# Integrated Atlas of Mental Health and Alcohol and Other Drugs of Western Australia – Volume I

## Metropolitan Perth

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WA Primary Health Alliance

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The report has been prepared through a consultancy process using specific methods outlined in the Framework section of this report. ConNetica has relied upon the information obtained through the consultancy as being accurate. Reasonable efforts have been made to obtain and verify information from service providers across the region. However, some service providers did not respond to requests for information, invitations to complete a survey or to participate in an interview.

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

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# Abbreviations and Definitions

| Abbreviation | Definition |
|---|---|
| ABS | Australian Bureau of Statistics |
| ACTT | Aboriginal Children's Therapy Team |
| AOD | Alcohol and Other Drugs |
| ATAPS | Access to Applied Psychology Services |
| ATSI | Aboriginal and Torres Strait Islander |
| ATT | Assessment and Treatment Team |
| BSIC | Basic Stable Input of Care |
| CALD | Culturally and Linguistically Diverse |
| CCT | Community Care Team |
| CLS | Consultant Liaison Service |
| CTT | Clinical Treatment Team / Community Treatment Team |
| CSRP | Community Supported Rehabilitation Program |
| CSRU | Community Supported Residential Units |
| CWAPHN | Country WA PHN |
| DBT | Dialectical Behavior Therapy |
| DESDE-LTC | Description and Evaluation of Services and Directories in Europe for Long-Term Care |
| DHS | Department of Human Services |
| DoH | Department of Health |
| ECATT | Enhanced Crisis, Assessment and Treatment Teams |
| ECT | Electro Convulsive Therapy |
| EDCLS | Emergency Department Consultation Liaison Service |
| GIS | Geographical Information System |
| GP | General Practitioner |
| HACC | Home and Community Care |
| HREC | Human Research Ethics Committee |
| ICOT | Intensive Community Outpatient Team |

| | |
|---|---|
| ICLS | Individualised Community Living Strategy |
| IRSD | Index of Relative Socio-economic Disadvantage |
| ITS | Integrated Therapy Service |
| LGA | Local Government Area |
| MATT | Mobile Assessment and Treatment Team |
| MCOT | Mobile Community Outpatient Team |
| MHCSS | Mental Health Community Support Service |
| MHNIP | Mental Health Nurse Incentive Program |
| MHPU | Mental Health Policy Unit, Brain and Mind Centre, University of Sydney |
| MTC | Main Type of Care |
| NDIS | National Disability Insurance Scheme |
| NGO | Non-Government Organisation (or community service provider) |
| PADAP | Pilbara Alcohol and Other Drug Program |
| PHaMs | Personal Helpers and Mentors Program |
| PHN | Primary Health Network |
| PIR | Partners in Recovery |
| PNPHN | Perth North PHN |
| PSPHN | Perth South PHN |
| SECU | Secure Extended Care Unit |
| SEIFA | Socio Economic Indexes for Areas |
| SRS | Supported Residential Service |
| SSAMHS | Statewide Specialist Aboriginal Mental Health Services |
| WA | Western Australia |
| WAPHA | Western Australian Primary Health Alliance |
| WHO | World Health Organisation |
| YEP | Youth Early Psychosis |

# Executive Summary

In Australia, in any given year approximately 20% of the population experience mental illness (Jorm et al, 2017). Each year it is estimated one in five Western Australians between 16 and 85 years has a mental illness (Western Australian Mental Health Commission, 2015). This equates to 395,000 persons, with a severity profile similar in proportion to national estimates. However Australians that live with serious mental illness and those with drug and alcohol issues continue to struggle with disconnected, complex and fragmented health and social service systems.

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).

This Integrated Atlas of Western Australia, commissioned by the Western Australian Primary Health Alliance (WAPHA) and the Western Australia Mental Health Commission aligns with this recommendation. It is a tool for evidence-informed planning that critically analyses the pattern of mental health care provided across Western Australia.

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 the services; as well as geographical information systems to geolocate the services. 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. This provides a sound basis for long-term service planning and development and significantly advances efforts towards more integrated care and achieving improved outcomes for all service users.

This supports WAPHA’s stated intention to focus on integrating services and building collaborative models of care, an approach also in line with the Western Australian Mental Health Commission’s strategic policy (Western Australian Mental Health Commission*, 2015).* The National Ice Taskforce report also highlights the need for improved coordination between existing services, including the need to improve referral pathways and provide greater access to care through GPs (Commonwealth of Australia, 2015).

The Integrated Mental Health and Alcohol and Other Drug Atlas of Western Australia comes at a pivotal moment in time, with reforms underway both at State and Federal level, including the recommissioning of services and the rollout of the National Disability Insurance Scheme (NDIS).

The Atlas project involved 240 stakeholders, with 75 interviews conducted and 165 organisations invited to complete a survey. There were 192 Organisations with services that met the criteria for inclusion in the Atlas, comprising 847 service delivery teams. Of these, 77% were providing mental health care (n = 654) and 23% AOD care (n = 193). This data is examined by PHN and is presented in two parts. Volume I (this report) covers Metropolitan Perth and encompasses Perth North (PNPHN) and Perth South (PSPHN). Volume II covers the Country WA PHN and its seven sub-regions.

## Summary of Findings

The PNPHN catchment covers an area of just under 3000 square kilometres with a population of 1.07 million. The region includes the North Metropolitan Health Service, as well as 17 Local Government Areas. A total of 237 mental health service delivery teams were identified across PNPHN. Of these,

62% were provided by the Non-Government (NGO) Sector, with the remainder provided by the Health services. Services were generally concentrated towards the south end of the region, especially around the large teaching hospitals, with relatively fewer services in the newer and highly populated areas of Wanaroo and Joondalup.

The PSPHN catchment covers an area of 5,148 $km^2$, with a population of 978,278 people. The region includes the South Metropolitan Health Service, as well as 16 LGAs. A total of 192 mental health service delivery teams or BSIC were identified across PSPHN. Services were generally concentrated towards the north end of the region, with relatively fewer services in Murray, Serpentine-Jarradale, Waroona and Mandurah.

The Country WA PHN (CWAPHN) catchment covers 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. Health service (clinical) teams are 58% of the total number of teams delivering care. There is significant variation between and even within individual regions.

The Atlas reveals key differences in the provision of mental health and AOD services across Metropolitan Perth and within and across Country WA, when compared with other regions in Australia and other countries around the world. These are:

- A lack of services providing day care
- A lack of sub-acute inpatient care
- High variability in patterns of care across Country regions
- Regional imbalances in patterns of care requiring further analysis, and
- A concentration of metropolitan services towards the inner-city areas rather than the outer suburban growth corridors.

There was significant disparity in the availability and capacity of services across the different jurisdictions, both between Perth North and Perth South, but more particularly between the seven Country regions. Whilst most of this variation can be explained by the very different characteristics of each region, some however, could be due to limitations with the analysis.

Data collection for the Atlas project took place during a time of intense change particularly in the metropolitan health sector. Additionally, the complexity and unique characteristics of service provision across remote areas presented unique challenges. Many teams in regional areas must necessarily be flexible and adaptive and frequently provide both acute and non-acute care of varying intensities. Functions that may be provided by separate clinical teams in the Metropolitan area are often covered by the one team in regional areas. Additionally, it is acknowledged that given the remote nature of some communities, emergency services, hospital emergency departments and many generalist services (including Aboriginal services) provide responses to and support for mental health issues. Additional analysis around the unique characteristics of rural and remote service provision, including bed occupancy, care transfer rates and the unique characteristics of the Aboriginal services would be highly beneficial.

There is no generally accepted 'perfect' system of care for mental health or AOD. Needs, environments and circumstances vary significantly between regions and indeed even within regions, especially regions as large as those in Country WA. This should be reflected in regional and sub-regional variations in care. What is generally accepted is that there should be a balance between the different types of care.

In considering future system structure, consistent with National and State strategies, it should rely less heavily on acute inpatient acute care and provide more resource in sub-acute beds, early intervention and prevention and community based outpatient care. Whilst still contentious in the Australian context, it is also considered that an ideal balance of care would include more day programs, particularly those specifically targeted at providing supported employment, vocational training and assistance, structured programs and social opportunities.

This Atlas provides a baseline measure of service availability at a critical time, immediately preceding the full roll-out of the NDIS and significant changes in commissioning of services at State and Federal levels. It is the 'before' picture against which the changes to the system can be measured and visualised in the future. As such it not only serves as a planning tool, but also as a measure of change.

The Atlas would not have been possible without the initiative of the Government of Western Australian Mental Health Commission and the Western Australian Primary Health Alliance that may lead to better planning and ultimately better service delivery for people experiencing mental illness and alcohol and other drug issues in Western Australia.

**Key findings - Metropolitan Perth**

- The pattern of mental health care across Metropolitan Perth is broadly similar to other areas of Australia with the following two key differences:
  - There are relatively more acute inpatient beds in Metropolitan Perth than other areas of Australia
  - Metropolitan Perth has significantly more Non-Acute Non-Mobile Outpatient teams provided by the Health services than other areas of Australia (and internationally)
- Perth North has greater breadth in its range of residential mental health care with high levels of hostel beds and more sub-acute inpatient beds (although the number is low)
- Perth North has relatively more Outpatient care than Perth South
- Perth North has relatively more Non-Acute AOD residential beds than Perth South
- There is very little AOD care is delivered by the clinical health system
- There is a lack of services providing Acute and Non-Acute Day Care
- Services are predominantly located closer to Inner Perth, in the North of PSPHN and in the South of PNPHN.

**Key findings - Country WA**

- There is a large variation in the pattern of care between regions
- Consistent with other remote areas in Australia and overseas, there is substantially more Outpatient care (for both AOD and mental health) than in the metropolitan areas, Perth South and Perth North
- Taken as a whole, Country WA has moderately acceptable levels of acute inpatient beds, but there

are no acute inpatient care in the Midwest, Pilbara and Wheatbelt regions. It is also relatively less than other remote areas in Australia and around the world

- There are no sub-acute hospital beds in any of the country regions
- The amount of care provided by the Health (clinical) sector verses the NGO sector varies substantially between regions. The Midwest region has a relatively stronger reliance on NGO providers for Non-Acute Outpatient care, whilst the Kimberley region has a relatively stronger reliance on health sector for Mobile Outpatient care. A reflection perhaps of the complexity and seriousness of mental health issues in the Kimberley
- The Kimberley has the largest volume of services. Reflecting the high rates of alcohol related hospital admissions here, there are also a higher volume of AOD services
- Existing service locations and catchments are relatively well aligned to geographic areas of higher population need
- Relative to other remote parts of the world, including Sør-Trøndelag, Norway and Far West NSW, Country WA has relatively less Non-Acute Outpatient care, but relatively more Acute Outpatient care delivered by clinicians
- There is relatively little AOD care provided in the South West region
- There are no AOD beds in the Great Southern region
- There is a relatively strong number of AOD residential rehab beds in the Midwest and Wheatbelt regions
- Day programs are lacking.

# 1. Framework

There has been considerable reform in mental health science, treatment and care over the last three or 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 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 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 draws 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 calls 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, 2013). 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) out-patient clinics, (ii) community mental health teams (CMHTs), (iii) acute in-patient 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 bedfellows 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 (AOD) within an Integrated Atlas has now been undertaken in several Australian states. 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, 2012).

Integrated Atlases allow policy planners and decision makers to understand the landscape in which they work (including areas of under- or over-supply), make bridges between the different sectors and better allocate services. This is particularly important as mental health and AOD services become more 'person-centred' (placing the person and their needs at the centre of their care) and public investment focuses on person-centred care coordination programs such as PIR or the NDIS. In addition, the new knowledge presented in the Atlas supports evidence and knowledge informed planning, decision-making and future service commissioning.

### 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 Atlas of WA 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.

## 1.2 Methodology

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).

## 1.3 Basic Stable Inputs of Care

A Basic Stable Input of Care (BSIC) is best described as a 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) involves 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).

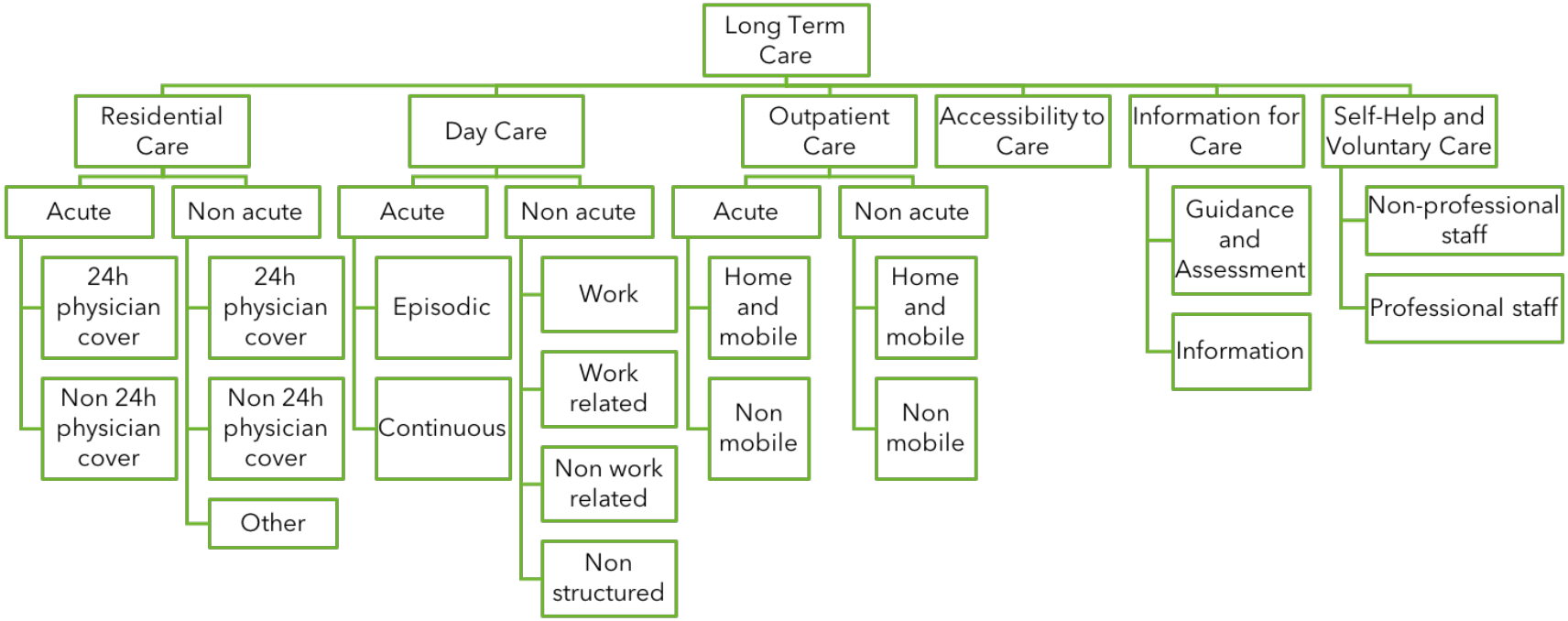



**FIGURE 1** MAIN TYPE OF CARE - CORE VALUES

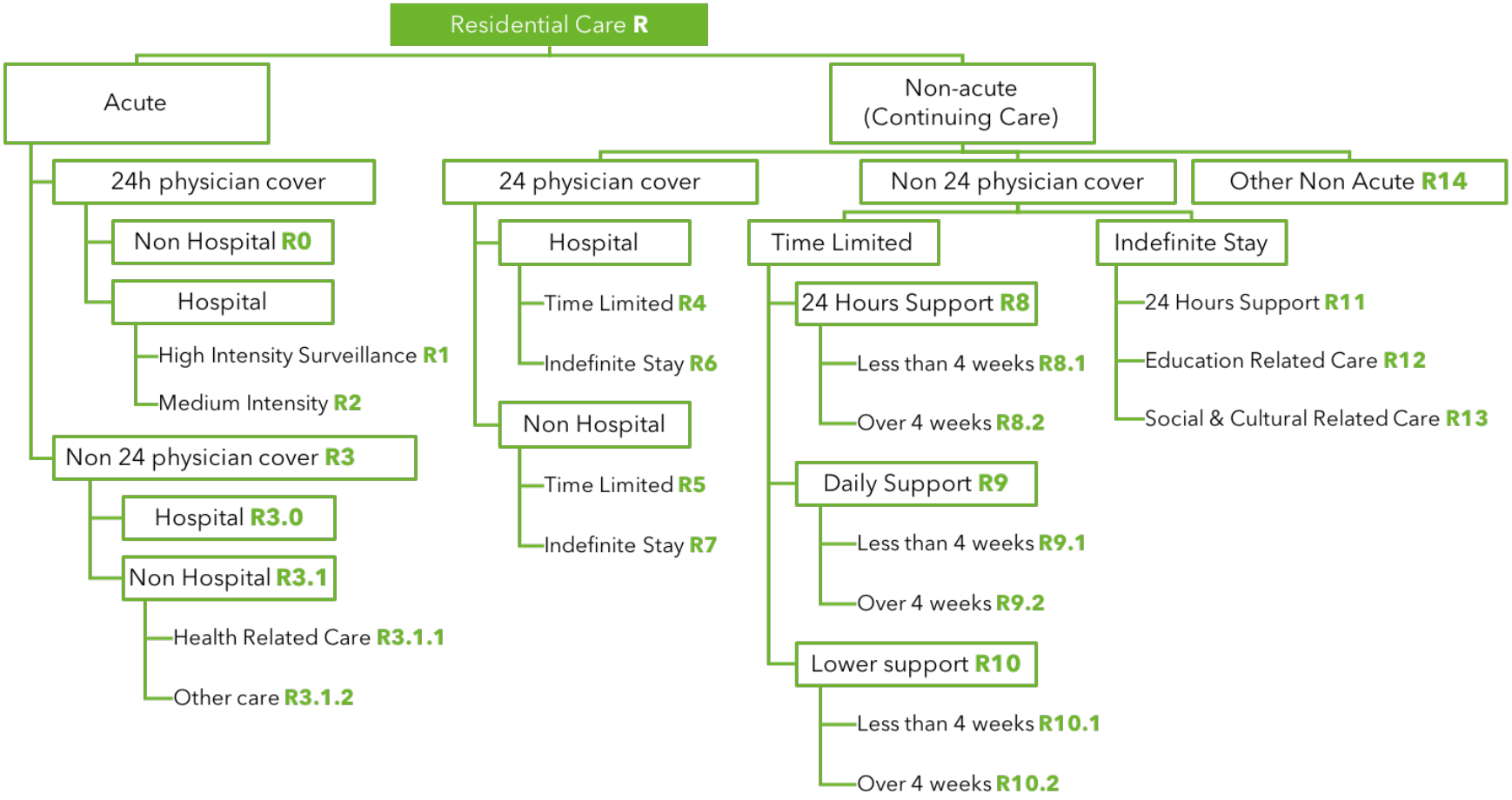



**FIGURE 2** RESIDENTIAL CARE CODING BRANCH

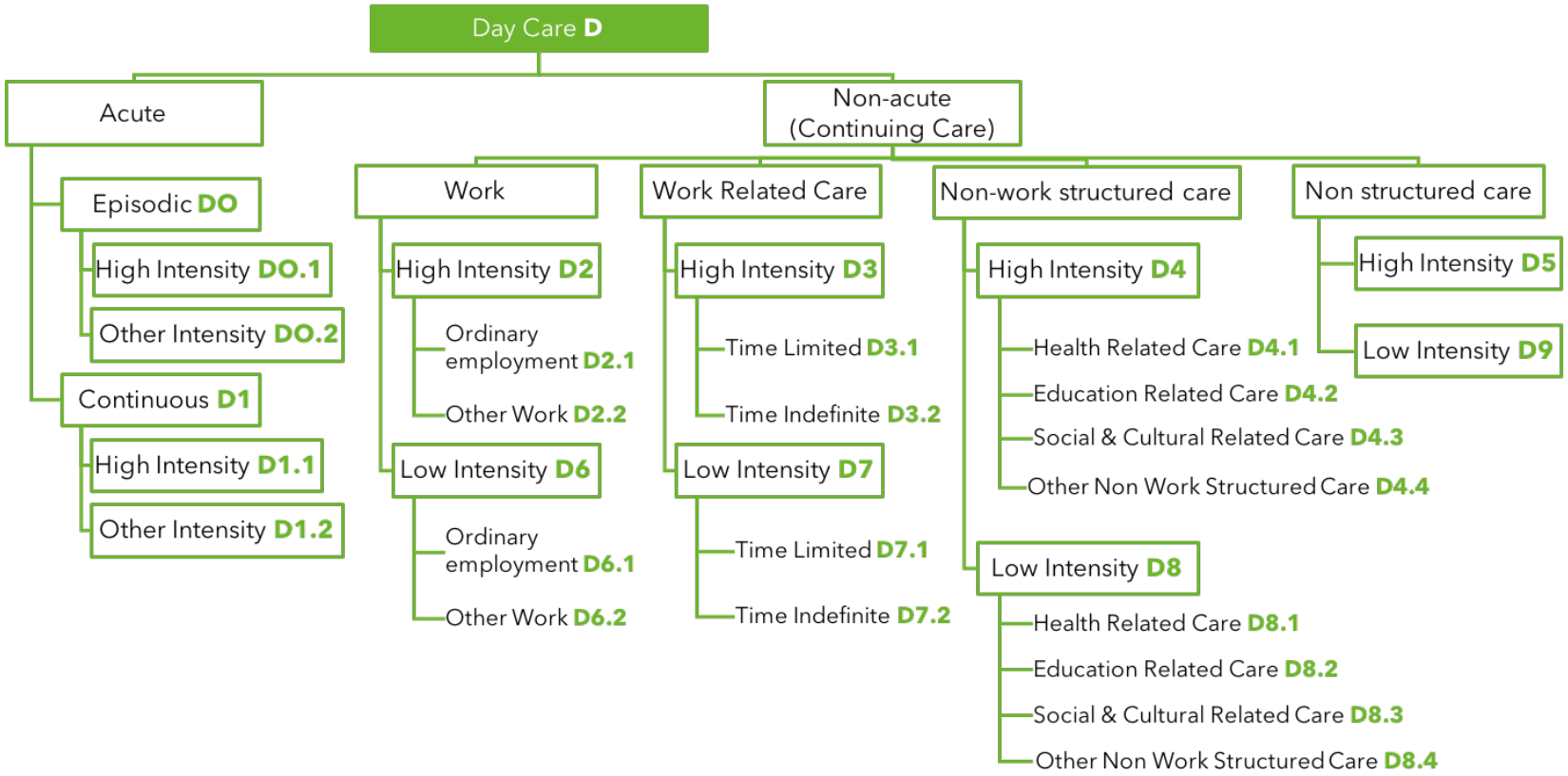



**FIGURE 3** DAY CARE CODING BRANCH

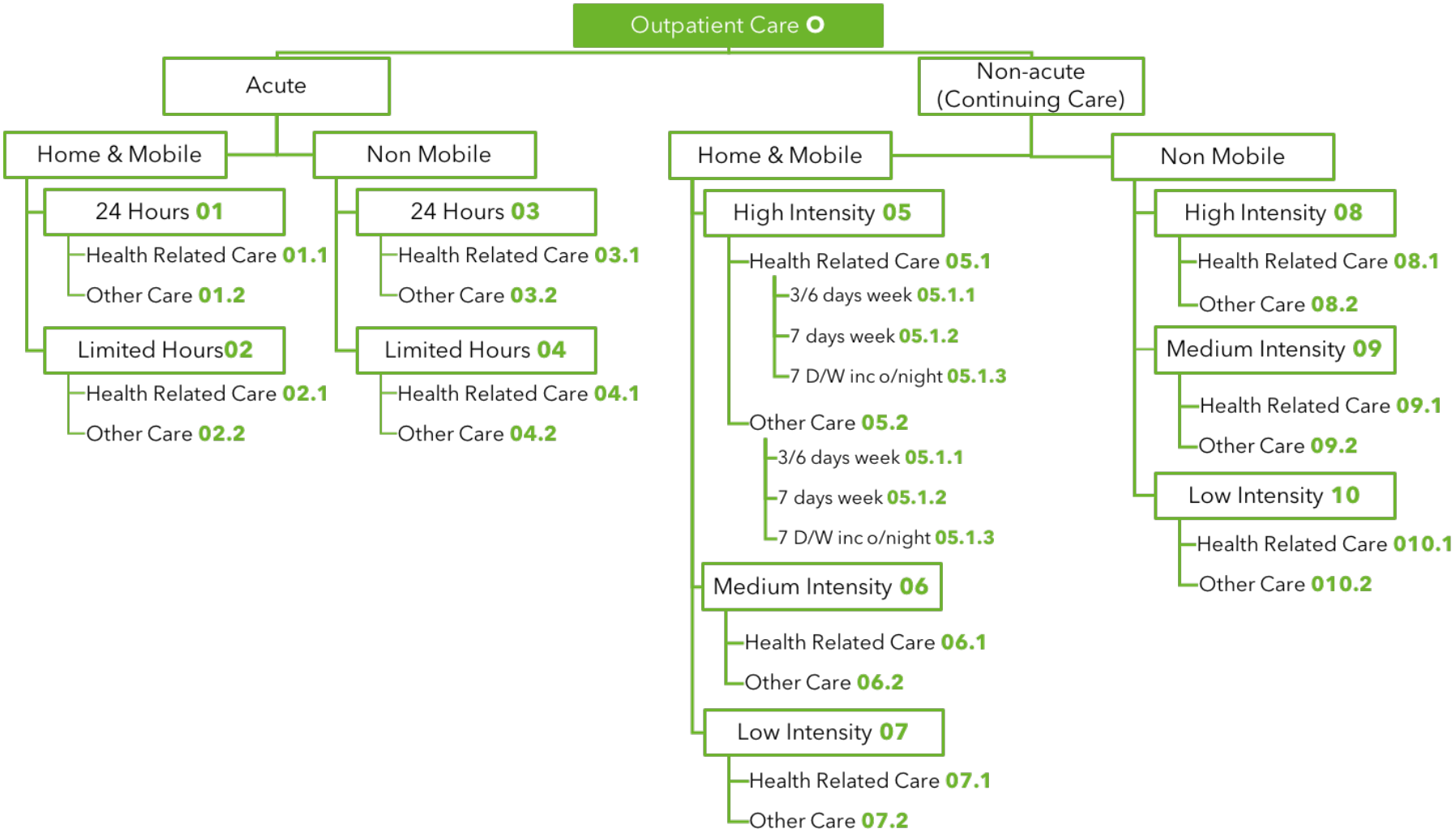



**FIGURE 4** OUTPATIENT CARE CODING BRANCH

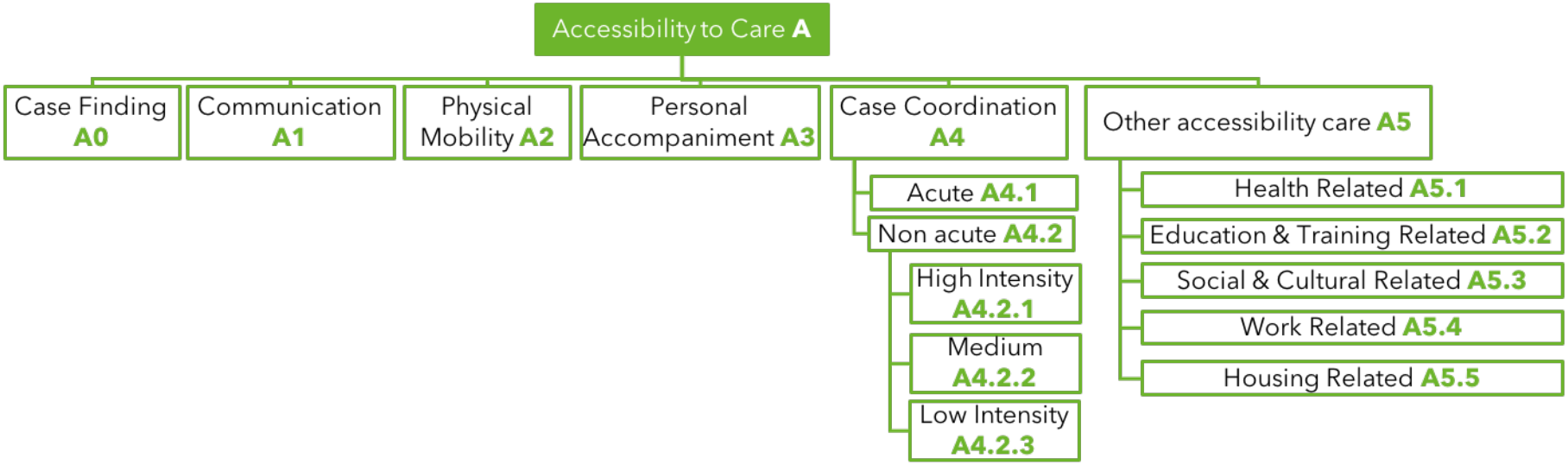



**FIGURE 5** ACCESSIBILITY TO CARE CODING BRANCH

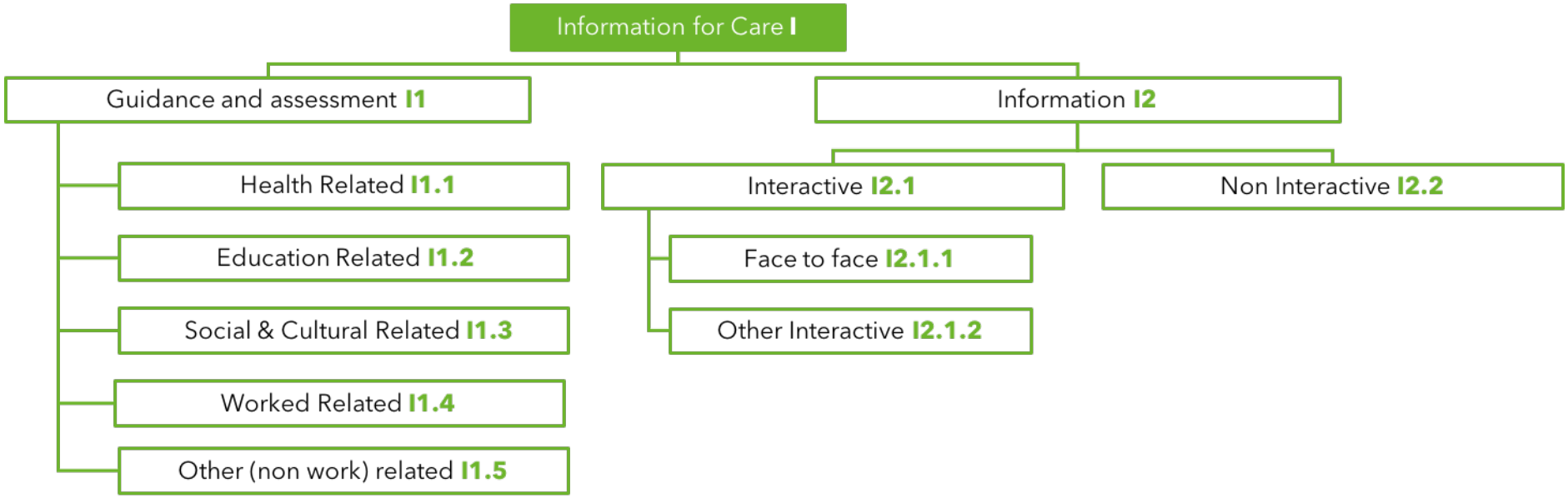



**FIGURE 6** INFORMATION FOR CARE CODING BRANCH

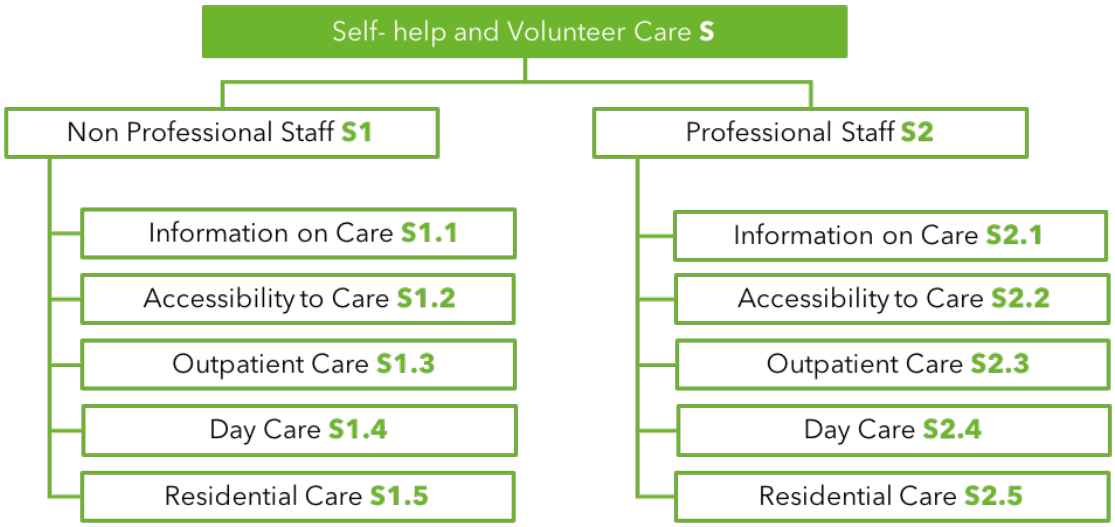



**FIGURE 7** SELF-HELP AND VOLUNTEER CARE CODING BRANCH

## 1.4 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 issues. 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 ATAPS and MBS. Within the WAPHA 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, 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 3 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 Perth North PHN or Perth South PHN** - The inclusion of services that are within the boundaries of WAPHA 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.

## 1.5 Atlas Development Process

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

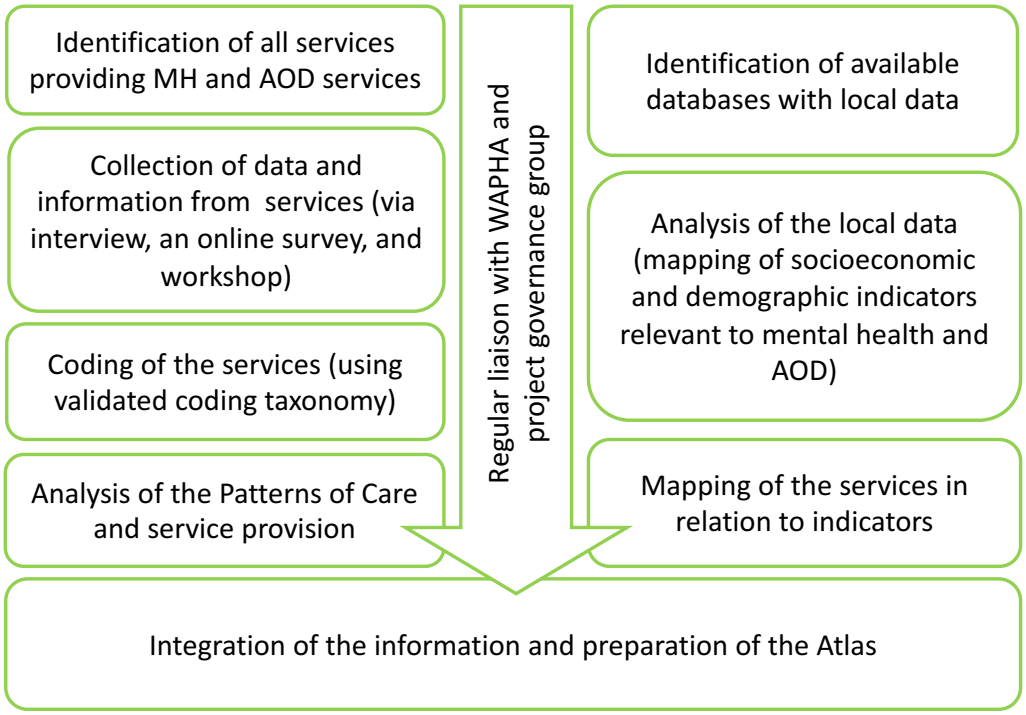



**FIGURE 8** INTEGRATED MENTAL HEALTH AND AOD ATLAS DEVELOPMENT PROCESS

### Step 1 – Ethics and Governance Approval

The project obtained all the requisite ethics, ethics exemption and governance approvals (Site Specific Assessments) (Table 2). Separate applications were submitted for North Metropolitan, South Metropolitan and Country WA to cover all the Department of Health organisations, hospitals and sites, and a separate application for Joondalup Health Campus.

In addition to the required application forms, these applications included the following materials:

- Participant Information Form

- Participant Consent form
- Project summary
- Draft on-line survey.

The project was initially assessed by the North Metropolitan Health Service Mental Health (NMHS MH) Research Ethics and Governance Office, and determined to be a low risk quality improvement project. A Quality Improvement (QI) application was submitted and once approved an ethics exemption was sought and received from the NMHS MH Human Research Ethics Committee (HREC). In accordance with the Department of Health's reciprocal acknowledgment of HREC approvals and exemptions, this was subsequently recognised also by the HREC of South Metro and Country WA respectively.

**TABLE 2** ETHICS PROCESS

| PHN Region | Ethics Body | Applications and outcome |
|---|---|---|
| North Metro | North Metropolitan Health Service Mental Health - Human Research Ethics Committee<br>Joondalup Health Campus - Human Research Ethics Committee | Quality Improvement application to Area SQRM committee – ethics exemption granted<br>Modified Site Specific Assessment (SSA) approved<br>HREC application submitted and approved |
| South Metro | South Metropolitan Health Service Human - Research Ethics Committee | Application for reciprocal DoH recognition of ethics exemption granted by North Metro HREC<br>SSA approved |
| Country WA | WA Country Health Service - Human Research Ethics Committee | Application for reciprocal DoH recognition of ethics exemption granted by North Metro HREC<br>SSA approval request submitted to each of the seven Regional WACHS Directors and approved |

The WA Health Declaration of Confidentiality form was completed and signed by each member of the ConNetica research team.

### Step 2 - Data Collection

The first step in the development of the Atlas was to undertake a range of meetings with the teams at WAPHA, 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 Western Australia. WAPHA regional coordinators played a critical role in the identification of services in the seven regional areas of WA.

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 was 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 based on the unique service characteristics in Western Australia.

** In Western Australia services frequently support 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. Services described as '14 years plus' were classified based on the information provided. 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 AOD 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 forensic unit in a hospital for adults with lived experience of mental illness will receive the following code: AX[F00-F99] - R4j (Figure 9).

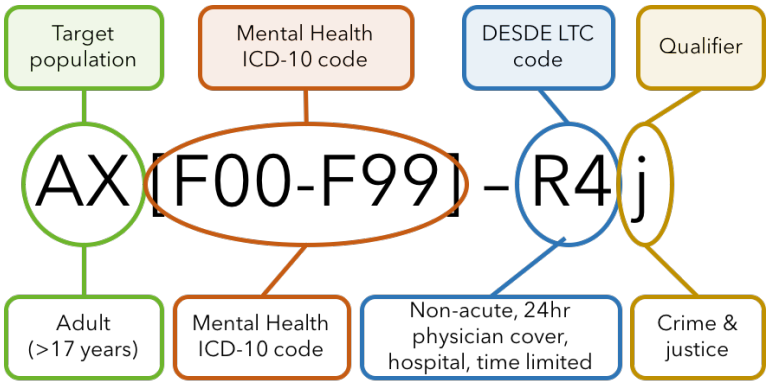



**FIGURE 9** CODE COMPONENTS EXAMPLE

To assist the reader, a DESDE-LTC Quick Reference Guide has been included (see Appendix B). 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 three WAPHA PHN areas. 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 (2011 population figures).

