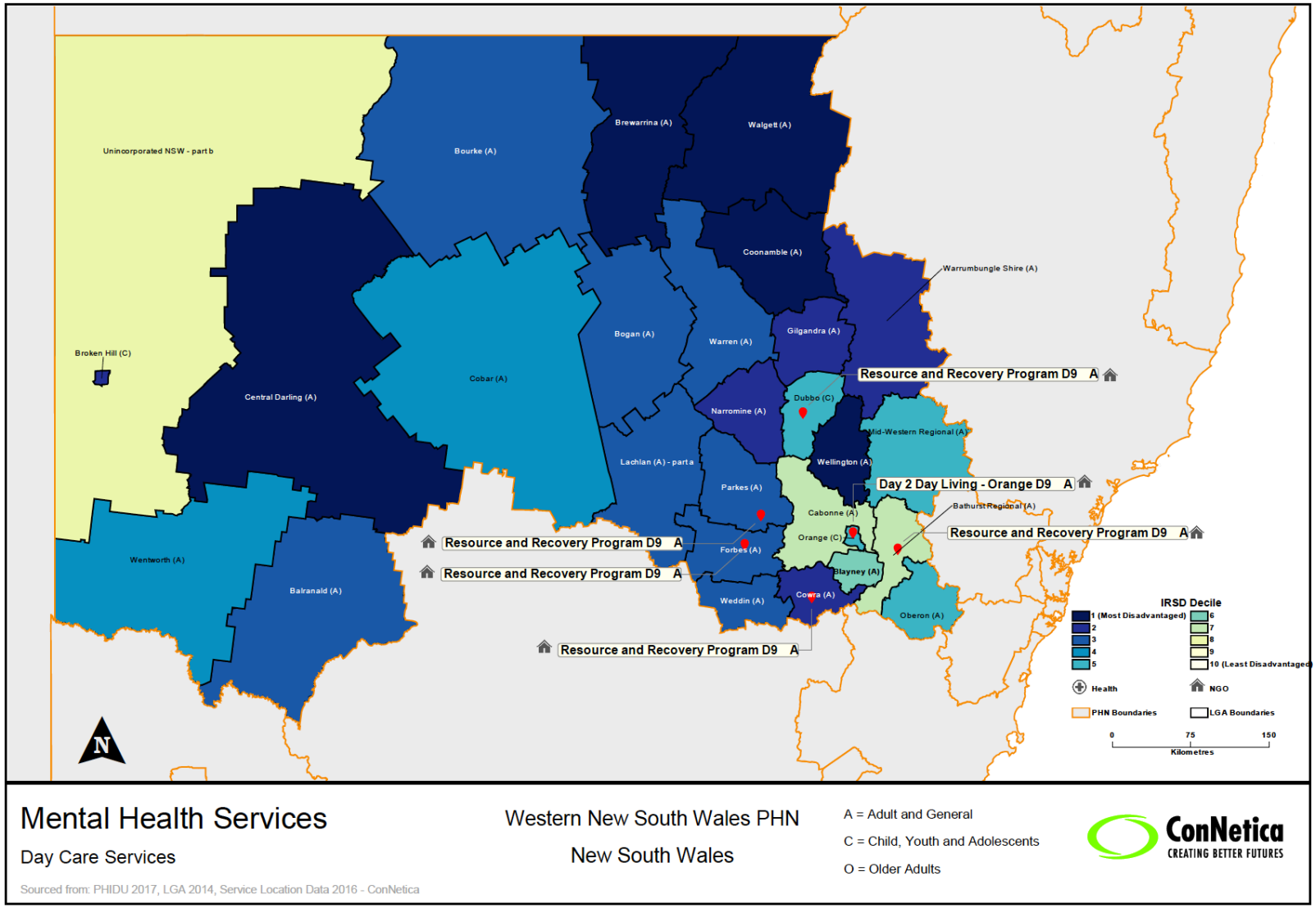


FIGURE 32 PLACEMENT OF DAY CARE MENTAL HEALTH SERVICES IN THE WNSW PHN REGION

Outpatient Care

Outpatient Care is the most common type of mental health care provided across the WNSW PHN region with 94 or 71% of the MTC identified as providing Outpatient Care across the region. Eighty-five of these MTC are for adults (or are not age specific). Forty of these are provided by the health sector and 45 by NGOs.

As in other remote and rural parts of Australia, there are many community mental health and drug and alcohol (CMHDA) teams working across both LHDs that necessarily provide both acute and non-acute care, whereas in metropolitan areas there are separate discrete teams that specialise in acute care (e.g. Crisis and Assessment Treatment Teams in Melbourne).

Generally, the CMHDA teams are working standard business hours and utilise the Mental Health Line (known within the region as Mental Health Emergency Care - MHEC) as a key additional resource for supporting the acute element of care, at night, on weekends and during the week through EDs and CMHDA locations across the region via teleconference facilities. As such, the work of the CMHDA is generally classified as Non-Acute with the broad range of acuity reflected with the addition of an 'a' or 'acute' qualifier to the DESDE code.

This however is changing across the Western NSW LHD area. As part of the service re-design currently underway, there will be new Intensive Case Management Teams introduced which will effectively split off from the Acute and Continuing Care Teams, dividing the acute from the non-acute care. These will offer a Flexible Assertive Community Treatment model that will focus on reducing preventable re-admissions to the inpatient units, a focus with similarities to the mental health Hospital Admission Risk Program (HARP) models offered in Victoria.

Acute Mobile Outpatient Care (O1 and O2 DESDE Codes)

There were no Acute Mobile Outpatient services for adults identified in the WNSW PHN region. However, in common with other rural and remote areas that have been mapped in Australia using the DESDE methodology and as described above, the teams run out of the WNSW PHN region are doing a blend of Acute and Non-Acute work. As such, these are classified under the Non-Acute codes below with their Acute work indicated by the addition of the 'a' qualifier.

Acute Non-Mobile Outpatient Care (O3 and O4 DESDE Codes)

There were two teams identified as providing Acute Non-Mobile Outpatient services for adults in the WNSW PHN catchment (Table 24). Of note is the MHEC that services the whole region. The Mental Health Line (MHEC) is a State-wide 24-hour Emergency Helpline and Mental Health Information Service. This service provides assessment and referral for mental health clients across WNSW as well as providing advice to service partners by telephone and by videoconference 24hrs a day, 365 days a year.

The number of MTC per 100,000 adults is 1.17.

TABLE 24 ACUTE NON-MOBILE OUTPATIENT MENTAL HEALTH CARE FOR ADULTS IN THE WNSW PHN REGION

Provider	Name	Suburb	DESDE - 1	Area
Western NSW LHD: CMHDAS Bathurst	Bathurst Emergency Department Mental Health Consultation & Liaison	Bathurst	GX[F00-F99] - O4.1Ih	Bathurst and Region
Mental Health Assessment/Triage/ Crisis Response	Mental Health Emergency Care	Orange	GX[F00-F99] - O3.1el	Region-wide

Non-Acute Mobile Outpatient Care (O5, O6 and O7 DESDE Codes)

There were 35 teams identified as providing Non-Acute Mobile services for adults in the WNSW PHN catchment (Table 25).

Flourish (formerly RichmondPRA) provides several Non-Acute Mobile services in the WNSW PHN region. This includes Housing Accommodation Support Initiatives (HASI) in Broken Hill, Parkes, Bourke, Bathurst and Dubbo. The HASI service provides housing support and coordination to those with co-existing mental illness and homelessness. Flourish also provide Personal Helpers and Mentors Programs (PHaMs) in Cobar and Bourke, along with a Family and Carers Respite Program (FCRP) in Broken Hill.

There is an Acute and Continuing Care Team (ACCT) with extended hours (8:30am till 10pm seven days a week) in Dubbo. This is a mobile team.

The number of MTC per 100,000 adults is 20.46.

TABLE 25 NON-ACUTE MOBILE OUTPATIENT MENTAL HEALTH CARE FOR ADULTS IN THE WNSW PHN REGION

Provider	Name	Suburb	DESDE - 1	Area
Western NSW LHD: CMHDAS Dubbo	Dubbo ACCT	Dubbo	AX[F00-F99] – O5.1a	Dubbo and Region
	Special Programs Team - Older adults and children	Dubbo	GX[F00-F99] – O5.1la	Dubbo and Region
Western NSW LHD: CMHDAS Lightening Ridge	Lightning Ridge Community Mental Health, Drug & Alcohol Team	Lightning Ridge	GX[F00-F99] – O5.1a	Lightning Ridge and surrounds
Western NSW LHD: CMHDAS Orange	Curran Centre - Orange CMHT - FACT	Orange	AX[F00-F99] – O5.1a	Orange
Flourish - RichmondPRA	HASI	Broken Hill	AX[F00-F99] - O5.2	N/S
	HASI	Parkes	AX[F00-F99] - O5.2	N/S
	HASI	Bourke	AX[F00-F99] - O5.2	N/S
One Door Mental Health (formerly schizophrenia fellowship of NSW)	PHaMs	Dubbo	AX[F00-F99] - O6.2	N/S
CentaCare Wilcannia Forbes	PHaMs	Broken Hill	AX[F00-F99] - O6.2	Broken Hill and surrounds
Flourish - RichmondPRA	PHaMs	Parkes	AX[F00-F99] - O6.2	Parkes and surrounds
	HASI	Bathurst	AX[F00-F99] - O6.2	N/S
	HASI	Dubbo	AX[F00-F99] - O6.2	N/S
	PHaMs	Cobar	AX[F00-F99] - O6.2	N/S
	PHaMs	Bourke	AX[F00-F99] - O6.2	N/S

Aftercare	PHaMs	Bathurst	AX[F00-F99] - O6.2	N/S
The Benevolent Society	PHaMs	Mudgee	AX[F00-F99] - O6.2	Mudgee
One Door Mental Health (formerly schizophrenia fellowship of NSW)	Mental Health Respite: Carer Support	Dubbo	AX[e310][F00-F99] - O7.2	N/S
Flourish - RichmondPRA	Family and Carers Respite Program	Broken Hill	AX[e310][F00-F99] - O7.2	N/S
LiveBetter (Formerly CareWest)	Mental Health Respite: Carer Support	Orange	GX[e310][F00-F99] - O7.2e	N/S
Mission Australia	HASI	Dubbo	AX[F00-F99] - O6.2	Dubbo
	Aboriginal HASI	Dubbo	AXIN[F00-F99] - O6.2	Dubbo
	HASI	Mudgee	AX[F00-F99] - O6.2	Dubbo
	HASI	Coonabarabran	AX[F00-F99] - O6.2	Coonabarabran
	Aboriginal HASI	Coonabarabran	AXIN[F00-F99] - O6.2	Coonabarabran
	HASI in the Home	Coonabarabran	AX[F00-F99] - O6.2	Coonabarabran
	HASI in the Home	Coonamble	AX[F00-F99] - O6.2	Coonamble and Region
	HASI	Coonamble	AX[F00-F99] - O6.2	Coonamble and Region
	Aboriginal HASI	Coonamble	AXIN[F00-F99] - O6.2	Coonamble and Region
	HASI	Walgett	AX[F00-F99] - O6.2	Walgett and Region
	Aboriginal HASI	Walgett	AXIN[F00-F99] - O6.2	Walgett and Region
	HASI	Lightning Ridge	AX[F00-F99] - O6.2	Lightning Ridge and surrounds
	Aboriginal HASI	Lightning Ridge	AXIN[F00-F99] - O6.2	Lightning Ridge and surrounds
	Aboriginal HASI	Bourke	AXIN[F00-F99] - O6.2	Bourke and region
	HASI	Broken Hill	AX[F00-F99] - O6.2	Broken Hill and surrounds
	PHaMs	Orange	AX [F00-F99] - O6.2	Orange

Placement of Non-Acute Mobile Outpatient Mental Health Care

Non-Acute Mobile Outpatient services are relatively evenly distributed across the WNSW PHN region (Figure 33). There are several HASI and Aboriginal HASI programs across the region - located in major towns and smaller LGAs. In the central LGAs of Bourke and Cobar there are both HASI and PHaMs programs available. In the significantly disadvantaged areas of Walgett and Coonamble there are several HASI programs, along with a Community Mental Health and Drug and Alcohol Team in Lightning Ridge. Noticeable gaps can be observed in the lower south areas of Wentworth, Central Darling and Balranald, however these are covered to some extent by Non-Mobile services in these locations. This also applies across the middle of the region from Brewarrina to the north through to Lachlan in the south.

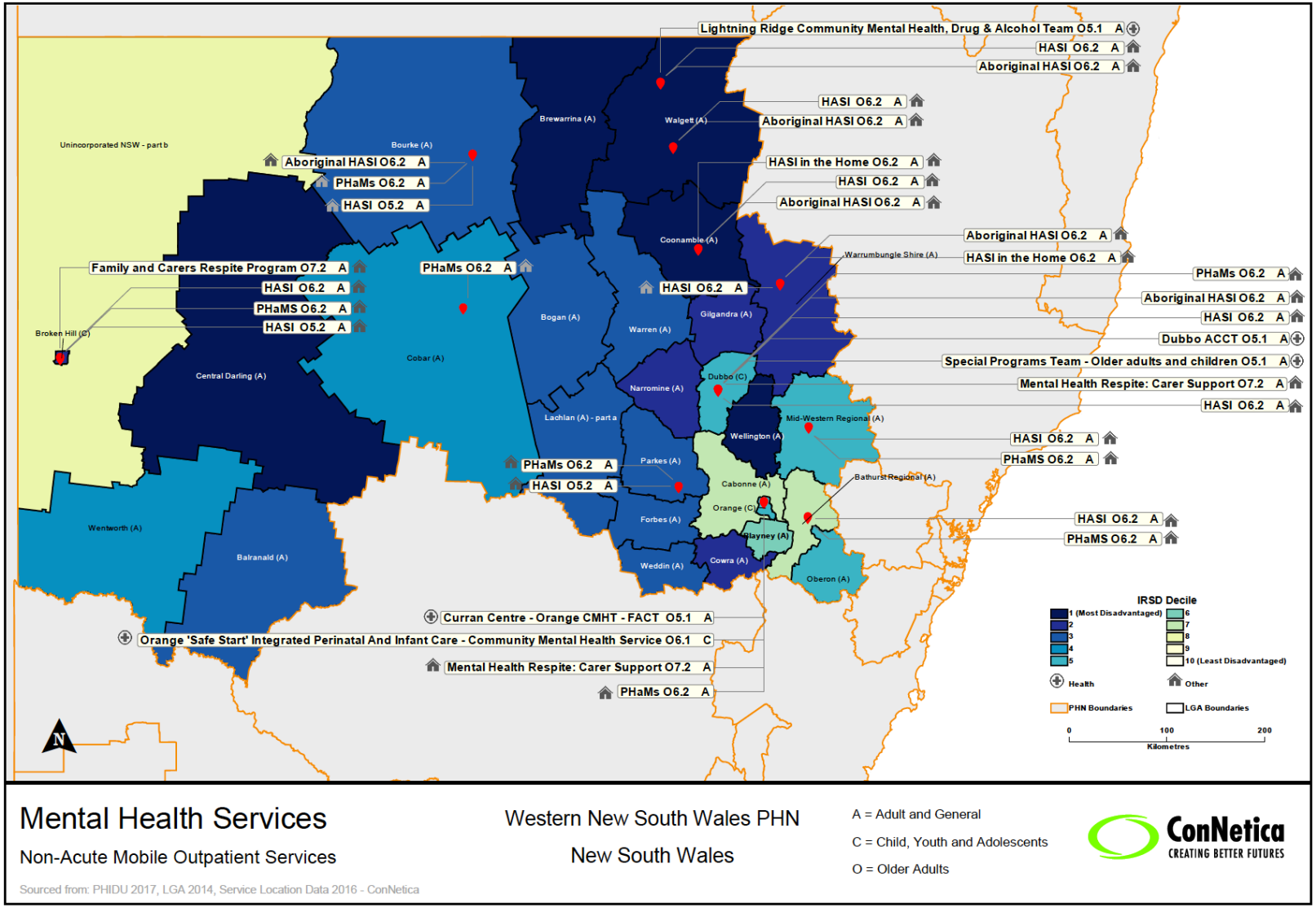


FIGURE 33 PLACEMENT OF NON-ACUTE MOBILE OUTPATIENT MENTAL HEALTH SERVICES IN THE WNSW PHN REGION

Non-Acute Non-Mobile Outpatient Care (O8, O9 and O10 DESDE Codes)

There were 48 teams identified as providing Non-Acute Non-Mobile Outpatient services for adults in the WNSW PHN catchment (Table 26).

Aftercare operates LikeMind in Orange. A number of service providers operate from this location in Kite Street, allowing access to a range of different services, including mental health services but also drug and alcohol, employment and training support, housing assistance and access to GPs, psychologists and social workers.

There are a number of MHNIP Nurses providing services at Bathurst, Cowra, Orange, Parkes, Lightning Ridge, Bourke, Walgett, Broken Hill and Cobar. The intensity of the work of these Nurses varies. Often when first connecting with a client (or during times the client is particularly unwell) the Nurse may see a client up to three times a week. However, on average, capacity limits interactions to less than three times a week, often fortnightly or monthly. One concern raised with the MHNIP is the distances some people need to travel to see the Nurse. At present, there is no flexibility for the MHNIP Nurse to attend to clients via teleconference or over the telephone. This means some quite unwell clients are required to travel by car over long distances. For clients that are severely depressed, may have suicidal ideation or are suffering from severe anxiety, the road trip is very difficult and often seen not only as a risk issue, but also as a barrier to service access.

There are two Community Mental Health and Drug & Alcohol (CMHDA) teams in the Far West. These are located in Broken Hill and Dareton. Clinicians in both teams provide a range of services to people with both mental health and drug & alcohol issues. They offer assessment, case management, psycho-education and a range of therapies. Both teams provide weekly mental health and drug & alcohol outreach clinics in neighbouring communities; the Broken Hill team supports Menindee and Wilcannia and the Dareton team supports Balranald.

Western NSW LHD has nine Community Mental Health and Drug and Alcohol Service (CMHDAS) teams across the region. Some, such as Bathurst, are running discrete age specific teams, whilst others are operating as one team working across all ages but incorporating specialist aged or youth clinicians within these teams. These can be identified by the GX age code.

CentaCare runs the Family and Carer Mental Health Support (FCMHSS) Programs which is funded by the NSW Government and located in Broken Hill.

The GP Superclinic which is based in Broken Hill provides a psychiatrist via teleconference for a couple of session each week. This professional is based in Brisbane and the service is bulk billed. It is hoped that the service may be able to be extended to after-hours sometime in the future.

Interrelate runs Support for Survivors of Institutional Abuse services in Dubbo and Orange. Mission Australia provides a number of Non-Acute Non-Mobile Outpatient services. The Enhanced Adult Living Support (ACLS) program is a new service funded by NSW Health that is designed to support adults with severe mental illness to transition out of long term residential care into the community. It is based on the HASI in the Home model. Mission Australia provides this service in Mudgee, Broken Hill and Orange.

The Royal Flying Doctor Service (RFDS) operates several clinics throughout the region and have bases in Broken Hill and Dubbo. From Broken Hill the RFDS covers a land area of 640,000 square kms, undertaking emergency retrievals for those living in remote and very remote locations and running clinics in a variety of locations. Approximately 50% of the work at the Broken Hill base is telehealth work, along with flying out to clinics in the region. Out of the Dubbo location the RFDS has funded a permanent psychologist position to provide outreach to surrounding areas. This includes clinical support for Aboriginal Health Workers to build capacity and provide secondary consultations. This role includes case planning and counselling.

The number of MTC per 100,000 adults is 28.07.