**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 (2011 population figures).

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 population's needs. WAPHA has been compared with 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).

# 2. Population Health and Socio-Demographic Indicators

The most recent publicly available data sources have been examined in relation to social, economic and demographic indicators for the PNPHN and PSPHN regions. 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 (CDE, 2016) .

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 CWAPHN, with the exception of socio-economic disadvantage which is presented as deciles, ranked nationally.

Key demographic, socio-economic factors and health outcomes data relevant to mental health and AOD are included to better understand the population needs across the region.

## Demographic Factors

For the purposes of this Atlas, a selection of indicators are provided to examine key at risk groups and create a demographic profile for the region (Table 3). In addition, throughout the Atlas the population is divided into discrete age groups to report rates of services per 100,000 target population.

**TABLE 3** 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 the entire state of Western Australia as well as separately for each of the three PHNs.

## 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 4).

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. 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 4** 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 negative incomes | Number of Individuals with income <$400 week / Total number of individuals per 100 |
| IRSD (Index of Relative Social Disadvantage) | One of four SEIFA indexes, IRSD identifies the geographic distribution of potential disadvantage based on factors including employment, education, income and social resources | Please refer to the following technical paper: http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/22CEDA8038AF7A0DCA257B3B00116E34/$File/2033.0.55.001%20seifa%202011%20technical%20paper.pdf |

## 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 CWAPHN, with different age profiles, the age standardised rate (ASR) is use 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 5).

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 (Joung et al, 2002). 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. Deaths from road traffic injuries are included for comparative purposes as, along with deaths from suicide and self-harm, falls and poisoning, they dominant the national injury burden or burden of disease in Australia (AIHW, 2016).

**TABLE 5** 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 |
| Road Toll | Data compiled from deaths data based on Cause of Death Unit Record Files - ICD-10 codes: V00-V06.[1], V09.2, V09.3, V10-V18.[4,5,9], V19.[4,5,6,9], V20-V28.[4,5,9], V29.[ 4,5,6,9], V30-V38. [5,6,7,9], V39.[4,5,6,9], V40-V48[5,6,7,9], V49[4,5,6,9], V50-V48.[5,6,7,9], V59.[4,5,6,9], V60-V68.[5,6,7,9],V69.[4,5,6,9], V70-V78.[5,6,7,9], V79.[4,5,6,9], V81.1, V82.1, V82.9, V83-V86.[0,1,2,3], V87, V89.2, V89.3 | Deaths from road traffic injuries, 0 to 74 years, ASR per 100,000 |

## 2.1 Population Data for Western Australia

This section summarises the population health and socio-demographic indicators for Western Australia and compares these indicators across the three PHN areas of Perth North (PN), Perth South (PS) and Country WA (CWA). It is acknowledged that within each PHN catchment these demographics will vary, and for Country WA there are seven regions, and considerable population variability between and within these that is not reflected in the aggregated comparisons.

There are 18 discrete health districts and a total of 138 Local Government Areas (LGAs) across the entire state (Table 6 and Table 7).

**TABLE 6** PHNs AND CORRESPONDING HEALTH SERVICES, DISTRICTS AND LOCAL GOVERNMENT AREAS OF PNPHN AND PSPHN

| Districts | LGAs | | |
|---|---|---|---|
| **PNPHN – North Metropolitan Health Service** | | | |
| Joondalup-Wanneroo<br>Central<br>City<br>Lower West<br>Swan & Hills | Bassendean (T)<br>Bayswater (C)<br>Cambridge (T)<br>Claremont (T)<br>Cottesloe (T)<br>Joondalup (C) | Kalamunda (S)<br>Mosman Park (T)<br>Mundaring (S)<br>Nedlands (C)<br>Peppermint Grove (S)<br>Perth (C) | Stirling (C)<br>Subiaco (C)<br>Swan (C)<br>Vincent (T)<br>Wanneroo (C) |
| **PSPHN – South Metropolitan Health Service** | | | |
| Bentley<br>Fremantle<br>Armadale<br>Rockingham-Kwinana<br>Peel<br>Southern Wheatbelt | Armadale (C)<br>Belmont (C)<br>Canning (C)<br>Cockburn (C)<br>East Fremantle (T)<br>Fremantle (C) | Gosnells (C)<br>Kwinana (T)<br>Mandurah (C)<br>Melville (C)<br>Murray (S) | Rockingham (C)<br>Serpentine-Jarrahdale (S)<br>South Perth (C)<br>Victoria Park (T)<br>Waroona (S) |

**TABLE 7** PHNs AND CORRESPONDING HEALTH SERVICES, DISTRICTS AND LOCAL GOVERNMENT AREAS OF CWAPHN

| Districts | LGAs | | |
|---|---|---|---|
| **CWAPHN – WA Country Health Service** | | | |
| Goldfields<br>Kimberley<br>Pilbara<br>Midwest<br>Great Southern<br>South West<br>Wheatbelt | Albany (C)<br>Ashburton (S)<br>Augusta-Margaret River (S)<br>Beverley (S)<br>Boddington (S)<br>Boyup Brook (S)<br>Bridgetown-Greenbushes (S)<br>Brookton (S)<br>Broome (S)<br>Broomehill-Tambellup (S)<br>Bruce Rock (S)<br>Bunbury (C)<br>Busselton (S)<br>Capel (S)<br>Carnamah (S)<br>Carnarvon (S)<br>Chapman Valley (S)<br>Chittering (S)<br>Collie (S)<br>Coolgardie (S)<br>Coorow (S)<br>Corrigin (S)<br>Cranbrook (S)<br>Cuballing (S)<br>Cue (S)<br>Cunderdin (S)<br>Dalwallinu (S)<br>Dandaragan (S)<br>Dardanup (S)<br>Denmark (S)<br>Derby-West Kimberley (S)<br>Donnybrook-Balingup (S)<br>Dowerin (S)<br>Dumbleyung (S)<br>Dundas (S) | East Pilbara (S)<br>Esperance (S)<br>Exmouth (S)<br>Gingin (S)<br>Gnowangerup (S)<br>Goomalling (S)<br>Greater Geraldton (C)*<br>Halls Creek (S)<br>Harvey (S)<br>Irwin (S)<br>Jerramungup (S)<br>Kalgoorlie/Boulder (C)<br>Katanning (S)<br>Kellerberrin (S)<br>Kent (S)<br>Kojonup (S)<br>Kondinin (S)<br>Koorda (S)<br>Kulin (S)<br>Lake Grace (S)<br>Laverton (S)<br>Leonora (S)<br>Manjimup (S)<br>Meekatharra (S)<br>Menzies (S)<br>Merredin (S)<br>Mingenew (S)<br>Moora (S)<br>Morawa (S)<br>Mount Magnet (S)<br>Mount Marshall (S)<br>Mukinbudin (S)<br>Murchison (S)<br>Nannup (S)<br>Narembeen (S) | Narrogin (S)<br>Narrogin (T)<br>Ngaanyatjarraku (S)<br>Northam (S)<br>Northampton (S)<br>Nungarin (S)<br>Perenjori (S)<br>Pingelly (S)<br>Plantagenet (S)<br>Port Hedland (T)<br>Quairading (S)<br>Ravensthorpe (S)<br>Karratha (C) †<br>Sandstone (S)<br>Shark Bay (S)<br>Tammin (S)<br>Three Springs (S)<br>Toodyay (S)<br>Trayning (S)<br>Upper Gascoyne (S)<br>Victoria Plains (S)<br>Wagin (S)<br>Wandering (S)<br>West Arthur (S)<br>Westonia (S)<br>Wickepin (S)<br>Williams (S)<br>Wiluna (S)<br>Wongan-Ballidu (S)<br>Woodanilling (S)<br>Wyalkatchem (S)<br>Wyndham-East Kimberley(S)<br>Yalgoo (S)<br>Yilgarn (S)<br>York (S) |

* Geraldton-Greenough (C) and Mullewa (S) merged to become Greater Geraldton (C) on 1st July 2011; † Roebourne (S) changed name to Karratha (C) on 1st July 2014

## 2.2 Population Profile

The 2.59 million people within Western Australia are differentially dispersed across the catchment from areas of low density in Country WA (Density Ratio = 0.22), through to the highly populated areas of PNPHN with a density ratio over 100 times that of the whole of Australia (Table 8). Not surprisingly PNPHN also has the lowest dependency ratio at 0.45, reflecting the high proportion of working age population living near the metropolitan centre of Perth.

**TABLE 8** DEMOGRAPHIC FACTORS FOR WESTERN AUSTRALIA

| PHN | Area* (sq. km) | Total Population† | Density Ratio | Dependency Ratio | Ageing Index | Indigenous Status (%)§ | Overseas Born (%)¶ |
|---|---|---|---|---|---|---|---|
| PNPHN | 2,975 | 1.07 million | 358.2 | 0.46 | 69.0 | 1.6 | 35.1 |
| PSPHN | 5,148 | 978,278 | 190.0 | 0.48 | 70.7 | 2.1 | 33.6 |
| CWAPHN | 2.5 million | 546,206 | 0.22 | 0.50 | 64.0 | 10.3 | 15.6 |
| **WA** | **2.64 million** | **2.59 million** | **0.98** | **0.48** | **68.4** | **3.6** | **33.0** |
| Australia | 7.7 million | 23.49 million | 3.1 | 0.54 | 78.1 | 3.1 | 24.6 |

Sourced from: * ASGS (ABS, 2011); †ERP 2015 (PHIDU, 2016); §ERP (non ABS) 2015 (PHIDU, 2016); ¶ABS, 2011

There is a strong association between ageing and health issues, including physical conditions, mental illness and dementia (AIHW, 2015). As the population has aged, conditions such as dementia (including Alzheimer's disease) have increased (ABS, 2016a). Additionally, many of the lifestyle changes associated with ageing can impact on mental health, including retirement and associated income changes, loss of capacity to live independently, bereavement, and social isolation (Domènech-Abella et al, 2017). None of the PHNs within Western Australia have higher numbers of older people compared to children (i.e. Ageing Index >100) and all were lower than the Australian average (78.1).

### *Cultural Diversity*

Overall, 3.62% of the WA population identifies as Aboriginal[1], with Aboriginal people comprising over 10% of the Country WA population. The Kimberley, Pilbara and Goldfields regions within Country WA have the greatest proportions of Aboriginal people.

Western Australia has a higher proportion of persons born overseas (33%) compared to Australia (24.6%). However, there is a large variation between PHNs with PNPHN being the most diverse with 35% of the population being born overseas. By contrast, 16% of residents in Country WA were born overseas.

### *Families*

PNPHN has the lowest proportion of single parent families within its catchment compared with the average rate for both Western Australia (19.9%) and Australia (21.3%) (Table 9).

[1] Within Western Australia, the term Aboriginal is used in preference to Aboriginal and Torres Strait Islander, in recognition that Aboriginal people are the original inhabitants of Western Australia. No disrespect is intended to our Torres Strait Islander colleagues and community. Please see: http://www.health.wa.gov.au/circularsnew/pdfs/12966.pdf for more information

**TABLE 9** SOCIOECONOMIC FACTORS FOR WESTERN AUSTRALIA

| PHN | Single parent families (%)* | Homelessness (per 1,000)† | Needing Assistance (%)* | Early school leavers* (ASR per 100) | Un employment (%)‡ | Income <$400 / wk (%)† | IRSD score§ |
|---|---|---|---|---|---|---|---|
| Perth North | 18.2 | NA | 5.8 | 28.7 | 5.5 | 34.2 | 1045 |
| Perth South | 20.7 | NA | 4.0 | 32.8 | 5.8 | 37.1 | 1020 |
| Country WA | 21.8 | NA | 3.8 | 40.2 | 5.6 | 35.4 | 983 |
| **WA** | **19.9** | **4.3** | **4.5** | **32.8** | **5.6** | **35.5** | **1022** |
| Australia | 21.3 | 4.9 | 4.9 | 34.3 | 5.9 | 38.9 | 1000 |

Sourced from: * 2011(PHIDU, 2016); † ABS, 2011b; ‡ June quarter 2016 (CDE, 2016); § IRSD 2011 (ABS, 2011c)

### *Human function*

The proportion of the WA population needing assistance with core activities (4.5%) is below the Australian (4.9%) average, so too is the proportions in Perth South and Country WA, 4.0% and 3.8%, respectively.

### *Education*

A strong link between health and education has been evident for many decades and relatedly, education can be highly predictive of employment and income, which can in turn influence health. Overall, the proportion of the WA population who left school prior to Year 10 or who did not go to school at all is slightly lower (ASR 32.8 per 100) compared to the Australian rate of 34.3 per 100. However, Country WA PHNs rate of early school leavers of 40.2 per 100 is higher than both the state and national rates.

### *Employment*

Unemployment has direct effects on mental health and wellbeing, in particular where feelings of being unproductive or isolated may lead to anxiety or depression. Whilst the unemployment rate within Western Australia (5.6%), as measured in the June quarter 2016, is slightly lower than the Australian rate of 5.9%, PNPHN has a slightly lower unemployment rate at 5.5%.

### *Income*

PSPHN has the highest percentage of individuals with low income, defined as less than $400 per week, with 37.1% of the population identified in this category, however this is still below national rate of 38.9%. Both PNPHN (34.2%) and CWAPHN (35.4%) PHNs have lower proportions of people on low income compared to the state average (35.5%).

### *Index of Relative Socio-economic Disadvantage*

PNPHN is the most advantaged area within Western Australia with an average score of 1045 which is only slightly higher than the WA overall average of 1022. The PHN of Country WA is the only catchment with an average IRSD score below 1000.

### *Health Status*

Estimates of self-reported health in WA indicate that people in Country WA PHN reported slightly higher rates of fair or poor health (15.1 per 100) compared to both the WA and Australian averages, 13.7 and 14.6 per 100 respectively. PSPHN also reported a slightly higher rate than the WA average at 14.1 with PNPHN reporting the lowest rate (Table 10).

**TABLE 10** HEALTH AND MORTALITY FOR WESTERN AUSTRALIA

| PHN | Fair/poor Health (ASR per 100)* | Psychological Distress (ASR per 100)* | Suicide (n)† | Suicide (ASR per 100,000)† | Road Toll (n)† | Road Toll (ASR per 100,000)† |
|---|---|---|---|---|---|---|
| Perth North | 12.8 | 10.1 | 552 | 11.6 | 185 | 3.9 |
| Perth South | 14.1 | 11.0 | 560 | 13.2 | 213 | 5.0 |
| Country WA | 15.1 | 10.6 | 447 | 18.0 | 335 | 13.7 |
| **WA** | **13.7** | **10.5** | **1,581** | **13.7** | **769** | **6.7** |
| Australia | 14.6 | 10.8 | 11,874 | 11.2 | 5,441 | 5.1 |

Sourced from: * 2011-12 (PHIDU, 2016); †2010-14 (PHIDU, 2016)

However, PSPHN reported a slightly higher rate of psychological distress (11.0 per 100) compared to both the WA and Australian rates of 10.5 and 10.8 respectively, with PNPHN again reporting the lowest rate for this indicator.

### *Mortality*

In Australia, deaths from suicide are well in excess of transport-related mortality with the latest data released indicating that there were 3,027[2] registered suicide deaths in Australia in 2015, representing an age-standardised rate of 10.2 per 100,000 (ABS, 2016). Suicide rates in Australia are rising and suicide is now the 13th leading cause of death in Australia, compared to the 14th leading cause in 2006 (ABS, 2016b).

Deaths from intentional self-harm occur among males at a rate three times greater than that for females. In 2015, the standardised death rate for males was 19.3 deaths per 100,000 people, while for females it was 6.1 deaths per 100,000 people (ABS, 2016b).

Despite the estimated mortality, the prevalence of suicide and self-harming behaviours remains difficult to gauge due to the difficulties associated with obtaining reliable data. De Leo et al (2009) estimate that the ABS suicide reports are some 20-30% below the actual number of deaths due to intentional self-harm.

Overall, Western Australia had a higher rate of suicide in 2015 (13.7 per 100, 000) compared to the Australian average (11.2 per 100, 000). Like the rest of the country, suicide rates in WA are rising – the rate in 2006 was 11.9 per 100,000.

Whilst all three PHNs in WA have rates higher than both the national rate, the Country WA PHN rate of 18.0 per 100,000, is significantly higher. This is largely explained by the higher proportion of Aboriginal people in Country WA and the alarming rates of suicide among Australia's Aboriginal people. A recent report published in the Medical Journal of Australia has found suicide rates for Aboriginal people in remote parts of WA are among the worst in the world (McHugh et al, 2016). It reported an age adjusted suicide rate of 74 per 100,000 for Aboriginal people in the Kimberley population. The report also found

- Those affected were becoming increasingly younger

[2] Note this figure (3,027) is a preliminary number reported by the ABS. Further revised figures will be released for the 2015 calendar year in 2017 and 2018. For further information, see Explanatory Notes 52-55 and "A more timely annual collection: changes to ABS processes" (Technical Note). See also the Causes of Death Revisions, 2012 and 2013 Technical Note in Causes of Death, Australia, 2014 for further details.
http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/3303.0Explanatory%20Notes12015?OpenDocument

- Incidents of self-harm among Aboriginal people in the region were also disproportionally high
- The age stratified rate of presentations with suicidal behaviour was highest amongst women aged 15-24 years (63 per 100,000) and men aged 25-34 years (44 per 100,000), and
- Of the presentations for suicidal behaviour recorded in the Kimberley database, 97.3% involved people unknown to the Kimberley Mental Health and Drug Service.

When compared to the road toll rates, almost all PHNs in WA report rates which are at least half of the reported suicide rates. Suicide now accounts for more years of potential life lost than any other single cause and more than all CVD causes of death (ABS, 2016).

# 3. Summary of Results

This project involves the creation of two distinct Integrated Atlases for Mental Health and Alcohol and Other Drug Services, one for Metropolitan Perth and one for Country WA. Each Atlas follows a similar structure; commencing with a description of the population health data for the relevant PHN, followed by separate sub-sections for mental health and AOD services.

The overall background and context in relation to service mapping and planning, Western Australian and Australian data is presented in this first volume, the Metropolitan Atlas.

## Data Collection

Data collection for this Atlas took place during 2016. Over 240 stakeholder organisations or groups were engaged in the Atlas project (Appendix A). Larger organisations or health services were often engaged at multiple levels and across multiple sites.

The Atlas data was collated from a total of 75 comprehensive face to face and telephone interviews, and online surveys. Online surveys were sent to 165 providers, with a completion rate of 76% (82% across CWAPHN). The finalisation of data collection often required a series of follow-up calls, emails and the provision of assistance to support the completion of the online survey.

At the request of WAPHA regional coordinators, three workshops were conducted to facilitate survey completion by service providers in Wheatbelt, Goldfields, and Midwest regions.

An extensive feedback process was completed late in 2016 and the early part of 2017 during which preliminary results and data was reviewed and verified with stakeholders, the Mental Health Commission, WAPHA and the Project Reference Group.

## Results

In total, 192 organisations had service delivery teams that satisfied the criteria for inclusion into the Atlas.

From within these 192 organisations 847 BSIC (or service delivery teams) were identified working across Western Australia, providing a total of 915 Main Types of Care (MTC) spread across 52 DESDE-LTC classifications (Figure 10).

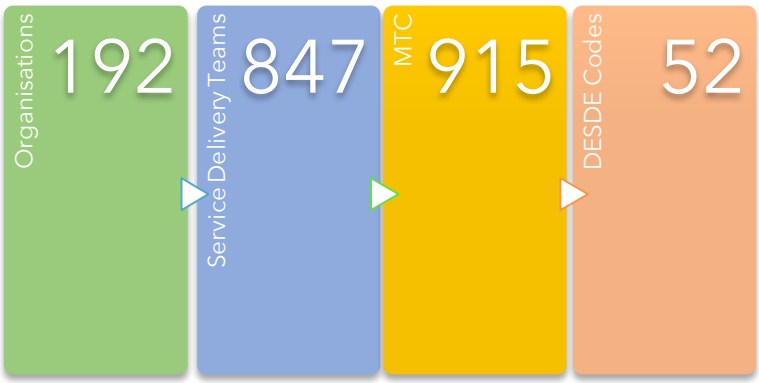



**FIGURE 10** SUMMARY OF SERVICES PROVIDING CARE FOR MENTAL HEALTH

Of the 915 MTC, 709 (77.5%) are mental health service delivery teams whilst 206 (22.5%) are AOD teams. Of the 20 Helplines included,12 are mental health related and six are AOD and 20 MTC were Helplines.

Regarding age distribution of services, child and adolescent teams account for 139 (15.2%) of the MTC, adults (and general) 717 (78.4%) and older adults, 59 (6.4%).

Health and Hospital Networks provide 376 (41%) of the MTC, with NGOs providing the remaining 539 or 59%. A small number of private providers (who are providing free services) are included within the NGO grouping.

# 4. Services in Western Australia

## 4.1 Mental Health Data for Western Australia

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 Western Australian prevalence and service data is given.

### Australian Prevalence

In Australia, in any given year almost 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 4-17, approximately 82,000 children and young adults (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, 2016). 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%).

Overall, of all people with a mental disorder in 2007, just over one-fifth (21%) had a severe disorder, one-third (33%) had a moderate disorder and just under half (46%) had a mild disorder (Figure 12).

### Mental Health in Western Australia

Each year it is estimated one in five Western Australians between 16 and 85 years has a mental illness (Western Australian Mental Health Commission, 2015). This equates to 395,000 persons, with a severity profile similar in proportion to national estimates (Figure 11 and Figure 12).

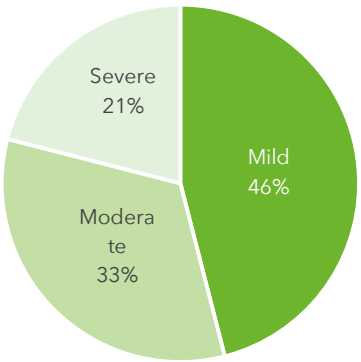



**FIGURE 11** SEVERITY OF MENTAL HEALTH IN WA

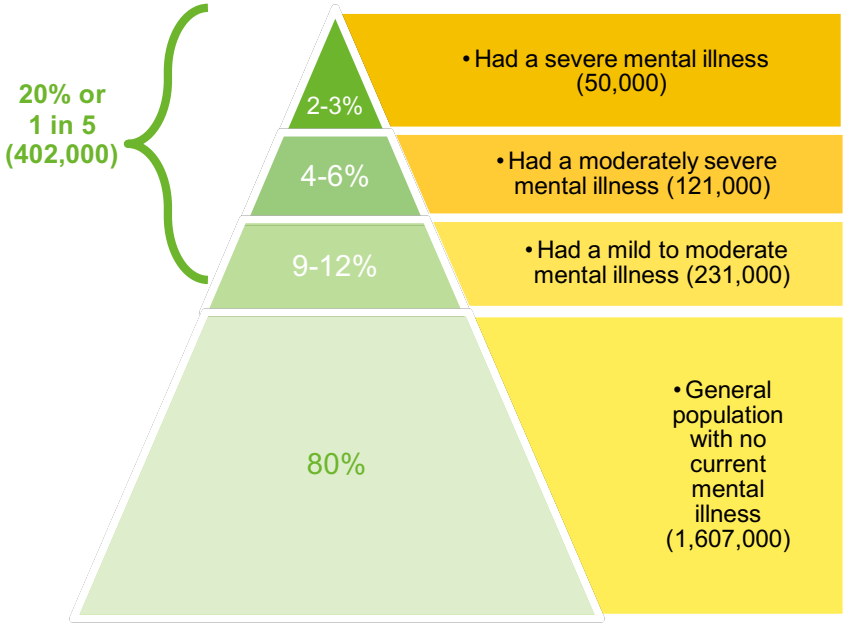



**FIGURE 12** ESTIMATED PREVALENCE OF ADULT MENTAL ILLNESS IN WESTERN AUSTRALIA

(Mental Health Commission, 2015)

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.

### *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.

WAPHA currently funds 17 service providers to deliver the MHNIP Program across the state. Data extracted from the MHNIP data tables (Commonwealth of Australia, 2016) indicate that the number of patients serviced by MHNIP in the WAPHA catchment declined during the period from 2011/12 to 2014/15 (Figure 13). The distribution of MHNIP patients and services across PHN are shown in Table 11.

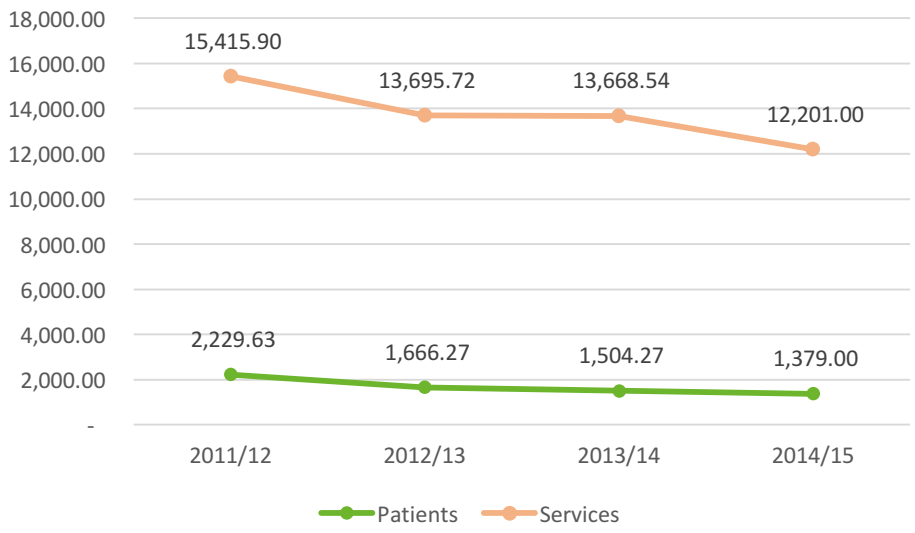



**FIGURE 13** MHNIP CLIENTS AND SERVICES, WAPHA 2011/12 – 2014/15

**TABLE 11** DISTRIBUTION OF MHNIP PATIENTS AND SERVICES IN 2014/15

| PHN | Patients | Services |
|---|---|---|
| Perth North | 752 | 7,066 |
| Perth South | 304 | 3,297 |
| Country WA | 323 | 1,839 |

Sourced from: Commonwealth of Australia (2016)

### *Medical Benefits or Medicare Funded Services*

Across Australia in 2014-15, almost 10 million Medicare-subsidised mental health-related services were provided by psychiatrists, GPs, psychologists and other allied health professionals to over two million patients (AIHW, 2016). 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, 2016).

Overall, Western Australia had the second lowest rate of patients presenting to services, and lowest provision of services at 69 patients per 1,000 population and 291 services per 1,000 population respectively, compared to the national rates in 2014-15 (88 patients and 414 services per 1,000 population) (Figure 14) (AIHW, 2016).

**FIGURE 14** MEDICARE SUBSIDISED MENTAL HEALTH RELATED SERVICES AND PATIENT RATES BY JURISDICTION 2014-15

(Department of Health, 2016a)

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 15).

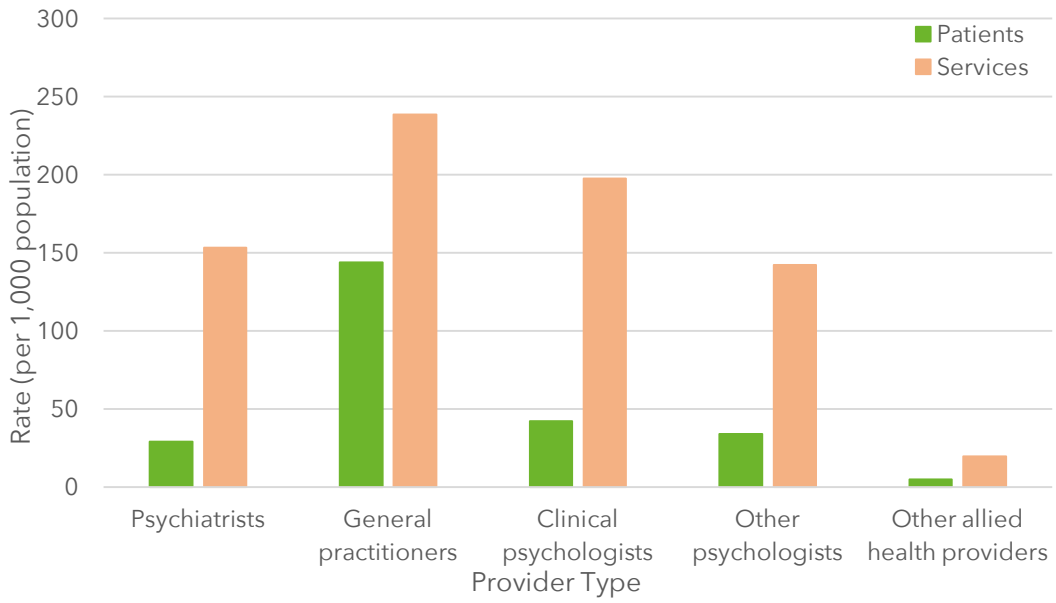



**FIGURE 15** AUSTRALIAN MEDICARE SUBSIDISED MENTAL HEALTH RELATED RATES BY PROVIDER TYPE 2014-15

(Department of Health, 2016a)

Within WA, the highest number of services were provided by General Practitioners (238,340) with all other providers accounting for close to the same number of services during 2014-15 (Table 12). For all provider types, the largest proportion of patients accessing Medicare-subsidised mental health-related services were females and consequently they accounted for greater than 60% of services delivered (Table 12).

**TABLE 12** WESTERN AUSTRALIAN MBS UTILISATION BY PROVIDER TYPE 2014-15

| Provider Type | Gender | Patients (n) | % | Services (n) | % | Benefits Paid | Fees Charged |
|---|---|---|---|---|---|---|---|
| **Psychiatrists** | Male | 15,918 | 51.0 | 63,979 | 40.0 | $8,541,715 | $13,398,111 |
| | Female | 15,289 | 49.0 | 95,918 | 60.0 | $12,819,665 | $18,921,253 |
| | **Total** | **31,207** | | **159,897** | | **$21,361,380** | **$32,319,364** |
| **General Practitioners** | Male | 54,181 | 37.8 | 89,116 | 37.4 | $7,308,567 | $7,826,625 |
| | Female | 89,177 | 62.2 | 149,224 | 62.6 | $12,249,450 | $13,291,206 |
| | **Total** | **143,358** | | **238,340** | | **$19,558,017** | **$21,117,831** |
| **Clinical Psychologists** | Male | 15,590 | 37.3 | 70,213 | 36.0 | $9,105,244 | $11,864,041 |
| | Female | 26,192 | 62.7 | 124,545 | 64.0 | $16,199,760 | $21,087,484 |
| | **Total** | **41,782** | | **194,758** | | **$25,305,004** | **$32,951,525** |
| **Other Allied Health Providers** | Male | 13,913 | 36.3 | 56,391 | 35.2 | $5,082,713 | $6,958,899 |
| | Female | 24,384 | 63.7 | 103,829 | 64.8 | $9,106,137 | $12,207,308 |
| | **Total** | **38,297** | | **160,220** | | **$14,188,850** | **$19,166,207** |
| **TOTAL** | | **176,956** | | **743,486** | | **$79,137,008** | **$103,512,188** |

### *Access to Allied Psychological Services (ATAPS)*

Access to Allied Psychological Services (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 relative distribution of ATAPS patients across the three WA PHN regions is shown in Table 13 below.

**TABLE 13** DISTRIBUTION OF ATAPS PATIENTS AND SERVICES 2014-15

| PHN | Patients | Services |
|---|---|---|
| Perth North | 2443 | 14840 |
| Perth South | 3283 | 16105 |
| Country WA | 2866 | 12557 |

Sourced from: Department of Health (2016b)

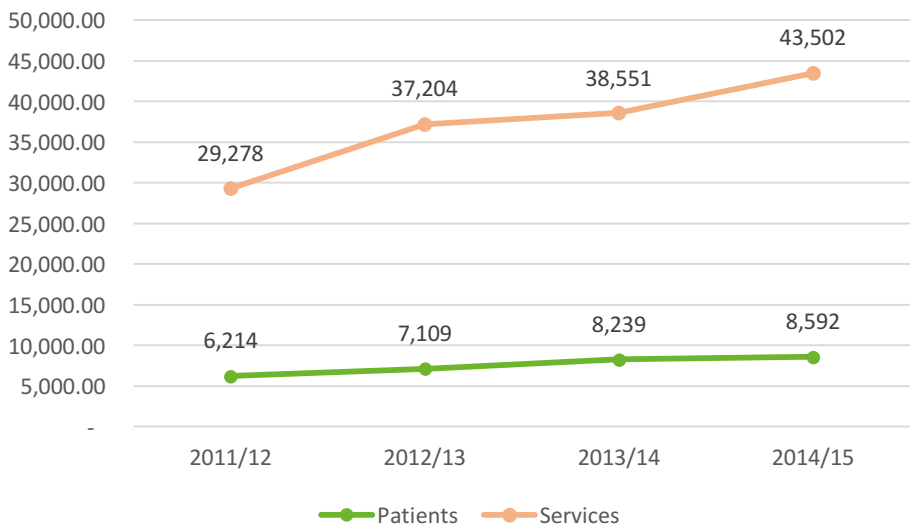
The profile of WA ATAPS clients in 2014/15 demonstrates that the largest cohort accessing ATAPS services were those aged 25-34 years (19.4%), followed by people aged 35-44 years (15.3%) and 18-24 years (14.1%) (Table 14).

**TABLE 14** DISTRIBUTION OF ATAPS BY AGE GROUP

| Age Group (years) | Patients | |
|---|---|---|
| | Number | Percent % |
| 0-4 | 55 | 0.6 |
| 5-11 | 1,009 | 11.7 |
| 12-17 | 887 | 10.3 |
| 18-24 | 1,214 | 14.1 |
| 25-34 | 1,671 | 19.4 |
| 35-44 | 1,314 | 15.3 |
| 45-54 | 1,186 | 13.8 |
| 55-64 | 821 | 9.6 |
| 65-74 | 333 | 3.9 |
| 75-84 | 91 | 1.1 |
| 85+ | 11 | 0.1 |
| **Total** | **8,592** | **100.0** |

Sourced from: Department of Health (2016b)

A total of 148,535 clients accessed the ATAPS program in Western Australia over the period 2011/12 – 2014/15 (Figure 16). The number of clients steadily increases from 2011/12 at 6,214 to 8,592 in 2014/15. Similarly, the number of sessions also increased over the same period albeit at a slightly




higher rate from 29,278 services in 2011/12 to 43,502 in 2014/15 (Department of Health, 2016b).

**FIGURE 16** ATAPS MDS TOTAL PATIENTS AND SESSIONS 2011/12 - 2014/15

## 4.2 Mental Health Services in Western Australia - Mapping Overview

### Introduction

This section of the Atlas provides a brief overview of the service delivery teams (or BSIC) delivering mental health care across Western Australia. The details of each team are provided as applicable in the three distinct atlases for the PHN areas.

Overall, 654 BSIC were identified that deliver 709 mental health MTC across Western Australia. 75% of these are services for adults, 17% are for children and adolescents and 8% are for older adults. Three quarters of all mental health services were Outpatient type care (Figure 17). There are 12 BSIC delivering mental health helplines (Table 15).

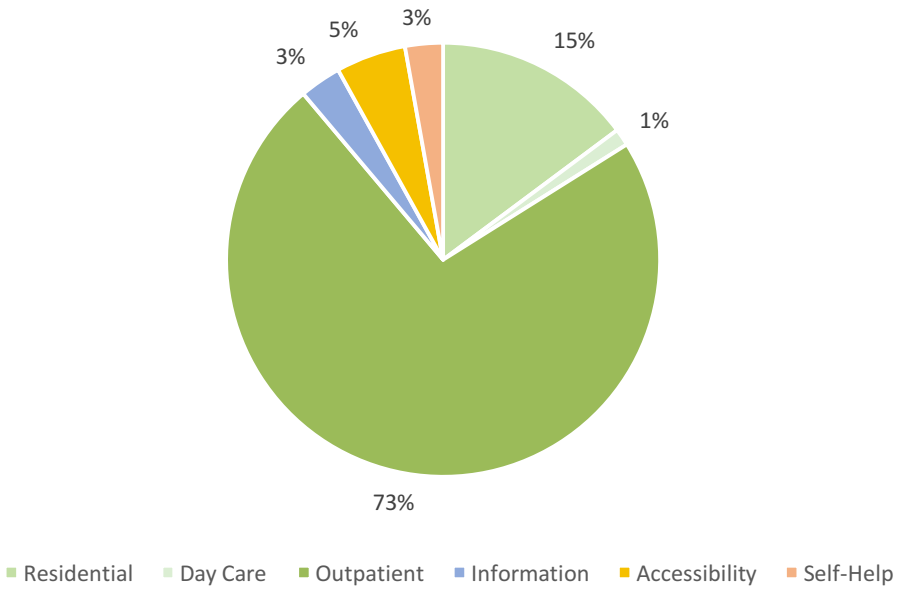



**FIGURE 17** MENTAL HEALTH MTC BY SERVICE TYPE

Across Western Australia, mental health BSIC were provided fairly evenly by NGOs and the Government Health services sector. It is important to note however that many of the services provided by NGOs are funded via Government contracts at State or Federal level. Figure 18 provides an overview of the mental health teams by care type across Western Australia.