TABLE 26 NON-ACUTE NON-MOBILE OUTPATIENT MENTAL HEALTH CARE FOR ADULTS IN THE WNSW PHN REGION

Provider	Name	Suburb	DESDE - 1	Area
Aftercare	Likemind Orange	Orange	AX[F00-F99] - O9.2r	N/S
Anima Clinica	MHNIP Nurse	Bathurst	AX[F00-F99] - O9.1	Bathurst and surrounds
CentaCare Wilcannia Forbes	Family and Carer Mental Health Support Program	Broken Hill	AX[e310][F00-F99] - O9.2	Far West
Coonamble Aboriginal Health Service	Psychologist	Coonamble	GXIN[F00-F99] - O10.1	Coonamble and Region
Cowra Medical Associates	MHNIP Nurse	Cowra	AX[F00-F99] - O10.1	N/S
Dudley Private Hospital	MHNIP Nurse	Orange	AX[F00-F99] - O10.1	N/S
Far West LHD	CMHDA (i)	Wilcannia	AX[F00-F99] - O9.1m	Far West
	CMHDA (i)	Menindee	AX[F00-F99] - O9.1m	Far West
	CMHDA (ii)	Balranald	AX[F00-F99] - O9.1	Far West
	CMHDA (i)	Broken Hill	AX[F00-F99] - O8.1m	Far West
	CMHDA (ii)	Dareton	AX[F00-F99] - O8.1m	Far West
GP Super Clinic	GP Super Clinic Psychiatric Telehealth	Broken Hill	GX[F0-F00] - O.10.1e	Far West
Interrelate Family Centres	Support for Survivors of Institutional Abuse	Dubbo	AX[Z69][F00-F99] - O9.2s	N/S
	Support for Survivors of Institutional Abuse	Orange	AX[Z69][F00-F99] - O9.2s	N/S
Julie Wilson Counselling Service	MHNIP Nurse	Parkes	AX[F00-F99] - O10.1	N/S
Lifeline	Gambling Counselling	Broken Hill	GX[F63.0] - O8.2	Far West
Maari Ma Aboriginal Corporation	Primary Care Specialist Service	Broken Hill	GXIN[F0-F99][F10-F19] - O9.1	Broken Hill and surrounds
Mission Australia	Enhanced Adult Community Living Support (ACLS)	Mudgee	AX [F00-F99] - O8.2	Mudgee
	Enhanced ACLS Dareton/Wentworth	Broken Hill	AX [F00-F99] - O8.2t	Dareton/Wentworth
	Enhanced ACLS	Orange	AX [F00-F99] - O8.2	Orange

NSW Outback Division of General Practice	MH Nurse - RARMS	Lightning Ridge	AX[F00-F99] - O10.1	N/S
	MNIP Walgett	Walgett	AX[F00-F99] - O10.1	Walgett and 200km
	MNIP Bourke	Bourke	AX[F00-F99] - O10.1	Bourke and 200km
	MNIP Cobar	Cobar	AX[F00-F99] - O10.1	Cobar and 200km
Royal Flying Doctor Service	RFDS Clinic Broken Hill	Broken Hill	GX[F00-F99] - O9.1e	Far West
	RFDS Clinic Ivanhoe Health Service	Ivanhoe	GX[F00-F99] - O9.1t	Far West
	RFDS Clinic Menindee Health Service	Menindee	GX[F00-F99] - O9.1t	Far West
	RFDS Clinic White Cliffs Health Service	White Cliffs	GX[F00-F99] - O9.1t	Far West
	RFDS Clinic Wilcannia Health Service	Wilcannia	GX[F00-F99] - O9.1t	Far West
	RFDS Clinic Tibooburra Health Service	Tibooburra	GX[F00-F99] - O9.1t	Far West
	MH Nurse	Broken Hill	GX[F00-F99] - O10.1	Far West
	RFDS Clinic Monolon Station	Monolon	GX[F00-F99] - O10.1t	Far West
	RFDS Clinic Tilpa	Tilpa	GX[F00-F99] - O10.1t	WNSW
	RFDS Clinic Pooncarie	Pooncarie	GX[F00-F99] - O10.1t	Far West
	RFDS Clinic Wanaaring Health Service	Wanaaring	GX[F00-F99] - O10.1t	WNSW
	RFDS Clinic Louth	Louth	GX[F00-F99] - O10.1t	WNSW
	RFDS Clinic Packsaddle	Packsaddle	GX[F00-F99] - O10.1t	Far West
The Benevolent Society	Brighter Futures - Bathurst	Bathurst	GX[F00-F99] - O10.2	Bathurst
	Brighter Futures - Parkes	Parkes	GX[F00-F99] - O10.2	Parkes
WNSW: CMHDAS Bathurst	Bathurst Community Mental Health Team - ACCT	Bathurst	AX[F00-F99] - O8.1am	Bathurst and Region
	Special Programs Team - Older adults and children	Bathurst	GX[F00-F99] - O8.1m	Bathurst and Region
WNSW: CMHDAS Mudgee	Mudgee CMHDAS	Mudgee	GX[F00-F99] – O8.1al	Mudgee and region
WNSW: CMHDAS	Bourke CMHDAS	Bourke	GX[F00-F99] – O8.1a	Bourke and

Bourke				region
WNSW: CMHDAS Orange	Orange ACCT-LikeMind	Orange	AX[F00-F99] – O8.1a	Orange and region
WNSW: CMHDAS Cowra	Cowra CMHDAS	Cowra	GX[F00-F99] - O8.1a	N/S
WNSW: CMHDAS Parkes	Parkes CMHDAS	Parkes	GX[F00-F99] - O8.1a	N/S
WNSW: CMHDAS Forbes	Forbes CMHDAS	Forbes	GX[F00-F99] - O8.1at	N/S
WNSW: CMHDAS Condobolin	Condobolin CMHDAS	Condobolin	GX[F00-F99] - O8.1at	N/S

Placement of Non-Acute Mobile Outpatient Mental Health Care

Non-Acute Non-Mobile services are very evenly distributed throughout the region (Figure 34). Community mental health teams are located in all major towns and the supplementation of these with the RFDS clinics and the MHEC service means most areas have some access to services. The possible exception to this is the areas of Bogan, Warren and Weddin, which all have higher than average suicide rates but no service presence, however this is understandable given the small population numbers.

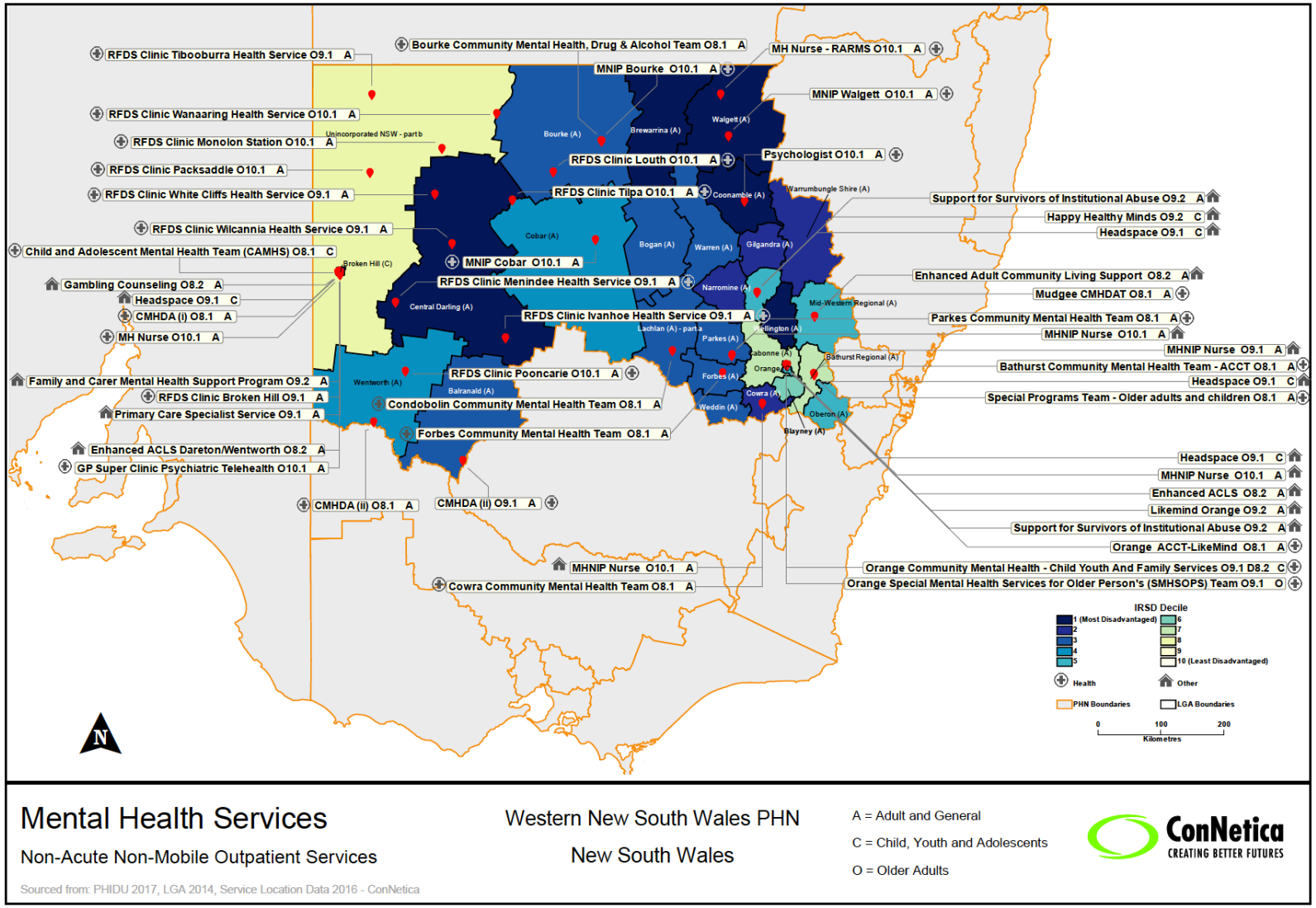


FIGURE 34 PLACEMENT OF NON-ACUTE MOBILE OUTPATIENT MENTAL HEALTH SERVICES IN THE WNSW PHN REGION

Accessibility Services

There were three teams identified as providing Accessibility services for adults in the WNSW PHN catchment (Table 27). There are two Partners in Recovery teams running from the one location in Dubbo, one provided by One Door Mental Health and the other by Marathon Health. NEAMI National in Dubbo run an Aboriginal Linkages Program out of their Recovery and Rehabilitation Unit. The linkages program outreaches to Aboriginal communities to provide care coordination and facilitate access to mental health services.

The number of MTC per 100,000 adults is 1.17.

TABLE 27 ACCESSIBILITY MENTAL HEALTH CARE FOR ADULTS IN THE WNSW PHN REGION

Provider	Name	Suburb	DESDE - 1	Area
One Door Mental Health (formerly schizophrenia fellowship of NSW)	PIR	Dubbo	AX[F00-F99] - A4.2.2	N/S
Marathon Health	PIR	Dubbo	AX[F00-F99] - A4.2.2	N/S
NEAMI	Aboriginal Linkages Program	Dubbo	AXIN[F00-F99] - A4.2.2	N/S

Information and Guidance

There were no teams identified as providing Information and Guidance services for adults in the WNSW PHN catchment.

Self-help and Voluntary Support

There were seven teams identified as providing Self-Help and Voluntary services for adults in the WNSW PHN catchment (Table 28). Grow runs several peer support groups, located in Broken Hill, Bathurst, Orange and Cowra. Grow groups meet weekly to provide a safe, supportive environment for those experiencing or who have experienced ill-mental health. There is a new Grow group being organised in Dubbo. This will begin in the second half of 2017.

Midwestern Consumer Advocacy Group is a separate entity which runs a day program from the O'Brien Centre at Bloomfield Campus. This group day program is supported by 0.2 FTE from the Western NSW LHD. Unpaid peer volunteers run this program.

The number of MTC per 100,000 adults is 4.09.

TABLE 28 SELF-HELP AND VOLUNTARY MENTAL HEALTH SUPPORT FOR ADULTS IN THE WNSW PHN REGION

Provider	Name	Suburb	DESDE - 1	Area
Mental Health, Drug & Alcohol Services Orange	Orange Mid-Western Consumer Advocacy Group (MWCAG)	Orange	AX[F00-F99] - S1.4	Orange and region
Far West Local Health District	Consumer Consultant	Broken Hill	GX[F00-F99] - S1.3	Far West
	Carer Coordinator	Broken Hill	GX[e310][F00-F99] - S1.3	Far West

Grow NSW	Mental Health Support Groups (i)	Broken Hill	GX[F00-F99] - S1.3	Broken Hill
	Mental Health Support Groups (i)	Bathurst	GX[F00-F99] - S1.3	Bathurst
	Mental Health Support Groups (i)	Cowra	GX[F00-F99] - S1.3	Cowra
	Mental Health Support Groups (i)	Orange	GX[F00-F99] - S1.3	Orange

5.5 Older Adult Mental Health Services

There are very few age specific teams providing mental health care across WNSW although as mentioned earlier, there are aged mental health specialists working within the blended community mental health and drug and alcohol teams.

There is one aged inpatient Residential service and one Outpatient service as detailed in Table 29 below.

TABLE 29 OLDER ADULT MENTAL HEALTH CARE MTC ACROSS WNSW

Population Group	Service Type	R	D	O	A	I	S	TOTAL
Child & Adolescent	Health	1	0	1	0	0	0	2
	NGO/Other	0	0	0	0	0	0	0
	Total	1	0	1	0	0	0	2
	%	50	0	50	0	0	0	100

Residential Care

There were no Sub-Acute or Other Inpatient services for older adults identified in the WNSW PHN region.

Acute Inpatient Services (R0, R1, R2 and R3 DESDE Codes)

There was one team identified as providing Residential Acute inpatient services for older adults in the WNSW PHN catchment (Table 30).

The Western NSW LHD manages the Lachlan Older Persons Acute Unit at Bloomfield Hospital. This is a 12-bed ward. This is a locked ward with moderately complex patients requiring acute care. Stays here are generally less than four weeks.

The number of Acute Inpatient beds per 100,000 older adults is 2.18 and the number of MTC per 100,000 older adults is 1.81.

TABLE 30 ACUTE RESIDENTIAL MENTAL HEALTH SERVICES FOR OLDER ADULTS IN THE WNSW PHN REGION

Provider	Name	Suburb	DESDE – 1 (beds)	Area
Mental Health Inpatient Services (Hospital Psychiatric Unit) - requires referral	Orange Health Service Bloomfield - Lachlan Specialist Mental Health Service Older Persons Acute IP	Orange	OX[F00-F99] - R2c (12)	Orange and region

Outpatient Care

There were no Acute Mobile, Acute Non-Mobile or Non-Acute Mobile Outpatient teams identified delivering mental health care for older adults in the WNSW PHN region. As discussed earlier, the blended CMHDAS teams do have specialist older adult clinicians working within their teams.

Non-Acute Non-Mobile Outpatient Care (O8, O9 and O10 DESDE Codes)

There was one team identified as providing Non-Acute Non-Mobile Outpatient services for older adults in the WNSW PHN catchment (Table 31). This team delivers specialised care for older persons experiencing non-acute mental illness.

The Community Mental Health Teams (CMHT) run by the Western NSW LHD are moving towards a model of care that combines the teams providing older adult mental health care with the infant, child, youth and family mental health services. This combined Special Programs Team (SPT) provides specialist assessment, intervention and treatment for children and young people who are experiencing mental health issues. It also plays a significant role in supporting families. As this team has been given a GX (general age) code it is described in the adult mental health services section.

The number of MTC per 100,000 adults is 1.81.

TABLE 31 NON-ACUTE NON-MOBILE OUTPATIENT MENTAL HEALTH CARE FOR OLDER ADULTS IN THE WNSW PHN REGION

Provider	Name	Suburb	DESDE - 1	Area
CMHDAS Orange	Orange Special Mental Health Services for Older Person's (SMHSOPS) Team	Orange	OX[F00-F99] – O9.1	Orange

Accessibility Services

There were no Accessibility services identified for older adults in the WNSW PHN region.

Information and Guidance

There were no Information and Guidance services identified for older adults in the WNSW PHN region.

Self-help and Voluntary Support

There were no Self-Help and Voluntary services identified for older adults in the WNSW PHN region.

5.6 Non-age Related Specific Populations

Services delivering specialised care for specific demographic groups are summarised in this section. These services have also been included in the previous service tables.

Gender Specific Services

Table 32 displays gender specific mental health services for the WNSW PHN region. The gender specific services are residential inpatient units, with males having specific beds in the Manara Statewide Rehabilitation Mental Health Inpatient Unit and the Castlereagh and Windamere Mental Health Inpatient Units. Females have 16 beds available in the Turon Statewide Rehabilitation Mental Health Inpatient Service. These are all located in Orange at the Bloomfield Hospital Campus.

TABLE 32 GENDER SPECIFIC SERVICES IN THE WNSW PHN REGION

Provider	Name	Suburb	DESDE – 1	Area
Mental Health Inpatient Services (Hospital Psychiatric Unit) - requires referral	Orange Health Service Bloomfield - Manara State Wide Rehabilitation Mental Health Inpatient Service	Orange	AXM[F00-F99] - R4 (16)	Statewide
	Orange Health Service - Castlereagh, Windamere, Mental Health Inpatient (State Wide) Rehabilitation Services	Orange	AXM[F00-F99] – R6c (20)	Statewide
	Orange Health Service Bloomfield - Turon State Wide Rehabilitation Mental Health Inpatient Service	Orange	AXF[F00-F99] – R4 (16)	Statewide

Services for Carers

Table 33 displays carer specific services within the WNSW PHN region. There is a mix of services covering Residential, Outpatient, Information and Guidance and Self-Help care types.

TABLE 33 CARER SPECIFIC SERVICES IN THE WNSW PHN REGION

Provider	Name	Suburb	DESDE – 1 (beds)	Area
Interrelate Family Centres	FMHSS	Cobar	CX[e310][F00-F99] - I2.1.1	N/S
CentaCare Wilcannia Forbes	FMHSS	Broken Hill	CX[e310][F00-F99] - I2.1.1	Far West
	FMHSS	Wilcannia	CX[e310][F00-F99] - I2.1.1	Far West
One Door Mental Health (formerly schizophrenia fellowship of NSW)	Mental Health Respite: Carer Support	Dubbo	AX[e310][F00-F99] - R14 (10)	N/S
	Mental Health Respite: Carer Support	Dubbo	AX[e310][F00-F99] - O7.2	N/S
Flourish - RichmondPRA	Family and Carers Respite Program	Broken Hill	AX[e310][F00-F99] - O7.2	N/S
LiveBetter (Formerly	Mental Health Respite: Carer	Orange	GX[e310][F00-F99] -	N/S

CareWest)	Support		O7.2e	
CentaCare Wilcannia Forbes	Family and Carer Mental Health Support Program	Broken Hill	AX[e310][F00-F99] - O9.2	Far West
Far West Local Health District	Carer Coordinator	Broken Hill	GX[e310][F00-F99] - S1.3	Far West

Services for Aboriginal and Torres Strait Islanders

Table 34 displays Aboriginal and Torres Strait Islander specific services for the WNSW PHN region. These services include a Primary Care Specialist Service run by Maari Ma Aboriginal Corporation and a psychologist based at the Coonamble Aboriginal Health Service. Mission Australia also provide several Aboriginal Housing Accommodation Support Initiative services across the region.

TABLE 34 ABORIGINAL AND TORRES STRAIT ISLANDER SERVICES IN THE WNSW PHN REGION

Provider	Name	Suburb	DESDE – 1	Area
NEAMI	Aboriginal Linkages Program	Dubbo	AXIN[F00-F99] - A4.2.2	N/S
Maari Ma Aboriginal Corporation	Primary Care Specialist Service	Broken Hill	GXIN[F00-F99][F10-F19] - O9.1	Broken Hill and surrounds
Coonamble Aboriginal Health Service	Psychologist	Coonamble	GXIN[F00-F99] - O10.1	Coonamble and Region
Mission Australia	Aboriginal HASI	Dubbo	AXIN[F00-F99] - O6.2	Dubbo
	Aboriginal HASI	Coonabarabran	AXIN[F00-F99] - O6.2	Coonabarabran
	Aboriginal HASI	Coonamble	AXIN[F00-F99] - O6.2	Coonamble and Region
	Aboriginal HASI	Walgett	AXIN[F00-F99] - O6.2	Walgett and Region
	Aboriginal HASI	Lightning Ridge	AXIN[F00-F99] - O6.2	Lightning Ridge and surrounds
	Aboriginal HASI	Bourke	AXIN[F00-F99] - O6.2	Bourke and region

5.7 Patterns of Mental Health Care across the WNSW PHN Region

To understand the balance between the different types of care offered in an area, a radar tool, also known as a spider diagram, is utilised. The spider diagram is a tool to visually depict the mix of service types (pattern of care) in a particular area. Each of the 21 points on the radius of the spider diagram represents the number of MTC for a particular type of care per 100,000 adults.

Consistent with other areas mapped across Australia, the pattern of care for adult mental health services in the WNSW PHN region shows relatively more Outpatient Care than any other type of care (Figure 35).

Outpatient Care is predominantly provided by Non-Acute Non-Mobile teams from the Health sector (such as the CMHDAS). The Non-Acute Mobile teams, such as those delivering PHaMs and HASI, are predominantly provided by the NGO or private sector.

In the WNSW PHN catchment Acute Outpatient Care is provided by MHEC, emergency departments (supported via video-conference by the MHEC) and CMHDAS teams which are described as Non-Acute although it is acknowledged they do some Acute work (which is indicated with the addition of the ‘a’ qualifier to the DESDE code). As such, there is very little Acute Outpatient Care evident in the pattern of care.

In terms of Residential Care, there was a higher rate per 100,000 adults for the provision of Sub-Acute hospital based Residential Care when compared with Acute hospital inpatient care. It is noted some of these beds are Statewide services. There was a higher level of Day Care across the WNSW PHN region than other areas mapped across Australia, indicating strength in this area.

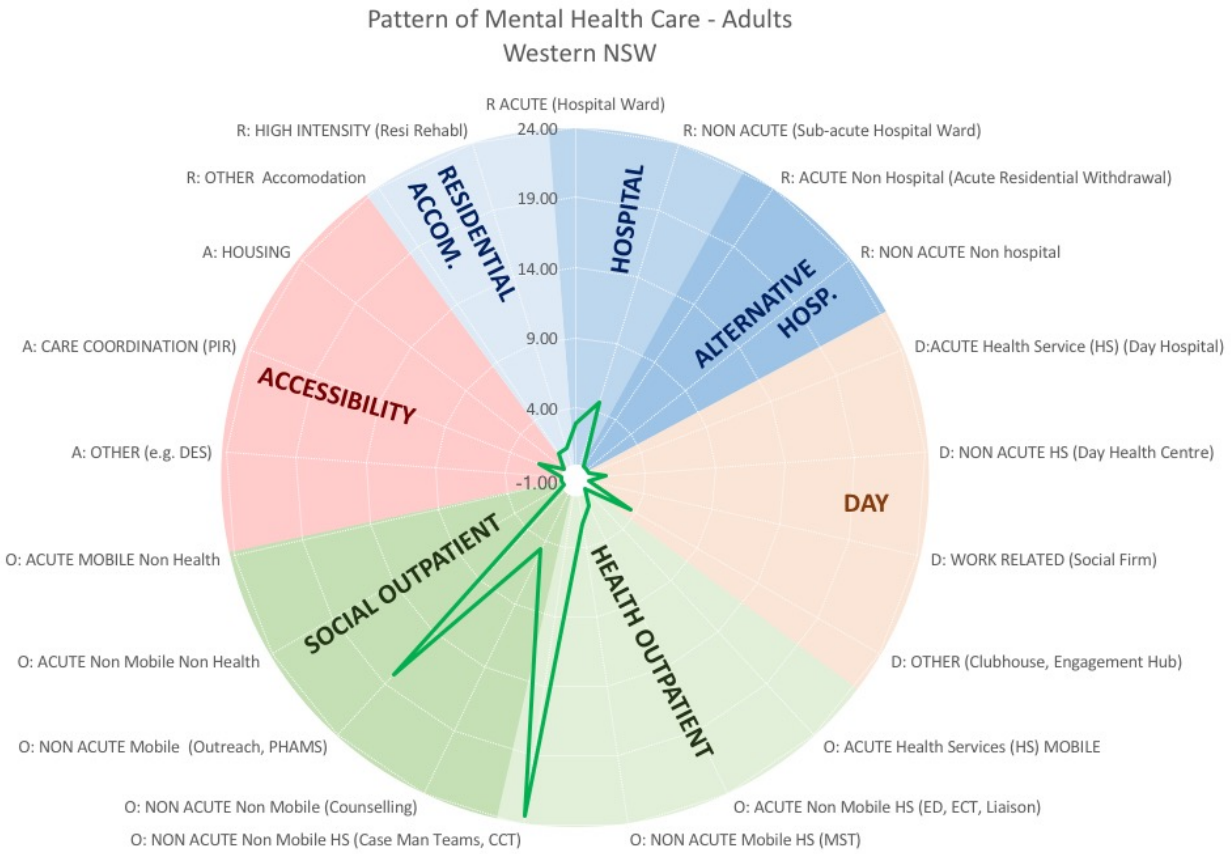


FIGURE 35 PATTERN OF MENTAL HEALTH CARE - WNSW PHN REGION

5.8 Workforce Capacity – Mental Health

Introduction

During the data gathering process for this Atlas, stakeholders were asked to report the full time equivalent (FTE) staffing levels for each BSIC. FTE data was sometimes not able to be provided, and at times, what was provided was more of an estimation or lacked specificity. As such, the data presented here should be used as an approximation of the workforce characteristics.

Data was collected for 75 of the 131 mental health teams identified in this project (57%). There was a total of 258.94 FTE reported across the 75 mental health teams that provided their data. In terms of capacity, it helps to understand the sizes of the teams working across the area. To do this teams are broken down into three types; extra small (<1 FTE), small (2-5 FTE), medium (from 6-20 FTE) and large (over 20 FTE). As seen in Table 35 below, most mental health teams across WNSW PHN are extra small (47%) or small (32%) in size.

Teams working in NGOs are generally smaller than those working in the health sector with an average team size for NGOs of 3.06 (Table 36). The average team size for health sector teams was 5.01 FTE (Table 36).

TABLE 35 WNSW PHN REGION MENTAL HEALTH TEAM SIZES

Teams	Not Stated	X-Small (<1 FTE)	Small (1-5 FTE)	Medium (6-20 FTE)	Large (>20FTE)	Total
Total	56	35	24	16	0	131
%	-	47%	32%	21%	0%	100%*

*Please note – This is as a percentage for those that provided FTE.

TABLE 36 MENTAL HEALTH AVERAGE TEAM SIZE: HEALTH SECTOR VS. NGO

Provider Type	Teams	Total FTE	Average Team Size
Health	15	75.16	5.01
NGO/PRV	60	183.76	3.06
Total	75	258.94	3.45

There is a lack of clarity around staff types in all three sectors examined. Whilst sometimes a breakdown of staff qualification types was provided, there is an inconsistency in the fullness or accuracy of this detail to provide any analysis. In the mental health sector, one organisation might describe its staff as ‘Outreach Workers’, another will call them ‘Community Mental Health Practitioners’ and yet another ‘Community Mental Health Workers’.

Many staff will have a degree and a significant level of experience. The qualifications for these positions vary widely but most commonly it will be Social Work, Psychology or Occupational Therapy.

6. Alcohol and Other Drugs Data for NSW

The connection between mental health and AOD use is well documented, for this reason, the underlying population and service data in relation to AOD provides background and context to the service mapping for the WNSW PHN region. For comparative purposes, a brief overview of Australian prevalence and service data is also provided.

Prevalence and Treatment Data for Australia and NSW

In 2014-15, an estimated 114,912 people or about 1 in 200 Australians received a total of 170,367 AOD treatment episodes nationally (AIHW, 2017). Since 2005-06, alcohol (38%), cannabis (24%), amphetamines (20%) and heroin (6.1%) have remained the most common principal drugs of concern. In 2014-15, 170,367 treatment episodes were provided by publicly funded alcohol and other treatment agencies with 95% of clients receiving treatment for their own drug use, with the majority (69%) being male.

Of the states and territories, NSW had the lowest rate of AOD patients, and consequentially, the lowest rate of services provided across the country (Figure 36) (AIHW, 2017).

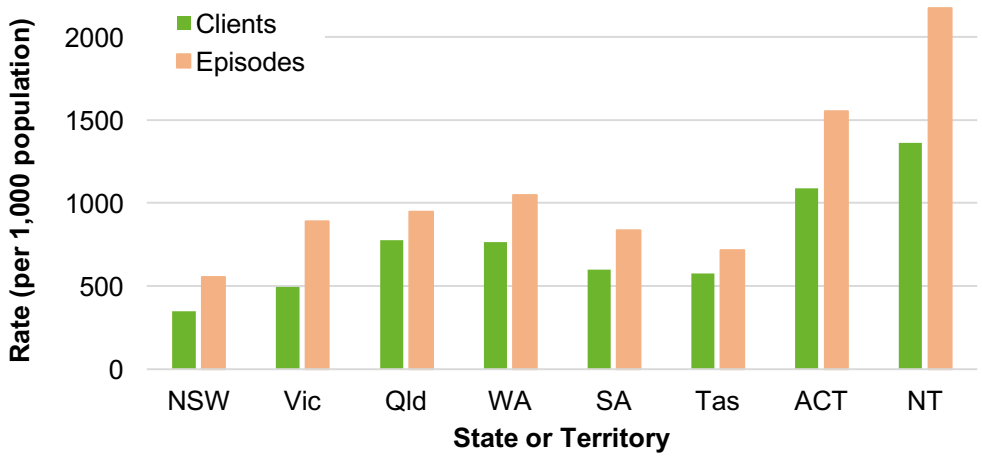


FIGURE 36 ESTIMATED RATES OF AOD CLIENTS AND EPISODES BY JURISDICTION, 2014-15

In NSW in 2014-15, the most common principal drug of concern was alcohol with 14,789 episodes (42%) followed by amphetamines with 7,357 episodes (21%) (Figure 37).

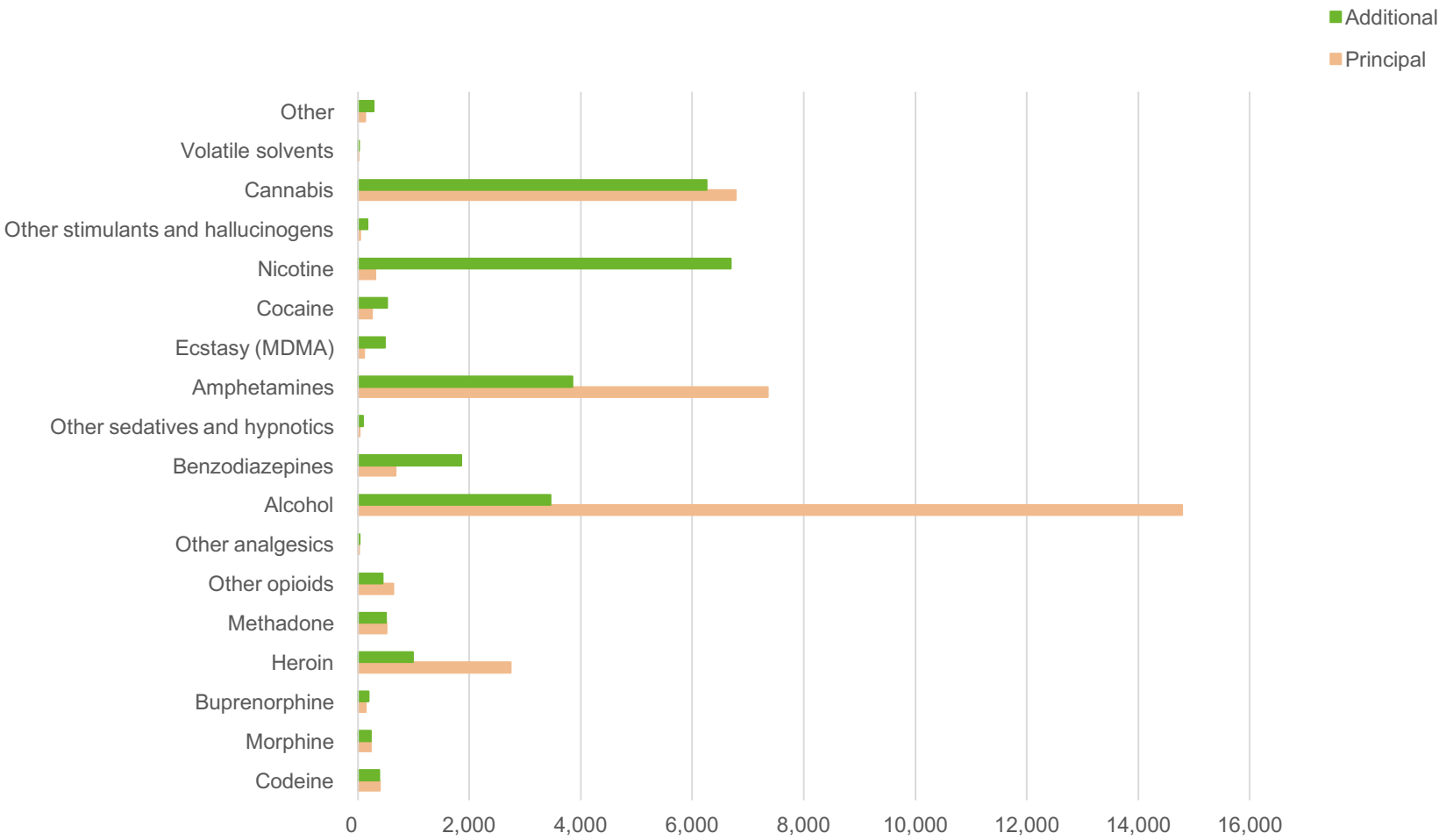


FIGURE 37 CLOSED EPISODES PROVIDED FOR OWN DRUG USE BY DRUG OF CONCERN, NSW, 2014-15

Source: AIHW 2016

Furthermore, in NSW, 38% of episodes involved counselling as the form of treatment, making it the most common, followed by assessment (17% of episodes) and withdrawal management (13%) (Figure 38).

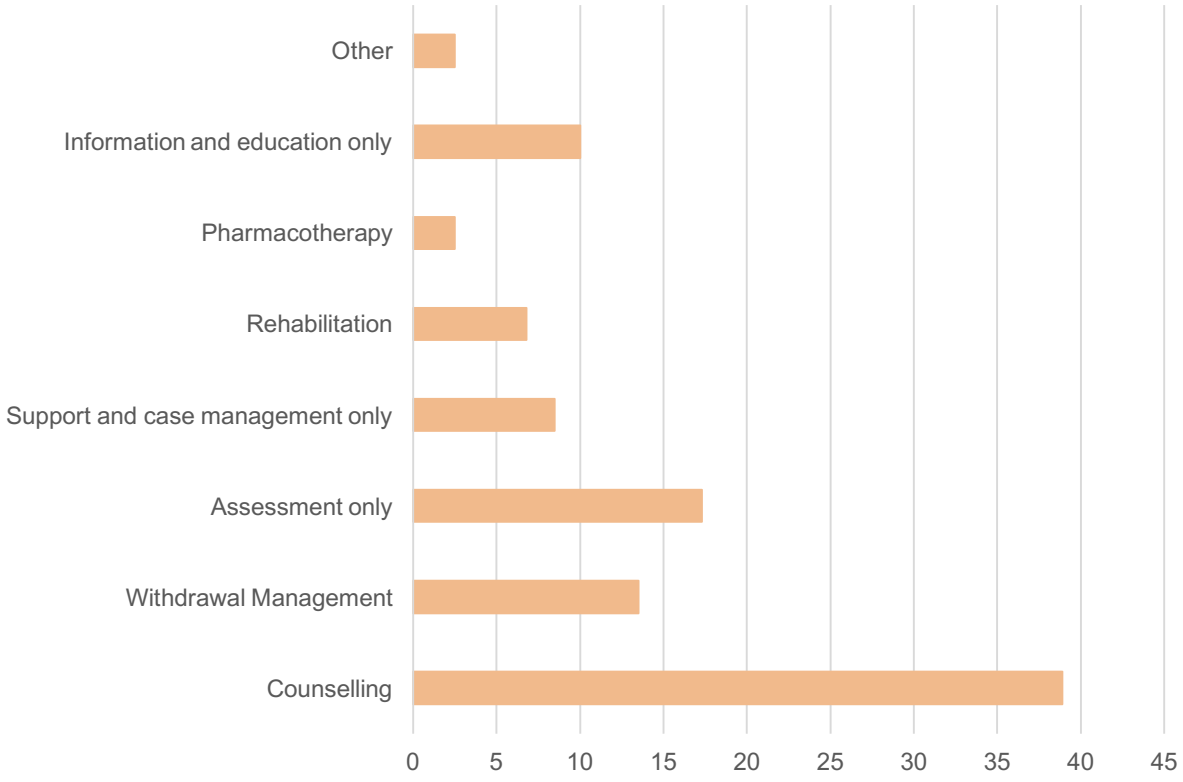


FIGURE 38 CLOSED EPISODES BY MAIN TREATMENT TYPE, NSW, 2014-15

Table 37 displays the estimated population aged 15 years and over with risky levels of alcohol consumption. All LGAs within the WNSW PHN area have a higher percentage of estimated risky alcohol consumption amongst those aged 15 years and over when compared with the national figure, excluding Central Darling and Broken Hill. Risky alcohol consumption is highest in the Blayney and Oberon LGAs, and lowest in Central Darling and Broken Hill (PHIDU, 2016).

TABLE 37 ESTIMATED POPULATION AGED 15 YEARS AND OVER WITH RISKY ALCOHOL CONSUMPTION

LGA	Alcohol consumption at risk to health (n)	Alcohol consumption at risk to health (ASR per 100)
Balranald	95	20.1
Bathurst	1,506	20.7
Blayney	264	25.6
Bogan	125	20.7
Bourke	NP	NP
Brewarrina	NP	NP

Broken Hill	924	15.0
Cabonne	489	19.6
Central Darling	100	15.0
Cobar	203	20.7
Coonamble	174	20.7
Cowra	493	18.7
Dubbo	1,476	21.2
Forbes	361	19.9
Gilgandra	183	18.5
Lachlan (a)	185	19.9
Mid-Western	907	19.7
Narromine	276	18.5
Oberon	207	23.7
Orange	1,454	19.2
Parkes	576	18.8
Walgett	NP	NP
Warren	119	20.5
Warrumbungle	399	18.8
Weddin	148	20.8
Wellington	320	18.4
Wentworth	276	20.1
Unincorp. NSW	NP	NP
WNSW PHN	**11,260**	**19.7**
Australia	792,499	16.7

Sourced from: PHIDU 2016

Alcohol related hospitalisations are displayed in Figure 39, and methamphetamine hospitalisations, representing the second most prevalent drug of choice in the WNSW PHN region, are shown in Figure 40.

Between 2009-2010 and 2014-2015 financial years the overall rate of alcohol related hospitalisations within the WNSW PHN catchment have reduced substantially, from just under 800 hospitalisations per 100,000 population to approximately 615 per 100,000 population. Conversely, other PHNs and the state overall have slightly increased over this time, and are now higher when compared with the WNSW PHN region.

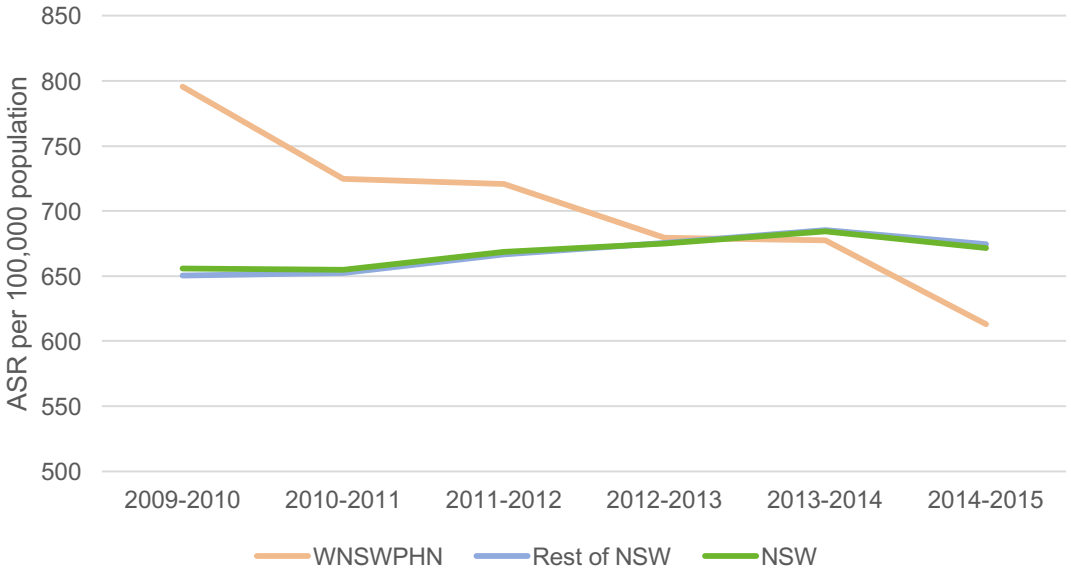


FIGURE 39 ALCOHOL-RELATED HOSPITALISATIONS FOR THE WNSW PHN REGION, REST OF NSW AND NSW

Source: Centre for Epidemiology and Evidence (2016)

In Figure 40 there is a clear significant trend upwards for hospitalisations related to methamphetamine use, both in WNSW PHN and the state as a whole. Methamphetamine use has drastically increased in the WNSW PHN region from the 2012-2013 financial year, and is now close to parity with the Statewide hospitalisation rate.

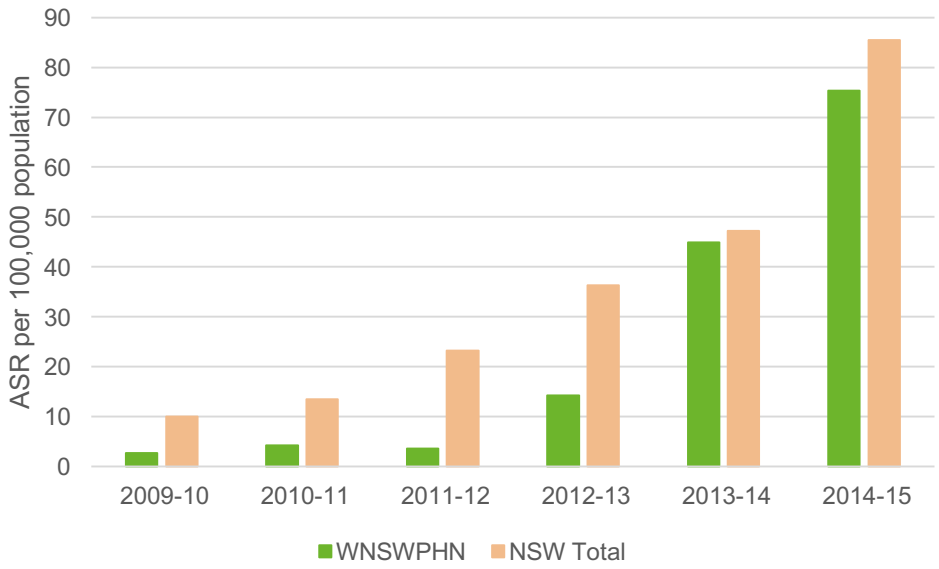


FIGURE 40 METHAMPHETAMINE RELATED HOSPITALISATIONS FOR THE WNSW PHN REGION AND NSW

Source: Centre for Epidemiology and Evidence (2017)

Figure 41 displays the average distance travelled in kilometres to treatment services (across Australia), broken down by Indigenous and Non-Indigenous populations. Whilst data is not available specifically for NSW, the WNSW PHN region does have a higher proportion of Aboriginal and Torres Strait Islander

people compared with the Australian average. Coupled with the fact that the WNSW PHN area covers several remote and very remote areas, distance travelled to services can be a barrier to accessing quality alcohol and other drug programs. For all but one treatment category (heroin), the distance travelled by Aboriginal and Torres Strait Islander people requiring alcohol or other drug treatment is significantly greater than the Non-Indigenous population. The greatest disparity lies in alcohol treatment, with the Indigenous population travelling on average 145kms, compared with the Non-Indigenous population travelling on average 54kms. Discussions with several key Aboriginal Health Service providers throughout the WNSW PHN region highlight the significant barrier that long travel times to services has on service use for Indigenous populations.