**TABLE 15** NUMBER OF MAIN TYPES OF MENTAL HEALTH CARE IN WESTERN AUSTRALIA

| Population Group | Service Type | R | D | O | A | I | S | TOTAL |
|---|---|---|---|---|---|---|---|---|
| Child & Adolescent | Health | 3 | 2 | 52 | 0 | 4 | 0 | 61 |
| | NGO/Other | 1 | 0 | 49 | 1 | 3 | 0 | 54 |
| | **Sub-total** | **4** | **2** | **101** | **1** | **7** | **0** | **115** |
| Adult | Health | 43 | 2 | 173 | 3 | 9 | 0 | 230 |
| | NGO/Other | 43 | 4 | 205 | 18 | 16 | 8 | 294 |
| | **Sub-total** | **86** | **6** | **378** | **21** | **25** | **8** | **524** |
| Older Adult | Health | 11 | 0 | 37 | 0 | 5 | 0 | 53 |
| | NGO/Other | 4 | 1 | 0 | 0 | 0 | 0 | 5 |
| | **Sub-total** | **15** | **1** | **37** | **0** | **5** | **0** | **58** |
| Total | Health | 57 | 4 | 262 | 4 | 18 | 0 | 339 |
| | NGO/Other | 48 | 5 | 254 | 19 | 19 | 8 | 331 |
| | Helplines | - | - | - | - | - | 12 | 12 |
| | **Total** | **105** | **9** | **516** | **22** | **37** | **20** | **709** |
| | **%** | **14** | **1** | **75** | **3** | **6** | **1** | **100** |

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

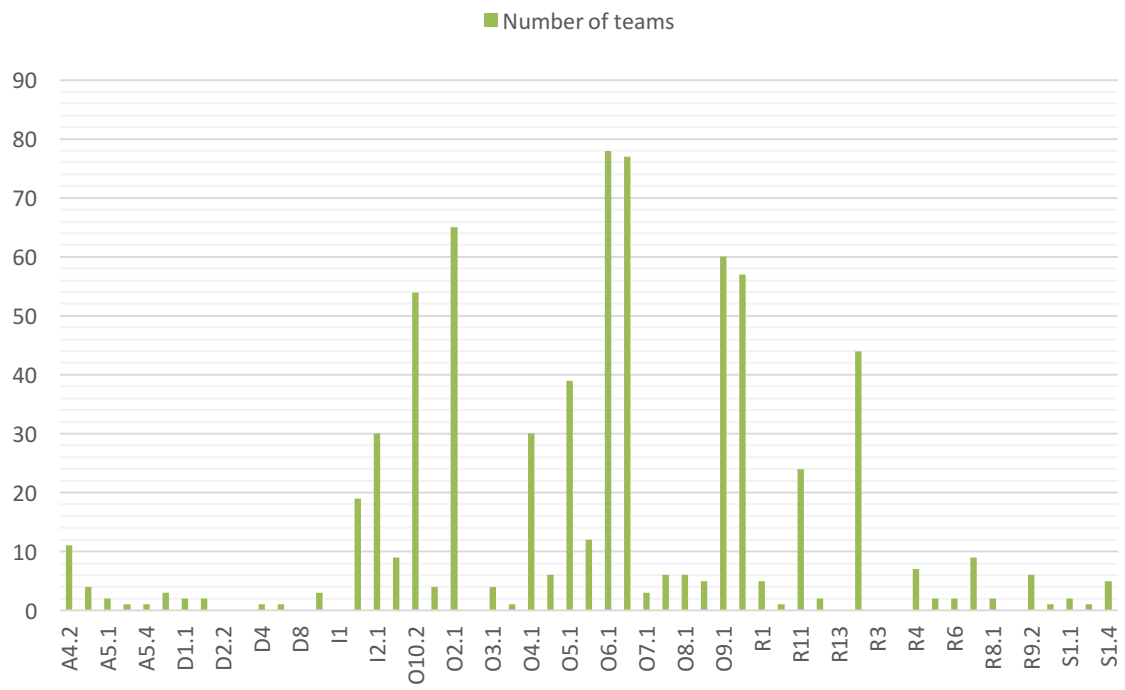



**FIGURE 18** NUMBER OF MENTAL HEALTH TEAMS AND TYPES OF SERVICES IN WA

## 4.3 State-wide Mental Health Helplines

This section of the Atlas provides a brief overview of the type, availability and location of service delivery teams (or BSIC) delivering State-wide Telephone Helplines or online forums/chatrooms across Western Australia. Table 16 lists these services.

Note this section does not include National Helpline or web-based services such as those delivered by SANE Australia (except through its online forum partners in WA), Beyond Blue, Lifeline or MiNetworks. Teams that deliver other State-wide mental health or AOD services are detailed in the section pertaining to the location of their service.

**TABLE 16** MENTAL HEALTH HELPLINES AND ONLINE FORUMS

| Provider Type | Provider | Name | DESDE - 1 | Coverage | Hours of service |
|---|---|---|---|---|---|
| Health Sector | North Metropolitan Health Service (Now East Metropolitan) | MHERL and Ruralink – 1800 552 002 | GX[F0-F99] - I1.1e | Statewide | Ruralink operates 4.30pm-8.30pm M-F and 24 hours Sat, Sun and Public Holidays. MHERL 24/7 |
| NGO | Mental Illness fellowship of WA | Telephone Information and Referral Service (MI Network) – 08 9237 8999 | GX[F0-F99] - I2.1.2e | Statewide | Monday to Friday 9:00 am to 5:00 pm on (08) 9237 8999 |
| NGO | Lifeline WA | Telephone Crisis Support 13 11 14 | GX[F0-F99] - I2.1.2e | Australia wide | 24h/7d |
| NGO | Lifeline WA | Crisis Support Chat – Online Chatroom | GX[F0-F99] - I2.1.2e | Australia wide | Summer: 9pm – 1:30am AWST; Winter 10pm – 2:30am AWST. |
| NGO | Samaritans | Help Line: 135 247 | GX[F0-F99] - I2.1.1e | Statewide | 24h/7d |
| NGO | Samaritans | YouthLine: 1800 198 313 | CX[F0-F99] - I2.1.1e | Statewide | 24h/7d |
| GOV | Mental Health Commission | 08 9224 8888, 1300 555 788 (Perth metropolitan), 1800 676 822 (Peel region) | GX[F0-F99] - I2.1.1e | Statewide | 24h/7d |
| GOV | Mental Health Commission | 1800 552 002 – TTY 1800 720 101 | GX[F0-F99] - I2.1.1e | Statewide | 4.30pm – 8:30am Monday to Friday and 24 hours Saturday, Sunday and public holidays. |
| NGO | MIFWA | Online Forums | GX[F0-F99] - I2.1.1e | Australia wide | 24h/7d |
| GOV | Department of Child Protection and Family Support | 9223 1111, 1800 199 008 (free call STD), 9325 1232 (TTY) | GX[F0-F99] - I2.1.1e | | 24h/7d |

## 4.4 Alcohol and Other Drugs Data for Western Australia

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 in relation to the service mapping for Western Australia. For comparative purposes, a brief overview of Australian prevalence and service data is also provided.

### Prevalence and Treatment Data for Australia and Western Australia

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, 2016). 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 and the majority were male (69%).

Of the states and territories, Western Australia had the fourth highest rate of AOD patients (765 per 100,00 population) which was higher than the Australian average of 558 per 100,000 population (Figure 19). However, it delivered the third highest rate of episodes of care per 100, 000 population (1050) and higher than the national average of 827 per 100,000 population (AIHW, 2016).

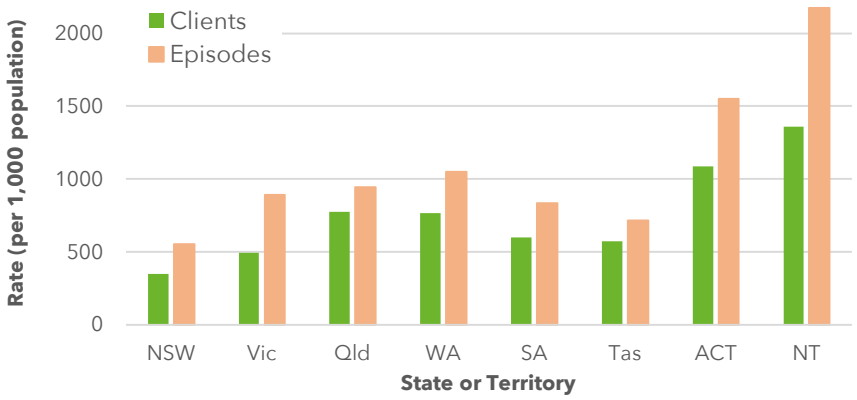



**FIGURE 19** ESTIMATED RATES OF AOD CLIENTS AND EPISODES BY JURISDICTION, 2014-15

Source: AIHW (2016)

In Western Australia in 2014-15 the most common principal drug was alcohol with 8,223 episodes (37%) followed by amphetamines with 5,586 episodes (25%) (Figure 20).

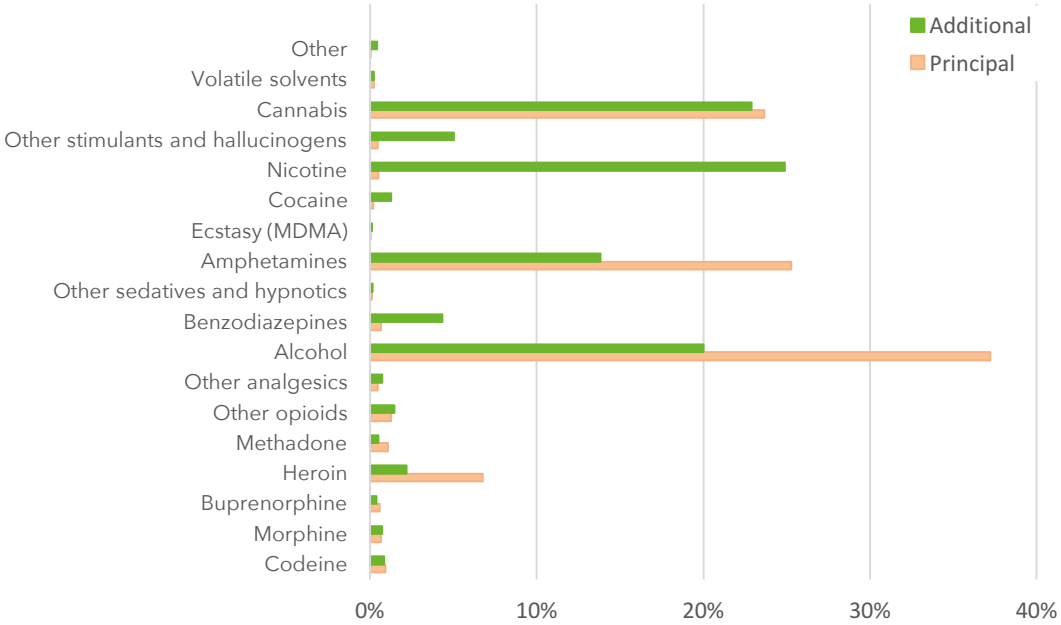



**FIGURE 20** CLOSED EPISODES PROVIDED FOR OWN DRUG USE BY DRUG OF CONCERN, WESTERN AUSTRALIA, 2014-15

Source: AIHW 2016

Furthermore, in Western Australia, 69% of clients and 62% of episodes involved counselling as the form of treatment, making it the most common, followed by withdrawal management (9% of episodes) (Figure 21).

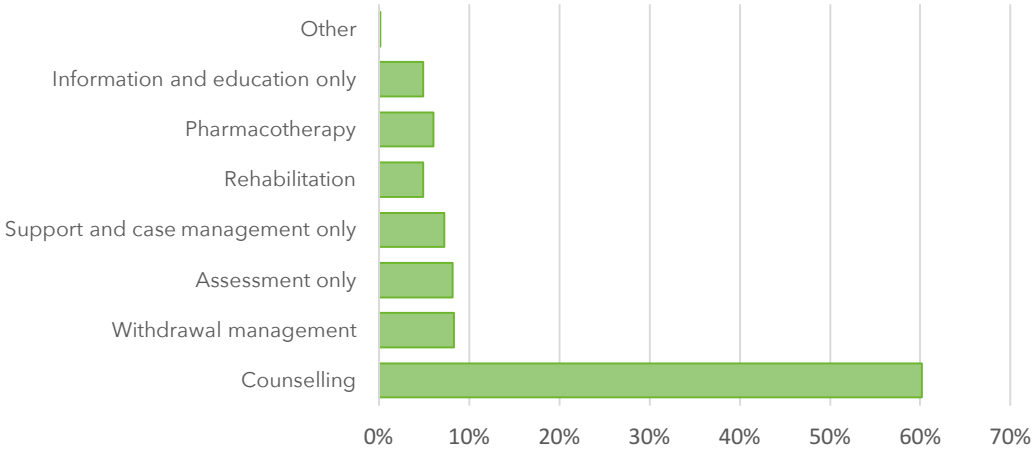



**FIGURE 21** CLOSED EPISODES BY MAIN TREATMENT TYPE, WESTERN AUSTRALIA, 2014-15

## Community Program for Opioid Pharmacotherapy

In WA, the Community Program for Opioid Pharmacotherapy (CPOP) framework governs the prescribing of opioid pharmacotherapy used for the treatment of opioid dependence in the State (DoH, 2016), in conjunction with The Poisons Regulations 1965 which sets out the regulatory controls associated with the prescribing of treatments for opioid dependence (such as Subutex® or Suboxone®).

The 2015 CPOP report (DoH, 2016) indicates that as at 31 December 2015, there are 115 authorised active prescribers in WA (excluding those based at Next Step Drug and Alcohol Services and Department of Corrective Services prison dosing sites). An authorised prescriber is defined as a 'medical practitioner who is authorised by the Chief Executive Officer or delegate to treat opioid dependence with opioid pharmacotherapy in Western Australia'. GPs, psychiatrists and clinical psychologists comprise the majority of authorised prescribers in WA. The number of authorised prescribers in each of the three Atlas PHN regions has been obtained from the 2015 CPOP report (Table 17).

**TABLE 17** NUMBER OF AUTHORISED ACTIVE PRESCRIBERS AND COMMUNITY PHARMACIES BY HEALTH DISTRICT

| Health Service | Number of authorised active prescribers | Number of community pharmacies authorised to participate in CPOP | Average Patient Rate per 10 000 population |
|---|---|---|---|
| North Metro Health Service | 65 | 130 | 20.72 |
| South Metro Health Service | 13 | 99 | 24.57 |
| Country Health Service | 37 | 99 | 13.05 |
| **Total** | **115** | **328** | **16.45** |

Sourced from: Western Australian Community Program for Opioid Pharmacotherapy 2015 Annual Report, pp 31, 33, 39

With regards to the average number of authorised patients per 10,000 population above, it is pertinent to note that the average masks considerable variation across health districts. The CPOP 2015 report notes for example that the number of authorised patients per 10 000 population ranged from zero in Murchison and East Kimberley in 2015 to 35.5 patients in Bentley South (DoH, 2016). Across the state, the majority of the 2015 CPOP authorisations were issued to patients residing within the North and South Metropolitan Health Services catchments (86% of Subutex®, 82% of Suboxone®, and 76% of Methadone in the metropolitan area). Overall, the largest age group seeking treatment for both males and females were aged 30 to 40 years, with 32.6 patients per 10 000 population for females and 51.6 patients per 10 000 population for males recorded for 2015 (DoH, 2016).

## 4.5 Alcohol and Other Drugs Service Mapping - Overview

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

Where a BSIC has two 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 state.

There were a total of 193 BSIC identified that deliver 206 MTC of AOD care across Western Australia (Table 18). This includes six BSIC delivering AOD Helpline services.

Outpatient care, including outreach services made up 61% of the MTC, Information and Guidance 8% and Residential Accommodation 23% (Table 18).

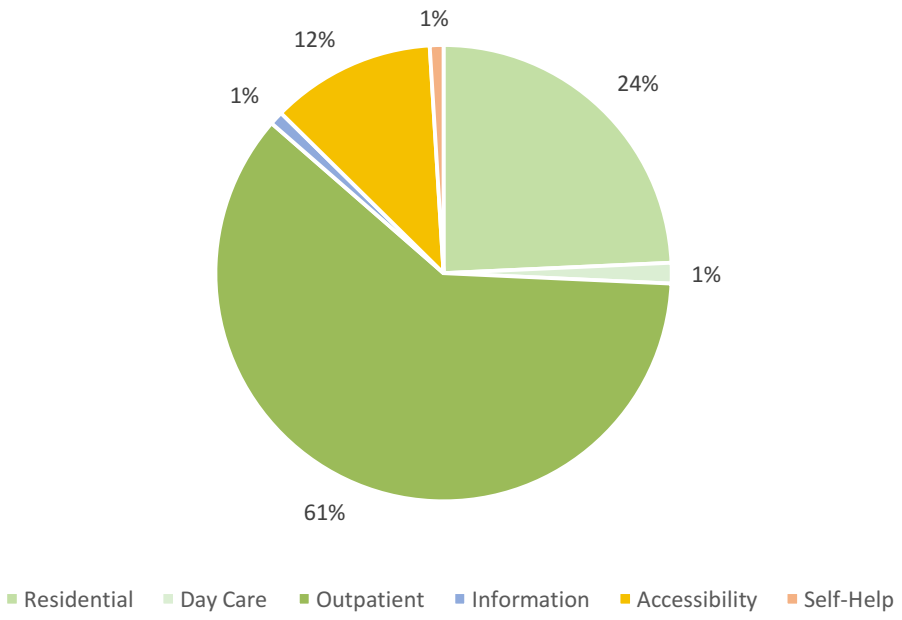



**FIGURE 22** SUMMARY OF SERVICES PROVIDING CARE FOR AOD

Of these MTC, 87.8% (181) are for adults (or general age group), 12% (24) are for children and adolescents and 0.5% (1) are for older adults. The Health sector delivers 15% of these MTC and 85% are delivered by NGOs.

**TABLE 18** NUMBER MAIN TYPES OF ALCOHOL AND OTHER DRUG CARE IN WESTERN AUSTRALIA

| Population Group | Service Type | R | D | O | A | I | S | TOTAL |
|---|---|---|---|---|---|---|---|---|
| Child & Adolescent | Health | 0 | 0 | 1 | 0 | 1 | 0 | 2 |
| | NGO/Other | 3 | 1 | 12 | 0 | 6 | 0 | 22 |
| | **Sub-total** | **3** | **1** | **13** | **0** | **7** | **0** | **24** |
| Adult | Health | 0 | 0 | 20 | 0 | 0 | 0 | 20 |
| | NGO/Other | 47 | 2 | 92 | 2 | 10 | 2 | 155 |
| | **Sub-total** | **47** | **2** | **112** | **2** | **10** | **2** | **175** |
| Older Adult | Health | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| | NGO/Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | **Sub-total** | **0** | **0** | **0** | **0** | **1** | **0** | **1** |
| Total | Health | 0 | 0 | 21 | 0 | 2 | 0 | 23 |
| | NGO/Other | 50 | 3 | 104 | 2 | 16 | 2 | 177 |
| | Helplines | - | - | - | - | - | 6 | 6 |
| | **Total** | **50** | **3** | **125** | **2** | **18** | **8** | **206** |
| | **%** | **24%** | **1%** | **61%** | **1%** | **9%** | **4%** | **100%** |

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

The NGO sector is particularly active in providing Residential and Outpatient AOD services for adults in the state, delivering 150 main types of care compared with 23 from the health sector (Table 18).

## 4.6 Statewide AOD Helplines

Table 19 displays helplines for AOD being delivered across Western Australia, solely delivered by the Drug and Alcohol Office, Government of Western Australia.

**TABLE 19** STATEWIDE AOD HELPLINES

| Provider Type | Provider | Details | DESDE - 1 | Hours of service |
|---|---|---|---|---|
| Health Sector | Department of Health, Government of Western Australia | Metropolitan Callers: 08 9442 5000 Country Callers: 1800 198 024 | GX[F0-F99] - I2.1.1e | 24h/7d |
| Health Sector | | 08 9442 5050 or 1800 653 203 (country callers) | GX[F0-F99] - I2.1.1e | 24h/7d |
| Health Sector | | 1800 721 997 | GX[F0-F99] - I2.1.1e | 24h/7d |
| Health Sector | | 1800 874 878 | GX[F0-F99] - I2.1.1e | 24h/7d |
| Health Sector | | 08 9442 5000, 1800 198 024 (WA only) or for parents: 08 9442 5050, 1800 653 203 (WA only) | GX[F0-F99] - I2.1.1e | 24h/7d |
| Health Sector | | (08) 9442 5050 or 1800 653 203 (Rural WA only) | GX[F0-F99] - I2.1.1e | 24h/7d |

# Perth North PHN

# 5. Perth North PHN

The Perth Metropolitan area is divided into two PHN regions; Perth North (PNPHN) and Perth South (PSPHN). The PNPHN catchment covers an area of just under 3000 square kilometres. The region encompasses the North Metropolitan Health Service, as well as 17 LGAs (Figure 23).

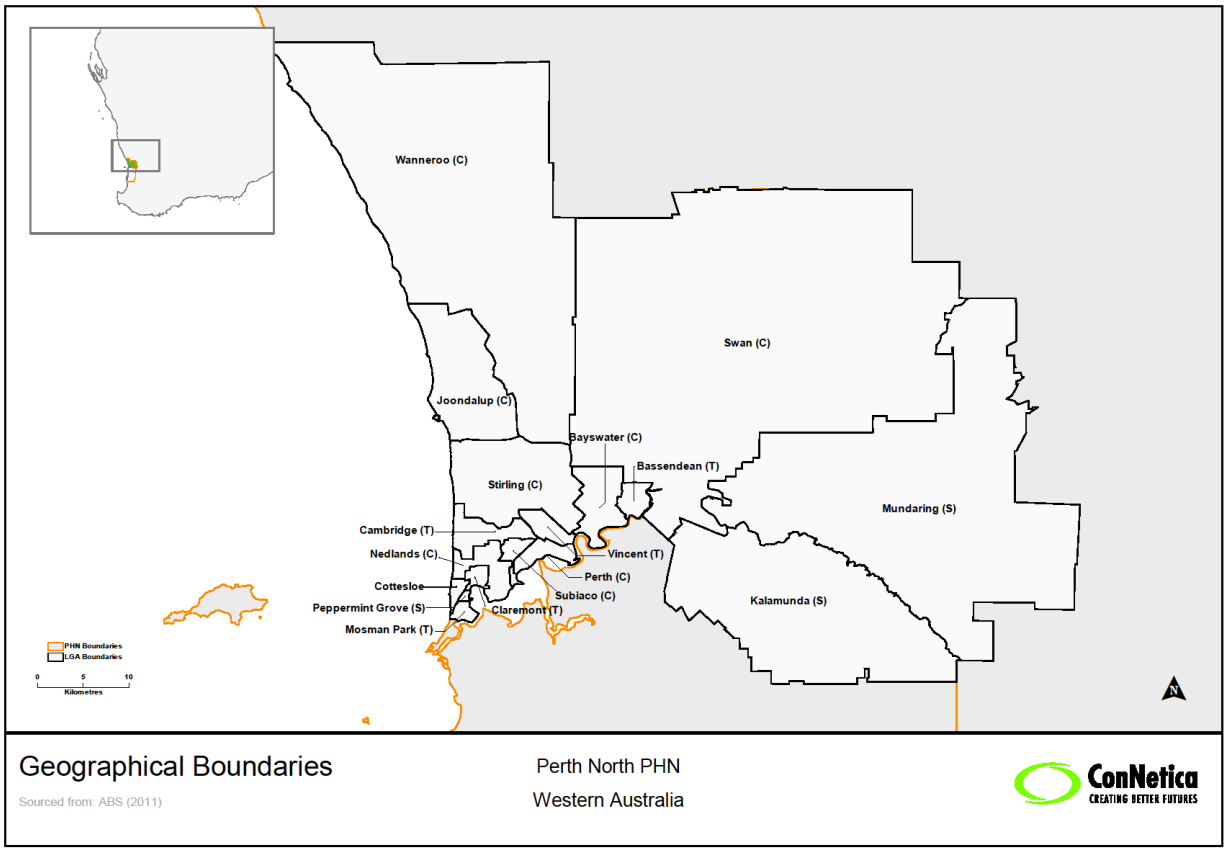



**FIGURE 23** GEOGRAPHICAL BOUNDARIES OF PNPHN

## 5.1 Population Demographics

Key population demographics relevant to this Atlas include the Estimated Residential Population (ERP) as well as indicators of the age structure of the population using measures such as the Dependency Ratios and Ageing Indexes. The diversity of the population is examined utilising the indicators of Indigenous status and proportion of those born overseas. Table 20 below presents key population demographics for the Wheatbelt Regions, disaggregated by LGA.

**TABLE 20** KEY POPULATION DEMOGRAPHICS FOR PNPHN

| LGA | Area* (sq. km) | Total Population† | Density Ratio | Dependency Ratio | Ageing index | Indigenous Status n (%)§ | Overseas Born (%)¶ |
|---|---|---|---|---|---|---|---|
| Bassendean | 10 | 16,101 | 1556.5 | 0.47 | 85.5 | 524 (3.1) | 28.2 |
| Bayswater | 33 | 70,472 | 2150.5 | 0.45 | 90.7 | 1,132 (1.6) | 38.3 |
| Cambridge | 22 | 28,250 | 1284.5 | 0.56 | 74.8 | 66 (0.2) | 28.9 |
| Claremont | 5 | 10,706 | 2160.4 | 0.56 | 132.5 | 58 (0.5) | 29.5 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Cottesloe | 4 | 8,602 | 2230.7 | 0.49 | 100.0 | 10 (0.1) | 23.3 |
| Joondalup | 99 | 167,891 | 1697.1 | 0.46 | 70.3 | 1,100 (0.6) | 37.7 |
| Kalamunda | 324 | 60,830 | 187.6 | 0.54 | 78.6 | 1,252 (2.0) | 27.9 |
| Mosman Park | 4 | 9,547 | 2196.0 | 0.50 | 97.6 | 164 (1.7) | 32.7 |
| Mundaring | 643 | 40,015 | 62.2 | 0.50 | 88.7 | 1,220 (3.0) | 24.4 |
| Nedlands | 20 | 23,084 | 1157.3 | 0.56 | 89.5 | 47 (0.2) | 32.8 |
| Peppermint Grove | 1 | 1,646 | 1541.8 | 0.60 | 102.7 | 10 (0.6) | 23.8 |
| Perth | 8 | 21,092 | 1754.6 | 0.17 | 163.6 | 177 (0.8) | 51.6 |
| Stirling | 105 | 227,566 | 2173.0 | 0.46 | 88.0 | 3,314 (1.4) | 35.8 |
| Subiaco | 7 | 20,423 | 2927.6 | 0.38 | 90.4 | 105 (0.5) | 38.5 |
| Swan | 1043 | 133,303 | 127.8 | 0.46 | 46.8 | 4,655 (3.4) | 30.0 |
| Vincent | 11 | 37,461 | 3292.8 | 0.31 | 75.7 | 258 (0.7) | 35.8 |
| Wanneroo | 685 | 188,785 | 275.6 | 0.49 | 40.4 | 3,397 (1.7) | 39.7 |
| **PNPHN** | **2,975** | **1.07 million** | **358.2** | **0.46** | **69.0** | **17,509 (1.6)** | **35.1** |
| WA | 2.64 million | 2.59 million | 0.98 | 0.48 | 68.4 | 95, 707 (3.6) | 33.0 |
| Australia | 7.7 million | 23.49 million | 3.1 | 0.54 | 78.1 | 729,048 (3.1) | 24.6 |

Sourced from: * ASGS (ABS, 2011a); †ERP 2015 (PHIDU, 2016); §ERP (non ABS) 2015 (PHIDU, 2016); ¶ABS, 2011b

### *Population Profile*

The LGAs of Joondalup and Stirling are the most populated of PNPHN, whilst Vincent is most densely populated with approximately 3292 persons per square kilometre.

### *Cultural Diversity*

The Indigenous Status indicator is below the Australian average (3.1%) for all but one LGA within PNPHN, Swan (3.4%). It is pertinent to note however that there is considerable suburb variability within LGAs in relation to this indicator, and this has implications for the location of some of the related specific Aboriginal mental health and/or AOD related services.

All LGAs within the PNPHN have higher proportions of overseas born compared to the Australian average of 24.6%, except for Peppermint Grove, Mundaring and Cottesloe. The LGA with highest proportion of overseas born was Perth at 51.6%, and the lowest was Cottesloe at 23.3%. Population characteristics by LGA are displayed in Figures 24 – 26.

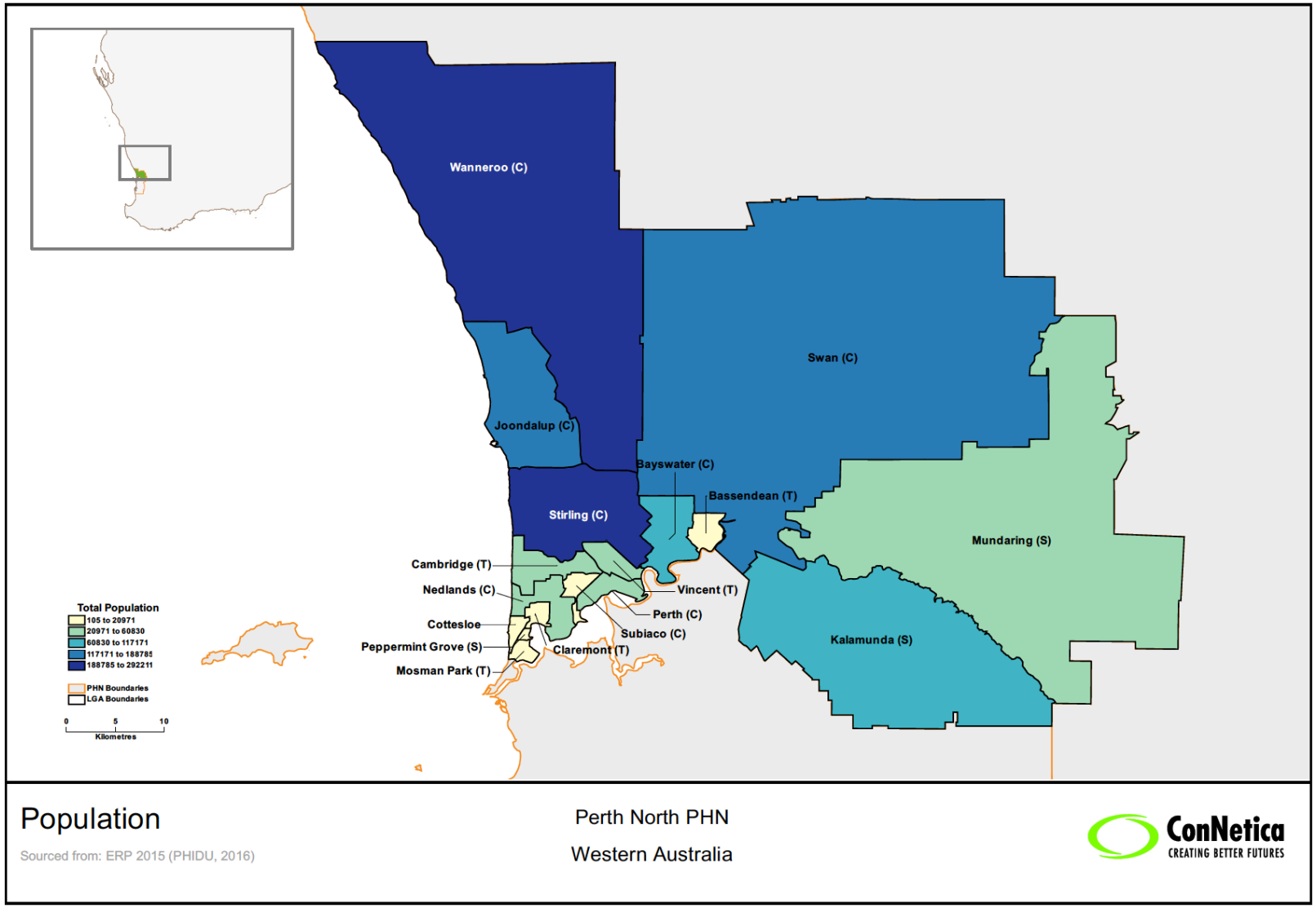



**FIGURE 24** POPULATION (ERP 2011) BY LGA IN PNPHN

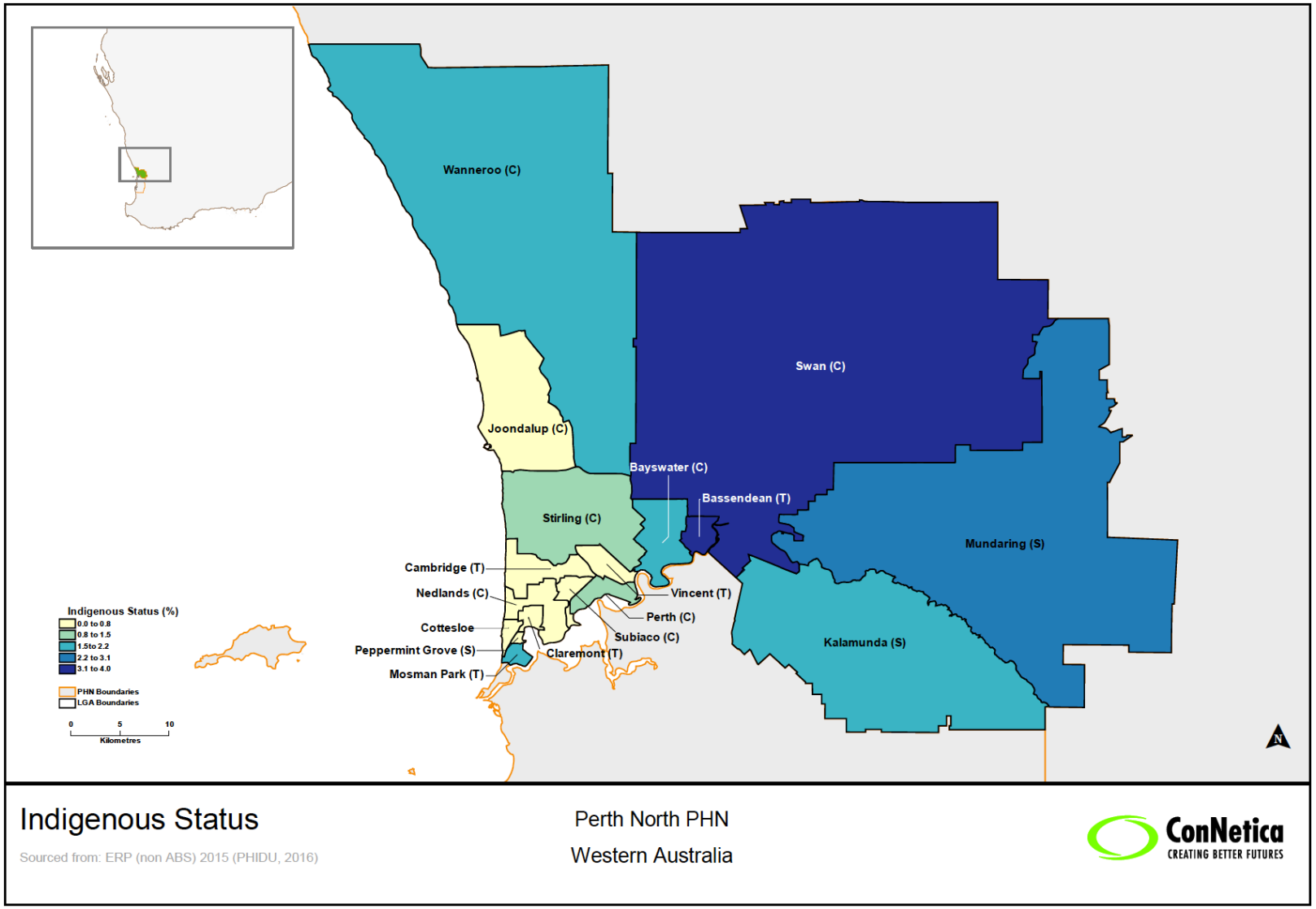



**FIGURE 25** INDIGENOUS STATUS BY LGA IN PNPHN

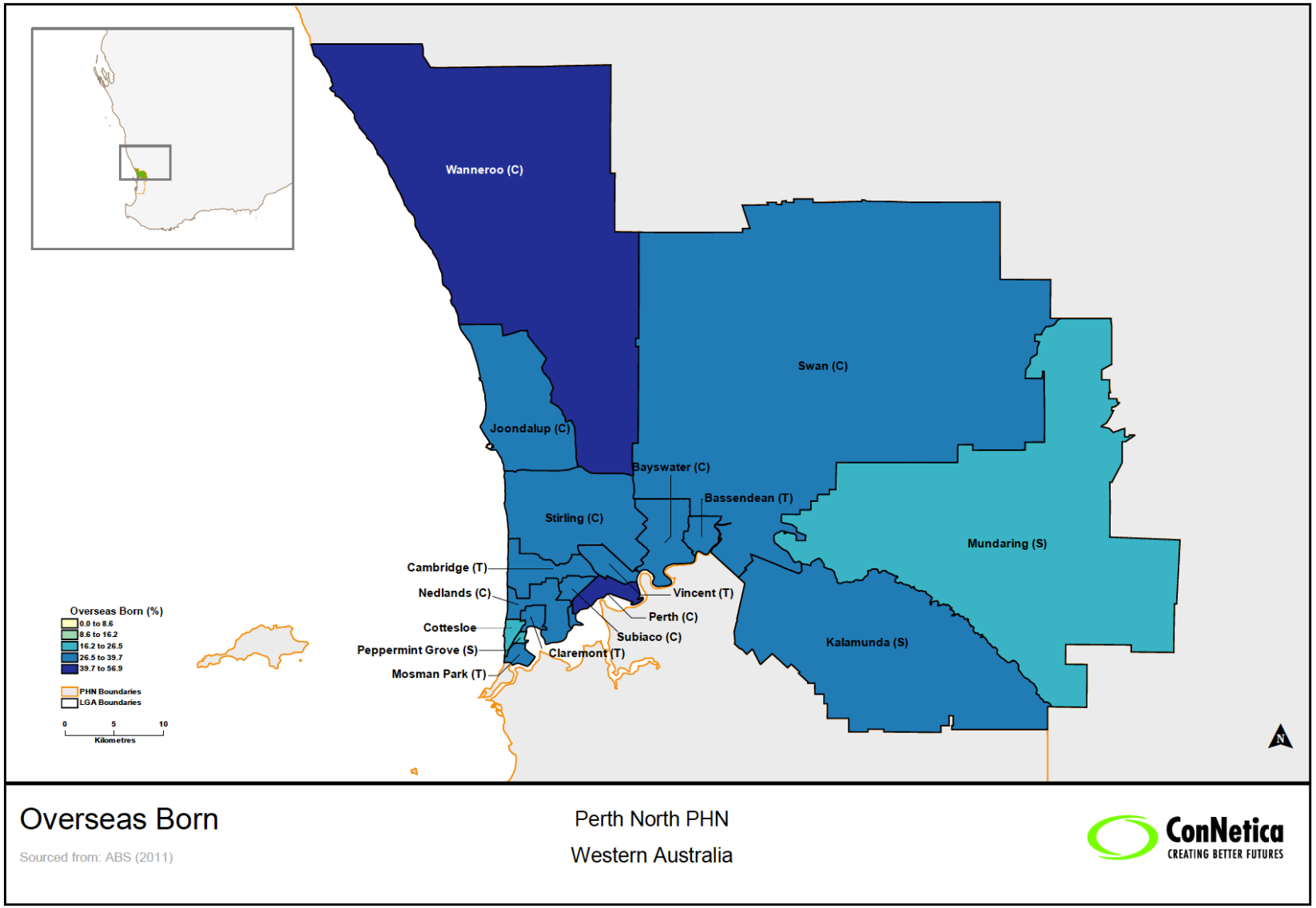



**FIGURE 26** PROPORTION OF POPULATION BORN OVERSEAS BY LGA IN PNPHN

## 5.2 Social Determinants of Health

Table 21 displays key socio-demographic statistics for PNPHN.

Apricot shading indicates LGAs with the worst score for that indicator, green shading represents the best score; arrows indicate where figures are higher or lower than the state average. Data is represented geographically by LGA in Figure 27 to Figure 32.

**TABLE 21** KEY SOCIO-ECONOMIC FACTORS FOR PNPHN

| LGA | Single parent families (%)* | Needing Assistance (%)* | Early school leavers* (ASR per 100) | Un employment (%)‡ | Income <$400 / wk (%)† | IRSD Decile (score)§ |
|---|---|---|---|---|---|---|
| Bassendean | 25.3⇧ | 4.8⇧ | 34.7⇧ | 6.9⇧ | 35.9⇧ | 8 (1004)⇩ |
| Bayswater | 20.3⇧ | 4.8⇧ | 30.6⇩ | 5.4⇩ | 35.4⇩ | 8 (1020)⇩ |
| Cambridge | 9.3⇩ | 3.3⇩ | 16.7⇩ | 2.6⇩ | 29.9⇩ | 10 (1117)⇧ |
| Claremont | 15.1⇩ | 3.6⇩ | 13.3⇩ | 2.6⇩ | 31.5⇩ | 10 (1095) ⇧ |
| Cottesloe | 12.5⇩ | 2.9⇩ | 10.6⇩ | 1.3⇩ | 26.9⇩ | 10 (1116)⇧ |
| Joondalup | 15.2⇩ | 2.8⇩ | 27.8⇩ | 4.0⇩ | 33.4⇩ | 10 (1082)⇧ |
| Kalamunda | 19.3⇩ | 3.4⇩ | 33.7⇧ | 3.8⇩ | 34.2⇩ | 9 (1050)⇧ |
| Mosman Park | 15.1⇩ | 4.6⇧ | 15.0⇩ | 3.3⇩ | 34.4⇩ | 10 (1066)⇧ |
| Mundaring | 17.9⇩ | 3.5⇩ | 32.6⇩ | 5.1⇩ | 36.0⇧ | 10 (1052)⇧ |
| Nedlands | 9.7⇩ | 3.4⇩ | 11.6⇩ | 1.9⇩ | 34.3⇩ | 10 (1115)⇧ |
| Peppermint Grove | 11.5⇩ | 2.5⇩ | 15.0⇩ | 3.3⇩ | 32.3⇩ | 10 (1126)⇧ |
| Perth | 15.8⇩ | 2.0⇩ | 16.2⇩ | 5.8⇧ | 26.6⇩ | 10 (1063)⇧ |
| Stirling | 19.5⇩ | 4.2⇧ | 27.5⇩ | 6.7⇧ | 34.4⇩ | 9 (1028)⇧ |
| Subiaco | 13.7⇩ | 3.1⇩ | 13.7⇩ | 2.8⇩ | 32.8⇩ | 10 (1077)⇧ |
| Swan | 21.6⇧ | 3.7⇩ | 37.2⇧ | 7.0⇧ | 35.9⇧ | 8 (1011)⇩ |
| Vincent | 14.0⇩ | 4.1⇩ | 20.1⇩ | 4.9⇩ | 29.0⇩ | 10 (1058)⇧ |
| Wanneroo | 19.1⇩ | 3.2⇩ | 34.5⇧ | 8.5⇧ | 35.8⇧ | 9 (1026)⇧ |
| **PNPHN** | **18.2** | **5.8** | **28.7** | **5.5** | **34.2** | **1045** |
| WA | 19.9 | 4.5 | 32.8 | 5.6 | 35.5 | 1022 |
| Australia | 21.3 | 4.9 | 34.3 | 5.9 | 38.9 | 1000 |

Sourced from: * 2011(PHIDU, 2016); † ABS, 2011b; ‡ June quarter 2016 (CDE, 2016); § IRSD 2011 (ABS, 2011c)

### *Single Parent Families*

The LGAs of Bassendean (25.3%), and Swan (21.6%) both have higher proportions of single parent families within their catchments compared with the average rate for both PNPHN (18.2%) and Australia (21.3%).

### *Human function*

All LGAs within PNPHN had lower percentages than the Australian average (4.9%) for needing assistance. However, a number of LGAs had proportions higher than the state average of 4.5%. The LGA with the highest rate was Bassendean at 4.8%, and the lowest Perth at 2%.

### *Education*

Overall, the PNPHN population had a significantly lower rate of the population who have left school prior to Year 10 or who did not go at to school at all (28.7 per 100) compared to both the Western Australian and Australian rates, 32.8 and 34.3 per 100 respectively (Figure 29). However, six LGAs within the catchment did have higher rates of early school leavers, and they included the populations within the following LGAs: Bassendean (34.7), Bayswater (30.6), Kalamunda (33.7), Mundaring (32.6), Swan (37.2), and Wanneroo (34.5).

### *Unemployment*

Wanneroo had the highest unemployment rate, as measured by the June quarter 2016, at 8.5%, considerably higher than the PNPHN (5.5%) and state and national averages, 5.6% and 5.9% respectively. Cottesloe LGA had the lowest rate of unemployment recorded in the June quarter 2016 at only 1.3%.

### *Income*

All LGAs within the PNPHN catchment reported lower proportions of low individual income per week compared to the Australian average (38.9%). However, a number of LGAs had proportions higher than the state average (35.5%) including Bassendean (35.9%), Mundaring (36.0%), Swan (35.95%) and Wanneroo (35.8%).

### *Index of Relative Socio-economic Disadvantage*

The Index of Relative Socio-economic Disadvantage (IRSD) is a socio-economic index computed by the ABS that draws on information about the economic and social conditions of people and households within an area to provide a comparative measure of disadvantage.

A higher score indicates a more advantaged area when compared to one with a lower score which may be considered more disadvantaged. Factors taken into account include the proportions of people with low incomes, qualifications or skilled occupations.

All LGAs in PNPHN had IRSD scores higher than 1000, with Peppermint Grove being the highest and most advantaged with a score of 1126. 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 PNPHN LGAs that have relative disadvantage scores of less than 1000 (ABS, 2011c). Figure 27 through Figure 32 display the data geographically across the PNPHN.

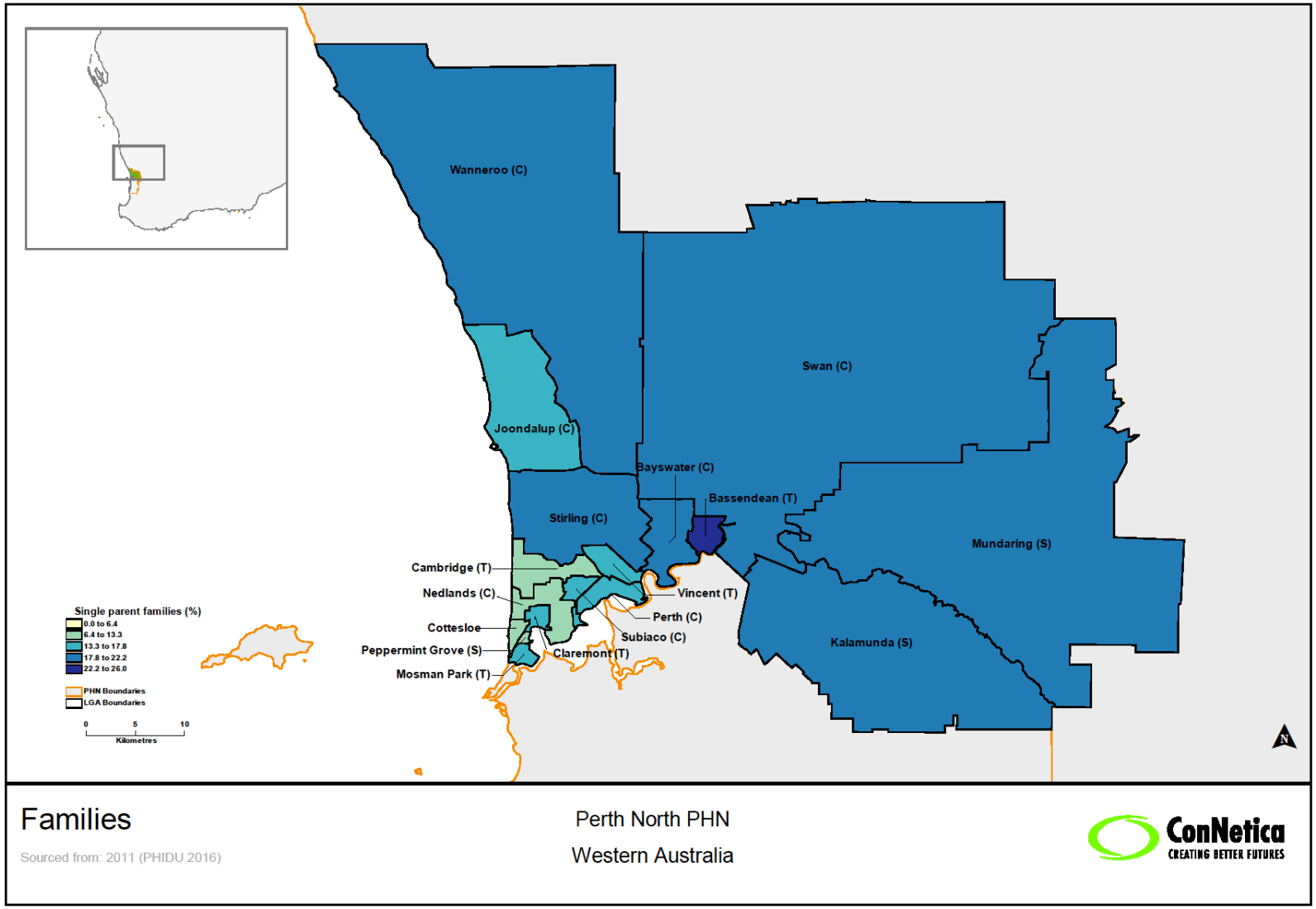



**FIGURE 27** PROPORTION OF SINGLE PARENT FAMILIES BY LGA PNPHN

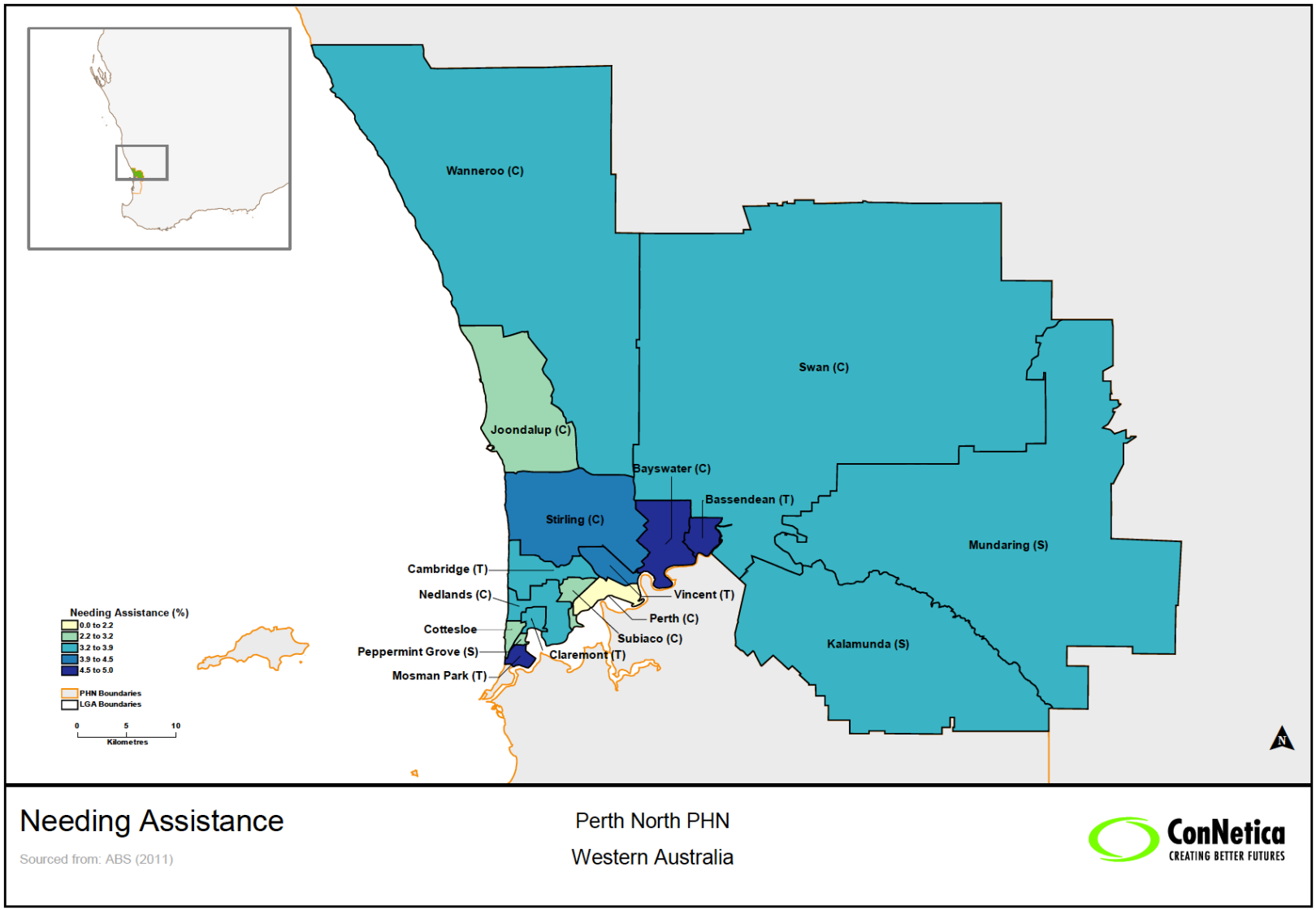



**FIGURE 28** PROPORTION OF THOSE NEEDING ASSISTANCE BY LGA IN PNPHN

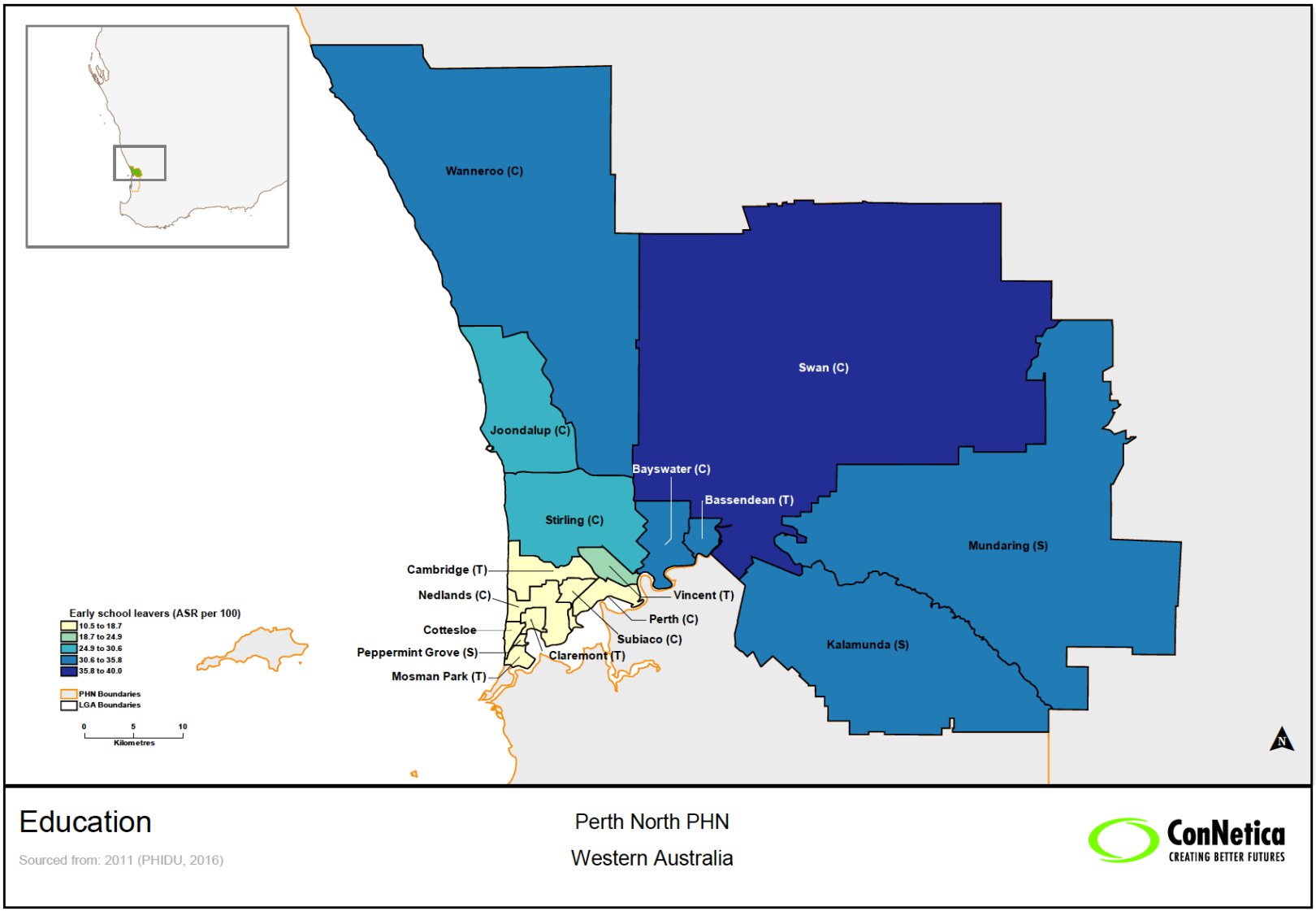



**FIGURE 29** PROPORTION OF EARLY SCHOOL LEAVERS BY LGA IN PNPHN

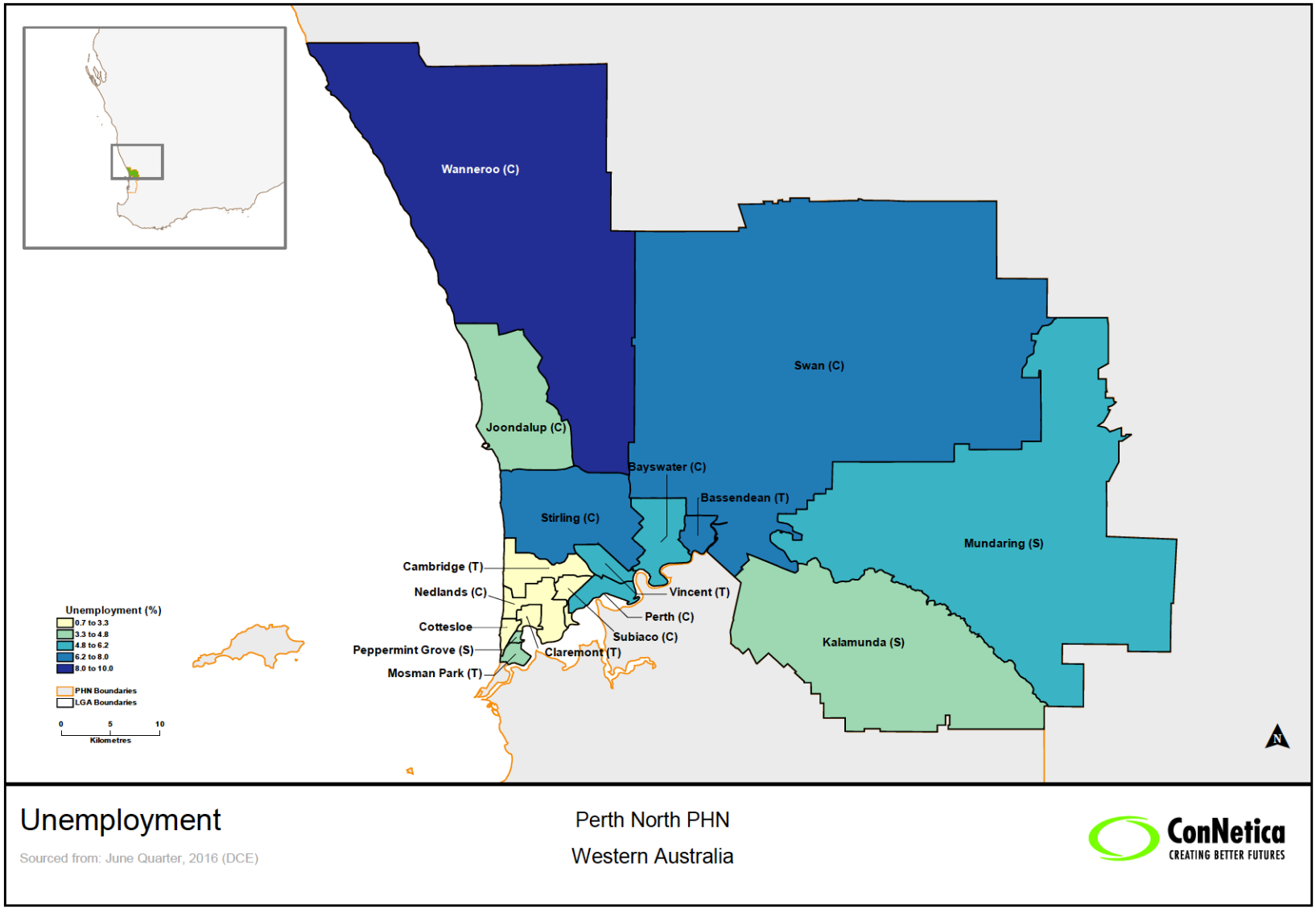



**FIGURE 30** PROPORTION OF UNEMPLOYMENT BY LGA IN PNPHN

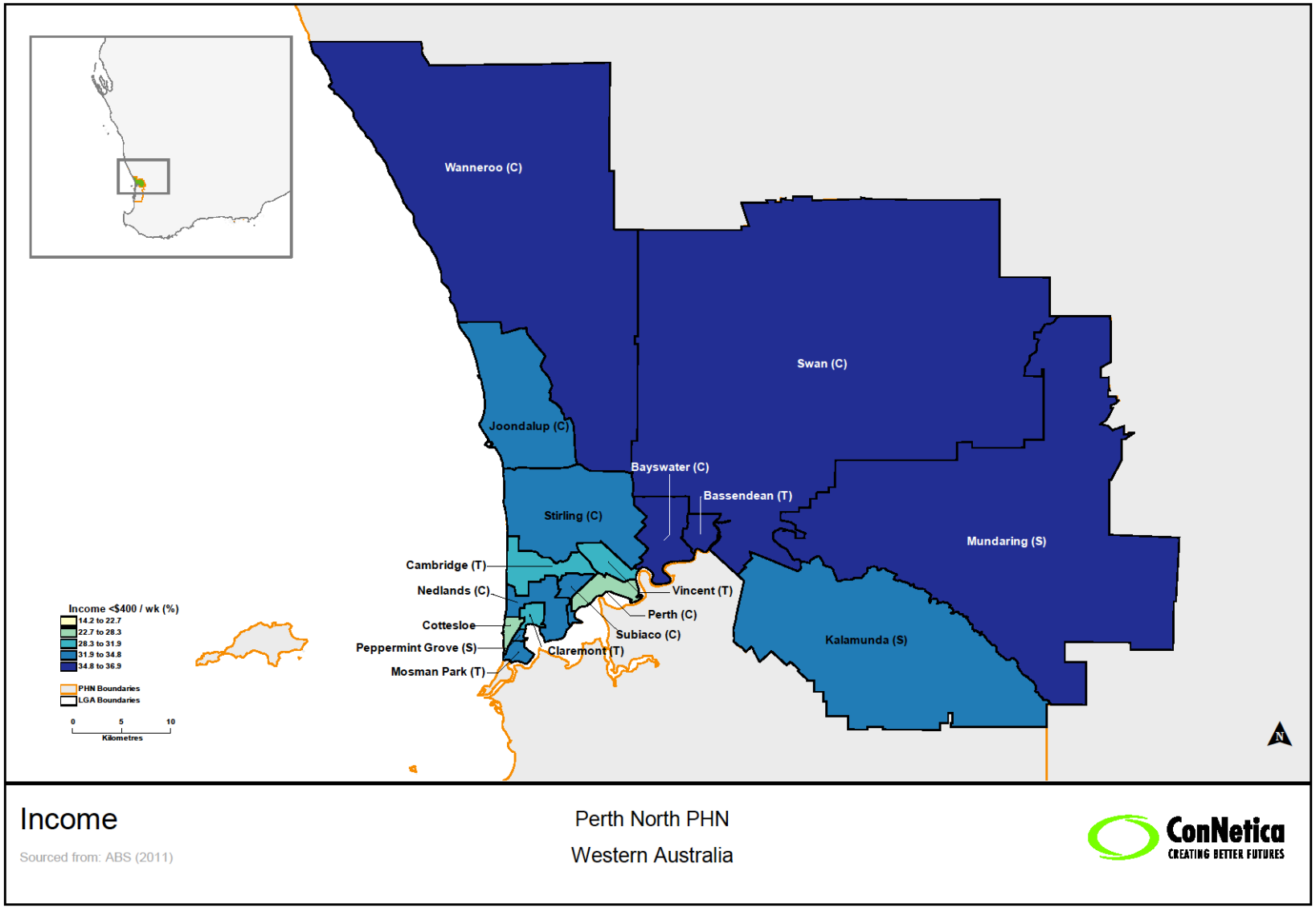
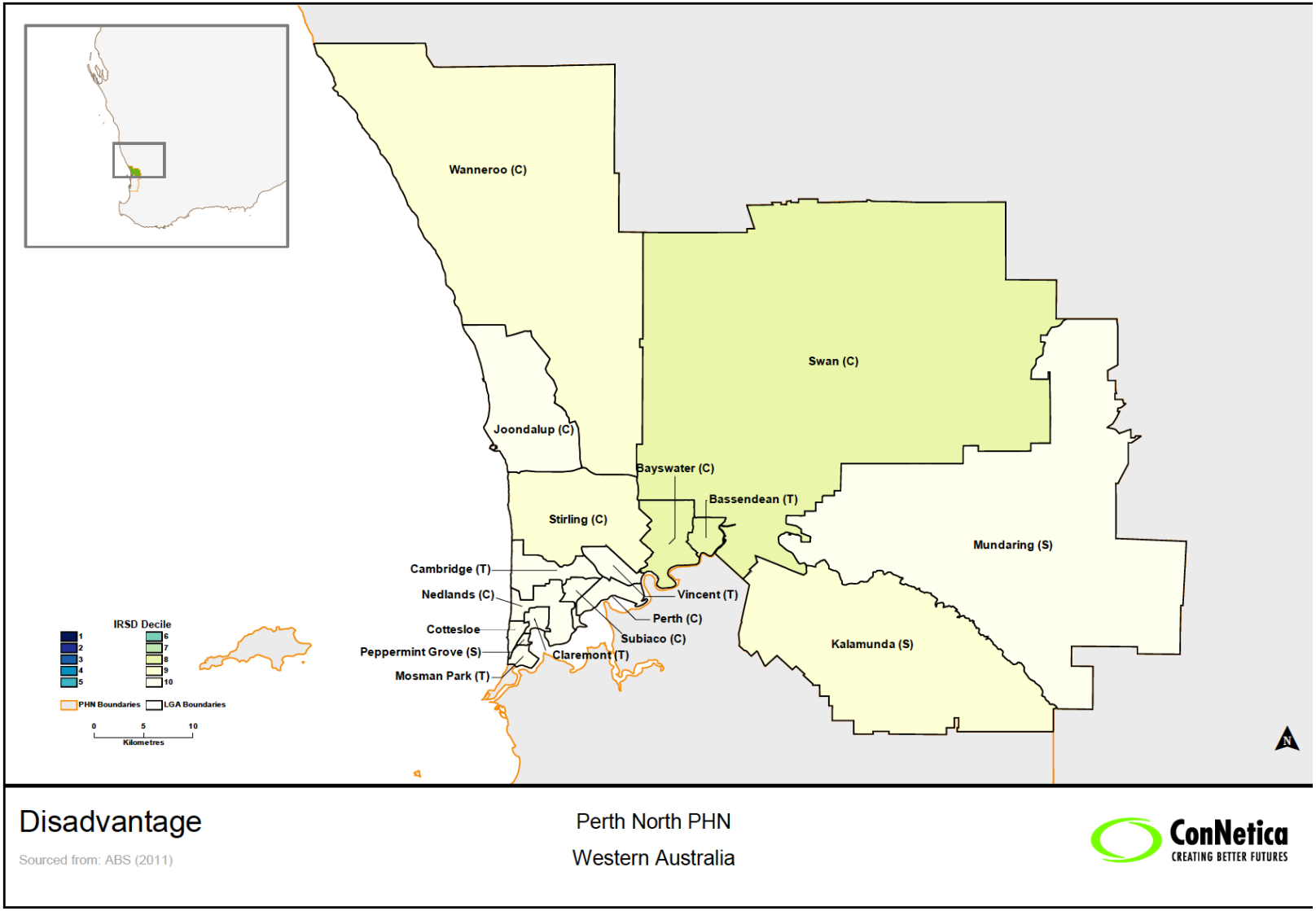



**FIGURE 31** INDIVIDUAL WEEKLY INCOME (<$400/WK) BY LGA IN PNPHN




Disadvantage

Sourced from: ABS (2011)

Perth North PHN

Western Australia

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**FIGURE 32** INDEX OF RELATIVE SOCIO-ECONOMIC DISADVANTAGE (IRSD) 2011 BY LGA IN PNPHN

## 5.3 Health and Mortality

A number of indicators of health status have been examined including self-report heath status, a population based indicators of psychological distress and some mortality measures (Table 22).

**TABLE 22** HEALTH AND MORTALITY FOR PNPHN

| LGA | Fair/poor Health (ASR per 100)* | Psychological Distress (ASR per 100)* | Suicide (n)† | Suicide (ASR per 100,000)† | Road Toll (n)† | Road Toll (ASR per 100,000)† |
|---|---|---|---|---|---|---|
| Bassendean | 15.4⇧ | 11.8⇧ | 17 | 22.9⇧ | n/a | n/a |
| Bayswater | 15.1⇧ | 10.8⇧ | 40 | 12.3⇩ | 16 | 4.9⇩ |
| Cambridge | 9.0⇩ | 8.5⇩ | 11 | 8.4⇩ | n/a | n/a |
| Claremont | 9.1⇩ | 9.1⇩ | 6 | 12.1⇩ | n/a | n/a |
| Cottesloe | 9.1⇩ | 9.5⇩ | 5 | 12.8⇧ | n/a | n/a |
| Joondalup | 10.6⇩ | 9.6⇩ | 72 | 9.1⇩ | 22 | 2.8⇩ |
| Kalamunda | 12.5⇩ | 8.9⇩ | 37 | 13.6⇩ | 17 | 6.3⇧ |
| Mosman Park | 9.1⇩ | 9.5⇩ | 6 | 13.6⇩ | n/a | n/a |
| Mundaring | 13.0⇩ | 10.1⇩ | 25 | 13.6⇩ | 15 | 8.2⇧ |
| Nedlands | 8.9⇩ | 7.6⇩ | 5 | 4.9⇩ | n/a | n/a |
| Peppermint Grove | 9.1⇩ | 9.5⇩ | n/a | n/a | 0 | 0.0⇩ |
| Perth | 12.8⇩ | 10.3⇩ | 12 | 11.5⇩ | n/a | n/a |
| Stirling | 13.7 | 10.6⇧ | 146 | 14.1⇧ | 31 | 3.0⇩ |
| Subiaco | 9.9⇩ | 9.7⇩ | 6 | 6.7⇩ | n/a | n/a |
| Swan | 14.9⇧ | 10.1⇩ | 73 | 12.9⇩ | 31 | 5.5⇩ |
| Vincent | 12.2⇩ | 10.2⇩ | 20 | 11.2⇩ | 7 | 3.7⇩ |
| Wanneroo | 14.0⇧ | 10.4⇩ | 70 | 9.0⇩ | 26 | 3.3⇩ |
| **PNPHN** | **12.8** | **10.1** | **552** | **11.6** | **185** | **3.9** |
| WA | 13.7 | 10.5 | 1,581 | 13.7 | 769 | 6.7 |
| Australia | 14.6 | 10.8 | 11,874 | 11.2 | 5,441 | 5.1 |

Sourced from: * 2011-12 (PHIDU, 2016); †2010-14 (PHIDU, 2016)

### *Health and Wellbeing*

Estimates of self-reported health in the PNPHN catchment indicate that people in the Bassendean (15.4 per 100), Bayswater (15.1 per 100), Swan (14.9 per 100) and Wanneroo (14.0 per 100) LGAs reported higher rates of fair or poor health compared to both the state and national averages, 13.7 and 14.6 per 100 respectively (Table 22). In addition to high levels of fair or poor self-report health, the Bassendean LGA also had a higher rate of psychological distress (11.8 per 100) compared to both the Western Australian and Australian rates of 10.5 and 10.8 respectively.

### *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.

Bassendean has a significantly higher rate of suicide compared to the state average of 13.7 per 100,000, with a rate of 22.9. However, ten LGAs had rates that were also higher than the national rate of 11.2 per 100,000 these include Bayswater (12.3), Claremont (12.1), Cottesloe (12.8), Kalamunda (13.6), Mosman Park (13.6), Mundaring (13.6), Perth (11.5) Stirling (14.1), Swan (12.9) and Vincent (11.2).

When compared to the road toll rates, almost all LGAs in the PNPHN catchment report rates which are at least half of the registered suicide rates. In fact, for some LGAs the rate of deaths due to road traffic incidents is so small that it was not recorded, though a suicide rate is (for example, the Cottesloe LGA had a suicide rate of 12.8 per 100,000 but no road toll rate recorded). Figure 33 through Figure 35 display selected health and mortality indicators geographically across the PNPHN.