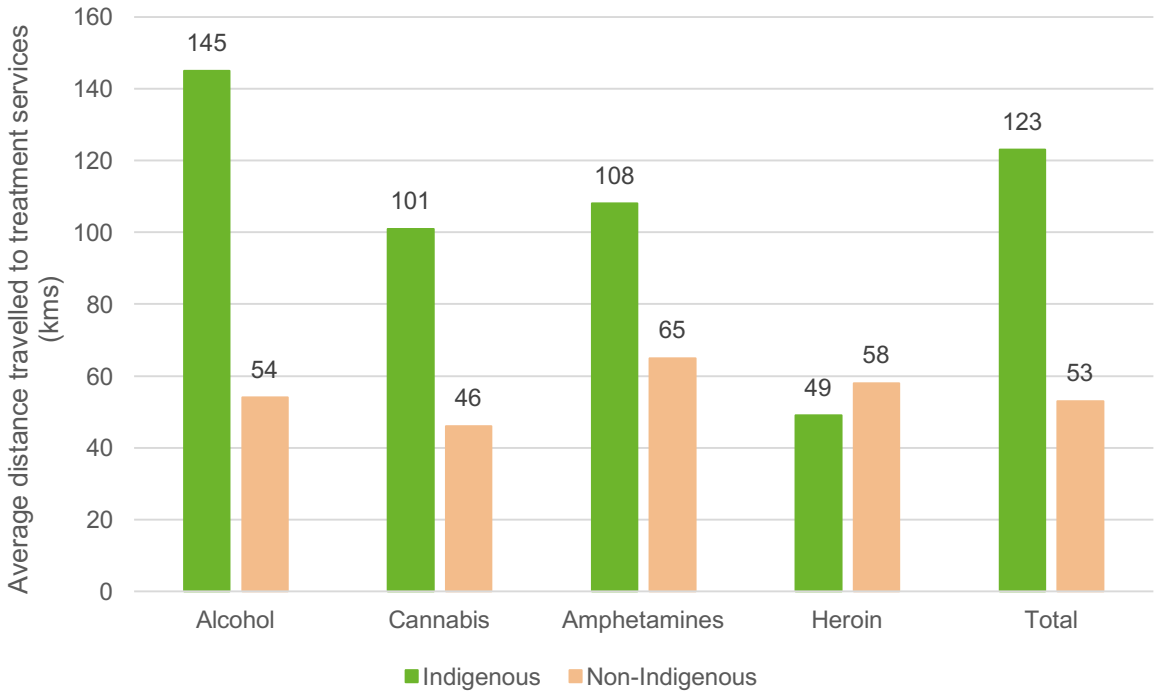


FIGURE 41 AVERAGE DISTANCE TRAVELLED TO AOD TREATMENT (KMS) FOR INDIGENOUS AND NON-INDIGENOUS POPULATIONS IN AUSTRALIA

Source: AIHW (2017)

7. Alcohol and Other Drug Services in the WNSW PHN Region

7.1 Overview

This section of the Atlas provides a brief overview of the types of service delivery teams (BSIC) delivering Alcohol and Other Drug (AOD) care in the WNSW PHN region; that is, services where the primary presentation is specifically for AOD Issues.

Where a BSIC has two Main Types of Care (MTC) codes (i.e. the team provides two distinct service types), it was included in the table related to its main MTC service classification table. Once again, Outpatient Care made up the majority of AOD service provision in the region.

There was a total of 18 BSIC identified that deliver 18 MTC of AOD care across the WNSW PHN region (Table 38). All of these are services for Adults. The Health sector delivers 50% of these MTC and 50% are delivered by NGOs. Outpatient Care, including outreach services made up 61% of the MTC and Residential Care 28% (Figure 43).

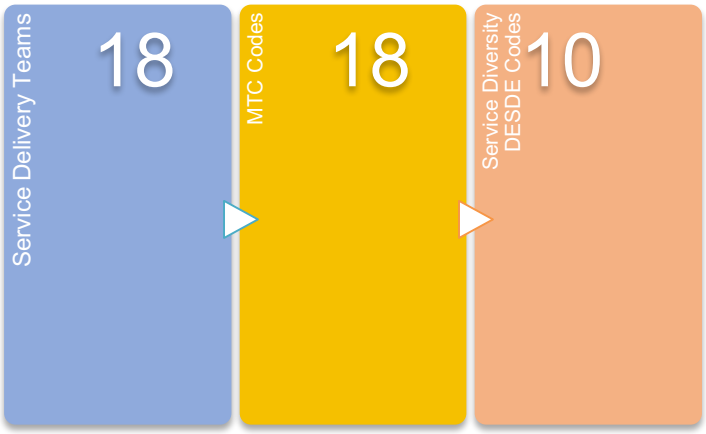


FIGURE 42 SUMMARY OF SERVICES PROVIDING CARE FOR AOD

TABLE 38 NUMBER OF MAIN TYPES OF ALCOHOL AND OTHER DRUG CARE IN WNSW PHN

Population Group	Service Type	R	D	O	A	I	S	TOTAL
Child & Adolescent	Health	0	0	0	0	0	0	0
	NGO/Other	0	0	0	0	0	0	0
	Sub-total	0	0	0	0	0	0	0
Adult	Health	1	0	8	0	0	0	9
	NGO/Other	4	0	3	1	1	0	9
	Sub-total	5	0	11	1	1	0	18
Older Adult	Health	0	0	0	0	0	0	0
	NGO/Other	0	0	0	0	0	0	0
	Sub-total	0	0	0	0	0	0	0
Total	Health	1	0	8	0	0	0	9
	NGO/Other	4	0	3	1	1	0	9
	Total	**5**	**0**	**11**	**1**	**1**	**0**	**18**
	%	28%	0%	61%	6%	6%	0%	100%

Outpatient Care, including outreach services made up 61% of the MTC, Accessibility and Information 6% (rounded) and Residential Care made up 28% (Figure 43).

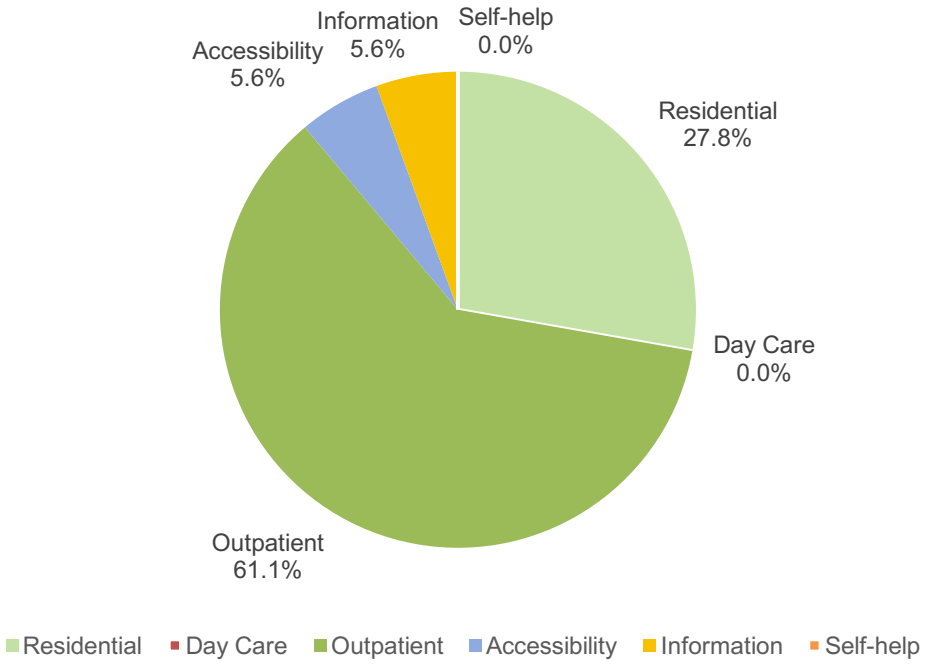


FIGURE 43 AOD SERVICES BY MTC SERVICE TYPE IN THE WNSW PHN REGION

7.2 Child and Adolescent AOD Services

There were no alcohol and/or other drug services identified for children and adolescents in the WNSW PHN region.

7.3 Adult AOD Services

Residential Care

Acute Inpatient Services (R0, R1, R2 and R3 DESDE Codes)

There was one team identified as providing Residential Acute Inpatient services for adults in the WNSW PHN catchment (Table 39). The Involuntary Drug and Alcohol Treatment Unit is a locked, secure 24-hour facility on the Bloomfield campus. Court orders are required for admission to this intensive service of 'last resort'.

The number of Acute Inpatient beds per 100,000 adults is 4.68 and the number of MTC per 100,000 adults is 0.58.

TABLE 39 ACUTE RESIDENTIAL AOD CARE FOR ADULTS IN THE WNSW PHN REGION

Provider	Name	Suburb	DESDE – 1 (beds)	Area
Drug & Alcohol Inpatient Services (Hospital Psychiatric Unit) - requires referral	Orange Health Service Bloomfield - Involuntary Drug & Alcohol Treatment Unit	Orange	AX[F10-F19] – R1cj (8)	Statewide

Sub-Acute Inpatient Services (R4, R5, R6, R7 DESDE Codes)

There was one team identified as providing Residential Sub-Acute Inpatient services for adults in the WNSW PHN catchment (Table 40). The Orana Haven Drug and Alcohol Rehabilitation Centre is a service for Indigenous Men with a capacity of 18 beds. Approximately 150-200 people per year are catered for at Orana Haven. The Centre links with external services including the Murdi Paaki Drug and Alcohol Network, Brewarrina Aboriginal Health Service and the Triple P Positive Parenting Program.

The number of Acute Inpatient beds per 100,000 adults is 10.52 and the number of MTC per 100,000 adults is 0.58.

TABLE 40 SUB-ACUTE RESIDENTIAL AOD CARE FOR ADULTS IN THE WNSW PHN REGION

Provider	Name	Suburb	DESDE – 1 (beds)	Area
Orana Haven	Drug and Alcohol Rehabilitation Centre	Gongolgon	AXIN[F10-F19] - R5 (18)	Statewide

Other Inpatient Services (R8, R9, R10, R11, R12 and R13 DESDE Code)

There were three teams identified as providing Other Residential Inpatient services for adults in the WNSW PHN catchment (Table 41).

Lyndon Community provides the 16 bed Wattlegrove Rehabilitation Service which is located on the Bloomfield Health Campus. This provides those who have completed their detox program a structured, live-in environment for their drug and/or alcohol rehabilitation. Generally, individuals will spend approximately three months in the service, dependent on completion of milestones set out in their care plan.

The Lyndon Withdrawal Unit offers a voluntary residential detox program with 12 beds, treating over 800 people a year from across the state. Approximately 60% of those are from the WNSW PHN region. The average stay is seven days, but individuals can stay up to 21 days if required.

The Weigelli Centre in Darbys Falls is an 18-bed drug and alcohol rehabilitation centre. The wait list is considerable at Weigelli (four months), and the average length of stay at the centre is 12 weeks.

The number of Acute Inpatient beds per 100,000 adults is 26.91 and the number of MTC per 100,000 adults is 1.75.

TABLE 41 OTHER RESIDENTIAL AOD CARE FOR ADULTS IN THE WNSW PHN REGION

Provider	Name	Suburb	DESDE – 1 (beds)	Area
Lyndon Community	Wattlegrove Rehabilitation Services	Orange	AX[F10-F19] – R8.2 (16)	Statewide
	Lyndon Withdrawal Unit	Orange	AX[F10-F19] – R8.1 (12)	Statewide
Weigelli Centre	Drug and Alcohol Rehabilitation	Darbys Falls	AXIN[F10-F19] - R8.2 (18)	Statewide

Placement of Adult Residential Mental Health Services

The placement of Residential AOD services is visualised in Figure 44 which shows the two Aboriginal population specific drug and alcohol rehabilitation services located in Brewarrina and Walgett, along with the remaining Residential services which are provided in Orange. In Orange, the Lyndon Community Withdrawal Unit and the Wattlegrove Rehabilitation Services are shown alongside the Involuntary Drug and Alcohol treatment service located in the Orange Bloomfield Hospital campus. There were no AOD Residential services identified to the southwest of Brewarrina, meaning that people would need to travel long distances to access Inpatient care.

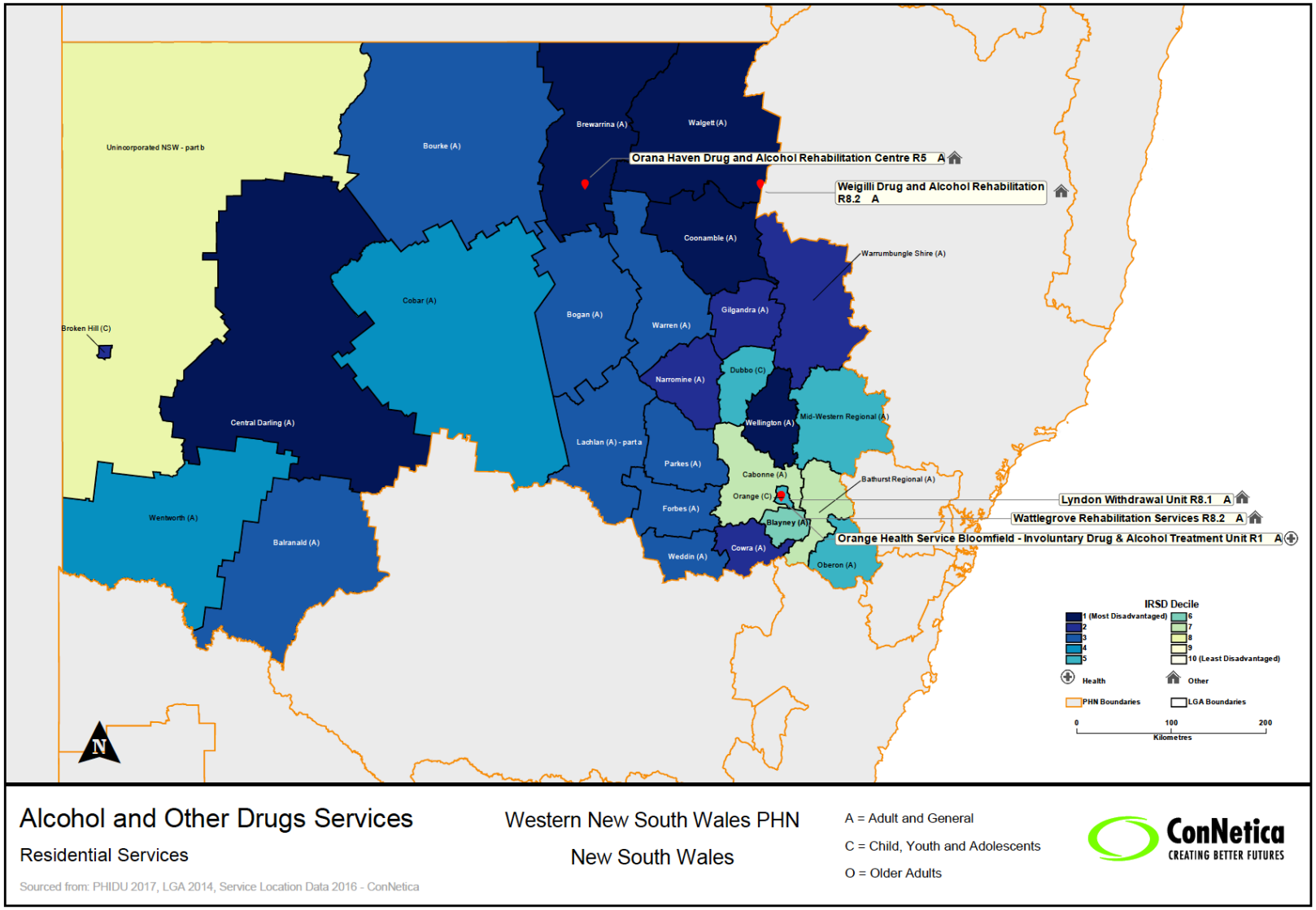


FIGURE 44 PLACEMENT OF RESIDENTIAL AOD SERVICES IN THE WNSW PHN REGION

Day Care

There were no AOD Day Care services for adults identified in the WNSW PHN region.

Outpatient Care

There were no Acute Mobile or Acute Non-Mobile Outpatient AOD services identified for adults in the WNSW PHN region.

Non-Acute Mobile Outpatient Care (O5, O6 and O7 DESDE Codes)

There was one team identified as providing Non-Acute Mobile Outpatient services for adults in the WNSW PHN catchment (Table 42).

The Orange Outreach Team run by Lyndon Community is based at Moonya Cottage on the Bloomfield Campus. The team primarily conducts home visits and runs groups in different locations across the Central West region. A fraction of the team (0.5 FTE) works specifically to link those leaving the Wattlegrove Centre into community supports. The team also satellites out of headspace centres in Bathurst and Orange, Wattletree House, LikeMinds and Community Corrections.

The number of MTC per 100,000 adults is 0.58.

TABLE 42 NON-ACUTE MOBILE OUTPATIENT AOD CARE FOR ADULTS IN THE WNSW PHN REGION

Provider	Name	Suburb	DESDE - 1	Area
Lyndon Community	Orange Outreach Team	Orange	AX[F10-F19] – O6.2	Central Western NSW

Non-Acute Non-Mobile Outpatient Care (O8, O9 and O10 DESDE Codes)

There were 10 teams identified as providing Non-Acute Non-Mobile Outpatient services for adults in the WNSW PHN catchment (Table 43).

MERIT is a flexible 12-week program available to people facing court charges and struggling with drug and alcohol issues. MERIT helps people gain control over their substance use and aims to prevent subsequent court appearances. It is a voluntary program and participants can refer themselves or be referred by the police, a lawyer, magistrate or other service.

The Opioid Treatment Program (OTP) is located at the Broken Hill Health Service. It is a free program that offers methadone or suboxone (buprenorphine plus naloxone) for opioid treatment. The aim of the OTP is to help people reduce or eliminate other opioid use, improve the health, psychological functioning and well-being of individuals and families, facilitate social rehabilitation, reduce the spread of blood-borne diseases associated with injecting opioid use and reduce the risk of overdoses and deaths associated with opioid use. Acacia Cottage also offer an Opiate Treatment Program, run by the Community Mental Health and Drug and Alcohol Service.

The number of MTC per 100,000 adults is 5.85.

TABLE 43 NON-ACUTE NON-MOBILE OUTPATIENT AOD CARE FOR ADULTS IN THE WNSW PHN REGION

Provider	Name	Suburb	DESDE - 1	Area
CMHDAS Dubbo	AOD Counselling	Dubbo	AX[F10-F19] – O9.2	Dubbo
Coonamble Aboriginal Health Service	Drug and Alcohol Worker	Coonamble	AXIN[F10-F19] - O9.2	Coonamble and Region
Lyndon Community	Dubbo Outreach Team	Dubbo	AX[F10-F19] – O9.2	N/S

Salvation Army	Rural Alcohol and Drug Support Service	Dubbo	AX[F10-F19] – O9.2g	Dubbo
CMHDAS Bathurst	Opiate Treatment and D&A Counselling Team (OTT)	Bathurst	AX[F10-F19] - O9.1	Bathurst and Region
CMHDAS Dubbo	Acacia Cottage	Dubbo	AX[F10-F19] – O9.1	Dubbo
CMHDAS Orange	Orange Opiate Treatment and D&A Counselling Team (OTT)	Orange	AX[F10-F19] – O9.1	N/S
Far West Local Health District	Opioid Treatment Program	Broken Hill	AX[F10-F19] - O9.1	Far West
	MERIT - Magistrates Early Referral into Treatment	Broken Hill	AX[F10-F19] – O9.1j	Far West
CMHDAS Orange	Orange MERIT - Magistrates Early Referral into Treatment	Orange	AX[F10-F19] – O10.1j	N/S

Placement of Adult Outpatient Mental Health Services

Non-Acute AOD Outpatient services are visualised in Figure 45 below. Services are primarily located around the major regional towns of Broken Hill, Dubbo and Orange, with an Opiate Treatment and Drug and Alcohol Counselling team in Bathurst. There is a drug and alcohol worker in the LGA of Coonamble. Much of the central LGAs of the region had no Non-Acute Outpatient AOD services identified, indicating there may be considerable travel either for the consumer or mobile outpatient teams to deliver services in these areas.