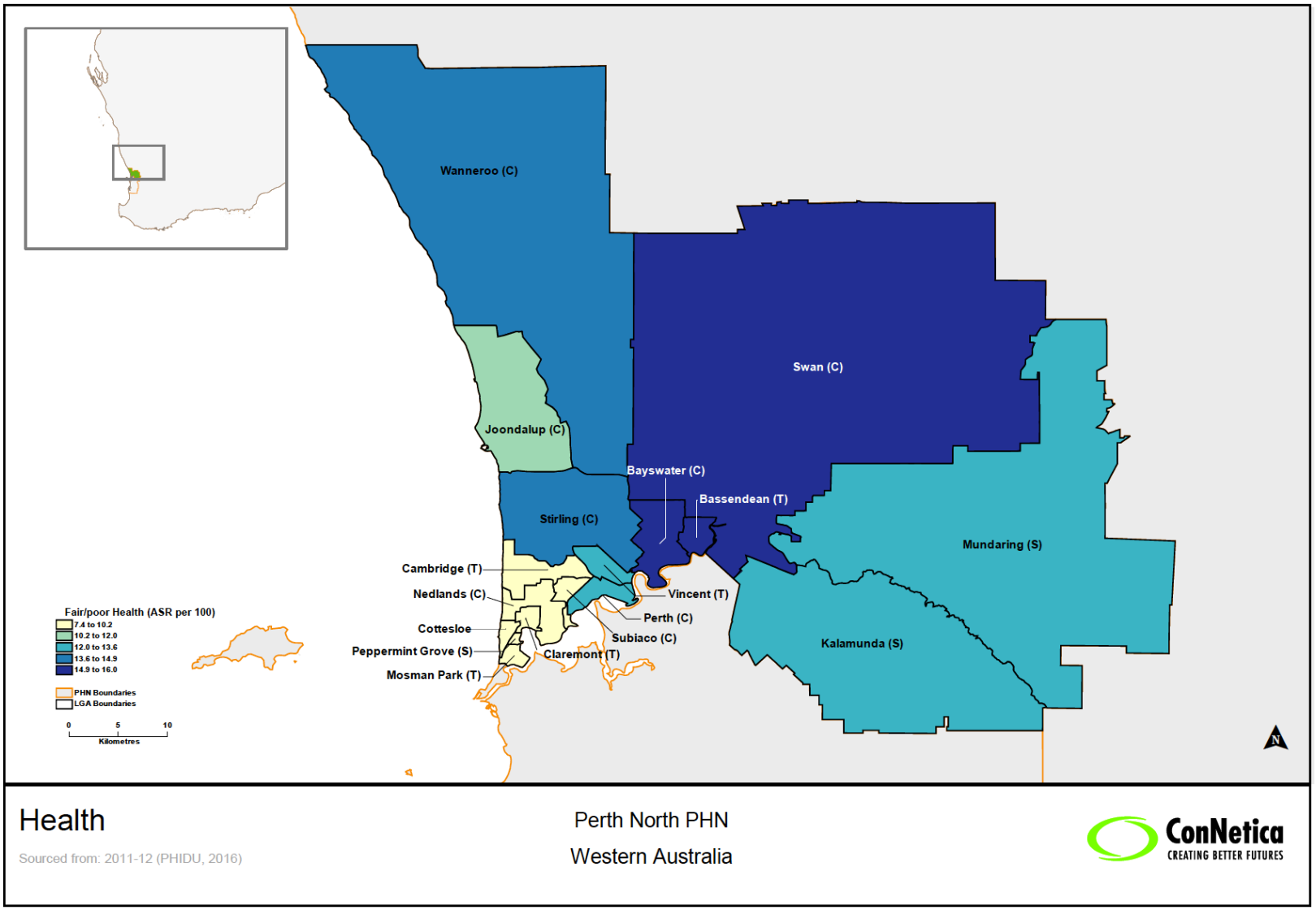



**FIGURE 33** SELF-RATED FAIR/POOR HEALTH BY LGA IN PNPHN

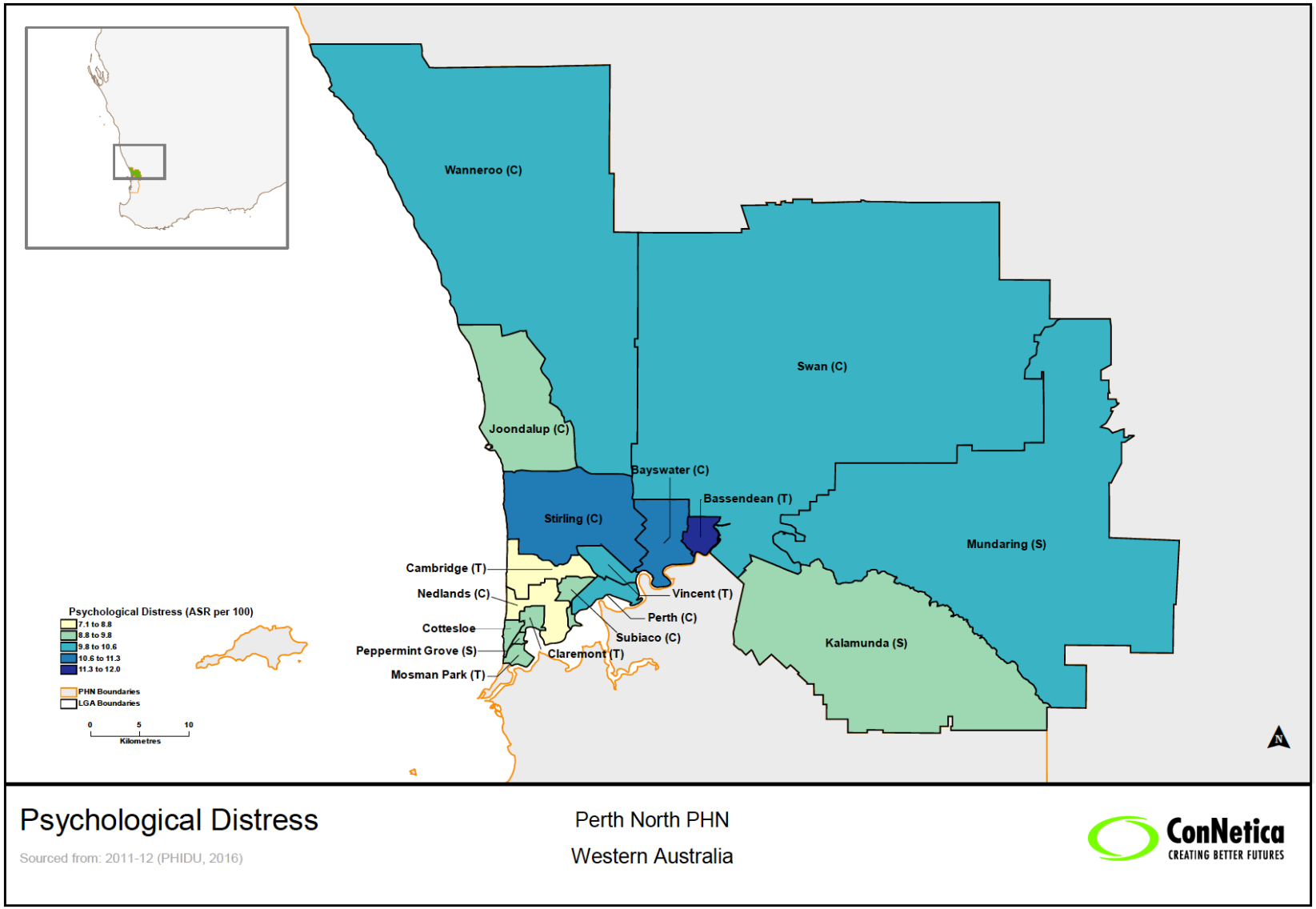
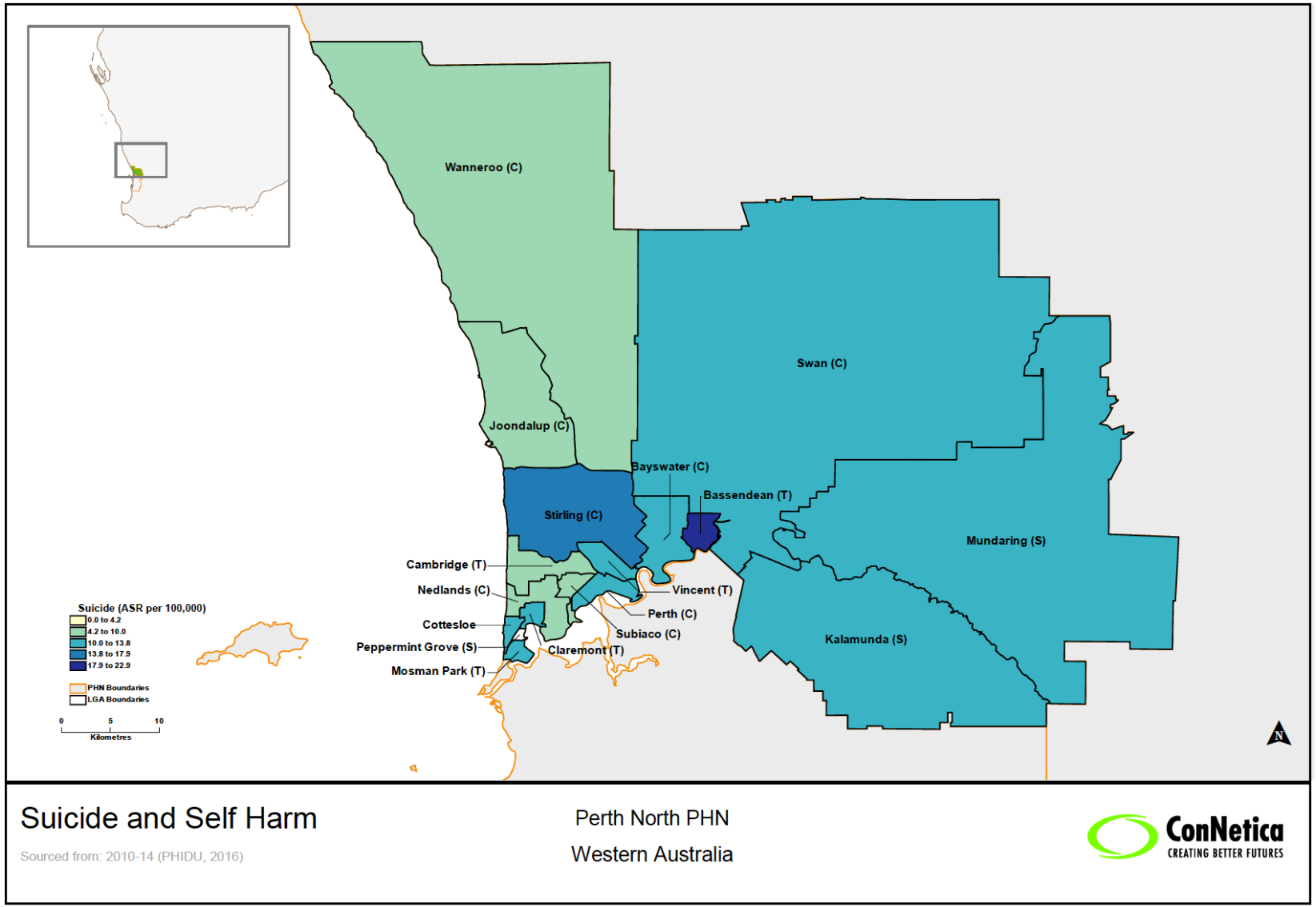



**FIGURE 34** PSYCHOLOGICAL DISTRESS BY LGA IN PNPHN




Suicide and Self Harm

Sourced from: 2010-14 (PHIDU, 2016)

Perth North PHN

Western Australia

ConNetica
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**FIGURE 35** SUICIDE BY LGA IN PNPHN

# 6. Mental Health Data - PNPHN

Publicly available population mental health and mental health service data is included in section 4.1 above, where for comparative purposes, a brief overview of Australian and Western Australian prevalence and service data is given. The Prevalence and Treatment Data presented below is specific to PNPHN.

## 6.1 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, in particular, 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. Where possible, in addition to the data below, the MHNIP services provided across PNPHN have been included in the Outpatient Services tables as part of the service mapping that follows.

Data extracted from the MHNIP data tables (Commonwealth of Australia, 2016) indicates that the number of patients serviced by MHNIP in the PNPHN catchment declined during the period from 2011/12 to 2014/15 (Figure 36).

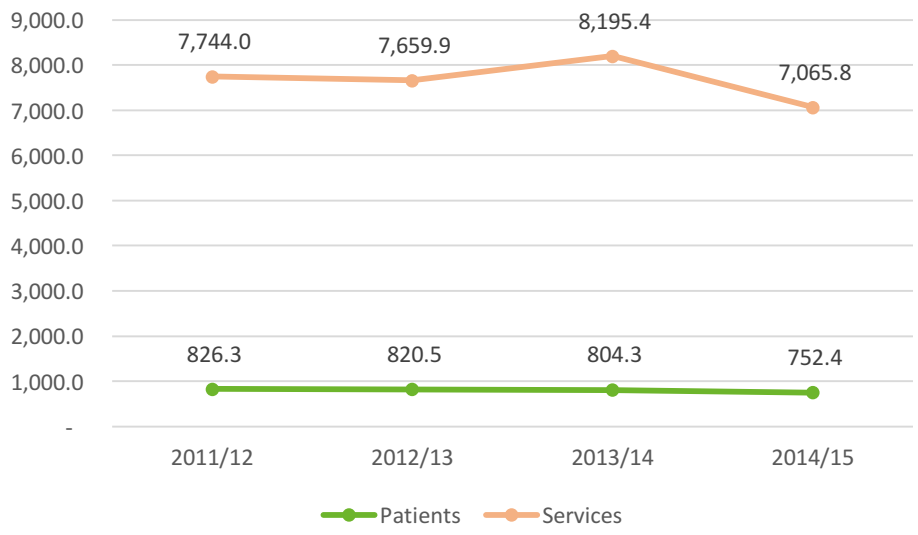



**FIGURE 36** MHNIP CLIENTS AND SERVICES, PNPHN CATCHMENT 2011/12 - 2014/15

## 6.2 Medical Benefits or Medicare Funded Services

Within the PNPHN catchment, the highest number of services were provided by Clinical Psychologists (106,719 or 29.3%), however GPs provided close to the same number of services during 2014-15 (105,428 or 29.0%) (Table 23).

**TABLE 23** PNPHN MBS UTILISATION BY PROVIDER TYPE 2014-15

| Service Type | Gender | Patients (n) | Services (n) | Benefits Paid | Fees Charged |
|---|---|---|---|---|---|
| Psychiatrists | Male | 7,145 | 31,206 | $4,108,502 | $6,396,199 |
| | Female | 7,505 | 49,838 | $6,587,240 | $9,694,483 |
| | **Total** | **14,650** | **81,044** | **$10,695,742** | **$16,090,682** |
| General Practitioners | Male | 23,820 | 39,762 | $3,256,797 | $3,530,345 |
| | Female | 39,134 | 65,666 | $5,395,567 | $5,946,392 |
| | **Total** | **62,953** | **105,428** | **$8,652,364** | **$9,476,737** |
| Clinical Psychologists | Male | 8,318 | 37,591 | $4,888,897 | $6,422,751 |
| | Female | 14,345 | 69,128 | $9,017,457 | $11,854,714 |
| | **Total** | **22,662** | **106,719** | **$13,906,354** | **$18,277,465** |
| Other Allied Health Providers | Male | 6,043 | 25,080 | $2,261,682 | $3,184,999 |
| | Female | 10,501 | 45,850 | $4,037,190 | $5,516,991 |
| | **Total** | **16,544** | **70,930** | **$6,298,872** | **$8,701,990** |
| **Total** | | **79,642** | **364,132** | **$39,555,059** | **$52,548,996** |

At the Statistical Area Level 3 (SA3), Wanneroo recorded the highest number of patients utilising MBS mental-health related services in 2014-15 (15,208 patients), however the highest number of services claimed during the same time period was in Swan (66,659 services) (Table 24). Overall, the lowest number of services were delivered in Joondalup (21,294 services), and the lowest number of patients in Kalamunda (3,741). General Practitioners provided the highest number of services in the Wanneroo (23,051) and Swan (17,368), Psychiatrists in Swan (17,562), and Clinical Psychologists in Swan (21,008).

**TABLE 24** PNPHN MBS UTILISATION BY SA3 AND PROVIDER TYPE 2014-15

| SA3 | Provider Type | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Psychiatrists | | General Practitioners | | Clinical Psychologists | | Other Allied Health Providers | | Total | |
| | Patients (n) | Services (n) | Patients (n) | Services (n) | Patients (n) | Services (n) | Patients (n) | Services (n) | Patients (n) | Services (n) |
| Bayswater - Bassendean | 1,221 | 6,713 | 4,691 | 7,551 | 1,713 | 8,221 | 1,247 | 5,341 | 8,871 | 27,826 |
| Perth City | 1,686 | 9,542 | 3,492 | 5,769 | 1,843 | 8,932 | 710 | 3,168 | 7,731 | 27,411 |
| Cottesloe - Claremont | 2,258 | 11,288 | 10,158 | 16,726 | 4,070 | 5,398 | 2,403 | 9,824 | 12,754 | 57,060 |
| Joondalup | 681 | 3,953 | 3,898 | 6,408 | 1,177 | 5,398 | 1,228 | 5,537 | 4,757 | 21,294 |
| Kalamunda | 569 | 3,135 | 3,002 | 4,814 | 980 | 4,614 | 1,012 | 4,434 | 3,741 | 16,997 |
| Mundaring | 2,189 | 13,762 | 5,897 | 10,338 | 3,044 | 15,422 | 1,301 | 15,422 | 8,255 | 45,255 |
| Swan | 2,972 | 17,562 | 10,326 | 17,368 | 4,474 | 21,008 | 2,511 | 10,721 | 13,642 | 66,659 |
| Stirling | 1,320 | 6,733 | 8,370 | 13,405 | 2,134 | 9,683 | 2,933 | 12,467 | 10,104 | 42,288 |
| Wanneroo | 1,757 | 8,365 | 13,120 | 23,051 | 3,228 | 14,221 | 3,200 | 13,705 | 15,208 | 59,342 |
| **PNPHN** | **14,650** | **81,044** | **62,953** | **105,428** | **22,662** | **106,719** | **16,544** | **70,930** | **79,642** | **364,132** |
| Australia | 362,079 | 2,302,742 | 1,672,646 | 2,917,909 | 409,538 | 1,870,276 | 71,665 | 311,946 | 2,069,004 | 9,785,527 |

## 6.3 Access to Allied Psychological Services (ATAPS)

Access to Allied Psychological Services (ATAPS) is provided under the Better Access to Services strategy to enable patients to access assistance for short-term intervention. As such it is targeted at support and treatment for people who have mild to moderate mental illness.

A total of 8980 clients accessed the ATAPS program in the PNPHN catchment over the period 2011/12 – 2014/15 (Figure 37). Whilst the number of clients has remained relatively stable over time, the number peaked in 2014/15 at 2443. Over the same time period there has been an overall increase in the number of session provided under the program, peaking in 2014/15 at 14,840 sessions.

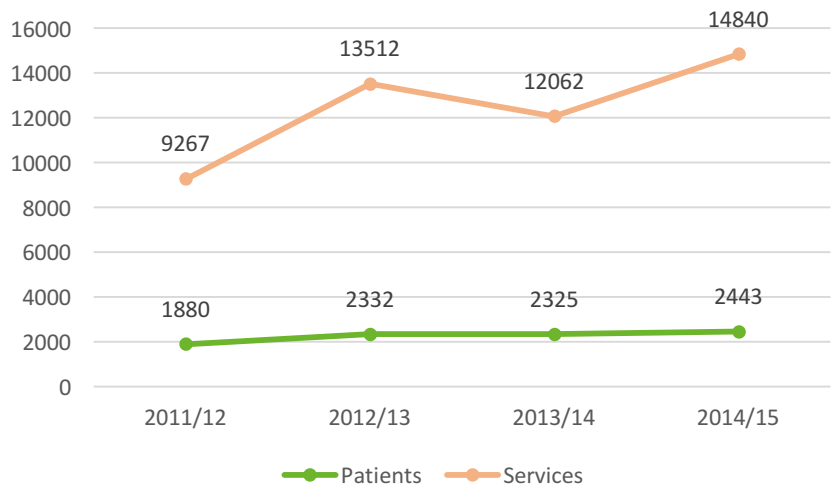



**FIGURE 37** ATAPS MDS TOTAL PATIENTS AND SESSIONS 2011/12 - 2014/15

The profile of ATAPS clients in 2014/15 demonstrates that the largest cohort accessing ATAPS services were those aged 25-34 years (18.7%), followed by people aged 35-44 years (15.3%) and 18-24 years (13.8%) (Table 25).

**TABLE 25** DISTRIBUTION OF ATAPS PATIENTS BY AGE GROUP

| Age Group (years) | Patients | |
|---|---|---|
| | Number | Percent |
| 0-4 | 14 | 0.6 |
| 5-11 | 323 | 13.2 |
| 12-17 | 221 | 9.0 |
| 18-24 | 337 | 13.8 |
| 25-34 | 457 | 18.7 |
| 35-44 | 373 | 15.3 |
| 45-54 | 351 | 14.4 |
| 55-64 | 230 | 9.4 |
| 65-74 | 109 | 4.5 |
| 75-84 | 25 | 1.0 |
| 85+ | 3 | 0.1 |
| **Total** | **2,443** | **100.0** |

Sourced from: Department of Health (2016b)

# 7. Mental Health Services - PNPHN

## 7.1 Introduction

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

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

There was a total of 237 BSIC (or service delivery teams) identified that deliver mental health care in PNPHN. These teams deliver 243 Main Types of Care across 37 different DESDE classifications (Figure 38). 79% of these are services for adults, 14% are for children and adolescents and 7% are for older adults. As per Figure 39 below, 66% of service teams are delivering Outpatient type services, 21% Residential and 6% Information and Guidance.

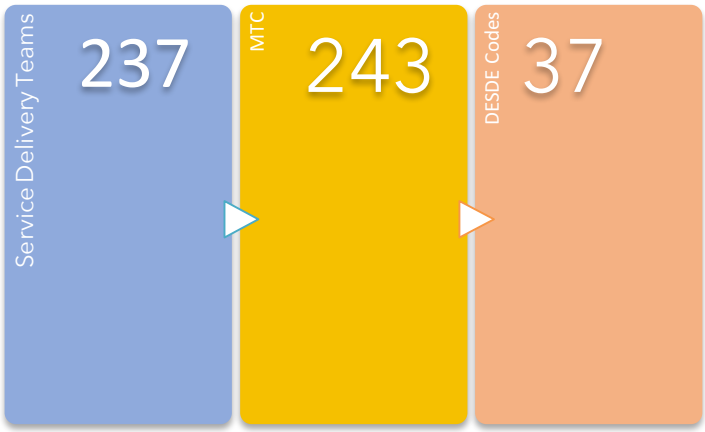



**FIGURE 38** SUMMARY OF SERVICES PROVIDING CARE FOR MENTAL HEALTH

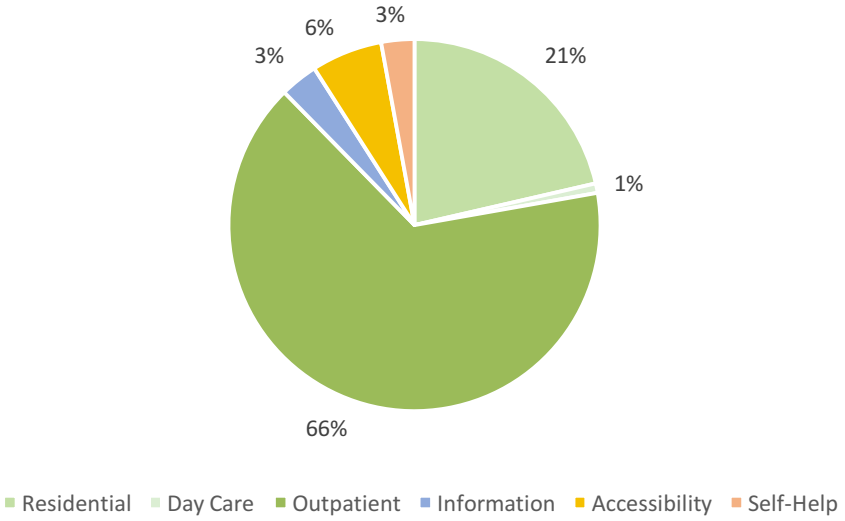



**FIGURE 39** MENTAL HEALTH MTC BY CATEGORY PNPHN

Interestingly within PNPHN, the majority of BSIC were provided by the NGO sector (62%) with the remainder provided by the Health services (38%), an indication of the importance of the community sector as key service providers for treatment and management of mental illness, with NGOs often funded by government (e.g. Mental Health Commission, Department of Health) to deliver services and programs (Table 26). It should be noted however that approximately 7% of the service delivery 'teams' identified are operating as one-person or 'unitary' teams and many of these are from the NGO sector, something which should be considered when interpreting this data.

**TABLE 26** NUMBER OF MAIN TYPES OF MENTAL HEALTH CARE IN PNPHN

| Population Group | Service Type | R | D | O | A | I | S | TOTAL |
|---|---|---|---|---|---|---|---|---|
| Child & Adolescent | Health | 1 | 0 | 11 | 0 | 1 | 0 | 13 |
| | NGO/Other | 0 | 0 | 19 | 1 | 1 | 0 | 21 |
| | **Sub-total** | **1** | **0** | **30** | **1** | **2** | **0** | **34** |
| Adult | Health | 20 | 0 | 43 | 1 | 2 | 0 | 66 |
| | NGO/Other | 23 | 1 | 79 | 6 | 11 | 7 | 127 |
| | **Sub-total** | **43** | **1** | **122** | **7** | **13** | **7** | **193** |
| Older Adult | Health | 6 | 0 | 7 | 0 | 0 | 0 | 13 |
| | NGO/Other | 2 | 1 | 0 | 0 | 0 | 0 | 3 |
| | **Sub-total** | **8** | **1** | **7** | **0** | **0** | **0** | **16** |
| Total | Health | 27 | 0 | 61 | 1 | 3 | 0 | 92 |
| | NGO | 25 | 2 | 98 | 7 | 12 | 7 | 151 |
| | **Total** | **52** | **2** | **159** | **8** | **15** | **7** | **243** |

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

## 7.2 Residential Care - Mental Health

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

#### *Children and Adolescents*

There were no identified Acute Inpatient services for children and adolescents across the PNPHN region.

#### *Adults*

There were 13 teams identified as providing Residential Acute Inpatient services for adults in the PNPHN catchment (Table 27). The number of Acute Inpatient beds per 100,000 adults is 30.96 and the number of BSIC per 100,000 adults is 2.11. This compares with 27.42 per 100,000 adults in PSPHN. The higher number of Acute beds per 100,000 population in PNPHN is partly attributable to the locality of the Graylands Hospital, which services patients from around the State, as it is the only dedicated public mental health hospital in WA. For example, there are six Acute beds at Graylands that are set aside for use by the Midwest catchment. Note there are mental health 'beds' provided via the Hospital in the Home program (HITH). Whilst these are provided for within the budgets for 'beds' under the DESDE methodology they are classified as an Outpatient service and are included in that section.

**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 27** ACUTE INPATIENT CARE FOR ADULTS IN PNPHN

| Provider | Name | Suburb | DESDE - 1 (beds) | Beds | Catchment |
|---|---|---|---|---|---|
| Sir Charles Gairdner Hospital | MH Unit Jurabi | Nedlands | AX[F0-F99] - R1 | 6 | Lower West |
| | MH Observation Area | Nedlands | AX[F0-F99] - R2 | 6 | Lower West |
| | MH Unit Karajini | Nedlands | AX[F0-F99] - R2c | 6 | Lower West |
| | MH Unit Tanmani | Nedlands | AX[F0-F99] - R2 | 18 | Lower West |
| Graylands Hospital | Acute Beds- Dorrington | Mt Claremont | AX[F0-F99] - R2 | 18 | Stirling |
| | Acute Beds - Yvonne Pinch | Mt Claremont | AX[F0-F99] - R2 | 6 | Stirling |
| | Acute Beds - Montgomery | Mt Claremont | AX[F0-F99] - R2 | 15 | Stirling |
| | Acute Beds - Smith | Mt Claremont | AX[F0-F99] - R2 | 15 | Stirling |
| Joondalup Health Campus | Inpatient Adult, Authorised, Secure, Acute | Joondalup | AX[F0-F99] - R2c | 10 | Joondalup |
| | Inpatient Adult, Authorised, Open, Acute | Joondalup | AX[F0-F99] - R2 | 37 | Joondalup |
| Royal Perth Hospital | RPH Ward 2K | Perth | AX[F0-F99] - R2 | 20 | N/S |

| | | | | | |
|---|---|---|---|---|---|
| King Edward Memorial Hospital | Mother Baby Unit (MBU) | Subiaco | AX[F53] - R2 | 8 | Statewide |
| Midland hospital | Mental Health Unit 4A and 4B | Midland | AX[F0-F99] - R2 (25)<br>AX[F0-F99] - R2c (15) | 40 | People living in the east metropolitan and wheat belt regions |

### *Older adults*

There were six teams identified as providing Residential Acute Inpatient services for older adults in the PNPHN catchment (Table 28). The number of BSIC per 100,000 older adults is 4.53. The number of Acute hospital Inpatient beds (R1 and R2) totals 56 (excluding the 32 R4 beds which are classified as sub-Acute). This equates to a rate of 42.28 Acute beds per 100,000 older adults. This is substantially higher than in other States around Australia. The number of beds per 100,000 older adults in Western Sydney for example is 6.95 and it is 33.88 in South Eastern Melbourne PHN.

**The number of Acute Inpatient beds per 100,000 older adults is 42.28 and the number of BSIC per 100,000 older adults is 4.53.**

**TABLE 28** ACUTE INPATIENT MENTAL HEALTH CARE FOR OLDER ADULTS IN PNPHN

| Provider | Name | Suburbs | DESDE - 1 (beds) | Beds | Catchment |
|---|---|---|---|---|---|
| Lower West (Selby) Older Adult Mental Health Service | Inpatient Unit - Psychiatric Intensive Care Unit | Shenton Park | OX[F0-F99] - R1c | 8 | Lower West Catchment |
| | Inpatient Units Authorised, Secure Acute/Sub-Acute. | Shenton Park | OX[F0-F19] - R2c (8)<br>OX[[F0-F99] - R4c (16) | 24 | Lower West Catchment |
| Osborne Park Older Adult MHS (Osborne Park Hospital Campus) | Acute Inpatient Unit | Stirling | OX[F0-F99] - R2c (8)<br>OX[F0-F99] - R4c (16) | 24 | Osborne Stirling Catchment |
| Midland hospital | Mental Health Unit 4C | Midland | OX[F0-F99] - R2c | 16 | N/S |
| St John of God | Ursula Frayne Unit - Authorised Assessment Unit | Mt Lawley | OX[F0-F99] - R2c | 10 | N/S |
| | Restorative Unit | Mt Lawley | OX[F0-F99] - R2c | 6 | N/S |

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

There were six teams identified as providing Sub-Acute hospital care (102 beds) and three teams providing Sub-Acute non-hospital Inpatient care (50 beds) across the PNPHN (Table 29). Graylands Hospital accounts for the majority of Sub-Acute beds statewide, within the PNPHN.

**The number of Sub-Acute Inpatient beds per 100,000 adults is 22.96 and the number of BSIC per 100,000 adults is 1.36.**

**TABLE 29** SUB-ACUTE INPATIENT MENTAL HEALTH CARE FOR ADULTS IN PNPHN

| Provider | Name | Suburbs | DESDE-1 (beds) | Beds | Catchment |
|---|---|---|---|---|---|
| Graylands Hospital | HECS Units | Mt Claremont | AX[F0-F99] - R4c | 14 | Stirling |
| | HECS Units | Mt Claremont | AX[F0-F99] - R4c (8)<br>AX[F0-F99] - R2c (2) | 10 | Stirling |
| | Murchison West | Mt Claremont | AX[F0-F99] - R4c | 21 | Stirling |
| | HECS Units - Murchison East | Mt Claremont | AX[F0-F99] - R4c | 22 | Stirling |
| State Forensic | Frankland Centre - Acute Inpatient High security unit at Graylands | Mt Claremont | AX[F0-F99] - R6 | 30 | N/S |
| | Hutchison - Open Forensic, Non-Acute Inpatient Service (Rehab Program), Male only: | Mt Claremont | AX[F0-F99] - R6j | 7 | N/S |
| St Bartholomew's House | Midland Accommodation Unit - Transitional Housing | Midland | AX[F0-F99] - R7 | 6 | Statewide |
| | Sunflower Villas CSRU | Stirling | AX[F0-F99] - R7 | 22 | Statewide |
| | Swan Villas CSRU | Middle Swan | AX[F0-F99] - R7 | 22 | Statewide |

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

### *Adults*

There were 19 teams identified as providing other Residential Inpatient services, including supported accommodation and hostel type accommodation for adults in the PNPHN catchment.

Richmond Wellbeing provides Residential options ranging from short term to long term accommodation. The Recovery Accommodation Service, Ngulla Mia and Community Options Services provide 24/7 support. These Residential Inpatient services provide individualised support, liaising with case managers and other agencies and supporting ongoing clinical support and the development of everyday life skills.

Psychiatric Hostels are also included in this classification. In total 477 beds were identified here not including hostels that did not provide bed numbers. The services are listed in Table 30.

**The number of other Residential beds per 100,000 adults is 72.05 and the number of MTC per 100,000 adults is 2.87.**

## Placement of Residential Care Services

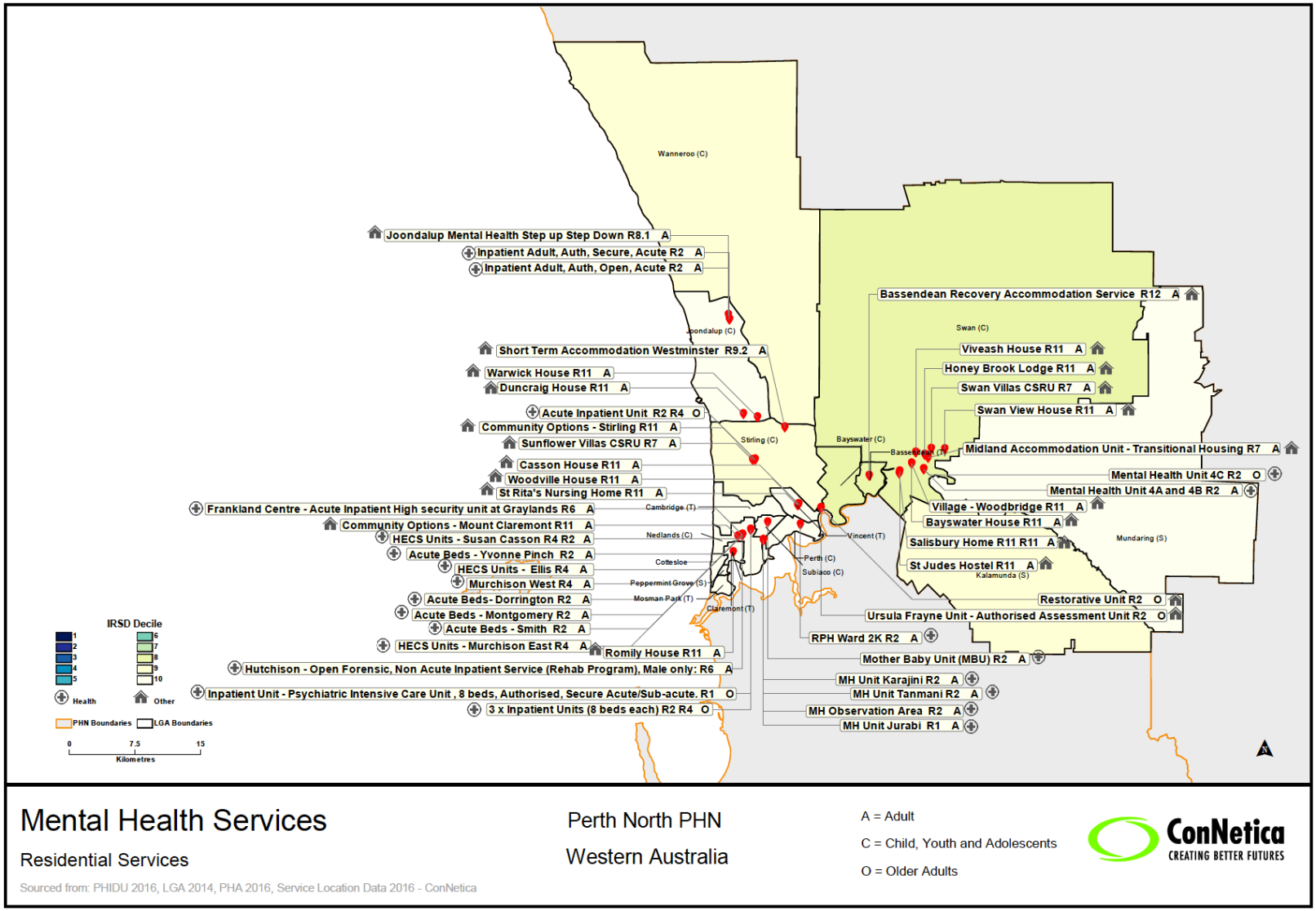
The locations of the Residential Care services across the PNPHN region are found in Figure 40.

Most services are located towards the southern end of the region.

**TABLE 30** OTHER INPATIENT CARE FOR ADULTS IN PNPHN

| Provider | Name | Suburbs | DESDE-1 (beds) | Beds | Catchment |
|---|---|---|---|---|---|
| NEAMI National | Joondalup Mental Health Step up Step Down | Joondalup | AX[F0-F99] - R8.1 (22) | 22 | Statewide |
| Richmond Wellbeing | Ngulla Mia | Belmont | AX[F0-F99][Z59] - R9.2 (32) | 32 | Statewide |
| | Short Term Accommodation Westminster | Westminster | AX[F0-F99] - R9.2 (6) | 6 | Westminster |
| Casson Homes | Casson House | North Perth | AX[F0-F99] - R11 (84) | 84 | North Perth |
| | St Rita's Nursing Home | North Perth | AX[F0-F99] - R11 (47) | 47 | North Perth |
| | Woodville House | North Perth | AX[F0-F99] - R11 (25) | 25 | Helena Valley |
| St Jude's Mental Health Services | St Judes Hostel | Guildford | AX[F0-F99] - R11 (59) | 59 | N/S |
| Romily House | Romily House | Claremont | AX[F0-F99] - R11 (70) | 70 | 6010 |
| Roshana | Honey Brook Lodge | MIDLAND | AX[F0-F99] - R11 (35) | 35 | N/S |
| Salisbury Home | Salisbury Home | Guildford | AXM[F0-F99] - R11 (28)<br>AXF[F0-F99] - R11 (6) | 32 | Perth |
| Southern Cross Care WA | Community Options - Stirling | Stirling | AX[F0-F99] - R11 (U/D) | - | N/S |
| | Community Options - Mount Claremont | Mount Claremont | AX[F0-F99] - R11 (U/D) | - | N/S |
| Vincentcare | Bayswater House | Woodbridge | AX[F0-F99] - R11 (6) | 6 | Statewide |
| | Duncraig House | Duncraig | AX[F0-F99] - R11 (4) | 4 | Statewide |

| | | | | | |
|---|---|---|---|---|---|
| | Viveash House | Viveash | AX[F0-F99] - R11 (4) | 4 | Statewide |
| | Swan View House | Swan View | AX[F0-F99] - R11 (4) | 4 | Statewide |
| | Village - Woodbridge | Woodbridge | AX[F0-F99] - R11 (28) | 28 | Statewide |
| | Warwick House | Warwick | AX[F0-F99] - R11 (4) | 4 | Statewide |
| Richmond Wellbeing | Bassendean Recovery Accommodation Service | Bassendean | AX[F0-F99] - R12 (12) | 12 | Bassendean |




## Mental Health Services

Residential Services

Perth North PHN

Western Australia

A = Adult

C = Child, Youth and Adolescents

O = Older Adults

ConNetica
CREATING BETTER FUTURES

Sourced from: PHIDU 2016, LGA 2014, PHA 2016, Service Location Data 2016 - ConNetica

**FIGURE 40** RESIDENTIAL CARE SERVICES IN PNPHN

## 7.3 Day Care - Mental Health

As expected, Day Care services are very limited, with only two identified, one for adults (Table 31) and one for older adults (Table 32). This is consistent with other states and reflects a general shift away from the more traditional day programs to working through Outpatient services to deliver a more integrated community based approach to social and cultural activities for people with mental illness.

For adults, the Lorikeet Centre, run by the Mental Illness Fellowship of WA, provides regular workshops and activities to support adults living with mental illness in developing work skills and engaging in social and recreational activities.

### Day Care Services

#### *Adults*

**TABLE 31** DAY CARE FOR ADULTS IN PNPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| Mental Illness Fellowship of WA | Lorikeet Centre | West Leederville | AX[F0-F99] - D9 | West Leederville |

#### *Older Adults*

For older adults, the only day program identified in PNPHN is the Outpatient Day Therapy Unit run by St John of God which supports older adults with mental illness and assists them in developing skills to engage socially and in the community.

**TABLE 32** DAY CARE FOR OLDER ADULTS IN PNPHN

| Provider | Name | Suburbs | DESDE - 1 (beds) | Catchment |
|---|---|---|---|---|
| St John of God | Outpatient Day Therapy Unit | Mt Lawley | OX[F0-F99] - D1.2 (6) | N/S |

Figure 41 displays the locations of the two Day Care services in the PNPHN.

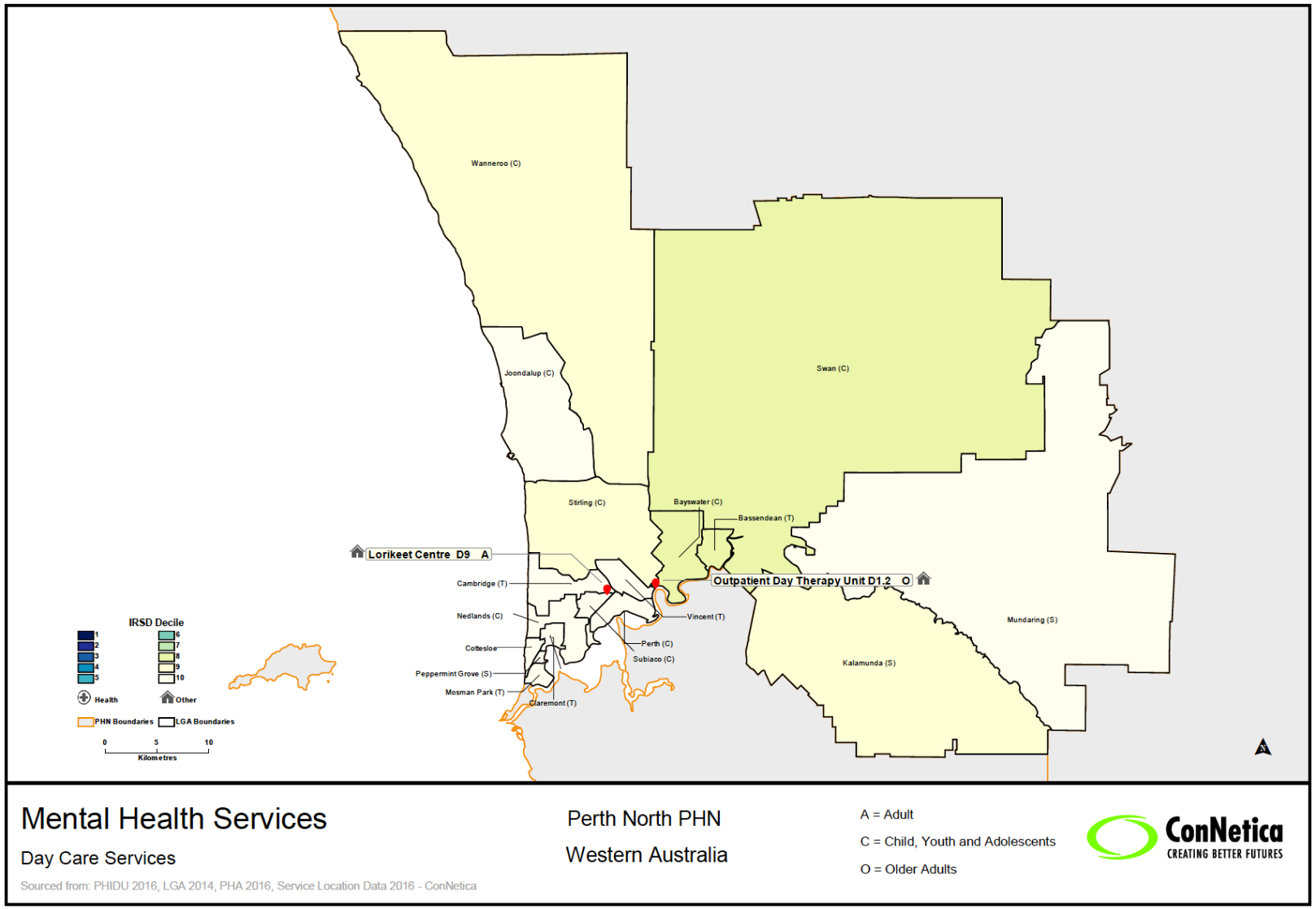



**FIGURE 41** DAY CARE SERVICES FOR PNPHN

## 7.4 Outpatient Care - Mental Health

Outpatient care is by far the largest category (65%) in the provision of mental health care in PNPHN (as it is across WA). Outpatient care is differentiated in four key ways:

- Between Acute and Non-Acute care
- Between Mobile and Non-Mobile care
- Between clinical (health) care and non-clinical (social) care and
- Between different levels of intensity; low, medium or high intensity.