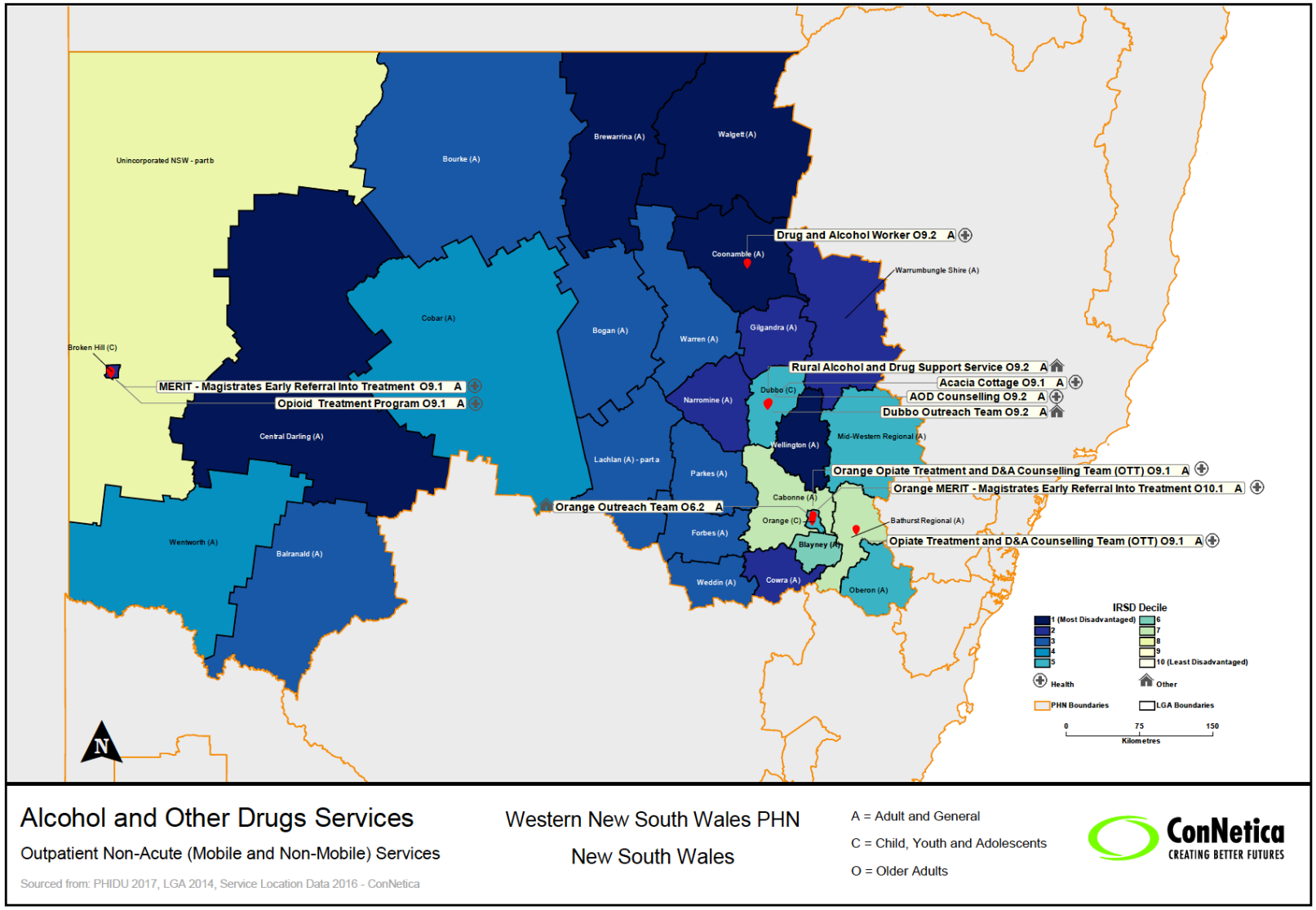


FIGURE 45 PLACEMENT OF NON-ACUTE OUTPATIENT AOD SERVICES IN THE WNSW PHN REGION

Accessibility Services

There was one team identified as providing Accessibility services for adults in the WNSW PHN catchment (Table 44).

Located on the Bloomfield Campus, the Murdi Paaki Drug and Alcohol Network aims to improve access to specialist drug and alcohol services. It provides support to existing primary health care providers. The network is a collaboration between the Lyndon Community, Maari Ma Aboriginal Health Corporation, Bourke Aboriginal Health Service, Coonamble Aboriginal Health Service and the Walgett Aboriginal Medical Service.

The number of MTC per 100,000 adults is 0.58.

TABLE 44 ACCESSIBILITY AOD CARE FOR ADULTS IN THE WNSW PHN REGION

Provider	Name	Suburb	DESDE - 1	Area
Lyndon Community	Murdi Paaki Drug and Alcohol Network	Orange	AXIN[F10-F19] – A5.1I	N/S

Information and Guidance

There was one team identified as providing Information and Guidance services for adults in the WNSW PHN catchment (Table 45).

The Mental Health Liaison position works across Lyndon Community's withdrawal and detox sites, providing consultation, liaison and assessments when people enter into the withdrawal unit.

The number of Acute Inpatient beds per 100,000 adults is 30.96 and the number of MTC per 100,000 adults is 1.96.

TABLE 45 INFORMATION AND GUIDANCE AOD CARE FOR ADULTS IN THE WNSW PHN REGION

Provider	Name	Suburb	DESDE - 1	Area
Lyndon Community	Mental Health Liaison Position	Orange	AX[F10-F19][F00-F99] – I1.1	Statewide

Self-help and Voluntary Support

There were no Self-Help or Voluntary teams identified delivering AOD care for adults in the WNSW PHN region.

7.4 Older Adult AOD Services

There were no older adult specific AOD services identified in the WNSW PHN region.

7.5 AOD Care for Non-Age Related Specific Populations

Services for Aboriginal and Torres Strait Islanders

Table 46 displays the Aboriginal and Torres Strait Islander specific AOD services in the WNSW PHN region. There are two Residential rehabilitation centres, each with a total of 18 beds. The Weigelli centre is run out of Darbys Falls, and Orana Haven out of Gongolgon. There is also a drug and alcohol worker as part of the Coonamble Aboriginal Health Service.

TABLE 46 ABORIGINAL AND TORRES STRAIT ISLANDER DRUG AND ALCOHOL SERVICES

Provider	Name	Suburb	DESDE - 1 (beds)	Area
Coonamble Aboriginal Health Service	Drug and Alcohol Worker	Coonamble	AXIN[F10-F19] - O9.2	Coonamble and Region
Lyndon Community	Murdi Paaki Drug and Alcohol Network	Orange	AXIN[F10-F19] – A5.1I	N/S
Weigelli Centre	Drug and Alcohol Rehabilitation	Darbys Falls	AXIN[F10-F19] - R8.2 (18)	Statewide
Orana Haven	Drug and Alcohol Rehabilitation Centre	Gongolgon	AXIN[F10-F19] - R5 (18)	Statewide

7.6 Patterns of AOD Care in the WNSW PHN Region

Consistent with other areas mapped across Australia, the pattern of care for adult AOD care in the WNSW PHN catchment shows relatively more Outpatient Care than any other type of care (Figure 46).

Outpatient Care is predominantly provided by Non-Acute Non-Mobile teams from the Health sector, along with Non-Acute Non-Mobile teams from the NGO sector. It is noted that many of the blended CMHDAS teams across the region are providing AOD services although not as discrete or separate teams and so these are not included in the AOD pattern of care.

In terms of Residential Care, the bulk of care provided is high intensity residential rehabilitation, with a small amount of Acute Inpatient care (Involuntary Drug & Alcohol Treatment Unit). There was no AOD Day Care identified in the region, and very little AOD Accessibility services.

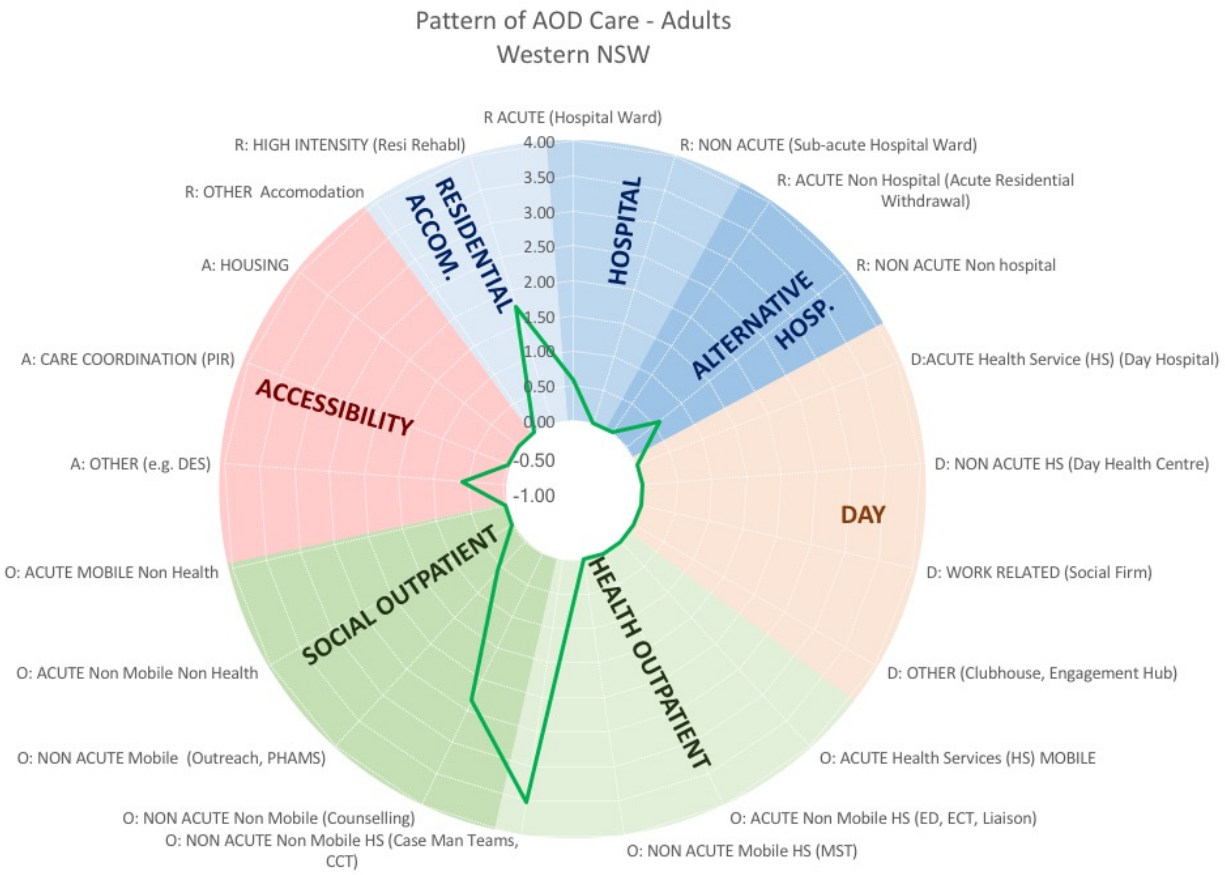


FIGURE 46 PATTERN OF AOD CARE - WNSW PHN REGION

7.7 Workforce Capacity – AOD

Introduction

During the data gathering process for this Atlas, stakeholders were asked to report the full time equivalent (FTE) staffing levels for each BSIC. FTE data was sometimes not able to be provided, and at times, what was provided was more of an estimation or lacked specificity. As such, the data presented here should be used as an approximation of the workforce characteristics.

Data was collected for 11 of the 18 AOD teams identified in this project (61%) with a total full time equivalent staff of 54.7 FTE. In terms of capacity, it helps to understand the sizes of the teams working across the area. To do this teams are broken down into three types; extra small (<1 FTE), small (2-5 FTE), medium (from 6-20 FTE) and large (over 20 FTE). As seen in Table 47 below, most AOD teams across the WNSW PHN catchment are small (46%), extra small (27%) or medium in size (27%).

There were very few specific AOD teams from the health sector and as such there is little data available. From the data extracted the average team size for the health sector was 1.57 FTE whilst the NGO teams are generally larger with an average of 6.25 FTE (Table 48). The average team size for health sector teams was 1.57 FTE (Table 48). It is noted that much of the health sector AOD work is carried out by the blended CMHDAS teams which are included in the mental health workforce data provided earlier in this report.

TABLE 47 WNSW AOD TEAM SIZES

Teams	Not Stated	X-Small (<1 FTE)	Small (1-5 FTE)	Medium (6-20 FTE)	Large (>20FTE)	Total
Total	7	3	5	3	0	18
%	-	27%	46%	27%	0%	100%*

*Please note – This is as a percentage for those that provided FTE.

TABLE 48 AOD AVERAGE TEAM SIZE: HEALTH SECTOR VS. NGO

Provider Type	Teams	Total FTE	Average Team Size
Health	3	4.7	1.57
NGO/PRV	8	50	6.25
Total	11	54.7	4.97

8. National and International Comparisons

One of the strengths of using the DESDE-LTC methodology is that it allows for comparisons with other areas that have been mapped both nationally and internationally using this methodology.

Using a standardised classification methodology allowed for comparisons of the patterns of care between different regions, and for reflection on the differences and consistencies between them. There is no 'right' pattern of care. Indeed, as there is an increasing move toward regionalised service planning and design to best meet specific regional needs, there is an expectation that differences in these patterns with occur. Comparisons, both international and national, allows for conversations in relation service planning and commissioning discussions, which may be termed 'fire starters'.

DESDE has now been utilised in some parts of the world for more than 20 years. Within Australia it has been applied to create the following Atlases:

- The integrated Mental Health Atlas of the Central and Eastern Sydney Primary Health Network Region (Salvador-Carulla et al, 2016b);
- The Integrated Mental Health Atlas of Western Sydney (Salvador-Carulla et al, 2016a);
- The Integrated Mental Health Atlas of The Far West (Salvador-Carulla et al, 2015b);
- The Integrated Mental Health Atlas of South Western Sydney (Salvador-Carulla et al, 2015a); and,
- The Integrated Mental Health Atlas of Brisbane North (Mendoza et al, 2015).

It is also being utilised in Atlases that are currently underway and due for publication in 2017 including:

- The Integrated Mental Health Atlas of Country Western Australia PHN Region;
- The Integrated Mental Health Atlas of Metropolitan Perth;
- The Integrated Mental Health Atlas of the Australian Capital Territory PHN Region;
- The Integrated Mental Health Atlas of Northern Sydney PHN.

8.1 National Comparatives

When comparing different rural and remote areas it is important to note that there can be substantial variation within and between regions.

Country Western Australia

The Country WA PHN (CWAPHN) catchment encompasses an area of just over 2.5 million km^2, representing approximately 32% of Australia's land area and encompassing a population of just over half a million people. It is a vast geographical area, approximately as big as half of the United States of America. It is comprised of seven regional health districts with 105 LGAs in total. There were a total of 213 teams identified as delivering mental health care across Country WA. Health service (clinical) teams deliver 58% of this care. There was significant variation between and even within individual regions and this must be considered when viewing the Country WA wide figures. The Kimberley for example, has an extremely high volume of services with a rate of Outpatient services for adults of 139.63 per 100,000 population. This compares with the Wheatbelt region rate of 62.63. It must be noted however that many teams in rural areas are smaller than those in the metropolitan areas and this must be factored in when comparing regions. In common with other areas of Australia, there was a noticeable deficit of Day Care services and Sub-Acute Residential Care. Consistent with other remote areas in Australia and overseas, there is substantially more Outpatient Care (for both AOD and mental health) than in metropolitan areas.

Figure 47 compares the WNSW PHN region with Country WA, whilst Table 49 highlights regional variations in the rates of MTCs per 100,000 adult populations.

Whereas CWAPHN has almost twice the population of the WNSW PHN region, it is considerably less dense. Overall, there are similar rates of Outpatient MTCs per 100,000 population across both areas.

With substantial variation between country regions across Western Australia, the spider chart (Figure 47) for CWAPHN provides an overview or indicative average picture of the pattern of mental health care. It shows similar rates of Acute Residential Care teams between the CWAPHN region and the WNSW PHN region, although the placement capacity indicates in raw numbers there are more acute beds across the WNSW PHN region. It also highlights the relatively high level of Sub-Acute care across the WNSW PHN catchment, although 72 of the 128 Sub-Acute beds in the WNSW PHN region are Statewide rather than region specific.

Other key differences are the higher levels of Day Care (day programs) across the WNSW PHN region, a key strength of the system. Outpatient Care teams delivered by the health sector are more prevalent across the WNSW PHN region although health teams across the CWAPHN region appear to be more mobile than in the WNSW PHN region. There are also appears to be relatively more NGO teams delivering Outpatient Care in the WNSW PHN catchment.

Great Southern Region - Western Australia

The Great Southern region lies on the south coast of Western Australia and is anchored by Albany (population of 37,233) as the main regional centre on the coast. It has a population of 63,630 (PHIDU, 2016) over an area of 39,007 $km^{2,}$ giving a population density of 1.63.

Figure 48 compares the Great Southern region of Western Australia with the WNSW PHN catchment. There were some consistencies evident between the two areas. Both have similar rates of Outpatient MTC per 100,000 adults. Both have a similar mix of Health sector to NGO provision of Non-Acute Non-Mobile and Non-Acute Mobile Outpatient services, although the WNSW PHN region has more of each. In the WNSW PHN region, Acute Outpatient Care was provided by MHEC, emergency departments (supported via video-conference by the MHEC) and CMHDAS teams which were described as 'Non-Acute' although it is acknowledged they do some Acute work. As such, there was very little Acute Outpatient Care evident in the pattern of care as compared with the Great Southern region. The WNSW PHN region had slightly higher rates of Day Care MTC although both regions had strength in this category as compared with other parts of Australia.

Overall there were similar numbers of Residential MTC per 100,000 adults across both regions (Table 49). Once again, the high levels of Sub-Acute Residential Care across the WNSW PHN region were evident, however the rate of Acute Residential Inpatient care was slightly less for the WNSW PHN region than the Great Southern region.

Midwest Region - Western Australia

The Midwest region of Western Australia stretches from the west coast and is bordered by the Pilbara, Wheatbelt and Goldfields regions. It covers 615,938 km^2 and has a population of 69,770 (PHIDU, 2016) which is most densely concentrated in the Geraldton-Greenough LGA on the west coast. The overall population density of the region is 0.11. The Upper Gascoyne LGA has the highest Indigenous Status (62.7%), with the lowest proportion residing in Exmouth (2.6%). The Wiluna LGA has the greatest cultural diversity with 24.2% of the people in this LGA being born overseas.

Figure 49 compares the WNSW PHN region with the Midwest region of Western Australia. Overall there was less Residential MTC per 100,000 in the Midwest when compared with the WNSW PHN catchment

(Table 49). There was more Acute and Sub-Acute Residential Care evident in the WNSW PHN catchment. There was no Day Care across the Midwest region.

There was a higher level of Outpatient MTC across the Midwest as compared with the WNSW PHN area (58.84 vs. 49.69 per 100,000 adults). With a closer look into these MTC rates, an anomaly with the coding of the Western Australian CMH teams was evident. Uniquely to the area, some Country WA CMH teams were given two separate MTC codes to indicate an even mix of Acute vs. Non-Acute Outpatient Care provision provided by these teams. Once again this contrasts with the lack of separate or discrete Acute Outpatient Care provided across the WNSW PHN region. Again, it is noted that some Acute care is provided by the Non-Acute CMHDAS teams and the MHEC via telephone and video conference across the region. There appears to be significantly higher levels of Non-Acute Outpatient Care provided by the health sector across the WNSW PHN region.

South Eastern Melbourne - Victoria

The South Eastern Melbourne PHN (SEMPHN) catchment encompasses an area of 2 892 km^2 stretching from St Kilda to Sorrento and as far east as Bunyip, encompassing a population of 1.4 million people across 177 suburbs. Within the SEMPHN boundary there are three local health networks (Monash Health, Alfred Health and Peninsula Health) encompassing a total of 10 LGAs. Sixty-one percent of the population is adult, 24 percent children and 15 percent older adults. This area has a lower than average proportion of Aboriginal and Torres Strait Islander people compared to Australia.

Figure 50 compares the pattern of AOD care across the WNSW PHN area with the SEMPHN region. There is a broad similarity in the pattern of AOD care between the two regions. Overall, the WNSW PHN catchment has a greater depth of AOD services, with more Non-Acute Outpatient Care provided by both the NGO and the Health sector. The WNSW PHN region also has more Residential AOD and Accessibility care services.

TABLE 49 WNSW PHN REGION AND WESTERN AUSTRALIA REGIONAL ADULT MTC RATE COMPARISONS

				Residential		Day Care		Outpatient	
Region	**Total Population***	**Land Area** KM²**	**Density**	**N**	**MTC/100,000 adults**	**N**	**MTC/100,000 adults**	**N**	**MTC/100,000 adults**
South West WA	174,052	23,998	7.25	4	3.95	1	.99	25	24.71
Great Southern WA	63,570	39,007	1.63	3	9.00	1	3.00	15	44.98
Wheatbelt WA	74,368	154,862	0.48	0	0.00	0	0	28	62.63
Goldfields WA	59,023	771,726	0.08	2	5.10	2	5.10	20	50.96
Midwest WA	69,770	615,938	0.11	2	4.90	0	0	24	58.84
Kimberley WA	39,100	424,517	0.09	2	7.76	0	0	36	139.63
Pilbara WA	67,503	507,896	0.13	0	0.00	0	0	20	38.90
WNSW PHN	**310,610**	**441,225**	**0.70**	**17**	**9.94**	**8**	**4.68**	**85**	**49.69**
Country WA	**546,206**	**2,537,944**	**0.22**	**13**	**3.86**	**4**	**1.19**	**168**	**49.93**

* Population data sourced from PHIDU (2016) ** Land area sourced from Government of WA Dept. of Regional Development at http://www.drd.wa.gov.au/regions/Pages/default.aspx

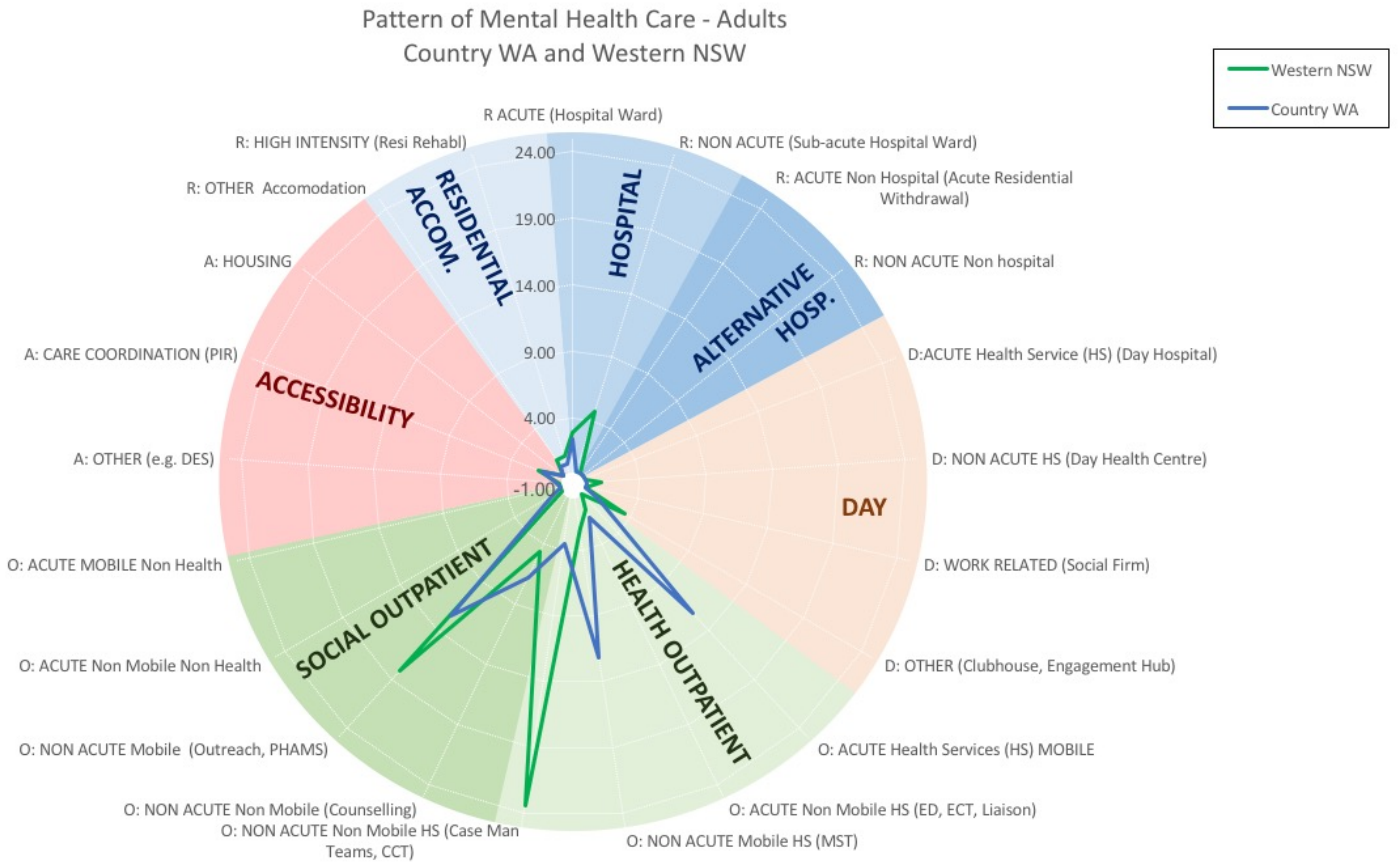


FIGURE 47 PATTERN OF MENTAL HEALTH CARE - WNSW PHN REGION AND COUNTRY WA PHN REGION

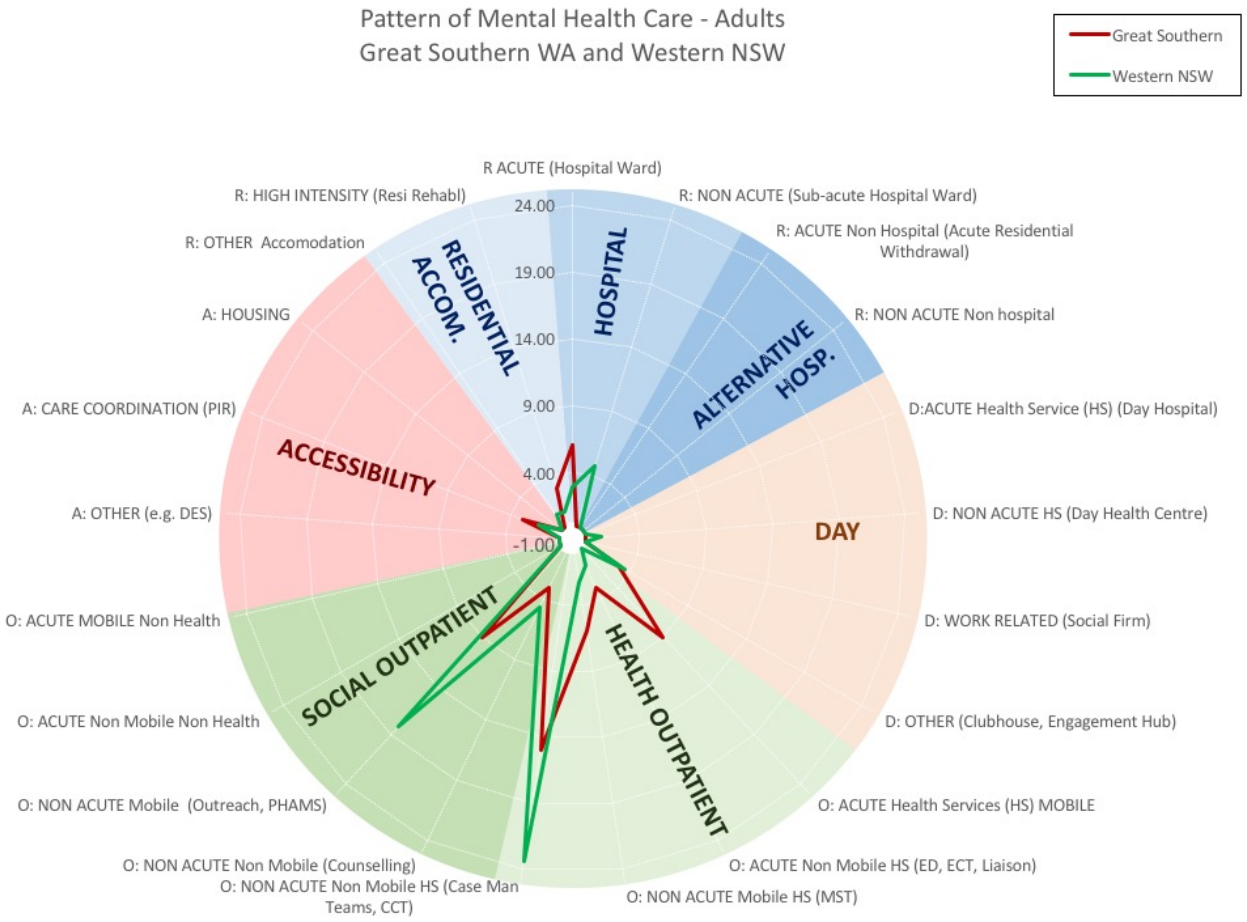


FIGURE 48 PATTERN OF MENTAL HEALTH CARE - WNSW PHN REGION AND GREAT SOUTHERN REGION OF WA

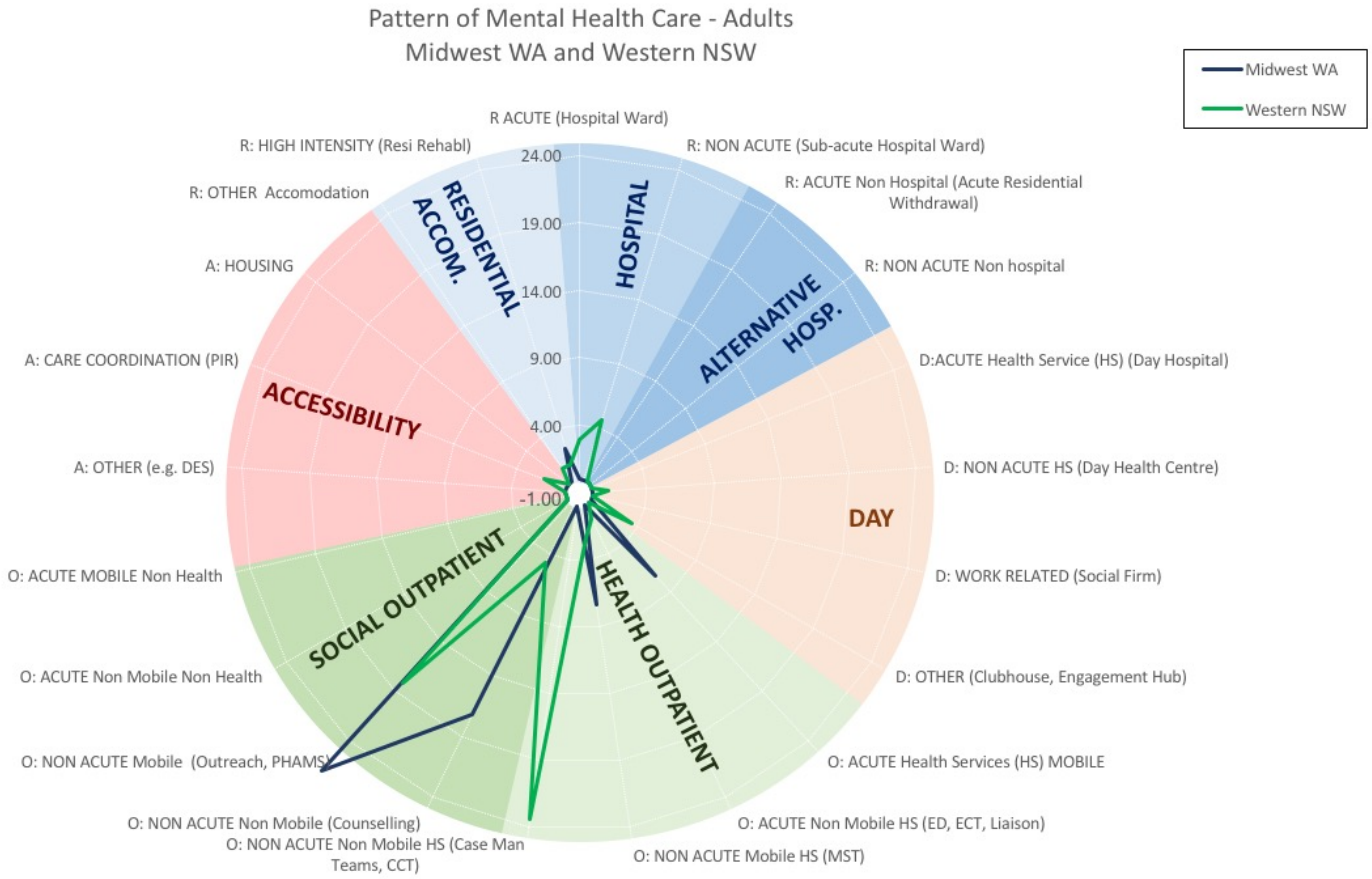


FIGURE 49 PATTERN OF MENTAL HEALTH CARE - WNSW PHN REGION AND MIDWEST REGION OF WA

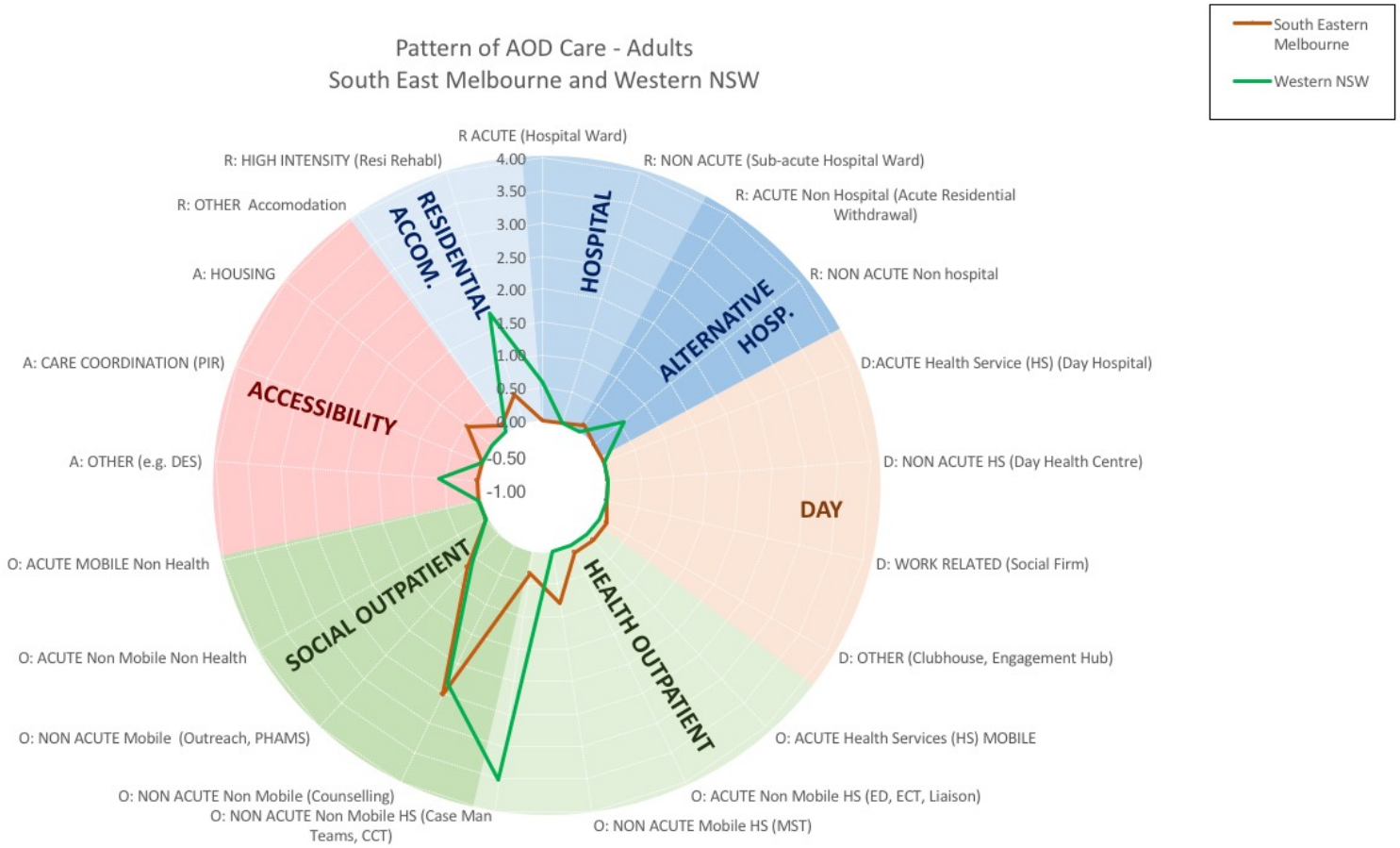


FIGURE 50 PATTERN OF AOD CARE - WNSW PHN REGION AND SOUTH EASTERN MELBOURNE PHN REGION

8.2 Placement Capacity - National Comparisons

Bloomfield Hospital in Orange is one of the largest mental health inpatient facilities in the Country. Given this, it is perhaps not surprising that the rates of Residential Care are at least comparable if not higher in the WNSW PHN region than other areas of Australia as highlighted in Figure 51 below. The rate of Acute Inpatient beds per 100,000 population at 30.4 is much higher than Country WA (19.04) and slightly higher than other areas of Australia, including Central and Eastern Sydney (26.04), Brisbane North (25.32) and Western Sydney (20.59). With the large number of Sub-Acute beds at Bloomfield, the rates of Sub-Acute inpatient beds (74.83) is significantly higher in the WNSW PHN catchment, however it is noted that many of these beds are Statewide services rather than region specific.

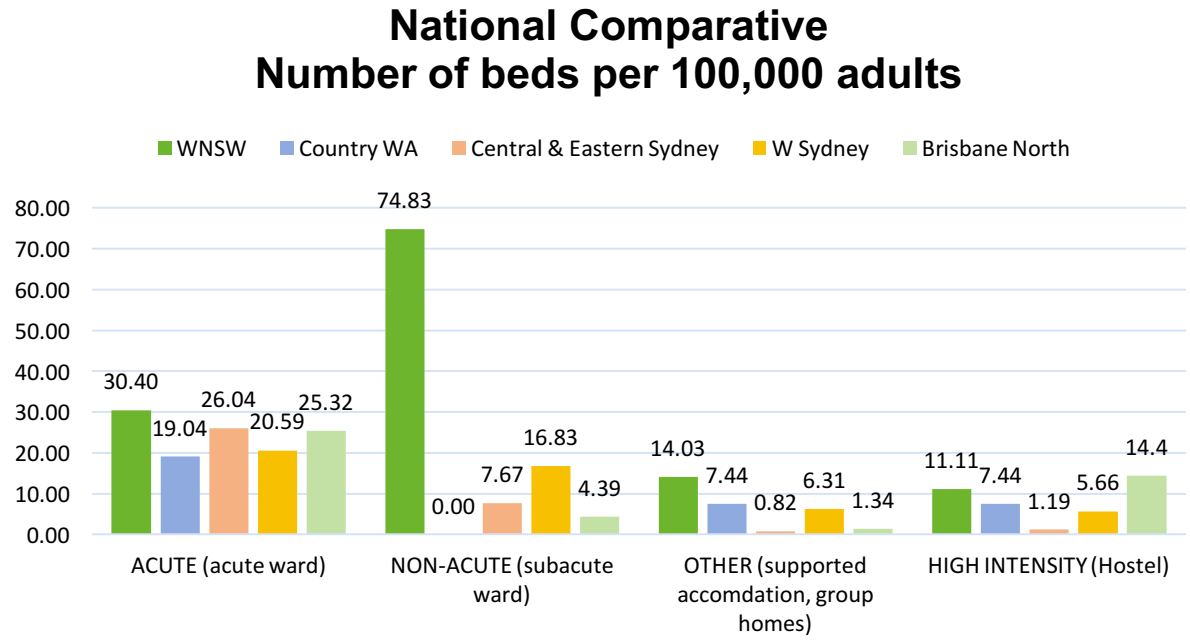


FIGURE 51 NATIONAL COMPARATIVE - BEDS PER 100,000

8.3 International Comparatives

In the absence of a gold standard for planning the provision of mental health and AOD services, international comparisons are useful for problematizing things that are often taken for granted, and identifying policy learnings and borrowings (Cacace et al, 2013). In order to conduct meaningful comparisons, it is important to use a standardised tool that goes beyond terminological variability.

There are several European areas that have been mapped using the DESDE-LTC. The use of a common language facilitates comparisons between the WNSW PHN region and the different community care models in Europe. The information on the European Countries has been presented as part of The Refinement Research Project (Refinement Project 2011) funded by the European Commission. Unfortunately, there is no mapped International area very similar to the WNSW PHN area (see population density in Table 50) (i.e. a mix of larger towns and very remote areas); so comparisons with two areas are made that, in spite of not being remote, are highly rural. Comparisons need to be taken with caution as all rural and remote areas have their own unique characteristics and there is often significant variability both across and within regional areas of Australia as evidenced with recent mapping of Western Australia and previous mapping of the Far West of NSW, both using the DESDE methodology. The WNSW PHN region presents its own unique characteristics. Any rural planning for mental health and/or AOD must be tailored to the local context as differences across rural and remote areas are far greater than in urban areas.

TABLE 50 RELATIVE POPULATION DENSITY

Region	Population Density
Sør-Trølelag (Norway)	15.60
Vall d'Aran I Alt Pirineu (Catalonia, Spain)	13.32
Great Southern WA	1.05
Midwest WA	0.12
Country WA	0.22
WNSW PHN	0.70

Norway

Figure 52 compares the pattern of mental health care in the WNSW PHN region with an area in Norway (Sør-Trøndelag). The provision of mental health services in Norway is organised within Health Authorities (HA), each one including several institutions/hospitals (Salvador-Carulla, 2015b). Norway has a high per capita spending on health and there is a high availability of different types of mental health care. The area in Norway (Sør-Trøndelag) covers 25 municipalities and it is the catchment area of the St Olavs Hospital HA. The municipalities are obliged to offer primary health care and long term care to all people in need of municipal services regardless of diagnosis. The GP is responsible for planning and coordinating preventive work, evaluation, and treatment and provides an important link between primary health care and the specialised health services. With regard to social and economic characteristics, Sør-Trøndelag has a low population density (15.60/km^2). It also has a very low unemployment index (Salvador-Carulla, 2015b). The WNSW PHN region has a population density of 0.7 (Table 50)

The main differences in the pattern of mental health care between Norway and the WNSW PHN catchment are related to the higher availability of Mobile (health related) teams in the Norwegian

System. A service is coded as mobile if the team goes to the home/place where the person lives (so, the person does not need to go to a facility). On the other hand, the WNSW PHN region has substantially more NGO teams providing Non-Acute Mobile Outpatient psycho-social mental health care.

There were relatively less Day Care services identified in the WNSW PHN catchment as compared with Norway. There is a similar level of Sub-Acute hospital care in the two regions but the availability of Acute Residential Care is higher in the WNSW PHN region.

Southern Europe Model of Mental Health Care

Figure 53 compares the WNSW PHN region with a Health Region in the North of Catalonia (Spain), Vall Aran-Alt Pirineu, which is isolated and highly rural. It is in a valley surrounded by mountains (the Pyrenees).

Mental Health in Southern Europe is characterised by a strong emphasis on community care, and low availability of psychiatric hospitals. As in the case of Northern Europe, the public health sector is funded from general taxes. In Spain, most of the mental health services are funded by the Regional Health Authorities. Social services are paid for by the social and employment authority. Community mental health care is organised in seven areas that include an Adult Mental Health Centre and other specific services. Mental health patients enter the system through primary care (PC), which fulfils a gatekeeping function. In Vall d'Aran there is no hospital; due to accessibility issues, they have special agreements with hospitals in France. When compared with Vall d'Aran, the WNSW PHN region has a greater number of, and more varied services, especially Outpatient psychosocial services but also general Day Care and both Acute and Sub-Acute hospital care.