### Acute Mobile Outpatient Care (O1 and O2 DESDE Codes)

#### *Children and Adolescents*

There were no services of this classification for children and adolescents identified in PNPHN.

#### *Adults*

There were 10 teams identified as providing Mobile Acute Outpatient services for adults in the PNPHN catchment. The number of BSIC per 100,000 adults is 1.51. It should be noted that two of these teams are providing the Hospital in the Home Service.

The mental health HITH program offers individuals the opportunity to receive hospital level treatment delivered in their home, where clinically appropriate. HITH is consistent with the approach of providing care in the community, closer to where individuals live. HITH is delivered by multidisciplinary teams including medical and nursing staff. People admitted into this program remain under the care of a treating hospital doctor. HITH is delivered in the community, but measured and funded via 'beds', and therefore falls under the hospital beds stream for funding purposes. For the purposes of this Atlas however it is classified here under Outpatient Services, but note its level of acuity with the O2.1 classification (Table 33). The Western Australian Mental Health, Alcohol and Other Drug Services Plan (2015-2025) indicates a move towards delivering approximately 20% of Inpatient mental health beds as HITH beds by the end of 2025.

**TABLE 33** ACUTE MOBILE OUTPATIENT CARE FOR ADULTS IN PNPHN

| Provider | Name | Suburb | DESDE - 1 | Area |
|---|---|---|---|---|
| Inner City Community MHS | ATT | Perth | AX[F0-F99] - O2.1 | City |
| | ICOT | Perth | AX[F0-F99] - O2.1 | City |
| Subiaco Adult CMHS | ATT | Subiaco | AX[F0-F99] - O2.1 | Lower West |
| Sir Charles Gairdner Hospital | Mental Health HiTH | Nedlands | AX[F0-F99] - O2.1d | Lower West |
| Graylands Hospital | Mental Health HiTH - Stirling | Mt Claremont | AX[F0-F99] - O2.1d | Stirling |
| Mirrabooka CMH | ATT | Mirrabooka | AX[F0-F99] - O2.1 | Stirling |
| Joondalup CMH | ATT | Joondalup | AX[F0-F99] - O2.1 | Joondalup |
| | Postnatal Depression Team | Joondalup | AXF[F30-F39] - O2.1 | Joondalup |
| Midland CMH | ATT | Midland | AX[F0-F99] - O2.1 | Swan |
| Midland CMH | ICOT/CLS - Swan | Midland | AX[F0-F99] - O2.1 | Swan |

### *Older Adults*

The Older Adults Hospital in The Home (HiTH), run by Lower West (Selby) Older Adult Mental Health Service, was the only team identified as providing Mobile Acute Outpatient services for older adults in the PNPHN catchment. The number of BSIC per 100,000 older adults is 0.76. As with the other regions of Western Australia, there is a scarcity of Mobile services providing Acute Outpatient care for older adults (Table 34).

**TABLE 34** ACUTE MOBILE OUTPATIENT CARE OLDER ADULTS IN PNPHN

| Provider | Name | Suburb | DESDE - 1 | Area |
|---|---|---|---|---|
| Lower West (Selby) Older Adult Mental Health Service | Older Adults Hospital in The Home (HiTH) | Shenton Park | OX[F0-F99] - O2.1d | Lower West Catchment |

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

### *Children and Adolescents*

There were two teams, the Pediatric Consultation Liaison Program and the Acute Community Intervention Team (ACIT), identified as providing Acute Non-Mobile Outpatient services for children and adolescents in the PNPHN catchment. Both teams are part of Child and Adolescent Mental Health Services WA (CAMHS). The number of BSIC per 100,000 children and adolescents is 0.75 (See Table 35).

**TABLE 35** ACUTE NON-MOBILE OUTPATIENT CARE CHILDREN AND ADOLESCENTS IN PNPHN

| Provider | Name | Suburb | DESDE - 1 | Area |
|---|---|---|---|---|
| Child and Adolescent Health Service (CAHS) Child and Adolescent MH Services WA (CAMHS) | Pediatric Consultation Liaison Program | Subiaco | CX[F0-F99] - O3.1l | State-wide |
| | Acute Community Intervention Team (ACIT) | Subiaco | CX[F0-F99] - O4.1 | State-wide |

### *Adults*

There were seven teams identified as providing Acute Non-Mobile Outpatient services for adults in the PNPHN catchment. Most of these are provided by public hospitals, with the exception of the Arbor service run by Anglicare, and the triage team at Yorgum (Table 36).

**The number of BSIC per 100,000 adults is 1.057**

**TABLE 36** ACUTE NON-MOBILE OUTPATIENT CARE ADULTS

| Provider | Name | Suburb | DESDE - 1 | Area |
|---|---|---|---|---|
| Sir Charles Gairdner Hospital | EDCLS | Nedlands | GX[ICD][F0-F99] - O3.1lh | Lower West |
| | Inpatient - consultation liaison | Nedlands | GX[ICD][F0-F99] - O3.1lh | Lower West |
| Osborne Park CMH | Perinatal/postnatal MH | Stirling | AXF[F0-F99] - O4.1l | Stirling |
| Royal Perth Hospital | RPH Consultation Liaison | Perth | AX[F0-F99] - 04.1l | U/S |
| King Edward Memorial Hospital | Department of Psychological Medicine | Subiaco | AX[ICD][F0-F99] - O4.1l | U/S |

| | | | | |
|---|---|---|---|---|
| Anglicare WA | Arbor | East Perth | GX[E95][F0-F99] - O4.2 | Metropolitan Perth |
| Yorgum | Triage Team | East Perth | AX[F0-F99] - O4.1 | U/S |

### *Older Adults*

There was one team identified as providing Acute Non-Mobile Outpatient services for adults in the PNPHN catchment (Table 37).

**The number of BSIC per 100,000 older adults is 0.76.**

**TABLE 37** ACUTE NON-MOBILE OUTPATIENT CARE OLDER ADULTS IN PNPHN

| Provider | Name | Suburb | DESDE - 1 | Area |
|---|---|---|---|---|
| Older Adult Psychiatric Consultation Liaison Team | Older Adult Psychiatric Consultation Liaison Team | Nedlands | OX[F0-F99] - O3.1I | Sir Charles Gairdner Hospital |

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

### *Children and Adolescents*

The majority of the 10 Non-Acute Mobile Outpatient services are provided by NGOs (Table 38). For example, MercyCare's Family Mental Health Support Service assists children, young people and their families with individualised care when they are experiencing issues of sadness or stress. This service is Carer specific, highlighted by the e310 code in the table. The service is provided over a short, medium and long term as needs require. Helping Minds also provides a Carers program for young Carers from its base in Perth.

Outcare's Children's Mental Health Court offers high intensity assistance for those facing mental health issues, offering therapeutic intervention, diversionary programs and brokerage funding to assist with recovery. It is pertinent to note that only one of these services extends as north as Joondalup and none beyond this into the northern corridor of Perth.

**The number of Non-Acute, Mobile Outpatient BSIC per 100,000 children and adolescents is 3.77.**

**TABLE 38** NON-ACUTE MOBILE OUTPATIENT CARE FOR CHILDREN AND ADOLESCENTS IN PNPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| YouthLink | YouthLink | Northbridge | CY[F0-F99] - O5.1m | Perth North Metro |
| Youth Axis | Youth Axis | Wembley | TA[F53][F98.9] - O5.1e | Perth Metro |
| Black Swan Health | hYEPP Joondalup | Joondalup | CY[F0-F99] - O5.1.1 | North metro |
| | hYEPP Osborne Park | Osborne Park | CY[F0-F99] - O5.1.1 | North Metro |
| State Forensic | Children's Court Program - Links Mental Health Intervention Team | Perth | TA[F0-F99] - O5.1 | N/S |
| Perth Inner City Youth Service | Pillar | Leederville | CA[F0-F99] - O6.2 | Statewide referrals from: Youth link Youth Reach South CAMS Headspace Bentley Adolescent Unit Hospital Adolescent wards. |
| Outcare | Children's Mental Health Court (LINKS) | East Perth | CA[F0-F99] - O6.2j | Metropolitan |
| MercyCare | Family Mental Health Support Service | Mirrabooka | CX[e310][F0-F99] - O6.2 | N/S |
| Helping Minds | FMHSS - Swan Family Mental Health Support Service | Midland | CX[F0-F99] - O6.2 | Swan |
| | Young Carers Support Perth Metro | Perth | CA[e310][F00-F99] - O6.2 | Perth Metro |

### *Adults*

There were 47 service delivery teams (BSIC) providing Non-Acute Mobile Outpatient services for adults in PNPHN. Of these, 23 are provided by clinical teams and the balance by a mix of government and non-government service providers as shown in Table 39 below.

Among the services provided by the non-government sector, Mental Illness Fellowship Western Australia's (MIFWA) Individualised Support and PIR services provide individualised support and support packages to those involved in the NDIS, PIR or Mi Way. PIR is also provided in PNPHN by Anglicare, Women's Health and Family Services, Cyrenian House and Uniting Care West. All of the Partners in Recovery (PIR) programs provide recovery oriented, person focused support to vulnerable individuals with complex needs and severe and persistent mental illness, assisting them to maximise their capabilities through social and environmental opportunities.

Uniting Care West offers the Recovery Options Services in several locations in PNPHN. This Personal Helpers and Mentors Service (PHaMs) provides support to people with severe and persistent mental illness, assisting people to manage daily activities and improving access to relevant support services.

Ruah is an active service in PNPHN and has six teams falling within this category, ranging from in reach programs to an individualised independent living strategy team through to its Wellness Recovery Action Plan initiative, which is a peer led program developing skills to improve mental health. Its Street to Home Program is located at the Ruah Centre in West Perth. Eight specialist homelessness services and a mental health Mobile Clinical Outreach Team (MCOT) work in partnership to assist people sleeping rough to access stable housing, and address issues surrounding their homelessness to achieve positive, long term outcomes, and an improved quality of life (Ruah, 2016).

Derbal Yerrigan Health Service delivers Non-Acute, Mobile Outpatient options for Aboriginal people of all ages in PNPHN from their Mirrabooka and Midland locations; these provide Outpatient counselling for individuals, families and groups for grief trauma and a range of other issues. In addition to this the Specialist Aboriginal Mental Health Service (SAMHS) team is providing its services (Statewide) from its base at Mt Claremont.

The 360 Health and Community Mobile GP clinic has also been included in this category as it provides its services to a transient population of all ages (GX), many of whom have both mental health and AOD issues. The 360 Health and Community Mental Health Outreach Worker is also working across both mental health and AOD.

The other specialist service in this category is the Black Swan Health Lighthouse Suicide Prevention Program. This program is for people who are at low to mild risk of suicide and self-harm, or for those who have been affected by suicide. It is not a crisis service, but rather works with GPs to assist them in managing and supporting any patients that fit this criteria.

**The number of BSIC per 100,000 adults is 7.10.**

**TABLE 39** NON-ACUTE MOBILE OUTPATIENT CARE FOR ADULTS IN PNPHN

| Provider | Name | Suburbs | DESDE-1 | Catchment |
|---|---|---|---|---|
| Osborne Park CMH | ICOT and Individualised community living strategy | Stirling | AX[F0-F99] - O5.1.1 | Stirling |
| Joondalup CMH | ICOT and Individualised community living strategy | Joondalup | AX[F0-F99] - O5.1.1 | Joondalup |
| SAMHS, Graylands Health Campus Brockway Road, Mt Claremont | The Specialist Aboriginal Mental Health Service (SAMHS) Metro | Mt Claremont | AXIN[F0-F99] - O5.1.1 | Statewide |
| Anglicare WA | PHaMs/PIR | Wanneroo | AX[F0-F99] - O5.1 | Wanneroo |
| Ruah | Intensive MH Support Program - Street to Home Program | West Perth | AX[F0-F99][F10-F19] - O5.1 | Metropolitan |
| Women's Health and Family Services | Partners in Recovery Program | Northbridge | AX[F0-F99] - O5.1 | Northern Perth Metropolitan |
| State Forensic | Community Forensic Mental Health Service (CFMHS): | Mt Claremont | AX[F0-F99] - O5.1 | N/S |
| Uniting Care West | Partners in Recovery (PIR) | Merriwa | AX[F0-F99] - O5.2 | Northern Perth Metropolitan |
| Cyrenian House | Cyrenian House - Partners in Recovery Program | Perth | AX[F0-F99] - O5.2 | City and North of the river |
| Perth Home Care Services (AVIVO) | Avivo North Metropolitan | Osborne Park | AX[e310][F0-F99] - O5.2 | North Metro |
| Inner City Community MHS | CTT Murray Street | Perth | AX[F0-F99] - O6.1 | City |
| | CTT Pier | Perth | AX[F0-F99] - O6.1 | City |
| | MCOT | Perth | AX[F0-F99] - O6.1 | City |
| Subiaco Adult CMHS | CTT Subiaco | Subiaco | AX[F0-F99] - O6.1 | Lower West |
| Neurophysiology Unit | Sir Charles Gairdner Mental Health Unit | Mt Claremont | AX[F0-F99] - O6.1h | N/S |

| | | | | |
|---|---|---|---|---|
| Mirrabooka CMH | CCT - East Team | Mirrabooka | AX[F0-F99] - O6.1 | Stirling |
| | CCT - West Team | Mirrabooka | AX[F0-F99] - O6.1 | Stirling |
| Osborne Park CMH | CCT - Duke Team | Stirling | AX[F0-F99] - O6.1 | Stirling |
| | CCT - Royal Team | Stirling | AX[F0-F99] - O6.1 | Stirling |
| Joondalup CMH | CTT East | Joondalup | AX[F0-F99] - O6.1 | Joondalup |
| | CTT West | Joondalup | AX[F0-F99] - O6.1 | Joondalup |
| Clarkson CMH | CTT North | Clarkson | AX[F0-F99] - O6.1 | Joondalup |
| Midland CMH | CTT Forest | Midland | AX[F0-F99] - O6.1 | Swan |
| | CTT River | Midland | AX[F0-F99] - O6.1 | Swan |
| 360 Health and Community | Street Doctor | Guildford | GX[F0-F99][F10-F19] - O6.1 | Perth Metro |
| Rise Network | Housing Support Team | Midland | AX[F0-F99]-O6.2 | N/S |
| | MH Team | Midland | AX[F0-F99]-O6.2 | N/S |
| | NDIS/ICLS Team | Midland | AX[F0-F99]-O6.2 | N/S |
| Derbarl Yerrigan | DYHS Mirrabooka -Counselling | Mirrabooka | GXIN[F0-F99] - O6.2 | Check if have catchment boundaries |
| | DHS Midland - Counselling | Midland | GXIN[F0-F99] - O6.2 | Check if have catchment boundaries |
| Mental Illness fellowship of WA | Individualised support NDIS | Midland | AX[F0-F99] - O6.2 | N/S |
| | PIR | Mt Lawley | AX[F0-F99] - O6.2 | Mount Lawley |
| Ruah | RUAH Inreach program – Lower North Metro | West Perth | AX[F0-F99] - O6.2 | Lower North Metro |

| | | | | |
|---|---|---|---|---|
| | RUAH Inreach program – Inner City | West Perth | AX[F0-F99] - O6.2 | Inner City |
| | Intensive personalised housing support program | West Perth | AX[F0-F99] - O6.2 | Belier, Falcon, Hamilton Hill, Wellard, Yangup |
| | Individualised Community Living Strategy | West Perth | AX[F0-F99] - O6.2 | Metro area, Geraldton, Esperance and Kalgoorlie |
| Uniting Care West | Recovery Options - PHaMs (Joondalup) | Merriwa | AX[F0-F99] - O6.2 | Joondalup |
| | Recovery Options - PhaMs (Clarkson) | Merriwa | AX[F0-F99] - O6.2 | Clarkson, |
| | Recovery Options - PhaMs Scarborough) | Perth | AX[F0-F99] - O6.2 | Scarborough |
| Outcare | Adult Mental Health Court (START) | Perth | AX[F0-F99] - O6.2J | Metropolitan |
| JOC Wellness and Recovery | Individual Support Services | Joondalup | AX[F0-F99] - O6.2 | Joondalup/Clarkson |
| | Individual Support Services | Shenton Park | AX[F0-F99] - O6.2 | Shenton Park, provides outreach from Fremantle to Mirrabooka |
| Black Swan Health | Lighthouse Suicide Prevention Program | Osborne Park | AX[T14.91][F0-F99] - O6.2ul | North metro |
| | Partners in Recovery - North Metro | Osborne Park | AX[F0-F99] - O6.2 | Perth North - old medicare local region |
| Osborne Park CMH | Community Support Residential Units (CSRU) liaison OT position CMHT | Stirling | AX[F0-F99] - O7.1u | Stirling |
| 360 Health and Community | Mental Health Outreach Worker | Guildford | GX[F0-F99][[F10-F19] - O7.1 | N/S |

| | | | | |
|---|---|---|---|---|
| Ruah | Wellness Recovery Action Plan (WRAP) | West Perth | AX[F0-F99] - O7.2g | Perth metropolitan area. Also can deliver in Geraldton |

### *Older Adults*

The older adult Non-Acute Mobile care services are provided by government health services in PNPHN, as shown in Table 40 below.

**The number of BSIC per 100,000 older adults is 3.78.**

**TABLE 40** NON-ACUTE MOBILE CARE FOR OLDER ADULTS IN PNPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| Lower West (Selby) Older Adult Mental Health Service | OA Community Team | Shenton Park | OX[F0-F99] - O6.1 | Lower West Catchment |
| Joondalup Older Adult MHS | OA Community Team | Joondalup | OX[F0-F99] - O6.1 | Joondalup/Wanneroo Catchment |
| Osborne Park Older Adult MHS (Osborne Park Hospital Campus) | Community Team | Stirling | OX[F0-F99] - O6.1<br>OX[F0-F99] - O3.1I | Osborne Stirling catchments |
| City Older Adult MHS | Community Team | Mt Lawley | OX[F0-F99] - O6.1 | N/S |
| Midland Community Mental Health Service | Community Team | Midland | OX[F0-F99] - O6.1 | N/S |

## Placement of Non-Acute Mobile Outpatient Care in PNPHN

Figure 42 displays geographically the Non-Acute Mobile Outpatient services within the PNPHN area.

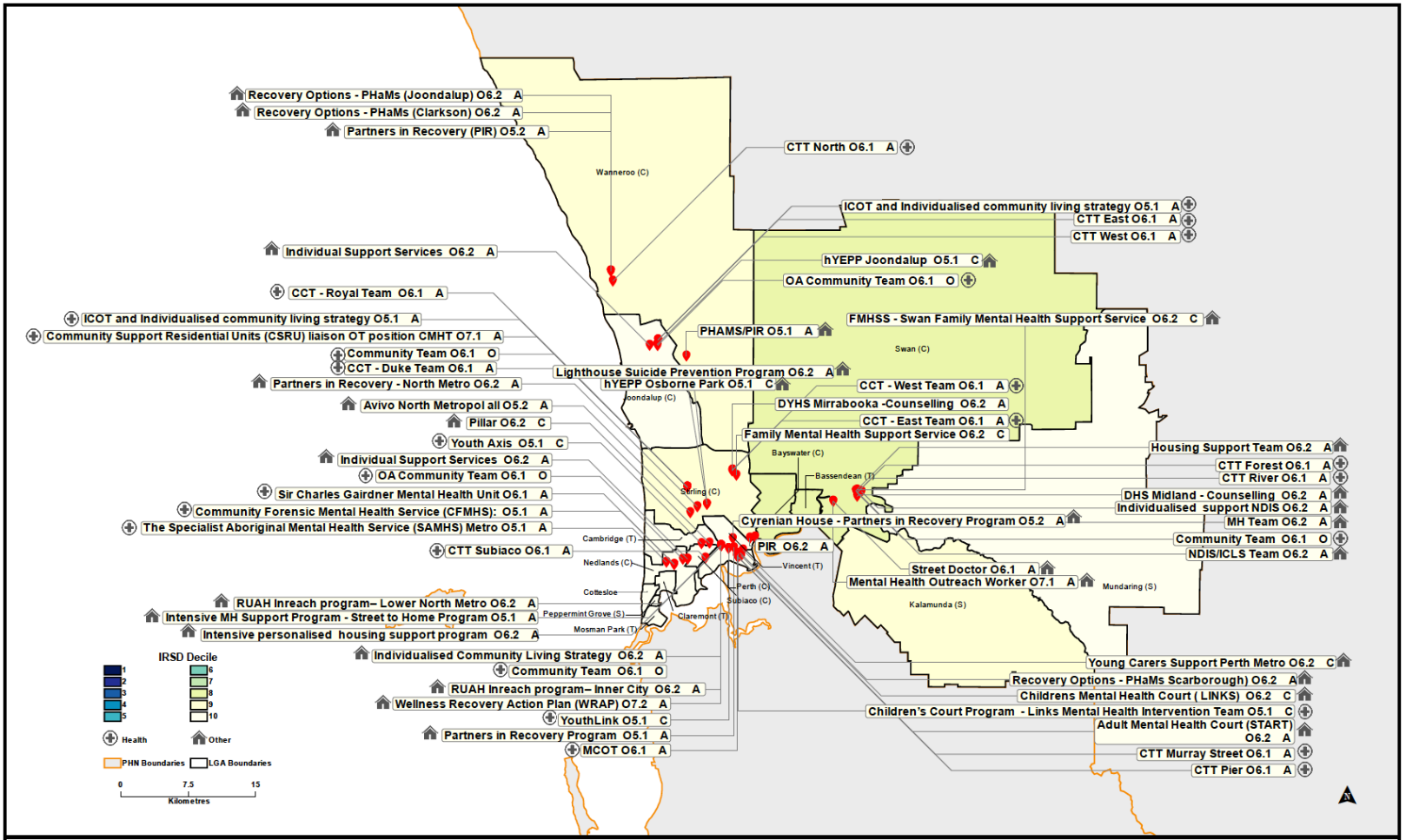



**FIGURE 42** NON-ACUTE MOBILE OUTPATIENT SERVICES IN PNPHN

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

### *Children and Adolescents*

There were 18 Non-Acute Non-Mobile child and adolescent services including 10 clinical teams.

These include a gender diversity program run by CAMHS based in Subiaco (Table 41) and the Reaching Out Hope eating disorders programs run by Women's Health and Family Services in Subiaco.

There is a breadth of NGO services within this category. These include Anglicare's Cypress which is a Carer specific support and counselling service provided by Anglicare for children bereaved by the event of suicide. Wanslea Family Services also runs the Care specific program Children of Parents with A Mental Illness (COPMI) program from Clarkson.

MIFWA's Early Intervention Recovery Program works with a person and their individual situation following the trauma of a psychotic episode. The program has a strong focus on recovery, as defined by the individual.

CentreCare has five dual diagnosis the Community Action Plan – Suicide Prevention program (CAPS) teams in the PNPHN catchment, providing counselling and support to adolescents and parents for a broad range of issues surrounding mental health such as self-harm, AOD and depression.

**The number of BSIC per 100,000 children and adolescents is 6.77.**

**TABLE 41** NON-ACUTE NON-MOBILE OUTPATIENT CARE FOR CHILDREN AND ADOLESCENTS IN PNPHN

| Provider | Name | Suburbs | DESDE-1 | Catchment |
|---|---|---|---|---|
| Youth Focus | Youth Early Psychosis - Midland | Midland | TA[F0-F99] - O9.1 | No boundary |
| Child and Adolescent Health Service (CAHS) Child and Adolescent MH Services WA (CAMHS) | Clarkson CAMHS | Clarkson | CX[F0-F99] - O9.1 | Locality - can provide post codes as required |
| | Hillarys CAMHS | Hillarys | CX[F0-F99] - O9.1 | Locality - can provide post codes as required |
| | Shenton CAMHS | Shenton Park | CX[F0-F99] - O9.1 | Locality - can provide post codes as required |
| | Swan CAMHS | Midland | CX[F0-F99] - O9.1 | Locality - can provide post codes as required |
| | Warwick CAMHS | Warwick | CX[F0-F99] - O9.1 | Locality - can provide post codes as required |
| | Gender Diversity Service | Subiaco | CX[F64.2] - O9.1h | Statewide |
| Black Swan Health | headspace Joondalup | Joondalup | CY[F0-F99] - O9.1du | Located in Joondalup but no geographical boundaries |
| | headspace Osborne Park | Osborne Park | CY[F0-F99] - O9.1du | Located in Osborne Park but no geographical boundaries |
| Anglicare WA | Cypress | Joondalup | CX[F0-F99][E95] - O9.2u | Perth north metro |
| CentreCare | CAPS (Counselling for adolescents and parents) | Joondalup | TA[F10-F19] - O9.2 | N/S |
| | CAPS (Counselling for adolescents and parents) | Midland | TA[F10-F19] - O9.2 | N/S |

| | | | | |
|---|---|---|---|---|
| | CAPS (Counselling for adolescents and parents) | Mirrabooka | TA[F10-F19] - O9.2 | N/S |
| Youth Focus | Headspace Midland (lead agency) | Midland | CY[F0-F99] - O9.2 | N/S |
| | Joondalup Youth Focus | Joondalup | CX[F0-F99] - O9.1 | N/S |
| Mental Illness Fellowship WA | Early Intervention Recovery Program | Midland | TA[F0-F99] - O9.2d | Midland |
| Women's Health and Family Services | Reaching Out Hope Program | Subiaco | CX[F50] - O10.2g | PMH EDP clients |
| Wanslea Family Services Inc | COPMI | Clarkson | CX[E310][F0-F99] - O10.2g | Perth North and South |

### *Adults*

Table 42 displays the 55 Non-Acute Non-Mobile Outpatient services for adults in PNPHN.

Mental Illness Fellowship of WA runs several peer led services for individuals, parents, carers and families who are experiencing mental health, the programs offer mentoring and support from those with lived experience. The Meerkat Mob and Parent Peer Support Program focus on those experiencing mental illness themselves whilst the Family Support Program and Well Ways MI Recovery services are there to support those around or caring for people with mental health issues.

Derbarl Yerrigan provides a counselling and support service for Aboriginal people, families or groups who are experiencing grief, trauma or other issues. The mental health nurse supports general practitioners by preparing mental health care plans for clients as well as care plans and crisis care. The Work Force Support Unit provides training for Aboriginal people in relation to social and emotional wellbeing, including the area of suicide. The social and emotional wellbeing workforce support unit aims to create and sustain a culturally appropriate and effective social and emotional wellbeing workforce based on the fundamental principles of community control and self-determination.

Ruah's Recreation program promotes mental wellbeing through sport and fitness, art and leisure, and social connection. Its Rec Urban Network is a social community linking program - activities include walking groups, meditation, social activities, lunch and PHAM worker visits.

The Beacon – Recovery Living Program is a counselling, case work and support service to transition clients onto long term sustainable accommodation once they have stabilized through transitional units at The Beacon.

Uniting Care West supports people who are socially isolated to make community connections through their Community Connections program in Ballajurra and Darch. They also assist Aboriginal Carers and Families where members are experiencing and affected by emotional and mental distress through the Recovery Options – Aboriginal Family Respite program.

Women's Health and Family Services offers a range of dedicated services for women in a variety of areas such as those who are at risk of mental health problems, have eating disorders or have perinatal or post-natal mental health issues.

**The number of BSIC per 100,000 adults is 8.31.**

## Placement of Non-Acute Non-Mobile Outpatient Mental Health Care across PNPHN.

Figure 43 displays all Non-Mobile Outpatient services geographically across the PNPHN.

**TABLE 42** NON-ACUTE NON-MOBILE OUTPATIENT CARE FOR ADULTS IN PNPHN

| Provider | Name | Suburbs | DESDE-1 | Catchment |
|---|---|---|---|---|
| Lifeline WA | Suicide Bereavement Support Counselling | Northbridge | GX[e310][T41.9][F0-F99] - O8.2s | Metropolitan Perth for face to face counselling, Regional and remote WA for telephone and Skype for counselling |
| | Suicide Bereavement Support Counselling | Hillarys | GX[e310][T41.9][F0-F99] - O8.2s | N/S |
| Helping Minds | Carer Advocate | Perth | AX[e310][F00-F99] - O8.2 | Statewide |
| Tender Care (Home Health) | Tender Care (Home Health) | Joondalup | AX[F0-F99] - O8.2 | North Metro and 2 regional areas - Wheatbelt and South West. |
| Osborne Park CMH | DBT | Stirling | AXF[F0-F99] - O9.1 | Stirling |
| Midland CMH | EIT | Midland | AX[F0-F99] - O9.1 | Swan |
| Mental Health Nurse Incentive Program | Abbotsford Clinic | West Leederville | AX[F0-F99] - O9.1 | N/S |
| | Trigg Health | Trigg | AX[F0-F99] - O9.1 | N/S |
| | Balanced HealthClinic | Joondalup | AX[F0-F99] - O9.1 | N/S |
| | University of WA Medical Centre | Nedlands | AX[F0-F99] - O9.1 | N/S |
| | Hay Street Medical Centre | Subiaco | AX[F0-F99] - O9.1 | N/S |
| | Fresh Start Recovery Program | Subiaco | AX[F0-F99] - O9.1 | N/S |
| | MH Nurse | Wembley | AX[F0-F99] - O9.1 | N/S |
| | MH Nurse | Nedlands | AX[F0-F99] - O9.1 | N/S |

| | | | | |
|---|---|---|---|---|
| State Forensic | Start Court | Perth | AX[F0-F99] - O9.1j | N/S |
| | Prison outreach program | Mt Claremont | AX[F0-F99] - O9.1j | N/S |
| 360 Health and Community | ALIVE Program | Guildford | AX[F0-F99] - O9.1 | North and East Metropolitan |
| | Partners in Recovery | Guildford | AX[F0-F99] - O9.2du | N/S |
| Derbarl Yerrigan | DYHS East Perth - Counselling and social and emotional wellbeing | East Perth | GXIN[F0-F99] - O9.2 | Check if have catchment boundaries |
| Mental Illness fellowship of WA | Family Support Program | Midland | GX[e310][F0-F99] - O9.2 | North Metropolitan |
| | The Meerkat Mob | Midland | GX[F0-F99] - O9.2g | No boundaries |
| Salvation Army | The Beacon - Recovery Living Program | Northbridge | AX[F0-F99] - O9.2u | Houses based across northern suburbs |
| Association for Service to Torture and Trauma Survivors | Counselling and Support | Perth | AX[F0-F99] - O9.2s | Direct service: Metropolitan<br>Indirect Service: State-wide |
| Helping Minds | MH Respite - North Metro Respite | perth | GX[e310][F0-F99] - O9.2u | North Metro |
| | MH Respite - North Metro Respite, Swan, Wanneroo, Joondalup | Midland | GX[e310][F0-F99] - O9.2u | Joondalup, Wanaroo, Swan |
| | NDIA Perth Hills, Bayswater, Bassendean, Chittering, Toodyay, York and Northam | Midland | GX[F0-F99] - O9.2u | NDIA Perth Hills, Bayswater, Bassendean, Chittering, Toodyay, York and Northam |
| 55 Central Inc | Community Support Program | Maylands | AX[F0-F99] - O9.2u | N/S |
| Midlands Women's Health Care Place | Midland Women's Health Care Place | MIDLAND | AXF[F53] - O9.2 | Ellenbrook WA, City of Swan, Shire of Mundaring, Town of Bassendean, Shire of Kalamunda |

| | | | | |
|---|---|---|---|---|
| Joondalup Hospital | Antenatal clinic | Joondalup | AXF[F0-F99] - O10.1 | People living in the City of Wanneroo and City of Joondalup |
| Statewide and Teritary MHS | Centre for Clinical Interventions | Northbridge | AX[F0-F99] - O10.1 | N/S |
| Rise Network | Tenancy Support | Midland | AX[F0-F99]-O10.2 | N/S |
| Derbarl Yerrigan | MH nurse | East Perth | GXIN[F0-F99] - O10.1u | N/S |
| Mental Illness fellowship of WA | Parent Peer Support Program | Midland | GX[F0-F99] - O10.2 | North Metropolitan |
| | Well Ways MI Recovery | Midland | GX[F0-F99] - O10.2gu | Offered at various location across WA each year |
| Ruah | RUAH Recreation Program | West Perth | AX[F0-F99] - O10.2g | Perth Metropolitan |
| | RUAH Rec – Urban Network | Northbridge | AX[F0-F99] - O10.2gu | Northbridge |
| Uniting Care West | Community connections | Ballajurra | AX[F0-F99] - O10.2 | Northern Perth Metropolitan |
| | Community connections | Darch | AX[F0-F99] - O10.2 | Northern Perth Metropolitan |
| | Recovery Options – Aboriginal Family Respite | Balga | GXIN[e310][F0-F99] - O10.2 | Northern Perth Metropolitan, Wanneroo, Joondalup and Stirling |
| Women's Health and Family Services | Mental Health Community Outreach Program (MHCOP) | Northbridge | AXF[F0-F99] - 10.2g | Northern Perth Metropolitan |
| | The Perinatal Mental Health Program | Northbridge | AXF[F53] - O10.2g | Northern Perth Metropolitan |
| | Making Sense of Motherhood | Joondalup | AXF[F53] - O10.2g | Joondalup, Northbridge |
| | Body Esteem Program | Joondalup | AXF[F50] - O10.2g | Perth Metropolitan |
| | Body Esteem Program | Northbridge | AXF[F50] - O10.2g | N/S |

| | | | | |
|---|---|---|---|---|
| | ABC Program (Part of the Perinatal Mental Health Service) | Northbridge | AXF[F53] - O10.2g | Mount Lawley |
| Yorgum | Workforce Support Unit | East Perth | AXIN[F0-F99] - O10.2g | East Perth |
| Mental Illness Fellowship of WA | Well Ways Carer Services | Midland | GX[e310][F0-F99] - O10.2 | Perth Metropolitan<br>Wheat belt<br>South West<br>Goldfields |
| Helping Minds | MH Respite - North Metro Carer Support | Perth | GX[e310][F0-F99] - O10.2<br>GX[e310][F0-F99] - R10.1 | North Metro. East Metro, Statewide |
| DADAA | DADAA | Midland | GX[F0-F99] - O10.2g | Perth: Eastern region through Midland, Wheatbelt through Lancelin, South metro through Fremantle, North metro through Wanneroo. |
| Statewide and Tertiary MHS | Graylands - Creative Expression Centre for Arts Therapy (CECAT) | Mt Claremont | AX[F0-F99} - O10.2g | N/S |
| | Graylands | Mt Claremont | AX[F0-F99} - O10.2 | N/S |
| | Graylands Campus | Mt Claremont | AX[F0-F99} - O10.2 | N/S |
| Even Keel Support Association | Even Keel Support Group | Joondalup | AX[F31] - O10.2g | N/S |
| | Even Keel Support Group | Midland | AX[F31] - O10.2g | N/S |
| | Even Keel Support Group | Yokine | AX[F31] - O10.2g | N/S |

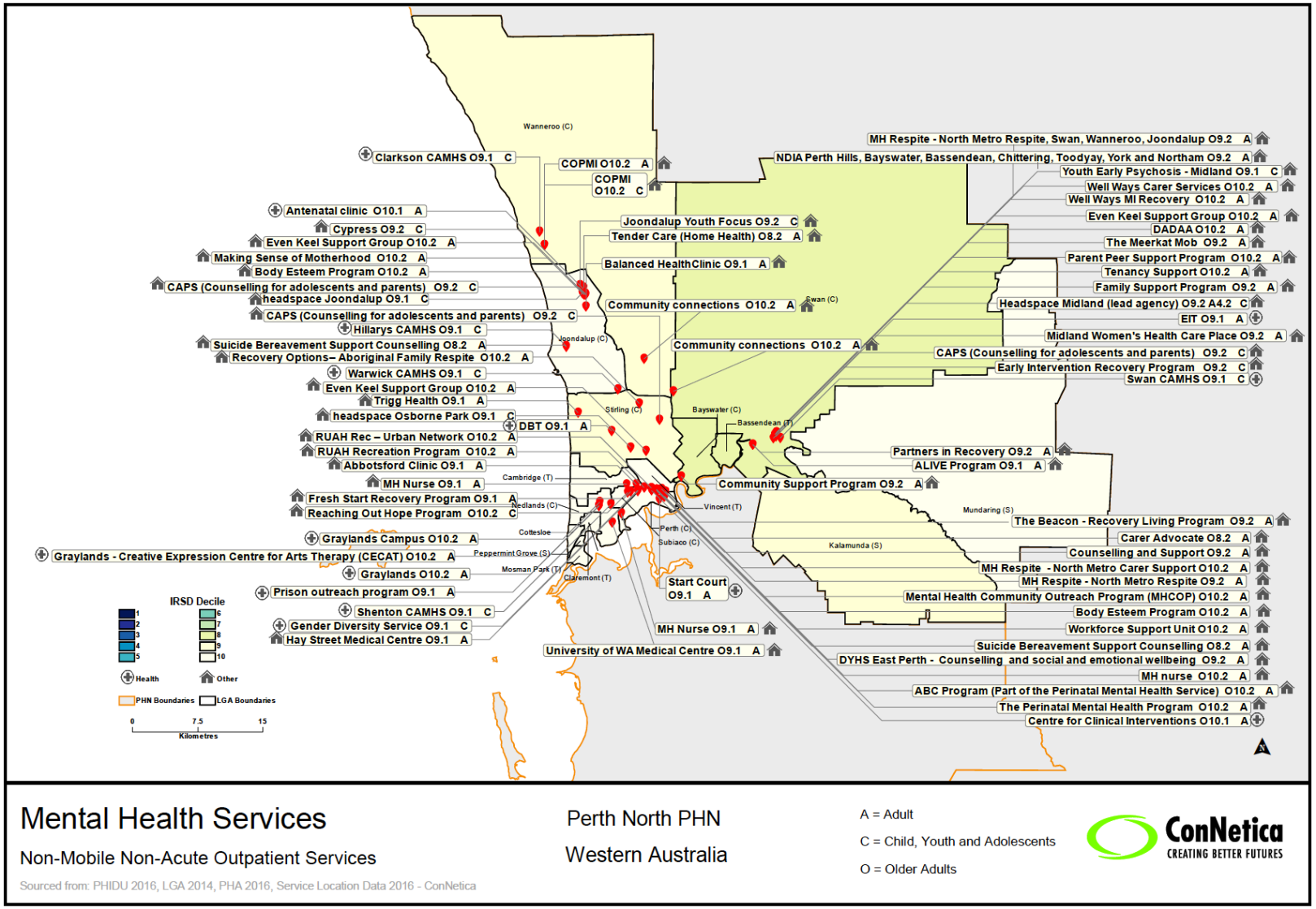



**FIGURE 43** NON-ACUTE NON-MOBILE OUTPATIENT CARE SERVICES IN PNPHN

## Other Non-Acute Outpatient Care

### *Adults*

There were three 'Other' Non-Acute Outpatient services in PNPHN.

The Women's Health and Family Services runs two Carer specific group programs.

The Parent/Partner Education and Support Program (PESP) is a service for anyone who has a loved one with an eating disorder. This may be a parent, sibling, partner, friend or adult child. Their loved one is not required to be participating in their Body Esteem Program and therefore may be under 18.

Their Grandparent Family Support Program provides counselling and support to Aboriginal women and their families with AOD concerns along with a range of other services. The program aims to reduce the negative impact of AOD for families. The program is free to all members of the family including teenagers and adults directly or indirectly affected.

Derbarl Yerrigan Health Service in East Perth runs a four-day camp allowing Stolen Generation members, who suffered abuse, the chance to connect with country in the regional area of Moora, WA. The camp offers free health checks and advice from a mental health nurse and an Aboriginal Health Worker. The program aims to improve the mental and physical health of the participants who had suffered because they had not been able to return to country (Table 43).

**The number of BSIC per 100,000 adults is 0.45.**

**TABLE 43** OTHER NON-ACUTE OUTPATIENT CARE FOR ADULTS IN PNPHN

| Provider | Name | Suburb | DESDE - 1 | Area |
|---|---|---|---|---|
| Women's Health and Family Services | The Parent / Partner Education and Support Program (PESP) | Joondalup | AX[e310][F50] - O11g | Joondalup |
| | Aboriginal Grandparent and family support program | Northbridge | AXIN[e310][F10-F19] - O11g | Metropolitan |
| Derbarl Yerrigan | Healing Camps | East Perth | AXIN[F0-F99] - O11g | N/S |

## 7.5 Information and Guidance Services

### *Children and Adolescents*

There were two Information and Guidance services targeted specifically toward children and adolescents. CAMHS provides the Acute Response Team based in Subiaco, whilst Helping Minds offers one service in Perth (Table 44).

**The number of BSIC per 100,000 children and adolescents is 0.75.**

**TABLE 44** INFORMATION AND GUIDANCE FOR CHILDREN AND ADOLESCENTS IN PNPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| Child and Adolescent Health Service (CAHS) Child and Adolescent MH Services WA (CAMHS) | Acute Response Team (ART) | Subiaco | CX[F0-F99] - I1.1le | Statewide |
| Helping Minds | COPMI - North Metro | Perth | CX[e310][F00-F99] - I2.1.1u | Statewide |

### *Adults*

Table 45 displays the 13 Information and Guidance services for adults. The Mental Health Advocacy Service has a large presence with services located across several regions. Also included here are the triage services at Graylands and Royal Perth Hospitals.

Nine of the 13 services are open age as indicated by the GX prefix. There is one Carer specific service, The Recovering Out Families Online Support Program run by Helping Minds.

**The number of BSIC per 100,000 adults is 1.96.**

**TABLE 45** INFORMATION AND GUIDANCE CARE FOR ADULTS IN PNPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| Graylands Hospital | Triage | Mt Claremont | AX[F0-F99] - I1.1 | Lower West |
| Royal Perth Hospital | RPH ED MH Triage | Perth | AX[F0-F99] - I1.1 | N/S |
| Lifeline WA | Community Education | Northbridge | GX[F0-F99] - I2.1.1gu | Statewide |
| | Community Education | Hillarys | GX[F0-F99] - I2.1.1g | N/S |
| Helping Minds | Recovering Our Families Online Support Program | Perth | AX[e310][F0-F99] - I2.1.2eu | N/S |
| | Client Service Advisor | Perth | GX[F0-F99] I2.1.2e | Statewide |
| Clan WA | Clan WA | Kewdale | AX[F0-F99] - I2.1.1g | South east metro, peel region, Mirrabooka |

| | | | | |
|---|---|---|---|---|
| Mental Health Advocacy Service | Bunbury Team | West Perth | GX[F0-F99] - I2.1.2eu | Bunbury - Busselton |
| | East Team | West Perth | GX[F0-F99] - I2.1.2e | Bentley - Armadale |
| | North Team | West Perth | GX[F0-F99] - I2.1.2e | Joondalup - Midland and North Perth |
| | Regional Team | West Perth | GX[F0-F99] - I2.1.2e | Broome, Kalgoorlie, Albany, Geraldton |
| | South Team | West Perth | GX[F0-F99] - I2.1.2e | Fremantle, Murdoch, Rockingham, Peel |
| | West Team | West Perth | GX[F0-F99] - I2.1.2e | Graylands, Subiaco, Nedlands |

## 7.6 Accessibility Services

### *Adults*

There were six Accessibility services for adults in PNPHN as described in Table 46.

The Mission Australia Children and Adolescent Family Support Service supports children and their families experiencing mental health issues through planning and linking to services.

Uniting Care West's Independent Living service assists people with a chronic, persistent mental illness. It provides a supportive landlord service to people renting accommodation. Referrals for accommodation are received from mental health clinics and individuals cannot apply for accommodation themselves.

atWork Australia runs an employment service in Herdsman that specialises in supporting people with mental illness to return to work. In addition to this, Advanced Personnel Management runs a specialist PHaMs that offer employment support in Perth.

**The number of BSIC per 100,000 adults is 0.91.**

**TABLE 46** ACCESSIBILITY CARE FOR ADULTS IN PNPHN

| Provider | Name | Suburbs | DESDE – 1 | Catchment |
|---|---|---|---|---|
| Mission Australia (WA) | Children and Adolescent Family Support Service (CAFS) | Osborne Park | GX[F0-F99] - A4.2.2 | Osborne Park |
| Attford Mental Health Services | Attford MHS | Perth | AX[F0-F99] - A5 | Central Perth |
| atWork Australia | Mental Health Employment Services | Herdsman | AX[F0-F99] - A5.4u | Perth, North Adelaide, Liverpool, Ryde, Newcastle |
| Midland CMH | CASS | Midland | AX[F0-F99] - A5.1 | Swan |

| | | | | |
|---|---|---|---|---|
| Advanced Personnel Management | PhaMs Employment | Mirrabooka | AX[F0-F99] - A5.4 | North Metro region – using DSS boundaries. This covers Mirrabooka Joondalup Swan River border to include Morley Bassendean Ashfield Midland border |
| Uniting Care West | Independent living | Perth | AX[F0-F99] - A5.5 | Northern Perth Metropolitan |

## 7.7 Self-Help and Voluntary Services

### *Adults*

Seven services were identified in the Self-Help and voluntary category. There were several additional services that were not included in this category because sufficient information was not received prior to publication.

Even Keel offers mutual support and self-help groups to help individuals to identify and develop new skills and personal resilience to build a satisfying life despite having a mental illness diagnosis. It runs various mutual support and self-help groups in the Metropolitan area including the Peel region, as well as one mutual support and self-help group in the South West region of Western Australian in Busselton.

Even Keel also facilitates in-patient information sessions at the key psychiatric treatment facilities around the Metropolitan and Peel region. These facilities include Bentley Hospital, Mimidi Park and Sir Charles Gardner Hospital. These groups have been included where their addresses were known. Stability has been assumed for the purposes of inclusion in this Atlas but were not provided sufficient data to adequately verify this.

Rainbow, a service provided by Uniting Care West is a unique service run in a number of meeting places in the Perth Metropolitan area where people with mental health issues can connect with other community members while enjoying a meal and a chat.

**The number of BSIC per 100,000 adults is 1.06.**

**TABLE 47** SELF-HELP AND VOLUNTARY CARE FOR ADULTS IN PNPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| Helping Minds | MH Promotion Team | Perth | GX[F0-F99]S1.1 | Perth, Bunbury |
| GROW | Grow WA | Wembley | AX[F0-F99] - S1.3g | Perth |
| Uniting Care West | Rainbow | Nedlands | AX[F0-F99] - S1.4 | Metro |
| | Rainbow | Wembley Downs | AX[F0-F99] - S1.4 | Metro |
| | Rainbow | Maylands | AX[F0-F99] - S1.4 | Metro |
| | Rainbow | Como | AX[F0-F99] - S1.4 | Metro |
| | Rainbow | Duncraig | AX[F0-F99] - S1.4 | Metro |

## 7.8 Patterns of Mental Health Care – PNPHN

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 essentially 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.

Figure 44 shows the pattern of mental health care for the PNPHN represented as a radar or spider diagram that represents the balance of care types.

The results depicted on the PNPHN spider diagram are relatively consistent with those in other parts of Australia and with Perth South, in that it shows little to no Day Care, a high level of Outpatient Care, a similar level of Acute Inpatient beds (with less sub-Acute beds) and Accessibility and Information services.

The key differences are with the balance between the levels of Mobile and Non-Mobile Outpatient care. PNPHN has relatively more Non-Acute Non-Mobile Outpatient care provided by the health sector.

It also has a relatively more Residential rehabilitation, which includes the psychiatric hostels. In the absence of in-depth information, these have been classified on the assumption that they provide 24-hour staff care (R11 DESDE Code).

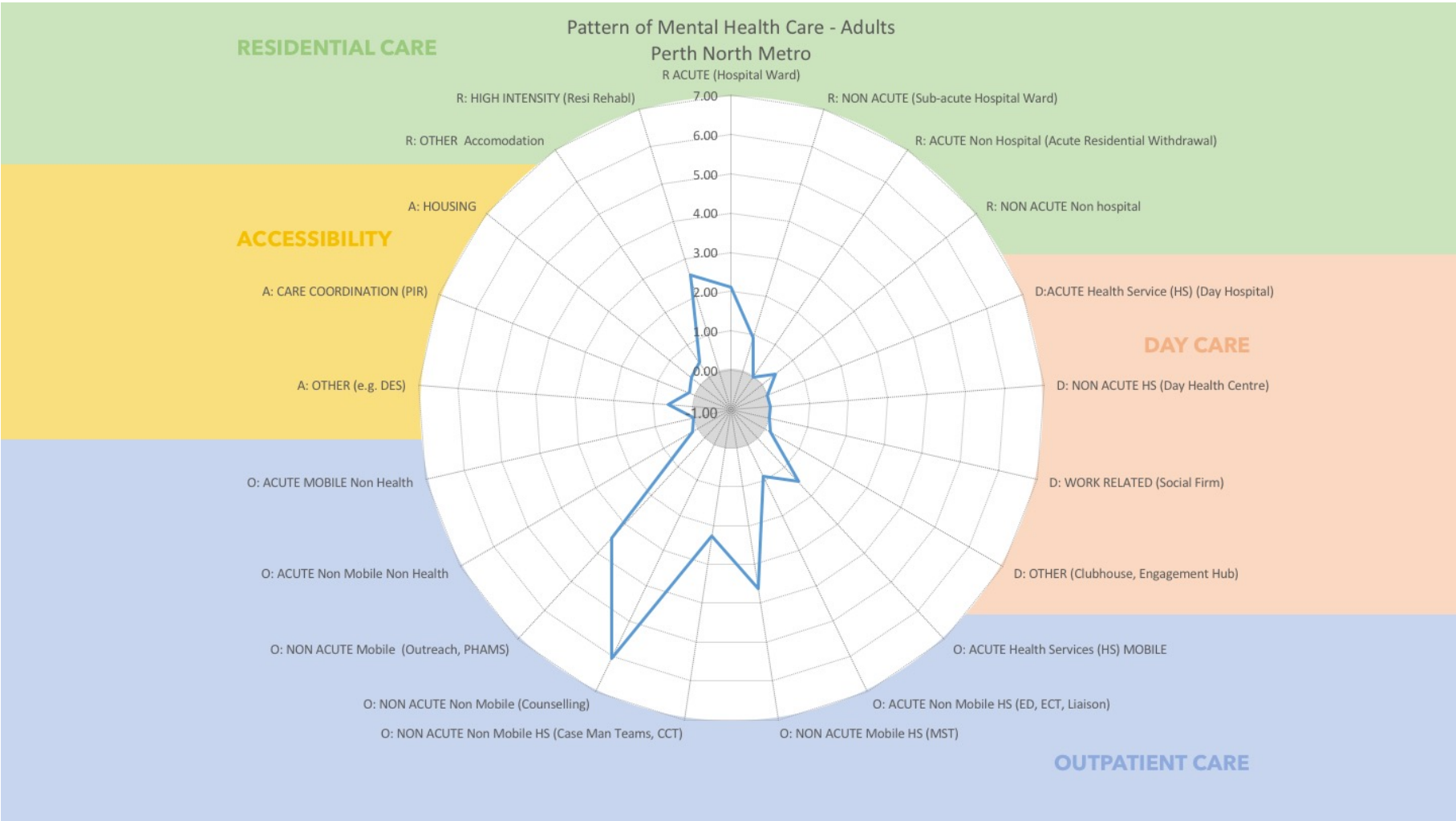



**FIGURE 44** PATTERN OF MENTAL HEALTH CARE PNPHN

## 7.9 Workforce Capacity – PNPHN

### Introduction

During the data gathering process for this Atlas, stakeholders were asked to report the full time equivalent (FTE) staffing levels for each BSIC. Data was collected for 302 of the 847 teams identified in this project (36%), which may relate to the Atlas being completed at a time of intense structural change. 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 not be relied upon but rather used as an approximation of the workforce characteristics.

Data in relation to PNPHN mental health workforce FTE was collected for 54% or 127 of the 237 mental health service delivery teams (BSIC) across PNPHN. As such data presented here should be treated with caution.

There was a total of 1171 FTE reported across the 127 teams that provided their data, giving an average team size of 9.22 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; small (<5 FTE), medium (from 6-20 FTE) and large (over 20 FTE). As seen in Table 48 below, most mental health teams are small or medium in size. Small teams average 2.83 FTE, medium teams average 10 FTE and large teams average 34.44 FTE.

Teams working in NGOs are generally smaller than those working in the health sector with an average team size for NGOs of 5.92 (76 teams, 450.21 FTE). The average team size for health sector teams is 14.96 FTE (91 teams, 1362.21 FTE).

**TABLE 48** MENTAL HEALTH TEAM SIZE

| Teams | Not Stated | X-Small (<1 FTE) | Small (1-5 FTE) | Medium (6-20 FTE) | Large (>20FTE) | Total |
|---|---|---|---|---|---|---|
| **Total** | 110 | 16 | 46 | 48 | 17 | 237 |
| **%** | - | 12% | 37% | 38% | 13% | 100%* |

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

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'.

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

# 8. Alcohol and Other Drugs Data - PNPHN

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 in relation to the service mapping for the PNPHN region.

Table 49 displays the estimated population aged 18 years and over with risky levels of alcohol consumption. All LGAs within the PNPHN area have a higher percentage of estimated risky alcohol consumption amongst those aged 18 years and over when compared with the national figure. Risky alcohol consumption is highest in the Bayswater and Perth LGAs, and lowest in Nedlands.

**TABLE 49** ESTIMATED POPULATION AGED 18 YEARS AND OVER WITH RISKY ALCOHOL CONSUMPTION

| LGA | Alcohol consumption at risk to health (n) | Alcohol consumption at risk to health (ASR per 100) |
|---|---|---|
| Bassendean | 865 | 7.2 |
| Bayswater | 4,034 | 7.6 |
| Cambridge | 1,202 | 5.9 |
| Claremont | 456 | 6.0 |
| Cottesloe | 383 | 6.1 |
| Joondalup | 8,511 | 6.6 |
| Kalamunda | 2,924 | 6.7 |
| Mosman Park | 433 | 6.1 |
| Mundaring | 2,014 | 6.9 |
| Nedlands | 918 | 5.5 |
| Peppermint Grove | 77 | 6.1 |
| Perth | 1,276 | 7.6 |
| Stirling | 11,411 | 6.8 |
| Subiaco | 927 | 6.1 |
| Swan | 6,246 | 7.2 |
| Vincent | 2,046 | 7.1 |
| Wanneroo | 8,073 | 6.8 |
| **PNPHN** | **51,796** | **6.8** |
| Australia | 792,499 | 4.7 |

Sourced from: PHIDU 2016

Alcohol related hospitalisations are displayed in Figure 45 and other drug hospitalisations are shown in Figure 46.

In 2011 and 2012 alcohol related hospitalisation have shown increases compared with the 2008-2010 period, largely matching the WA average. Other drug hospitalisations have also increased and are currently higher than the WA average. Figure 47 shows the number of calls to the Australian Drug Information Service by several specific drug types. Methamphetamine and cannabis have had modest increases over the past five years.

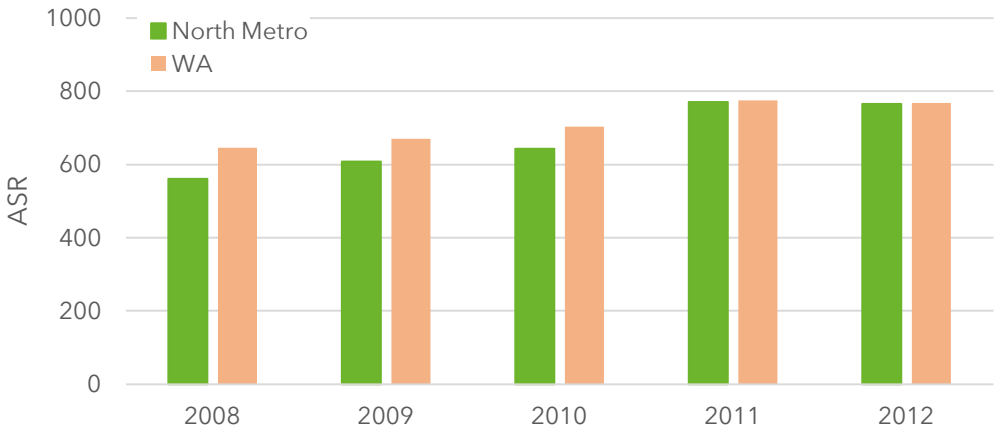



**FIGURE 45** ALCOHOL-RELATED HOSPITALISATIONS

Source: Alcohol and Other Drugs Indicators Report (2015)

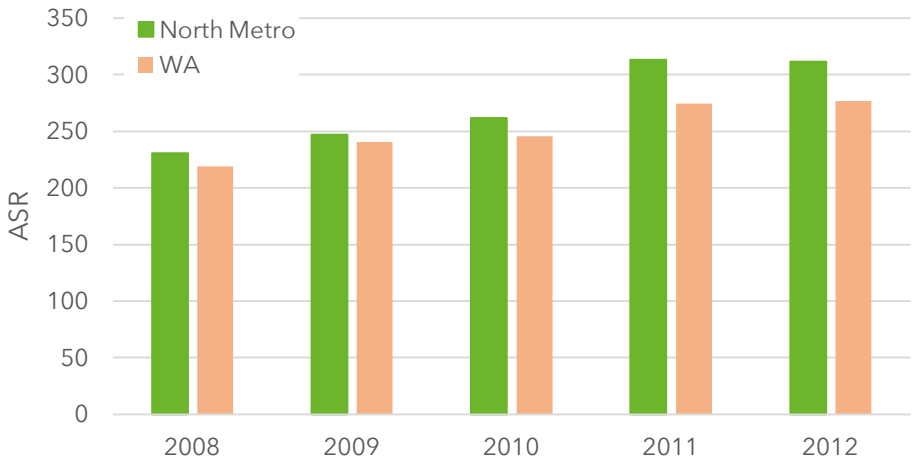



**FIGURE 46** OTHER DRUG RELATED HOSPITALISATIONS

Source: Drug and Alcohol Office (2015)

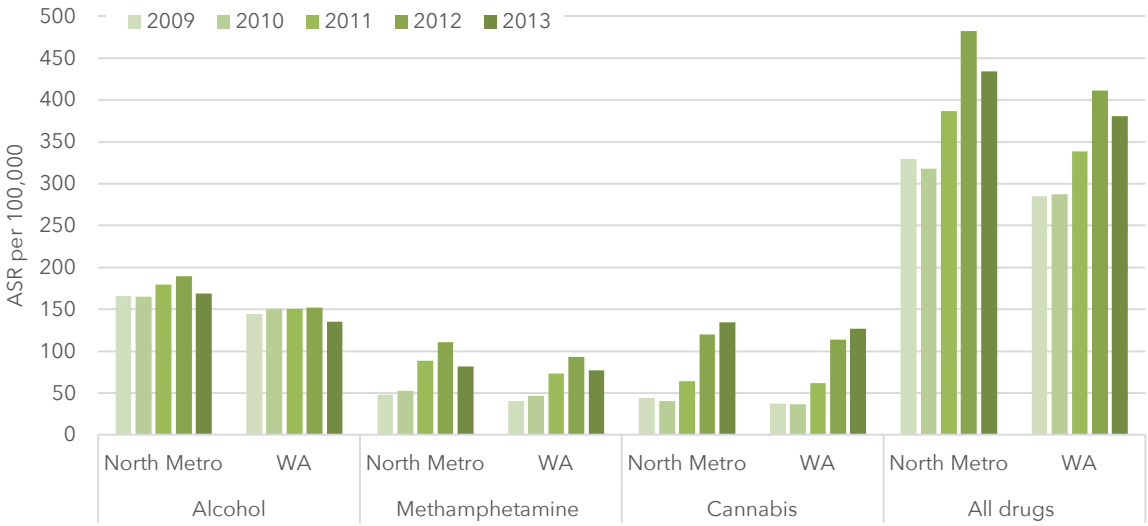



**FIGURE 47** RATE OF CALLS TO ADIS BY PRIMARY DRUG OF CONCERN

Source: Alcohol and Other Drugs Indicators Report (2015)

# 9. Alcohol and Other Drug Services - PNPHN

In this section of the Atlas the type, availability and location of or BSIC delivering Alcohol and Other Drug Care across the PNPHN are described; that is, services where the primary presentation is specifically for AOD Issues.

Each of the key DESDE classifications are outlined, then in turn, a description is provided of the services available under each type for children and adolescents, adults and then older adults.

Gender specific services are indicated using an additional letter added to the age code in the DESDE formula. For example, a mother-baby unit has a DESDE code - AXF[F00-F99] - R2, where the F is used to indicate this is a gender specific service.

For simplicity, where services are described as catering for all age groups (GX), they are included within the Adult sections as in practice it is mostly adults that utilise these services. These are readily identifiable by the GX at the start of the DESDE code. Where possible additional information is added to the tables to assist the reader to interpret the DESDE codes that have been applied.

Where a BSIC has two MTC codes, that is the team provides two distinct service types, it will be included in the table relevant to its primary MTC code.

Where a service is clearly funded for and dealing with dual diagnosis clients, it will have both the mental health [F0-F99] and the [F10-F19] ICD code.

There was a total of 69 BSIC identified that deliver 72 MTC of AOD care, across 21 different DESDE classifications in PNPHN (Figure 48). Table 50 displays the breakdown of services by NGO and health provider types.

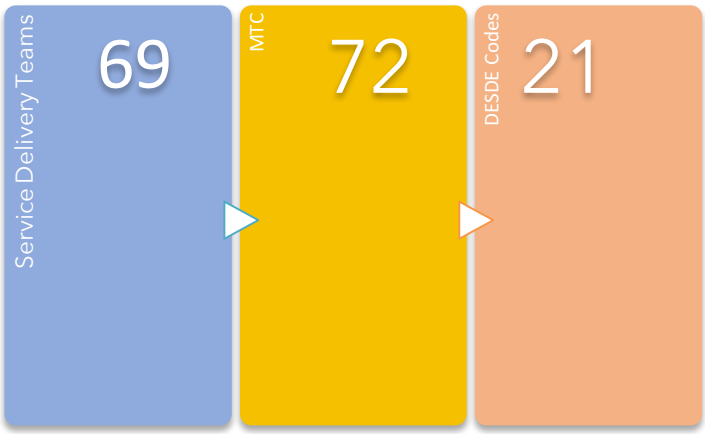



**FIGURE 48** SUMMARY OF SERVICES PROVIDING CARE FOR AOD

**TABLE 50** NUMBER OF MAIN TYPES OF ALCOHOL AND OTHER DRUG CARE IN PNPHN

| Population Group | Service Type | R | D | O | A | I | S | TOTAL |
|---|---|---|---|---|---|---|---|---|
| Child & Adolescent | Health | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | NGO/Other | 3 | 1 | 9 | 0 | 1 | 0 | 14 |
| | **Sub-total** | **3** | **1** | **9** | **0** | **1** | **0** | **14** |
| Adult | Health | 0 | 0 | 4 | 0 | 0 | 0 | 4 |
| | NGO/Other | 16 | 1 | 31 | 1 | 5 | 0 | 54 |
| | **Sub-total** | **16** | **1** | **35** | **1** | **5** | **0** | **58** |
| 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 | 0 | 0 | 4 | 0 | 0 | 0 | 4 |
| | NGO/Other | 19 | 2 | 40 | 1 | 6 | 0 | 68 |
| | **Total** | **19** | **2** | **44** | **1** | **6** | **0** | **72** |

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

Outpatient care, including outreach services made up 61% of the MTC, and Residential Accommodation made up 26% (Figure 49). Of these MTC, 21% (n = 13) are for children and adolescents, 79% (n = 49) are for adults, and there were none identified for older adults. The Health sector delivers 6% of these MTC and 94% are delivered by NGOs.

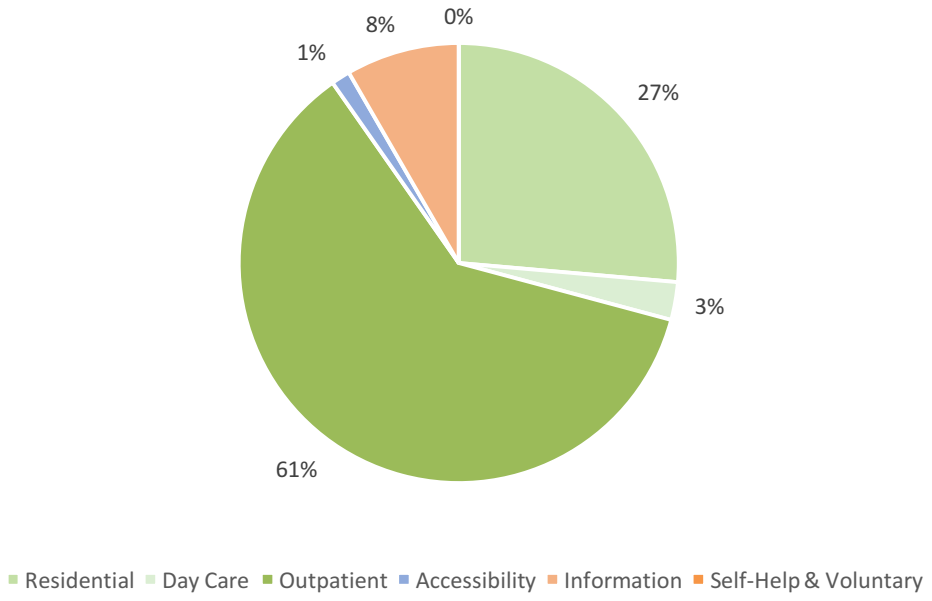



**FIGURE 49** AOD SERVICES BY MTC SERVICE TYPE IN PNPHN

## 9.1 Residential Care - AOD

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

No Acute Inpatient Residential AOD services were identified across PNPHN.

### Non-Acute Inpatient Services (R8 – R13 DESDE Codes)

#### *Children and Adolescents*

Table 51 displays the three Sub-Acute Inpatient services for children and adolescents. The Youth Withdrawal and Respite Service provides Residential support (up to 21 days) for young people looking to detoxify and address drug or alcohol misuse. The Youth Residential Rehabilitation Service provides Residential support for up to three months for young people who are experiencing difficulties related to drugs and alcohol. These services are run by Mission Australia.

Tenacious House Program is a voluntary Residential recovery program helping young men with life controlling issues to succeed in life. Tenacious House is located on 20 acres of semi-rural property and specialises in helping those with Addiction, Anxiety and Depression. On completion of the program each participant will have a pathway to employment or education and a personally designed recovery action plan.

**The number of BSIC per 100,000 children and adolescents is 1.13.**

**TABLE 51** NON-ACUTE INPATIENT AOD CARE FOR CHILDREN AND ADOLESCENTS IN PNPHN

| Provider | Name | Suburbs | DESDE - 1 (beds) | Catchment |
|---|---|---|---|---|
| Mission Australia (WA) | Youth Withdrawal and Respite Service | East Perth | CY[F10-F19] - R8.1 (10) | East Perth |
| | Youth Residential Rehabilitation Service | East Perth | TA[F10-F19] - R8.2 (10) | East Perth |
| Tenacious House | Tenacious House | Joondalup | TAM[F10-F19] - R9.2 (U/D) | N/S |

#### *Adults*

There were 15 BSIC identified as providing 'Other' AOD Residential services across PNPHN.

Fresh Start Recovery Program offers a rehabilitation service for Opioid related disorders [F11] which provides a stable environment for clients who are considering longer term Residential options. It allows them to be supervised, medicated where necessary and assessed for further rehabilitation. There are houses for men, women and mothers with young children (Table 52).

**The number of BSIC per 100,000 adults is 2.27.**

**TABLE 52** NON-ACUTE INPATIENT AOD CARE FOR ADULTS IN PNPHN

| Provider | Name | Suburbs | DESDE - 1 (beds) | Catchment |
|---|---|---|---|---|
| Fresh Start Recovery Program | Rehabilitation | Subiaco | AX[F11] -R8.1 (6) | Statewide |
| | Rehabilitation | Wembley | AX[F11] -R8.1 (6) | Statewide |

| | | | | |
|---|---|---|---|---|
| NextStep Drug and Alcohol Services | East Metro Drug and Alcohol Service | East Perth | AX[F10-F19] - R8.2 (17) | Statewide |
| Cyrenian House | Rick Hammersley Centre Therapeutic Community | Perth | AX[F10-F19] - R8.2 (40) | All areas but treatment service located North of Perth. |
| | Saranna Women and Children's Program - Residential AOD treatment program | Perth | AXF[F10-F19] - R8.2 (14) | All areas |
| | Serenity Lodge Therapeutic Community - AOD Services | Rockingham | AX[F10-F19] - R8.2 (28) | All areas but treatment service located south of Perth |
| Salvation Army | The Bridge Program – Residential rehab and assessment | Highgate | AX[F10-F19] - R9.2 (21) | Statewide |
| Fresh Start Recovery Program | Rehabilitation | Ballajurra | AXM[F11] -R9.2 (U/D) | N/S |
| WA Shalom Group | Rehab Centre | Brabham | AX[F10-F19] - R9.2 (33) | This facility only exists in Swan Valley. Clients self-refer from intrastate or interstate |
| | Rehabilitation Centre | Henley Brook | AX[F10-F19] - R9.2 (20) | N/S |
| | Rehabilitation Centre | Brabham | AX[F10-F19] - R9.2 (4) | N/S |
| Fresh Start Recovery Program | Rehabilitation | Warwick | AX[F11] -R9.2 (6) | N/S |
| | Rehabilitation | Mt Lawley | AXF[F11] - R9.2 (6) | N/S |
| | Rehabilitation | Kewdale | AXF[F11] - R9.2 (6) | N/S |
| Cyrenian House | Transitional Housing and Support Program | Perth | AX[F10-F19] - R10.2 (7) | All areas |

## Other Non-Acute Inpatient Services (R14 DESDE Code)

### *Adults*

Table 53 displays the one AOD Non-Acute other Inpatient service for adults in PNPHN.

**This is a rate of 0.15 BSIC per 100,000 adults**

**TABLE 53** NON-ACUTE OTHER INPATIENT AOD CARE FOR ADULTS IN PNPHN

| Provider | Name | Suburbs | DESDE - 1 (beds) | Catchment |
|---|---|---|---|---|
| Salvation Army | The Bridge – Sobering Up | Highgate | AXIN [F10-F19] - R14 (14) | Perth Metropolitan |

## Placement of Residential Care PNPHN

Figure 50 shows the locations of Residential AOD services across PNPHN. Services are mainly located to the south of the PNPHN area, becoming less concentrated moving out toward Joondalup and Swan LGAs.

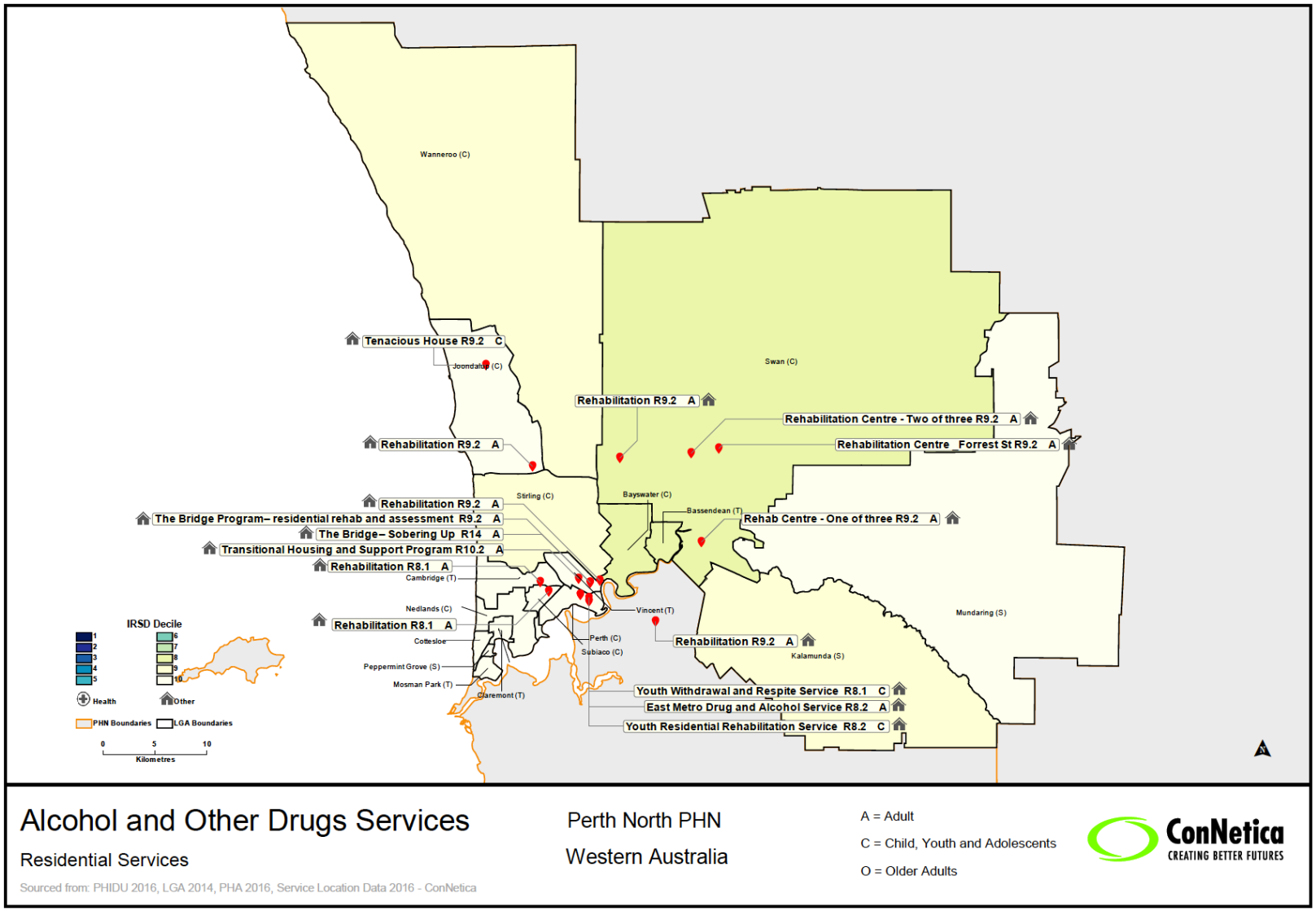



**FIGURE 50** PLACEMENT OF RESIDENTIAL AOD SERVICES IN PNPHN

## 9.2 Day Care - AOD

### *Children and Adolescents*

There was one child and adolescent AOD service identified as Day Care located in Midland run by the Swan City Youth Service (Table 54).

**The number of AOD Day Care BSIC per 100,000 Children and Adolescents is 0.38.**

**TABLE 54** AOD DAY CARE FOR CHILDREN AND ADOLESCENTS IN PNPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| Swan City Youth Service | Swan City Youth Service | Midland | CY[F10-F19] - D8 | Midland |

### *Adults*

For adults, one AOD day care service was identified which is in Brabham run by the WA Shalom Group (Table 55).

**The number of AOD Day Care BSIC per 100,000 Adults is 0.15.**

**TABLE 55** AOD DAY CARE FOR ADULTS IN PNPHN

| Provider | Name | Suburbs | DESDE - 1 (beds) | Catchment |
|---|---|---|---|---|
| WA Shalom Group | Employment services and Shalom Works | Brabham | AX[F10-F19] - D2.2 (60) | This facility only exists in Swan Valley. Clients self-refer from intrastate or interstate. |

### Placement of Day Care in PNPHN

The location of Day Care in PNPHN is shown in Figure 51. Both services are located in the Swan LGA.