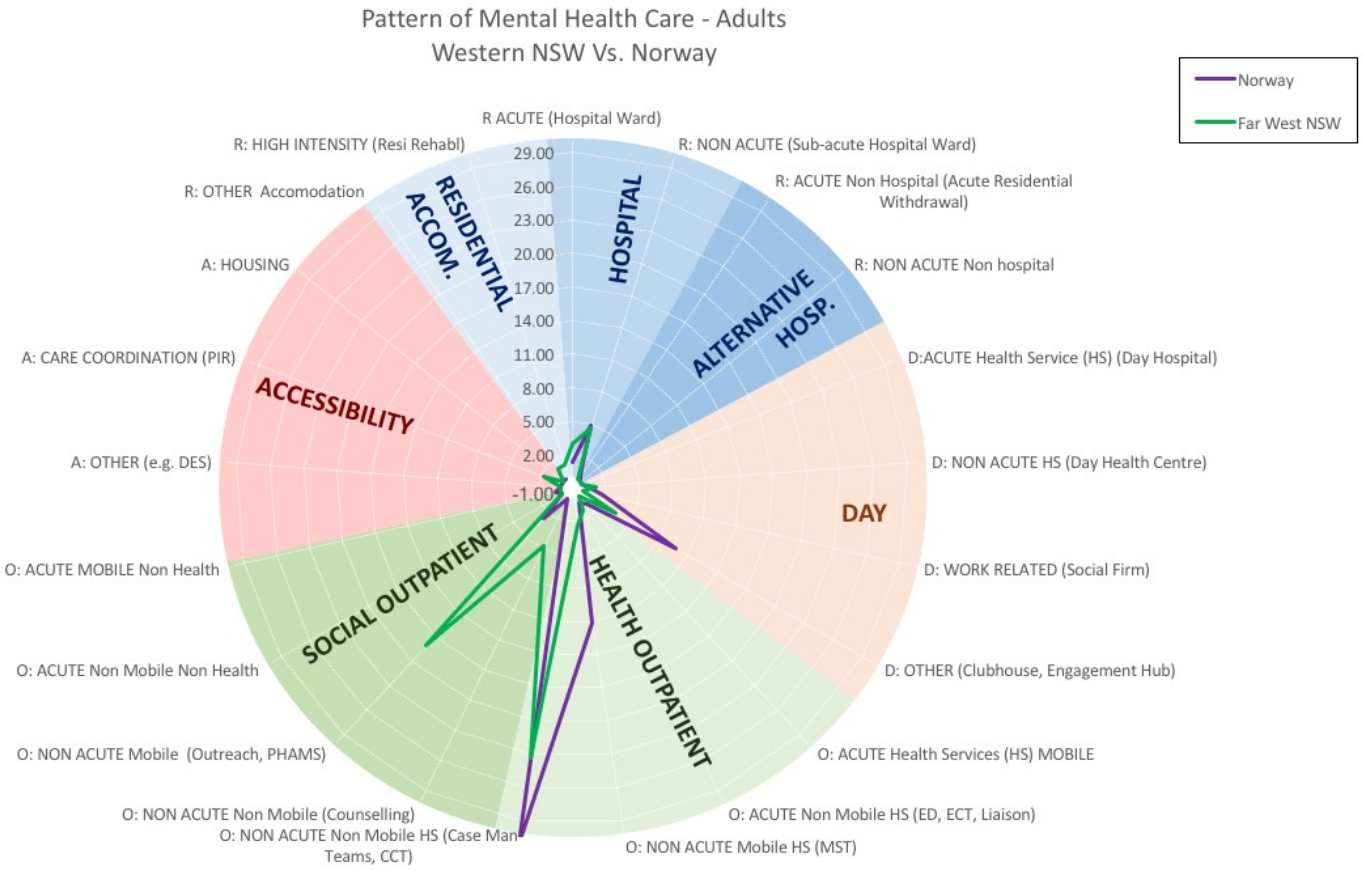


FIGURE 52 PATTERN OF MENTAL HEALTH CARE - WNSW PHN REGION AND NORWAY

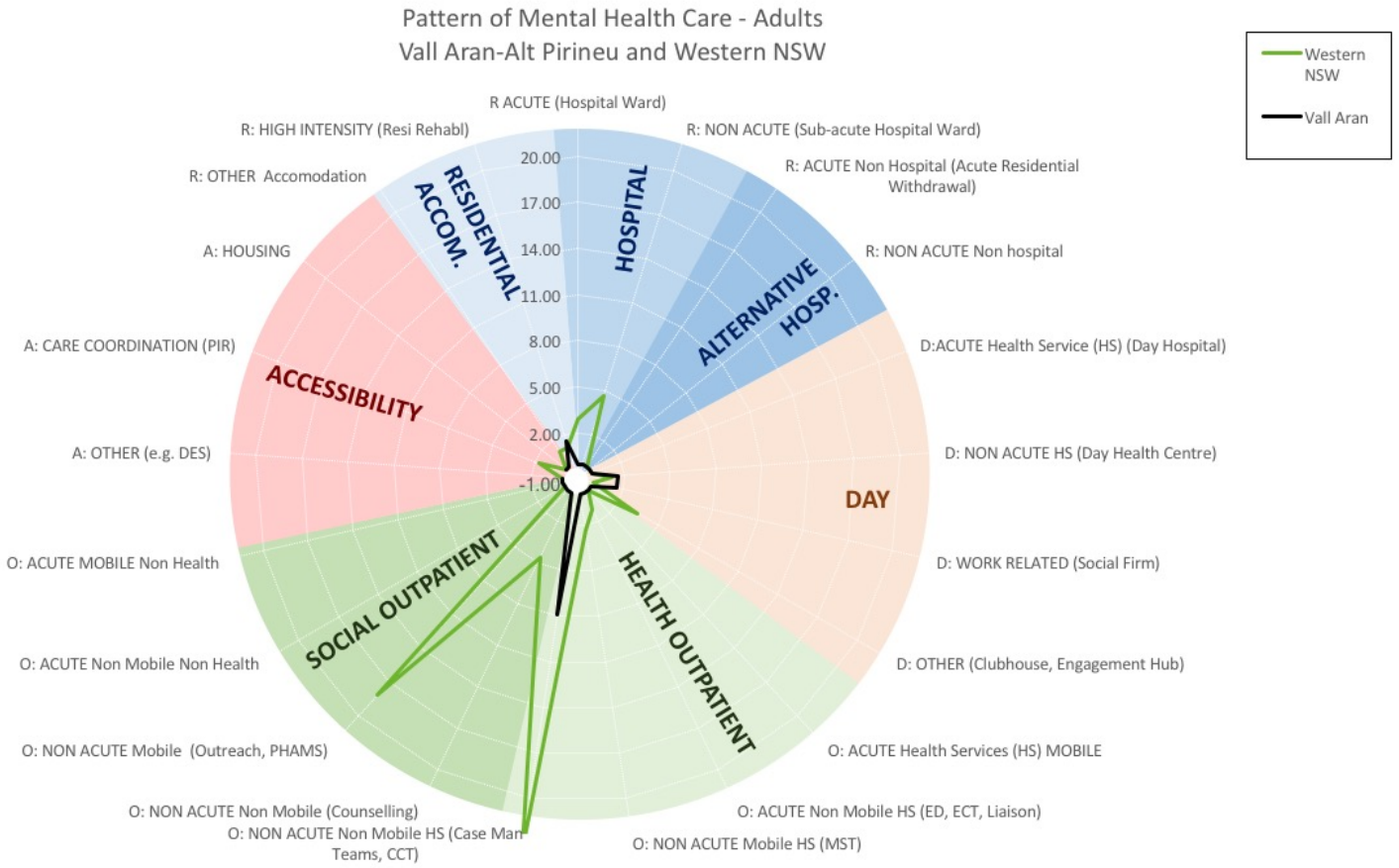


FIGURE 53 PATTERN OF MENTAL HEALTH CARE - WNSW PHN REGION AND VALL ARAN-ALT PIRINEU (SPAIN)

8.4 Placement Capacity Residential Care – International Comparisons

As discussed, Bloomfield Hospital in Orange is one of the largest mental health inpatient facilities in the country and as such the rates of Residential Care are higher in the WNSW PHN region than other areas in Australia and internationally, as highlighted in Table 51 below and Figure 54. The rate of Acute Inpatient beds per 100,000 population at 30.4, which is much higher than Country WA (19.04) and Norway (1.45). With the large number of Sub-Acute beds at Bloomfield, the rate of 74.83 beds per 100,000 is also significantly higher than both Country WA PHN region and Norway, however it is noted that many of these beds are Statewide services rather than region specific.

TABLE 51 RESIDENTIAL CARE BED RATES PER 100,000 POPULATION

MTC	Sør-Trølelag (Norway)	Vall d'Aran I Pirineu (Catalonia, Spain)	Country WA PHN	WNSW PHN
Acute Hospital Care R1, R2, R3	1.45	0.00	19.04	30.4
Sub-Acute Hospital R4, R6	1.88	0.00	0.00	74.83
Other R9, R10, R12, R13, R14	0.00	0.00	7.44	14.03
Non-hospital High Intensity - R8, R11	0.95	23.54	7.44	11.11

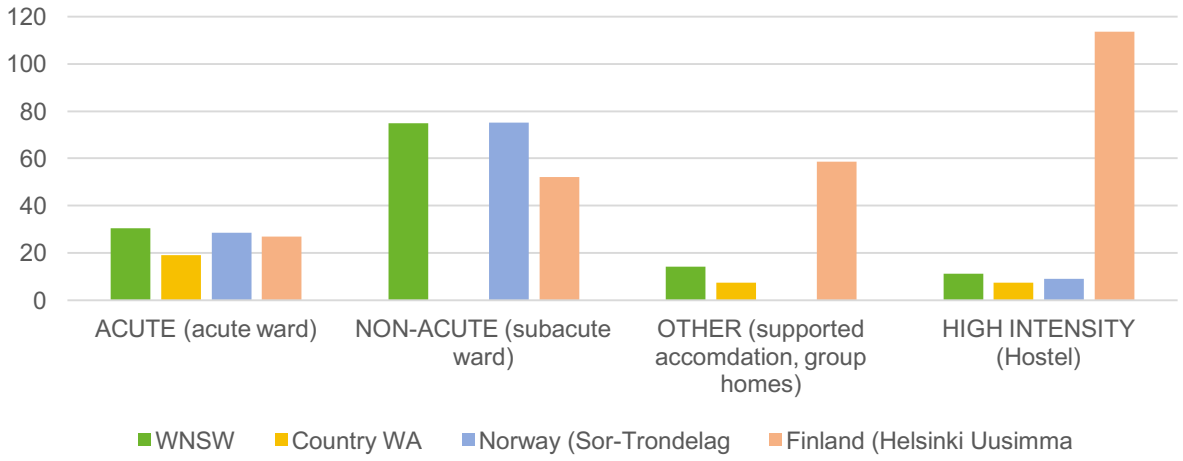


FIGURE 54 INTERNATIONAL COMPARATIVE - BEDS PER 100,000

9. Discussion

In recent years, there have been some key principles that have guided and will continue to guide the process of reform for the mental health care system in the Australia. These include stronger integration of care, more community based care and the introduction of stepped care models. These, along with more general health system reforms such as the introduction of PHNs and the NDIS have created an environment that is fluid, highly charged and changeable.

Moving to an integrated care model within a community of care approach requires clear knowledge of the existing structure and potential of the existing health services, the provision of investment in rural return, and a focus on sustainability (Hudson et al, 2015). When considering the leading role of the Far West in the development of the integrated care approach in Australia (Perkins et al, 2006), WNSW PHN is in an ideal position to evaluate and monitor new initiatives and models of care.

The Integrated Mental Health Atlas of Western NSW can support decision-making by planners to refine and improve the provision of mental health services in the area. Planning must always be tailored to the local context to ensure an equitable, sustainable and effective mental health system. This is even more essential in an area like WNSW as the differences across rural and remote areas are often far greater than those in urban areas.

This Atlas builds on and extends the 2015 Integrated Mental Health Atlas of The Far West. It reveals some major strengths and areas for improvement in the pattern of mental health care in the WNSW PHN region. The major strengths relate to: the good availability of Acute Inpatient Residential and Non-Acute Outpatient Care; a good geographical spread of Outpatient Care across the region; Relatively strong availability of Day Care across the Western NSW LHD but a lack of Day Care across the Far West LHD; A range of Carer specific and services specifically for Aboriginal and Torres Strait Islanders. Gaps identified as requiring further exploration include: A lack of age specific services for older people amongst an aging population; a lack of Day Care across the Far West LHD; an apparent lack of Acute Outpatient mental health care; a lack of community based rather than hospital based residential options for mental health care; small team sizes and challenges with staff recruitment and a relative over-supply of hospital based Non-Acute and Sub-Acute mental health care.

The key findings are discussed below.

System Reforms and the Introduction of the NDIS

The past few years have seen a plethora of changes taking place across the mental health landscape in Australia. Key themes and reforms that impact upon WNSW include:

- A drive towards more integrated models of care, including stepped care
- The introduction of PHNs and the re-commissioning of various mental health services
- The roll-out of the National Disability Insurance Scheme
- A push towards community based rather than hospital centric mental health care, including the move to close the last stand-alone psychiatric institutions in NSW

Times of intense reform such as this present both challenges and opportunities.

With the introduction of PHNs, some existing mental health services have been or are in the process of being recommissioned, including ATAPs and headspace for example. Naturally such shifts cause nervousness amongst both providers and clients and affect the stability of services.

The End of Service Stability?

Traditionally community managed mental health services were funded under State and Federal Government funding and service agreements that generally ran in three year cycles. The new environment will see that funding flowing instead through the PHNs and NDIS. Many of the new service contracts introduced by PHNs are for 12 months only. The PHN contracts have flexibility at their core. They are specifically tailored to local needs and will be adaptive to those needs over time. NDIS funding is focused on the individual. As such these funding streams will not be predictable longer term. The new services cannot be considered 'stable' in the context of the usual application of the DESDE criteria.

The introduction of the NDIS will result in substantial changes in the way mental health care is funded and delivered, with existing services such as PHaMs and PIR gradually phasing out over the next two years. NDIS rolls out across the region on July 1, 2017.

NDIS Impacts

Concerns have been raised about the impacts of the introduction of the NDIS, particularly around eligibility. It is already evident that some PHaMs clients and clients in high level residential care for example, will not be eligible for the NDIS. The Federal government has responded to these concerns with the provision of $80 million for psychosocial support services for people who do not qualify for the NDIS. There are also concerns around the time it takes to process an application and receive a package of care under the NDIS.

The full impact of the NDIS roll-out however remains unclear. From a provider perspective, there are some key areas of concern emerging:

- Sustainability of services. The NGO footprint across WNSW is not as large as found in metropolitan areas, and services are smaller. It is evident that staffing structures will shift, with increased casualisation of the workforce. This is likely to be particularly problematic in remote areas where attracting and retaining staff is already challenging
- The impact of NDIS pricing models on the capacity of services to travel to clients in remote locations is unclear. It may be that staffing may be re-distributed as a result of this
- Services describe a varying level of 'readiness' for the introduction. It seems likely that new providers will enter the system. It is unclear as to whether this will increase or decrease the fragmentation of services

Enhanced Adult Community Living Support

In 2014, the NSW Mental Health Commission released Living Well: A Strategic Plan for Mental Health in NSW 2014 -2024. This report set out directions for the reform of the mental health system in NSW and included two pivotal steps; To close the last remaining stand-alone psychiatric institutions and shift the focus of care away from hospitals and out to the community (NSW Mental Health Commission, 2014).

Whilst there has been a significant decrease in inpatient numbers over the past 20 years, data indicates that there are 380 people who remain residents in acute and non-acute mental health inpatient units for over a year. Some have lived as inpatients for many years (NSW Health, 2016).

The Pathways to Community Living Initiative (PCLI) is a coordinated statewide approach to support these people to move back out into less restrictive settings within the community. Enhanced Adult Community Living Support (EACLS) packages have been introduced to support this process. Mission Australia has introduced EACLS services in Mudgee, Broken Hill and Orange.

Availability and Accessibility to Services

Key data on service use across the WNSW PHN region indicates:

- The number of patients serviced by MHNIP declined during the period from 2011/12 to 2014/15
- Medicare-subsidised mental health-related services provided by psychiatrists, GPs, psychologists and other allied health professionals across the WNSW PHN region are slightly less than the State average for 2014-2015 (308 per 1,000 population vs. 410 per 1,000). Patient numbers at 118 per 1,000 are higher than the State average (88 per 1,000), a figure comparable with that of the Northern Territory (115.8 per 1,000)
- The number of clients accessing ATAPS between 2011/12 – 2014/15 increased, whilst the number of sessions almost doubled from 3,929 in 2011/2012 to 7,818 in 2014/15

In terms of mental health services identified and mapped for this Atlas, there were 131 BSIC or teams identified across the WNSW PHN region. This equates to a rate of 42.17 BSIC per 100,000 population. The number of services is generally higher in rural and remote areas and this is a similar rate to that found in Country WA (39 BSIC per 100,000). Figures for metropolitan areas are generally lower, 15.44 per 100,000 across Central and Eastern Sydney and 12.27 across South Eastern Melbourne, for example.

When compared with rural areas in Southern Europe, the WNSW PHN catchment has a greater number of, and more varied services, especially Outpatient psychosocial services but also general Day Programs and both Acute and Sub-Acute hospital care. When compared with rural areas in Northern Europe, there is relatively less Acute Outpatient Care provided by the health sector, relatively less Day Care but relatively more social Outpatient Care.

Lower spatial access to services is a central issue for remote and rural populations across the world and access to mental health services in the WNSW PHN region is no exception. Lower population thresholds for the provision of health care in rural and remote Australia are considered essential in policy making due to the principles of “equity; consideration of social determinants of health; flexibility, effective expenditure of resources, tailoring services to ensure consumer acceptability, prioritising services according to need, and providing services as close to home as possible” (Thomas et al, 2015).

Effort continues to increase accessibility to services across the WNSW PHN region. One example of this is the agreement reached between the Far West Local Health District and Ramsay Health in Mildura to improve accessibility to mental health care for the population on the southern border with Victoria.

Transport is a key issue for service access, particularly in remote areas. The Mental Health Services in Rural and Remote Areas (MHSRRA) program funds the provision of mental health services in rural and remote communities that would otherwise have little or no access to mental health services which includes the Royal Flying Doctors Service (RFDS), Aboriginal Health Services, and funding available through the WNSW PHN catchment.

The RFDS has bases in both Broken Hill and Dubbo and travels to 12 remote and rural locations across WNSW. This service provides crucial access to areas that would otherwise not have access to mental health care. However, many of these sites are only visited by a team monthly. As such there has been increased attention given to the development of hybrid approaches that combine face-to-face and eHealth services, such as the provision of telehealth services by the Mental Health Emergency Care line which is based in Orange. This team provides access to mental health specialists twenty-four hours and day, seven days a week, over the phone and via teleconference facilities across approximately 52 Multi Purpose Services (MPS) and Community Mental Health Drug and Alcohol service locations. Research has shown that MHEC has been widely utilised for emergency presentations, including increasing numbers of Aboriginal people and young people, across the WNSW PHN region. This research has also shown the majority of patients are referred to Outpatient Care with the number of patients admitted to hospital significantly declining (Saurman et al, 2014; Saurman et al, 2015). In

addition to MHEC, there is low intensity telephone psychiatric care at the GP Super Clinic in Broken Hill and almost half of the activity of the RFDS is via telephone, email and video call.

While eHealth is undoubtedly a crucial component of mental health care in rural and remote areas, it is important that eHealth does not substitute, but instead is considered supplemental to, locally based services (Allen et al, 2013). Further, with eHealth forming a key component of healthcare access in the area, more research is required to understand the levels of eHealth literacy across the region. Electronic health tools will provide little value if the intended users lack the skills or resources to effectively engage with them (Norman and Skinner, 2006).

Availability of Services for Aboriginal and Torres Strait Islanders

There were nine teams identified as providing mental health services for Aboriginal and Torres Strait Islanders, including a Primary Care Specialist Service run by Maari Ma Aboriginal Corporation and a psychologist based at the Coonamble Aboriginal Health Service. Mission Australia also provide several Aboriginal Housing Accommodation Support Initiative services across the region.

Gaps in Availability

There is relatively high availability of mental health services (42.17 BSIC per 100,000 population) across the WNSW PHN region. When compared to other regional areas in Country WA, there is relatively more Non-Acute Outpatient, higher bed per capita rates (although some are Statewide beds) and relatively more Day Care services, although Day Care is lacking in the Far West LHD. Bed rates and Day Care rates also compare favourably with metropolitan areas.

The only area that may be slightly deficient is the provision of Acute Outpatient Care. The distinction between Acute and Non-Acute work is often a blurry one in remote areas. These areas are often serviced by one blended team working in a highly-integrated fashion with clients as they move through varying levels of acuity and intensity. The restructure underway at Western NSW LHD will see the introduction of new Intensive Case Management Teams which will make the distinction between Acute and Non-Acute work more discernible in the future.

Availability of Day Care

Day Care is prevalent across the Western NSW LHD rather than the Far West LHD. There were six day programs identified across Orange, Dubbo, Forbes, Parkes, Cowra and Bathurst. There remain none in the Far West LHD region.

Availability of Specialised Mental Health Services

There are very few age specific teams providing mental health care to older adults across the WNSW PHN region although as mentioned earlier, there are aged mental health specialists working within the blended community mental health and drug and alcohol teams. There were also very few services that were specialised to specific mental health related issues, such as eating disorders for example. There were two services identified that offered support for survivors of institutional abuse and one counselling service for gambling addiction. The only gender specific services were inpatient facilities at Bloomfield Hospital. Carer services were available in most major towns, except for Bathurst.

Placement Capacity

The per capita rate of 30.4 Acute Inpatient beds per 100,000 population across the WNSW PHN region is much higher than Country WA (19.04) and slightly higher than other areas of Australia, including Central and Eastern Sydney (26.04), Brisbane North (25.32) and Western Sydney (20.59). This is not surprising given that Bloomfield Hospital in Orange is one of the largest mental health inpatient facilities in the Country. With the large number of Sub-Acute beds at Bloomfield, the rates of Sub-Acute inpatient

beds (74.83) is also significantly higher in the WNSW PHN region, however it is noted that many of these beds are Statewide services rather than region specific.

Workforce Capacity

Workforce data was available for 57% of the mental health teams included in this Atlas. Most of the mental health teams across the WNSW PHN region are small, with less than five staff in each, 47% have one staff member or less (Full time equivalent). Small teams are common across remote areas; however, they are particularly vulnerable to staff absences and turnover, increasing the strain on small teams to continue to provide a timely and responsive service.

It was also evident during the data collection for this Atlas that the sustainability of services is impacted by difficulties finding and attracting suitably skilled and trained staff and keeping them, particularly in remote areas. This is due to professional isolation, distance, working conditions, a perceived lack of career opportunities (including for family members) and scope-of-practice issues (Health Workforce Australia, 2013). This was raised a number of times during interviews, particularly in relation to Aboriginal Health Workers, Child and Adolescent Mental Health Clinicians and Mental Health Nurses, in particular credentialed Mental Health Nurses.

10. Study Limitations

There are several limitations that should be acknowledged.

Services may be missing because they were not able to be reached. Some organisations did not respond to the survey. Additionally, it is possible that others were overlooked in the creation of the initial stakeholder lists. An extensive feedback process was undertaken to verify and qualify the final data presented in the Atlas. It should be noted that services may have been excluded from the final data not because they were missed but rather because they did not meet Atlas criteria (see below).

Some services are not included because they are not specialist mental health or AOD services. These generalist services may still treat people with mental health ill-health or AOD issues, however they are not included as they do not specifically target these issues.

DESDE-LTC must be applied with rigour and consistency to ensure the accuracy of comparative data. The ability to make cross-comparisons with other areas both nationally and internationally is one of the key strengths of the tool. This necessarily means some more generalist services are excluded from analysis. This is particularly pertinent to this Atlas when considering the nature of services provided into remote and rural communities, including Aboriginal Medical Services and some (not all) of the generalist community services, prevention and early intervention services, Social and Emotional Wellbeing Services and remote hospitals (without mental health units). To fully appreciate the depth and complexity of these services, it would be necessary to do further analysis on the activities of these groups, something which could be achieved by mapping modalities of care using the International Classification of Mental Health Care.

Private providers are generally not included in an Atlas, as it is focused on services with a minimum level of universal accessibility (that is services must be free). As such private providers are generally only included where they are providing free services. The inclusion of private providers in the mapping of publicly available services is considered to increase noise and possibly distort the interpretation of results. It might also misrepresent the universality of access to services.

The assessment of services was made through a process telephone interviews and follow-up emails. Some information may not have been provided as at the report date, some information may have been misinterpreted, or contain inaccuracies and some assumptions may have been required to finalise a code or classification.

It is noted that the data collection period for this Atlas took place during a time of substantial change within the mental health and AOD sectors in the WNSW PHN region. Service redesign and restructures are taking places across the Western NSW LHD. In addition to this, the roll out of the NDIS on July 1 and the commencement of recommissioning of some services through the PHNs also added additional pressures and complexity to the services that were being mapped.

The Atlas focuses only on services provided from a base within the Western NSW PHN region. It is acknowledged that there are services that residents of the WNSW PHN region will use that may be outside of this catchment.

The Atlas compares the rates of beds, places and the numbers of teams (BSIC) per 100,000 population across the area of focus. These rates are then compared with other areas across Australia and internationally. However, when comparing the rates of teams, it is important to understand the size of these teams to get the most accurate assessment of the capacity of the services in a particular area. Therefore, additional effort has been applied to explore the size of teams with additional commentary provided to add further depth to the analysis. Data on FTE was however often not available or lacked specificity. The analysis provided should be viewed with this in mind.

11. Future Steps

This Atlas comprehensively mapped the stable services providing care for people with lived experience of mental illness and/or AOD issues and uses publicly available socio-demographic information on the WNSW PHN population.

The WNSW PHN region is a large region, with a wide variation in characteristics across and within the LGAs within it. The rural and remote areas and large Aboriginal populations present additional complexity. Whilst the Atlas provides a comprehensive assessment and analysis of the services provided within the area, it would be further enhanced and complimented by additional analysis, some of which is detailed below.

The role of primary care, general health and hospital services and emergency services in remote areas. Emergency services and emergency departments are often the first point of contact for people experiencing a mental health or AOD crisis in remote communities. As such, gaining a deeper understanding of their role in the provision of mental health and AOD care, the integration and availability of video-conferencing as a supplementary support, the care transfer rates and presenting issues and challenges would be highly beneficial.

Rates of utilisation of the services, by MTC, using the information provided in the administrative databases. The analysis of service utilisation will detect hot and cold spots and areas of improvement. The information collected in the local Atlas of Mental Health Care can be combined with utilisation and outcome data to produce decision support tools that may help decision for the analysis of benchmarking and relative efficiency, as well as to redesign and improve available services.

Mapping modalities of care. In creating the Atlas, it was evident that many service delivery teams operate in a highly flexible, integrated way, often undertaking a variety of program activities that it would be beneficial to understand in a deeper way. This could be achieved by mapping the modalities of care using the International Classification of Mental Health Care.

Rates of other chronic diseases relevant to people with mental ill-health and/or AOD issues. Cardio-vascular disease, Diabetes Mellitus, obesity and muscular-skeletal conditions could be added to future maps.

In-depth workforce analysis would support this and future Atlas work. This would facilitate a more comprehensive understanding and categorisation to most effectively articulate the profile, qualifications and experience of the workforce.

Further exploration of financing mechanisms and financing flows could be conducted. This would allow important areas such as the Better Access Program and Community Mental Health services provided by NGOs (and soon to be provided by NDIS) to be examined. The nature, consistency and stability of funding flows can substantially impact the stability and quality of the services provided.

The level of integration of the services providing Mental Health Care and/or AOD services and the philosophy of care of the services. A network analysis would allow for visualisation of the strength of relationships between organisations to better understand the level of connectivity and integration between services and the strength of these connections.

Pathways to care. Understanding how people navigate a system is a key area of knowledge that would add depth to service planning, design, utility and efficiency. This is particularly relevant as the NDIS rollout commences in July 2017.

12. Conclusion

Integrated Atlases are a key tool for evidence informed service planning and policy development. They are not a service directory or gazette of services. This Atlas included comprehensive mapping of services identified as stable and specifically tailored for the treatment of mental illness and AOD issues.

This Integrated Mental Health Atlas of Western NSW is a snapshot of this pivotal point in time and a jumping off point for further discussion across the region. It provides a great opportunity to harness this local evidence to innovate and improve existing service systems for the benefit of the local community.

Used in conjunction with the Regional Needs Analysis, it is an invaluable tool to identify and visualise service gaps to contribute to evidence informed service planning and policy development.

It can support the WNSW PHN to play a key role in the implementation of significant reform to the Mental Health system and deliver substantial improvements in the way residents access and utilise Mental Health and AOD Care across the region. Additionally, it provides an system snapshot at a critical point in time, just prior to the roll-out of NDIS, which will provide a benchmark for future comparisons and a visualisation of system change over time.

It can support the development of the ‘right care at the right time in the right place’ for those experiencing ill-mental health and/or AOD issues.

Appendix A

Stakeholder List

WNSW Local Health District

Aftercare

Anima Clinica

Annecto

ATAPS providers

Catholic Healthcare Ltd

CentaCare Wilcannia Forbes

Coonamble Aboriginal Health Service

Cowra Medical Associates

Dudley Private Hospital

Far West Local Health District

Flourish - RichmondPRA

GP Super Clinic

Grow NSW

Interrelate Family Centres

Julie Wilson Counselling Service

Lifeline

LiveBetter (Formerly CareWest)

*Lourdes Hospital

Lyndon Community

Maari Ma Aboriginal Corporation

Marathon Health

Mission Australia

MWCAG

NEAMI

NSW Outback Division of General Practice

One Door Mental Health (formerly schizophrenia fellowship of NSW)

Orana Haven

Ramsay Health Care

Royal Flying Doctor Service

Salvation Army

*The Baudinet Centre

The Benevolent Society

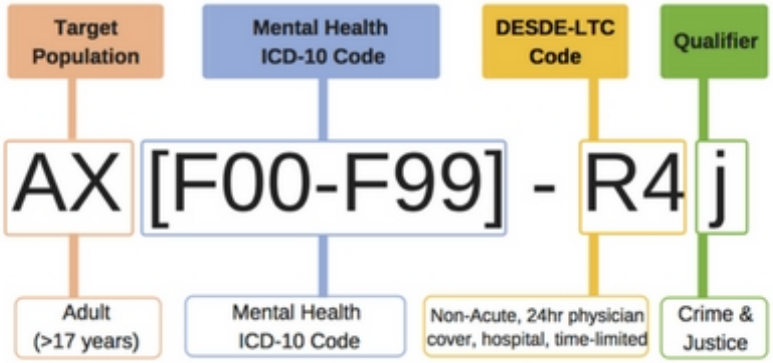
Weigelli Centre

*Indicates this service did not have teams included in the Atlas

Appendix B

DESDE-LTC Quick Reference Guide

DESDE-LTC Quick Reference Guide



Age Codes

GX **All age groups**
NX None/undetermined
CX **Child & Adolescents (0-17 years)**
CC Only children (0-11 years)
CA Only adolescent (12-17 years)
CY Adolescents and Young Adults (12-25 years)
AX **Adults (18-65 years)**
AY Young adults (18-25)
AO Older Adults (50-65)
OX **Older than 65**
TC Period from child to adolescent (8-13)
TA Period from adolescent to adult (16-25 years)
TO Period from adult to old (55-70)

Children and Adolescents (including young adults) – CC, CA, CX, CY, TC, TA, AY
Adults (Including services with no age specification) – AX, AO and GX
Older Adults – TO and OX

DESDE-LTC Codes

R Residential Care

D Day Care

O Outpatient Care

A Accessibility to Care

I Information for Care

S Self-Help and Voluntary Care

Diagnostic Groups

F00-F99 All types of mental disorders
F10-F19 Alcohol and other drug disorders
Z59 Problems related to housing and economic circumstances
F5 Delirium due to known physiological condition
F20-F29 Schizophrenia, schizotypal, delusional, and other non-mood psychotic disorders
F39 Unspecified mood disorder
F43 Acute stress reaction
F50 Eating disorders
F59 Unspecified behavioural syndromes associated with physiological disturbances & physical factors
F63 Impulse disorders
F64 Gender identity disorders
B20-B24 Human immunodeficiency virus (HIV)
310 Services for immediate family or carers
Z04.71/2 Encounter for examination and observation following alleged physical abuse
Z20-Z29 Persons with potential health hazards related to communicable diseases
Z65 Problems related to other psychosocial circumstances
Z69 Encounter for mental health services for victim and perpetrator of abuse
Z70 Counselling related to sexual attitude, behaviour and orientation
Z72 Problems related to lifestyle
ICD-T Used where there is not a specific diagnostic group for this service

Qualifiers

a - Acute care (complimentary) – Used where acute care is provided within a non-acute, non-residential setting but does not fit the criteria for the addition of a second MTC

b - Bundled care – Describes episode-related care provision, usually provided for non-acute patients within a time limited plan (eg., three months of brief psychotherapy).

c - Closed care – Denotes secluded MTC with a high level of security (e.g. locked doors)

d - Domiciliary care – Denotes this service is provided wholly at the home of the service user

e - eCare – Includes all care services relying on telephone, modern information and communication technologies (ICTs) (e.g. telecare/telemedicine, teleconsultation, teleradiology, tele monitoring)

f - Far-away – Describes care teams available for a defined population but too distant to be accessed on a routine basis

g - Group – This qualifier is applied to outpatient services that provide predominantly group activities and do not meet the criteria for a Day Care service (Typically 80% of their activity is through the provision of groups)

h - Hospital (Care provided in a hospital setting) – Describes non-residential MTCs ("O" or "D") provided within the hospital setting

i - Institutional care – Describes residential facilities characterised by indefinite stay for a defined population group, which usually have over 100 beds and which could be described as "Institutional care"

j - Justice care – Describes BSICs whose main aim is to provide care to individuals in contact with crime and justice services

l - Liaison care – Describes liaison BSICs where specific consultation for a subgroup of clients from another area within the facility, e.g. mental health care to a cancer ward of a hospital

m - Management – Describes an MTC where management, planning, coordination or navigation of care a core part the provision of their outpatient care

n - Novel – Describes hospital facilities of recent creation in hospital clusters or hospital campuses or community centres with partial residential care that not fulfil criteria for typical hospitals

o - 'On call' Physician – Describes residential MTCs where a physician is on call. The physician is not formally on duty at the centre part of the day, usually at night

p - Primary Care (Specialised Care provided in a primary care centre) – Describes specialised ambulatory care provided at the "primary care centre" by a qualified specialist from the specialised care centre

q - Quite – Indicates that the main attribute of the MTC (e.g., mobility, intensity) is significantly higher/greater than for other care teams coded in the same MTC

r - Reference – describes a MTC which operates as the main intake or referral point for the local area

s - Specialised care – Describes BSICs for a specific subgroup within the target population of the catchment area (e.g. eating disorders service)

t - Tributory – Describes an MTC that is a satellite team dependant on another main care team

u - Unitary – Describes an MTC that consists of only one team member

v - Variable – Service is subject to strong limitations of capacity or fluctuations in demand

w - Whole – Indicates that the service only provides the extreme level of the activity described by MTC.

x, y - Open Qualifiers – Could be added to describe extra information required by an specific research or requested by the funding agency or organisation for management or governance purposes.

MTC Codes

Residential Care

R0 Acute, 24-hours physician cover, non-hospital
R1 Acute, 24-hours physician cover, hospital, high intensity
R2 Acute, 24-hours physician cover, hospital, medium intensity
R3.0 Acute, non 24-hours physician cover, hospital
R3.1 Acute, non 24-hours physician cover, non-hospital, health related care
R3.2 Acute, non 24-hours physician cover, non-hospital, other
R3.2.1 Acute, non 24-hours physician cover, non-hospital, other, 24 hour care
R3.2.2 Acute, non 24-hours physician cover, non-hospital, other, Daily care
R3.2.3 Acute, non 24-hours physician cover, non-hospital, other, lower care
R4 Non-acute, 24-hours physician cover, hospital, time limited
R5 Non-acute, 24-hours physician cover, non-hospital, time limited
R6 Non-acute, 24-hours physician cover, hospital, indefinite stay
R7 Non-acute, 24-hours physician cover, non-hospital, indefinite stay
R8 Non-acute, non 24-hour physician cover, time limited, 24 hours support
R8.1 Non-acute, non 24-hour physician cover, time limited, 24 hours support, less than 4 weeks stay
R8.2 Non-acute, non 24-hour physician cover, time limited, 24-hours support, over 4 weeks
R9 Non-acute, non 24-hours physician cover, time limited, daily support
R9.1 Non-acute, non 24-hours physician cover, time limited, daily support, < 4 weeks
R9.2 Non-acute, non 24-hours physician cover, Time limited, Daily Support, > 4 weeks
R10 Non-acute, non 24-hours physician cover, time limited, lower support
R10.1 Non-acute, non 24-hours physician cover, time limited, lower support, < 4 weeks
R10.2 Non-acute, non 24-hour physician cover, time limited, lower support, > 4 weeks
R11 Non-acute, non 24-hours physician cover, indefinite stay, 24-hours support
R12 Non-acute, non 24-hours physician cover, indefinite stay, daily support
R13 Non-acute, non 24-hours physician cover, indefinite stay, lower support
R14 Non-acute, other non-acute

Outpatient Care

O1 Acute, home & mobile, 24 hours support
O1.1 Acute, home & mobile, 24 hours support, health related care
O1.2 Acute, home & mobile, 24 hours support, other Care
O2 Acute, home & mobile, limited Hours
O2.1 Acute, home & mobile, limited Hours, other care
O2.2 Acute, home & mobile, limited Hours, health related care
O3 Acute, non-mobile, 24 hours support
O3.1 Acute, non-mobile, 24 hours support, health related care
O3.2 Acute, non-mobile, 24 hours support, other care
O4 Acute, non-mobile, limited hours
O4.1 Acute, non-mobile, limited hours, health related care
O4.2 Acute, non-mobile, limited hours, other care
O5 Non-acute, home & mobile, high intensity
O5.1 Non-acute, home & mobile, high intensity, health related care
O5.1.1 Non-acute, home & mobile, high intensity, health related care, 3/6 days per week
O5.1.2 Non-acute, home & mobile, high intensity, health related care, 7 days per week
O5.1.3 Non-acute, home & mobile, high intensity, health related care, 7 days per week including overnight
O5.2 Non-acute, home & mobile, high intensity, other care
O5.2.1 Non-acute, home & mobile, high intensity, other care, 3/6 days per week
O5.2.2 Non-acute, home & mobile, high intensity, other care, 7 days per week
O5.2.3 Non-acute, home & mobile, high intensity, other care, 7 days per week including overnight
O6 Non-acute, home & mobile, medium intensity
O6.1 Non-acute, home & mobile, medium intensity, health related care
O6.2 Non-acute, home & mobile, medium Intensity, other care
O7 Non-acute, home & mobile, low intensity
O7.1 Non-acute, home & mobile, low Intensity, health related care
O7.2 Non-acute, home & mobile, low Intensity, other care
O8 Non-acute, non-mobile, high intensity
O8.1 Non-acute, non-mobile, high intensity, health related care
O8.2 Non-acute, non-mobile, high intensity, other care
O9 Non-acute, non-mobile, medium intensity
O9.1 Non-acute, non-mobile, medium intensity, health related care
O9.2 Non-acute, non-mobile, medium intensity, other care
O10 Non-acute, non-mobile, low intensity
O10.1 Non-acute, Non-mobile, low intensity, health related care
O10.2 Non acute, non-mobile, low intensity, other care
O11 Other non-acute outpatient care

Day Care

D0 Acute, episodic
D0.1 Acute, episodic, high intensity
D0.2 Acute, episodic, other intensity
D1 Acute, continuous
D1.1 Acute, continuous, high intensity
D1.2 Acute, continuous, other intensity
D2 Non-acute, work related, high intensity
D2.1 Non-acute, work, high intensity, ordinary employment
D2.2 Non-acute, work, high intensity, other work
D3 Non-acute, work related care, high intensity
D3.1 Non-acute, work related care, high intensity, time limited
D3.2 Non-acute, work related care, high intensity, time indefinite
D4 Non-acute, non-work structured care, high intensity
D4.1 Non-acute, non-work structured care, high intensity, health related
D4.2 Non-acute, non-work structured care, high intensity, Education related care
D4.3 Non-acute, non-work structured care, high intensity, social and cultural related care
D4.4 Non-acute, non-work structured care, high intensity, other non-work structured care
D5 Non-acute, non structured care, high intensity
D6 Non-acute, work, low intensity
D6.1 Non-acute, work, low intensity, ordinary employment
D6.2 Non-acute, work, low intensity, other work
D7 Non-acute, work related care, low intensity
D7.1 Non-acute, work related care, low intensity, time limited
D7.2 Non-acute, work related care, low intensity, time indefinite
D8 Non-acute, non-work structured care, low intensity
D8.1 Non-acute, non-work structured care, low intensity, health related care
D8.2 Non-acute, non-work structured care, low intensity, education related care
D8.3 Non-acute, non-work structured care, low intensity, social and cultural related care
D8.4 Non-acute, non-work structured care, low intensity, other non-work structured care
D9 Non-acute, non-structured day care
D10 Other non-acute day care

Information & Guidance

I1 Guidance and assessment
I1.1 Professional assessment and guidance related to health
I1.2 Professional assessment and guidance related to education
I1.3 Professional assessment and guidance related to social and cultural issues
I1.4 Professional assessment and guidance related to work
I1.5 Professional assessment and guidance related to other (non-work)
I2 Information
I2.1 Information provided through interaction
I2.1.1 Information provided through interaction - face to face
I2.1.2 Information provided through interaction - other
I2.2 Information, non-interactive

Accessibility to Care

A1 Access to communication
A2 Access to physical mobility
A3 Access to personal accompaniment
A4 Case coordination
A4.1 Case coordination, acute care
A4.2 Case coordination, non-acute care
A4.2.1 Case coordination, non-acute, high intensity
A4.2.2 Case coordination, non-acute, medium intensity
A4.2.3 Case coordination, non-acute, low intensity
A5 Other accessibility care
A5.1 Access to health services
A5.2 Access to Education and Training
A5.3 Access to social and cultural relations
A5.4 Access to employment
A5.5 Access to housing

Self-help & Volunteer

S1 Non-professional unpaid staff
S1.1 Non-professional unpaid staff, information on care
S1.2 Non-professional unpaid staff, accessibility to care
S1.3 Non-professional unpaid staff, outpatient care
S1.4 Non-professional unpaid staff, day care
S1.5 Non-professional unpaid staff, residential care
S2 Professional staff
S2.1 Professional staff, information on care
S2.2 Professional staff, accessibility to care
S2.3 Professional staff, outpatient care
S2.4 Professional staff, day care
S2.5 Professional staff, residential care

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We acknowledge that we work on the traditional lands of many Aboriginal clans, tribes and nations. We commit to working in collaboration with our region's Aboriginal communities and peoples to improve their health, emotional and social wellbeing in the spirit of partnership.