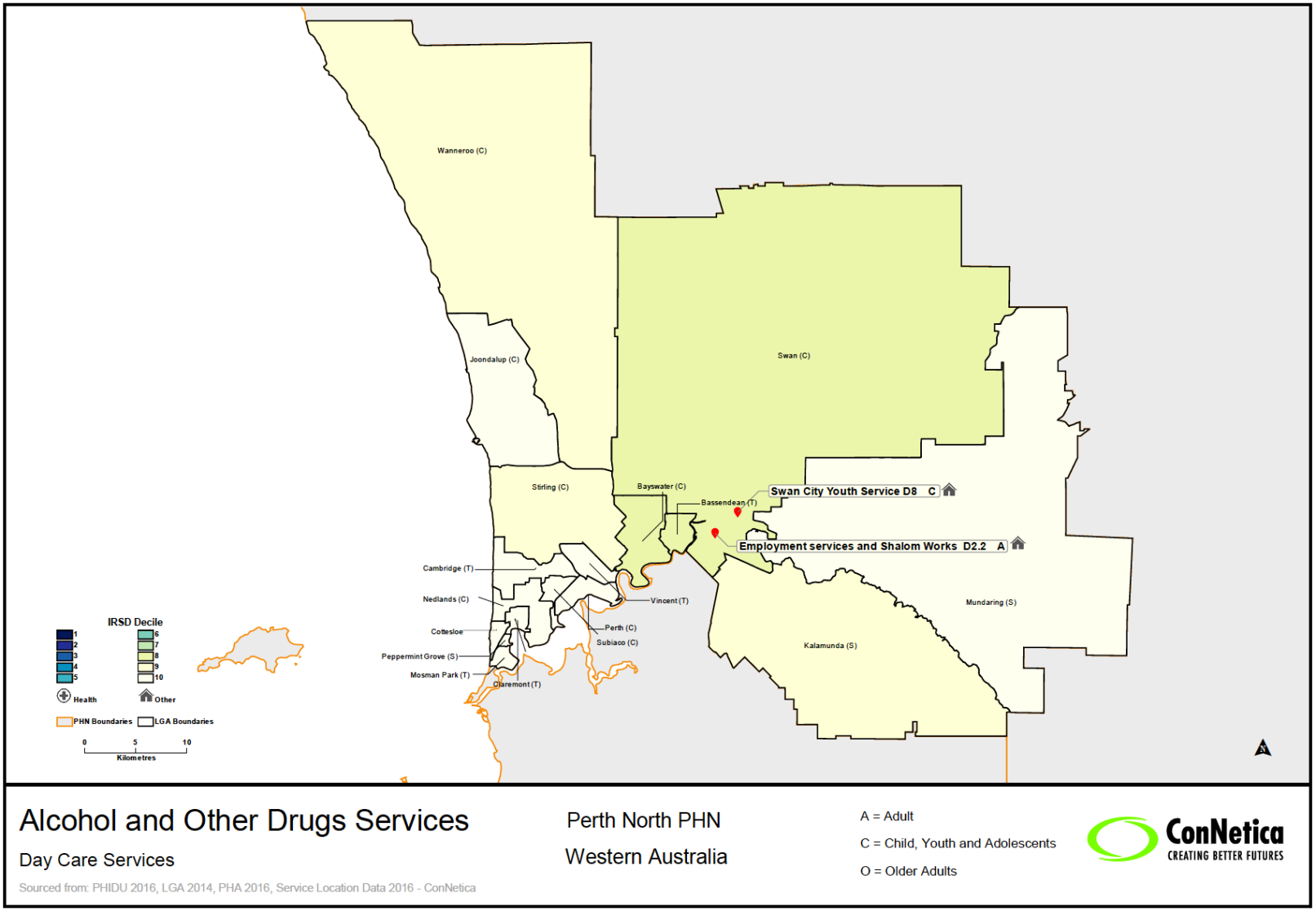



**FIGURE 51** PLACEMENT OF AOD DAY CARE IN PNPHN

## 9.3 Outpatient Care - AOD

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

#### *Children and Adolescents*

The Perth Inner City Youth Service runs two AOD Household Network (homelessness support) programs out of West Leederville and West Perth (Table 56). This service also assists with mental health concerns.

**The number of BSIC per 100,000 children and adolescents is 0.75.**

**TABLE 56** NON-ACUTE MOBILE OUTPATIENT AOD CARE FOR CHILDREN AND ADOLESCENTS IN PNPHN

| Provider | Name | Suburbs | DESDE - 1 (beds) | Catchment |
|---|---|---|---|---|
| Perth Inner City Youth Service | Household network | West Leederville | TA[Z59][F10-F19][F0-F99] - O6.2 (10) | Statewide |
| | Household network | West Perth | TA[Z59][F10-F19][F0-F99] - O6.2 (10) | Statewide |

#### *Adults*

Five Non-Acute Mobile Outpatient AOD services in PNPHN were identified, including the Drug and Alcohol Withdrawal Network (DAWN), Cyrenian House, 55 Central Inc and B-Attitudes Inc (Table 57). Two of these services are for the general population (GX).

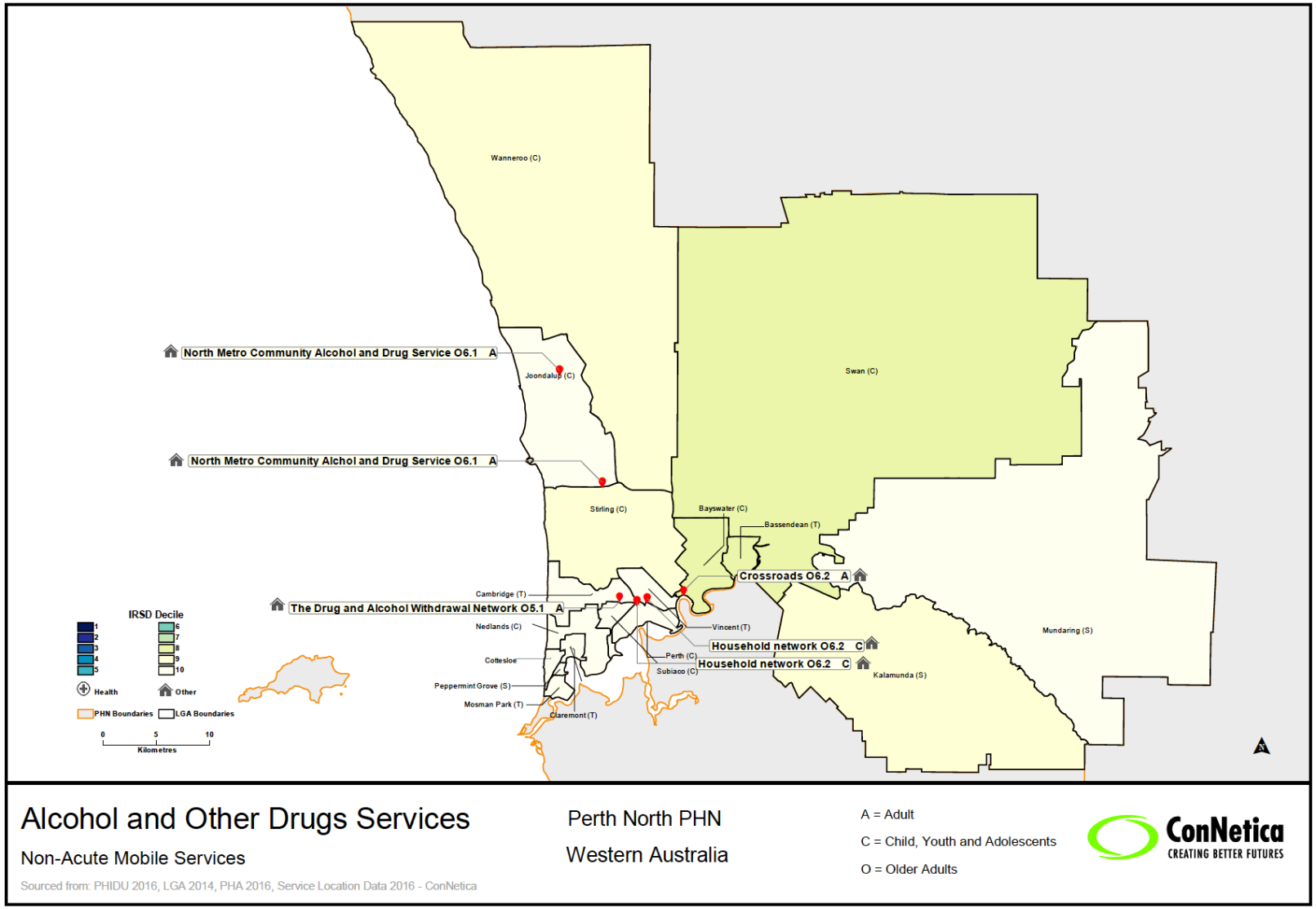
**The number of BSIC per 100,000 adults is 0.76.**

**TABLE 57** NON-ACUTE MOBILE OUTPATIENT AOD CARE FOR ADULTS IN PNPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| DAWN - Drug and Alcohol Withdrawal Network | The Drug and Alcohol Withdrawal Network | Subiaco | GX[F10-F19] - O5.1 | Perth Metro Area |
| Cyrenian House | North Metro Community Alcohol and Drug Service | Warwick | AX[F10-F19] - O6.1 | North of the River - specifically areas between Perth and Warwick |
| | North Metro Community Alcohol and Drug Service | Joondalup | AX[F10-F19] - O6.1 | North of the river, specifically areas from Warwick extending past Joondalup |
| 55 Central Inc | Crossroads | Maylands | AX[F10-F19] - O6.2 | N/S |
| B-Attitudes Inc | Community-based recovery services | Wembley | GX[F10-F19] - O7.2 | N/S |

### Placement of Non-Acute Mobile Outpatient AOD Care in PNPHN

Figure 52 shows the locations of Non-Acute Mobile Outpatient care in PNPHN. The south of the PNPHN area contains the most services, with two located on the fringes of the Joondalup LGA.




Alcohol and Other Drugs Services

Non-Acute Mobile Services

Sourced from: PHIDU 2016, LGA 2014, PHA 2016, Service Location Data 2016 - ConNetica

Perth North PHN

Western Australia

A = Adult

C = Child, Youth and Adolescents

O = Older Adults

ConNetica
CREATING BETTER FUTURES

**FIGURE 52** NON-ACUTE MOBILE OUTPATIENT CARE IN PNPHN

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

### *Children and Adolescents*

There were seven services of this type identified across PNPHN, four of which are specifically for Aboriginal young people and two of which are Cannabis specific (Table 58).

Both the Djooraminda Family, and the Djooraminda Indigenous Family Programs, provided by CentreCare provide culturally sensitive support and counselling for families affected by trauma on issues such as trauma, grief and loss, alcohol and substance abuse, and family and relationships.

Mission Australia offers a Cannabis Intervention Service for Indigenous youth which, with referrals from the Police or Courts, counsels young people about the adverse effects of using cannabis. It has an early intervention approach. Missions Young Person Opportunity program is also a program for Aboriginal youth. It is an early intervention, prevention and diversion program for young people referred by juvenile justice teams due to substance abuse related offensive behaviour.

The Kids in Focus WA (KIFWA) service is a Women's Health and Family Services counselling service for children affected by family member alcohol and substance issues.

WA Substance Users Association runs a Youth outreach service which works with young persons under 25 to reduce risk from injecting drug use - encourages harm minimisation and safer methods of use.

**The number of BSIC per 100,000 children and adolescents is 2.64.**

**TABLE 58** NON-ACUTE NON-MOBILE OUTPATIENT AOD CARE FOR CHILDREN AND ADOLESCENTS IN PNPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| CentreCare | Djooraminda - Family Support Service | Midland | CCIN[F10-F19] - O9.2 | Perth Metropolitan area |
| | Djooraminda - Indigenous family program | Midland | CXIN[F10-F19] - O9.2 | Perth Metropolitan area |
| Mission Australia (WA) | Cannabis Intervention Service | East Perth | CYIN[F12] - O9.2j | Metropolitan |
| | Young Persons Opportunity Program | East Perth | CYIN[F12] - O9.2j | Metropolitan |
| Women's Health and Family Services | KIFWA (Kids in Focus WA) | Northbridge | CX[F10-F19] - O9.2 | Perth Metropolitan |
| CentreCare | CAPS (Counselling for adolescents and parents) | Perth | TA[F10-F19] - O9.2 | Perth |
| WA Substance users association (WASUA) | Youth Outreach | Perth | TA[F10-F19] - O10.2mu | Perth Metropolitan |

### *Adults*

26 BSIC providing Non-Acute Non-Mobile Outpatient AOD care for adults across PNPHN were identified (Table 60). Seven of these are providing clinical care, two were Aboriginal services and 10 services are specifically for females.

There were many NGOs providing care in this category, with WANDAS, Women's Health and Family Services, Cyrenian House, Palmerston and The Salvation Army all providing several teams in the region.

Palmerston provides Non-Acute Outpatient care for adults with AOD issues via a number of services offered from its Perth office; this includes assessment, counselling, referrals and support and smart recovery groups, which aim to help individuals gain control over their addictive alcohol or drug behaviour, achieve a balanced lifestyle and lead meaningful lives.

The Salvation Army provides the Bridge Detox which is the only service of its kind in the catchment. This program and The Beacon – Community Living Plan program both provide support for individuals in re-engaging productively in the community.

**The number of BSIC per 100,000 adults is 3.93.**

### Other Non-Acute Outpatient Care (O11)

Two Non-Acute Other Outpatient AOD BSIC were identified, both are adult peer programs provided by WASUA (Table 59).

**The number of BSIC per 100,000 adults is 0.30.**

**TABLE 59** OTHER NON-ACUTE OUTPATIENT OD CARE FOR ADULTS IN PNPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| WA Substance users association (WASUA) | Overdose Prevention and Management Peer-Education Project, (OPAM). | Perth | AX[F10-F19] - O11 | N/S |
| WA Substance users association (WASUA) | Peer Naloxone project | Perth | AX[F10-F19] - O11 | Metro, Mandurah, Acacia and Bunbury |

### Placement of Non-Acute, Non-Mobile Outpatient AOD care

Figure 53 shows the location of Non-Acute Non-Mobile Outpatient services across PNPHN. Once again, these are mostly located in the heavily populated inner metropolitan area.

**TABLE 60** NON-ACUTE NON-MOBILE OUTPATIENT CARE FOR ADULTS IN PNPHN

| Provider | Name | Suburbs | DESDE - 1 (beds) | Catchment |
|---|---|---|---|---|
| Cyrenian House | Prison based Pathways Program and DATS (Drug and Alcohol Through Care Service) | Perth | AX[F10-F19] - O8.2gj | N/S |
| Yorgum | Clinical counselling Team | East Perth | AXIN[F10-F19] - O9.1 | Perth Metropolitan |
| NextStep Drug and Alcohol Services & Holyoake | North East Metro Community Drug Service | Midland | AX[F0-F19] - O9.1<br>AX[F0-F19] - O9.1j | Midland |
| Cyrenian House | NRS - Residential Pathways Program (Inclusive of Smoking Cessation Program) | Perth | AX[F10-F19] - O9.1<br>AX[F10-F19] - A5.1 | All areas |
| Women and Newborn Drug and Alcohol Service (WANDAS) | WANDAS Perinatal Services | Subiaco | AXF[F10-F19] - O9.1 | Statewide |
| | WANDAS Methadone or buprenorphine treatment | Subiaco | GXF[F10-F19] - O9.1 | N/S |
| | WANDAS Pregnancy outreach prison program | Subiaco | AXF[F10-F19] - O9.1 | Statewide |
| Palmerston | Palmerston Perth | Perth | AX[F10-F19] - O9.2 | Perth Metropolitan |
| Salvation Army | The Bridge – Continuing Care Program | Highgate | AX[F10-F19] - O9.2 | N/S |
| | The Beacon - Community Living Plan | Northbridge | AX[F10-F19] - O9.2 (18) | CBD |
| Uniting Care West | ASSP (Accommodation and support service program) | Perth | AXF[F10-F19] - O9.2ju (6) | Perth Metropolitan |
| Women's Health and Family Services | Drug and Alcohol Program (DAP) | Northbridge | AXF[F10-F19] - O9.2 | Northern Perth Metropolitan |
| | Rural In Reach (RINR) Video, Telephone - Statewide 60 locations | Northbridge | AX[F10-F19] - O9.2e | Statewide |

| | | | | |
|---|---|---|---|---|
| | Moving on program | Northbridge | AXF[F10-F19][F0-F99] - O9.2<br>AXF[F10-F19][F0-F99] - A5 | Metropolitan with outreach locations |
| Fresh Start Recovery Program | Treatment clinic | Subiaco | AX[F10-F19] - O9.1 | Statewide and interstate |
| | Counselling | Subiaco | AX[F11] - O9.2 | Perth metro North and South regions. |
| AADS - Aboriginal Alcohol and Drug Service | AOD Support Services | East Perth | AX[F10-F19] - O9.2<br>AXIN[F10-F19] - O9.2j | Statewide |
| Cyrenian House | Non-Residential Services (NRS) - Family Program | Perth | GX[F10-F19] - O9.2u | Metropolitan |
| | NRS - AOD Individual counselling and support | Perth | AX[F10-F19] - O9.2 | Metropolitan |
| WA Substance user's association (WASUA) | Hep C education and support | Perth | AX[F10-F19] - O10.1 | Perth Metropolitan |
| Women and Newborn Drug and Alcohol Service (WANDAS) | WANDAS Antenatal Services | Subiaco | AX[F10-F19] - O10.1 | N/S |
| Palmerston | Smart Recovery Groups | Northbridge | GX[F10-F19] - O10.2g | Perth Metropolitan |
| Salvation Army | The Bridge – Detox | Highgate | AX[F10-F19] - O10.2 (9) | Perth Metropolitan |
| Women's Health and Family Services | PEPISU Women and Children's Program - Circle of security | Northbridge | AXF[F10-F19] - O10.2s | Northern Perth Metropolitan |
| | Prison Program | Middle Swan | AXF[F10-F19] - O10.2jg | Metropolitan |
| Fresh Start Recovery Program | Support group | Subiaco | AX[F11][e310] - O10.2g | N/S |

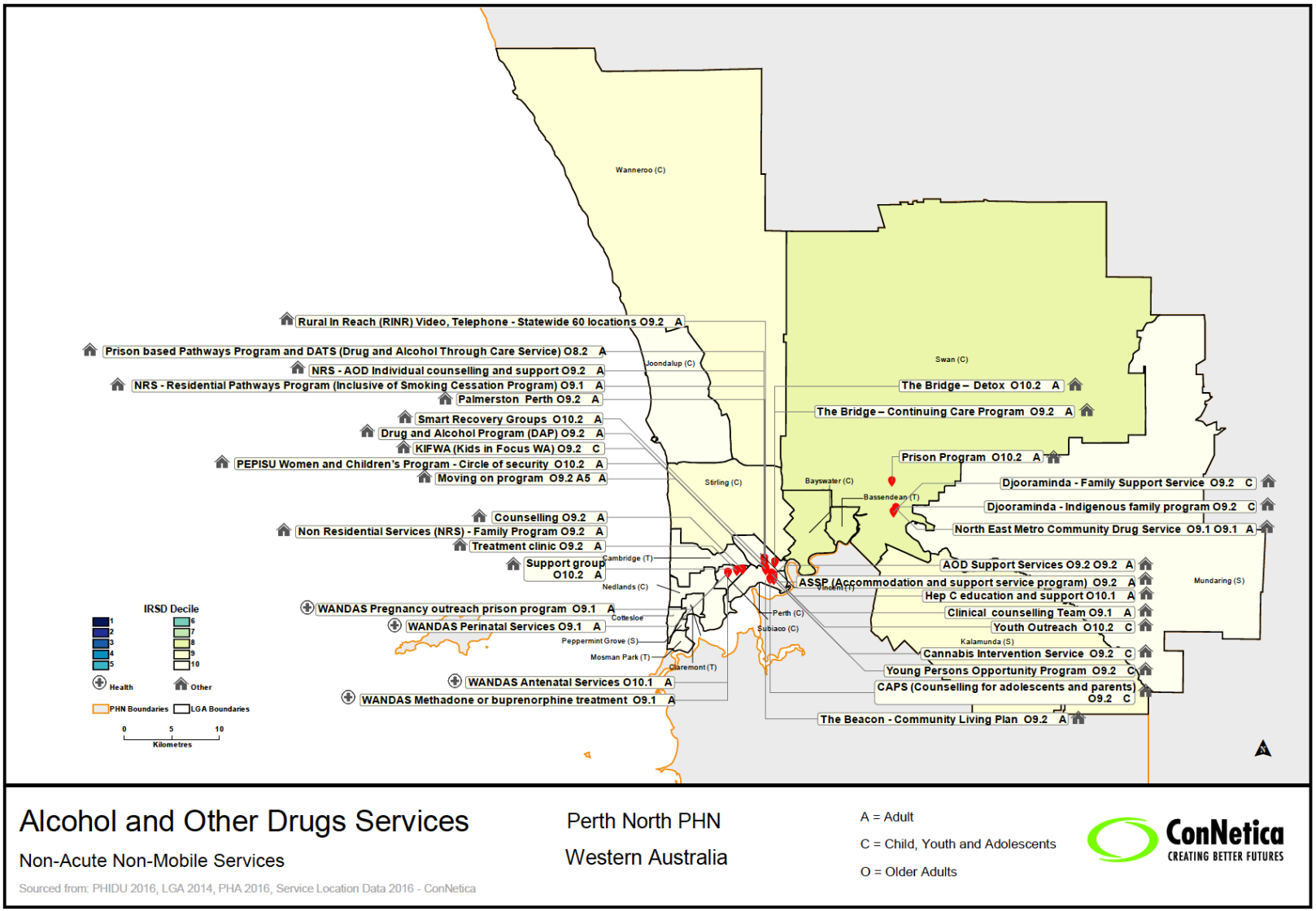



**FIGURE 53** AOD NON-ACUTE NON-MOBILE OUTPATIENT CARE IN PNPHN

## 9.4 Information and Guidance Services - AOD

### *Children and Adolescents*

One BSIC of this type was identified for children and adolescents in PNPHN (Table 61).

DAYS is an umbrella operation for a number of co-located programs and services run by Mission Australia for young people in Perth with alcohol and or other drug misuse.

**The number of BSIC per 100,000 Children and Adolescents is 0.38.**

**TABLE 61** AOD INFORMATION AND GUIDANCE CARE FOR CHILDREN AND ADOLESCENTS IN PNPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| Mission Australia (WA) | Drug and Alcohol Services (DAYS) | East Perth | CY[F10-F19] - I1.1e | East Perth |

### *Adults*

One BSIC was identified providing this type of care for adults in PNPHN (Table 62).

The WA Substance Users Association runs an information and guidance service in the Perth Metropolitan area.

**The number of BSIC per 100,000 adults is 0.15.**

**TABLE 62** AOD INFORMATION AND GUIDANCE FOR ADULTS IN PNPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| WA Substance Users Association (WASUA) | Perth NESP | Perth | AX[F10-F19] - O11 | Perth Metropolitan |

## 9.5 Patterns of AOD Care - PNPHN

The pattern of care for the PNPHN can be found in Figure 54. There is a heavy reliance on Non-Acute Non-Mobile counselling services, with a spike in Residential accommodation type care.

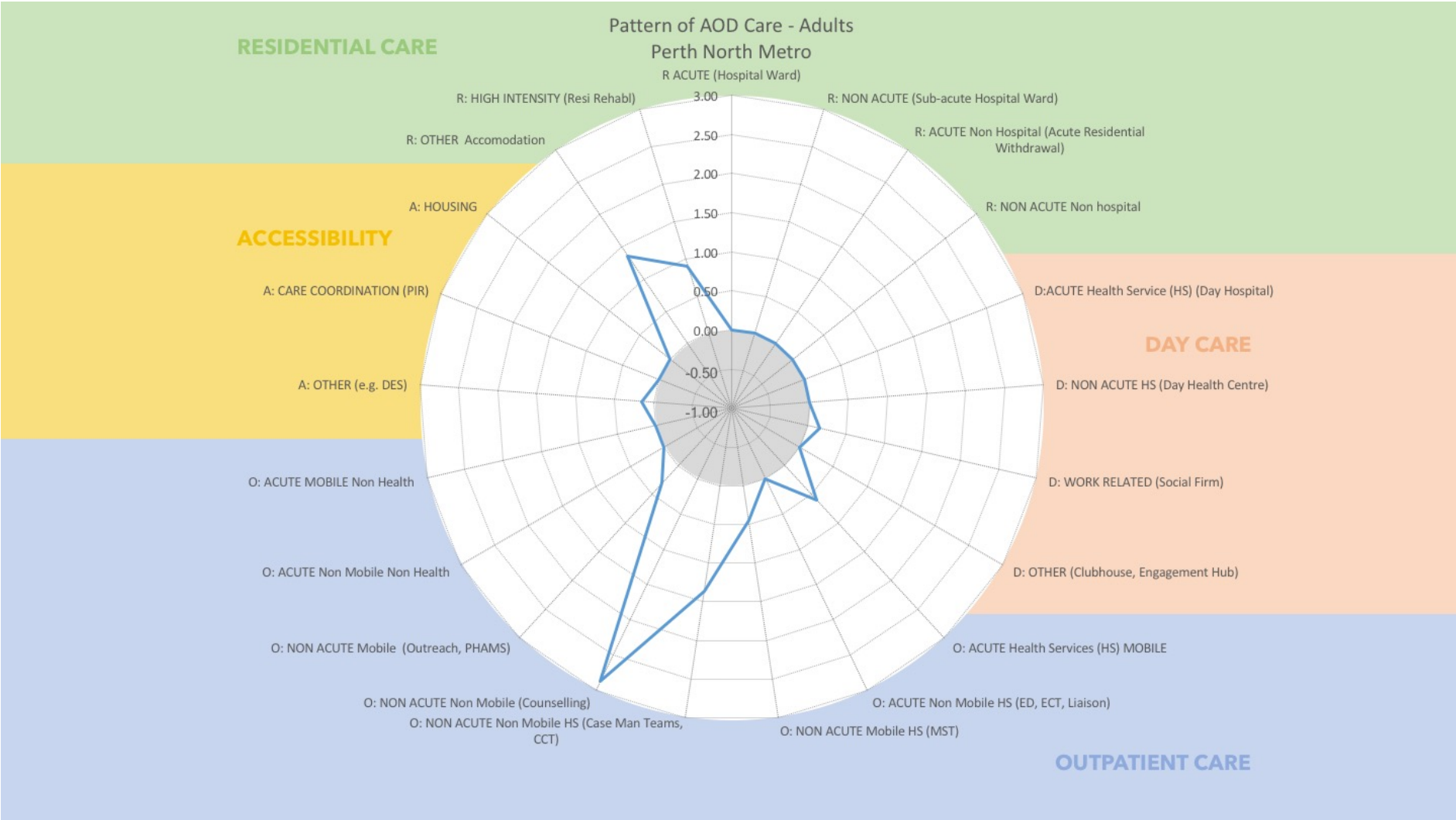



**FIGURE 54** PATTERN OF AOD CARE IN PNPHN

## 9.6 Workforce Capacity – AOD PNPHN

### Introduction

During the data gathering process for this Atlas stakeholders were asked to report the full time equivalent (FTE) staffing levels for each BSIC. Data was collected for 302 of the 847 teams identified in this project (36%), a symptom of working into the system at a time of intense structural change. FTE data was sometimes not able to be provided, and at times what was provided was more an estimation or lacked specificity. As such, the data presented here should not be relied upon but rather used as an approximation of the workforce characteristics.

Data in relation to PNPHN AOD workforce FTE was collected for just 39% or 27 of the 69 AOD delivery teams (BSIC). As such data presented here should be treated with caution. The average team size was 5.32 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 (less than 1 FTE), small (<5 FTE), medium (from 6-20 FTE) and large (20 plus FTE). As seen in Table 63 below, most AOD teams are small in size. Teams working in NGOs are generally smaller than those working in the health sector.

**TABLE 63** AOD TEAM SIZE

| Teams | Not Stated | X-Small (<1 FTE) | Small (1-5 FTE) | Medium (6-20 FTE) | Large (>20FTE) | Total |
|---|---|---|---|---|---|---|
| **Total** | 42 | 6 | 13 | 6 | 2 | 69 |
| **%** | - | 22% | 49% | 22% | 7% | 100%* |

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

# Perth South PHN

# 10. Perth South PHN

The PSPHN catchment encompasses an area of 5,148 km$^2$, with a population of 965,997 people. The region encompasses the South Metropolitan Health Service, as well as 16 LGAs (Figure 55).

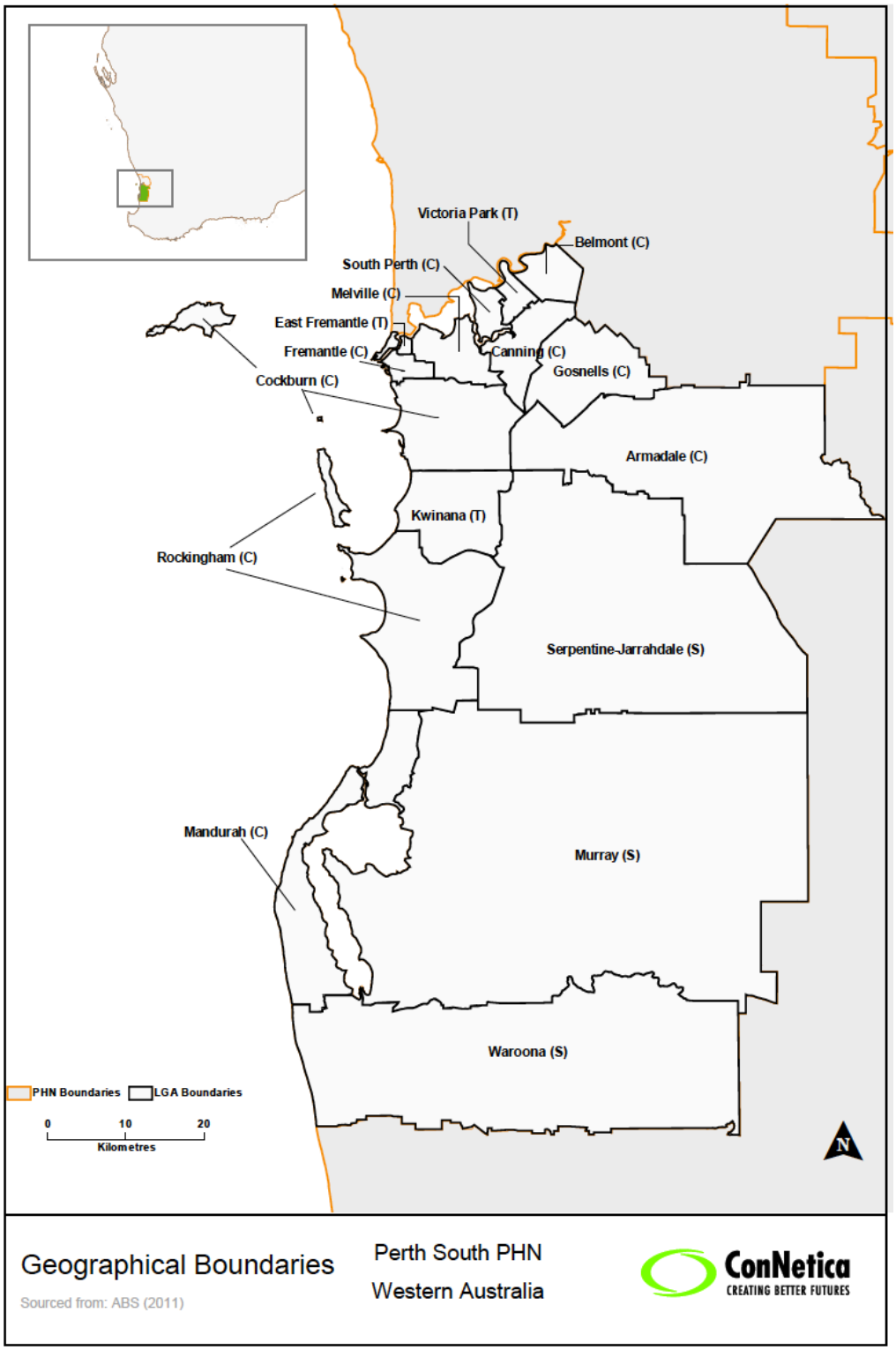



**FIGURE 55** GEOGRAPHICAL BOUNDARIES OF PSPHN

## 10.1 Population Demographics

Key population demographics relevant to this Atlas include the Estimated Residential Population (ERP) as well as indicators of the age structure of the population using measures such as the Dependency Ratios and Ageing Indexes. The diversity of the population is examined utilising the indicators of Indigenous status and proportion of those born overseas Table 64 below presents key population demographics for the PSPHN, disaggregated by LGA.

**TABLE 64** KEY POPULATION DEMOGRAPHICS FOR PSPHN

| LGA | Area* (sq. km) | Total Population† | Density Ratio | Dependency Ratio | Ageing index | Indigenous Status (%)§ | Overseas Born (%)¶ |
|---|---|---|---|---|---|---|---|
| Armadale | 559.9 | 77,586 | 138.57 | 0.49 | 51.8 | 2,556 (3.1) | 30.0 |
| Belmont | 39.7 | 40,968 | 1031.94 | 0.42 | 83.9 | 1,507 (3.6) | 37.2 |
| Canning | 64.9 | 98,063 | 1510.99 | 0.41 | 75.3 | 1,229 (1.2) | 45.9 |
| Cockburn | 167.9 | 106,580 | 634.78 | 0.45 | 54.0 | 2,260 (2.0) | 32.4 |
| East Fremantle | 3.1 | 7,831 | 2526.13 | 0.48 | 83.4 | 47 (0.6) | 25.4 |
| Fremantle | 19 | 30,881 | 1625.32 | 0.46 | 110.9 | 610 (1.9) | 31.3 |
| Gosnells | 127.2 | 123,993 | 974.79 | 0.46 | 51.2 | 3,670 (2.9) | 37.2 |
| Kwinana | 120 | 36,145 | 301.21 | 0.47 | 42.0 | 1,700 (4.5) | 27.9 |
| Mandurah | 174.2 | 82,693 | 474.70 | 0.66 | 112.1 | 1,967 (2.3) | 25.2 |
| Melville | 52.8 | 107,205 | 2030.40 | 0.49 | 102.3 | 740 (0.7) | 34.1 |
| Murray | 1711 | 16,865 | 9.86 | 0.66 | 100.7 | 451 (2.6) | 18.7 |
| Rockingham | 256.9 | 125,889 | 490.03 | 0.51 | 52.0 | 2,424 (1.8) | 31.4 |
| Serpentine-Jarrahdale | 904.1 | 22,695 | 25.10 | 0.50 | 40.1 | 411 (1.7) | 23.2 |
| South Perth | 19.8 | 46,477 | 2347.32 | 0.38 | 95.8 | 605 (1.3) | 35.6 |
| Victoria Park | 17.9 | 38,123 | 2129.78 | 0.32 | 75.3 | 722 (1.9) | 40.5 |
| Waroona | 831.8 | 4,001 | 4.81 | 0.58 | 86.2 | 152 (3.6) | 16.3 |
| **PSPHN** | **5,148** | **978,278** | **190.00** | **0.48** | **70.7** | **21,073 (2.1)** | **33.6** |
| WA | 2.64 million | 2.59 million | 0.98 | 0.48 | 68.4 | 95,707 (3.6) | 33.0 |
| Australia | 7.7 million | 23.49 million | 3.10 | 0.54 | 78.1 | 729,048 (3.1) | 24.6 |

Sourced from: * ASGS (ABS, 2011a); †ERP 2015 (PHIDU, 2016); §ERP (non ABS) 2015 (PHIDU, 2016); ¶ABS, 2011b

## Population Profile

### Cultural Diversity

Overall for PSPHN, the Indigenous Status indicator is below the state and national figures, 3.6% and 3.1% respectively. Only one LGA in the catchment has a higher Indigenous Status than across the state, being Kwinana (4.5%) LGA.

The majority of LGAs within the PSPHN have a higher proportion of people born overseas than the Australian average (24.6%). Canning LGA reports the highest proportion of overseas born people with 45.9% and Waroona LGA the lowest at 16.3%. Figure 56 through Figure 58 display key social demographic information geographically by LGA.

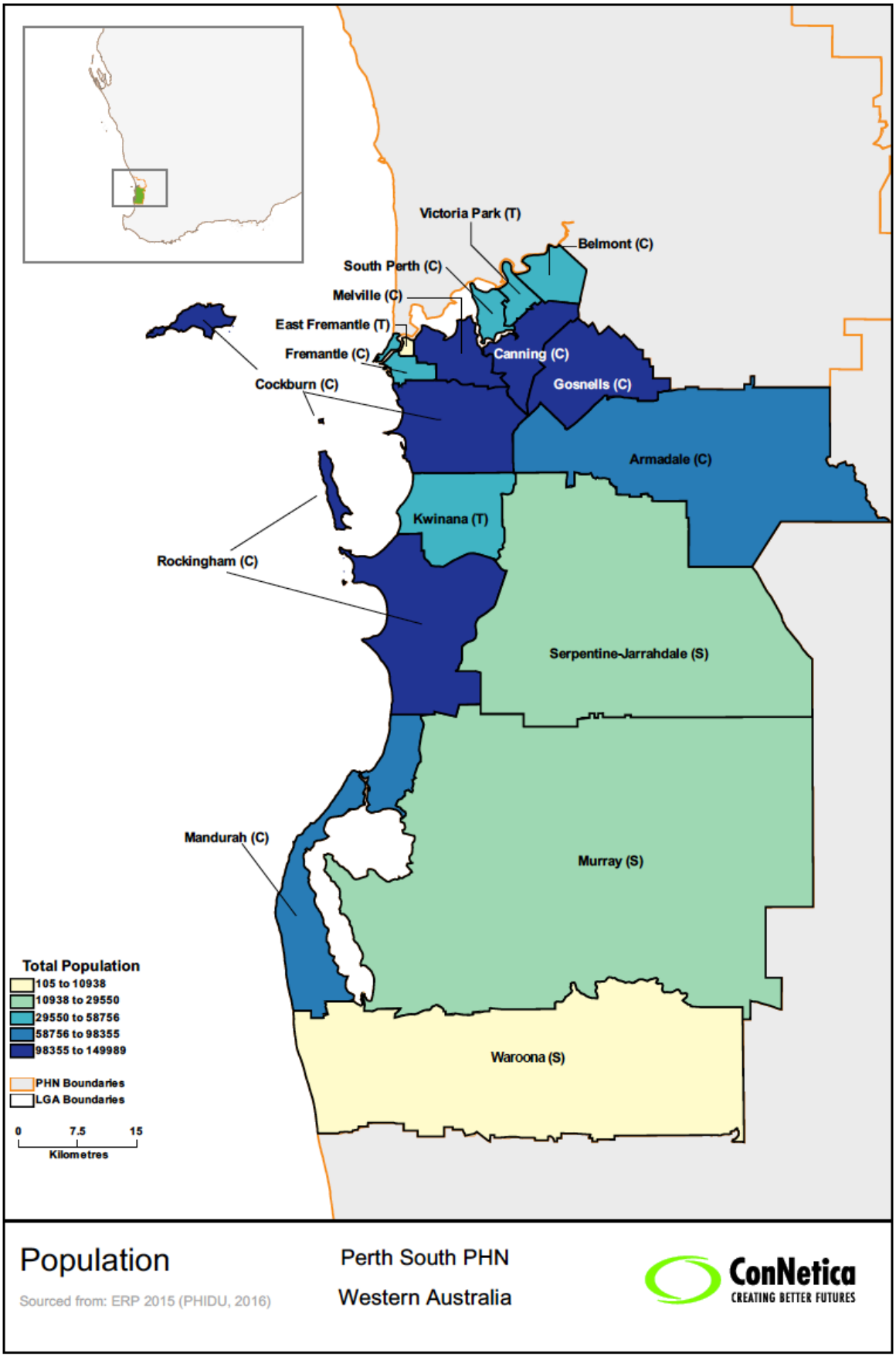



**FIGURE 56** POPULATION (ERP 2011) BY LGA IN PSPHN

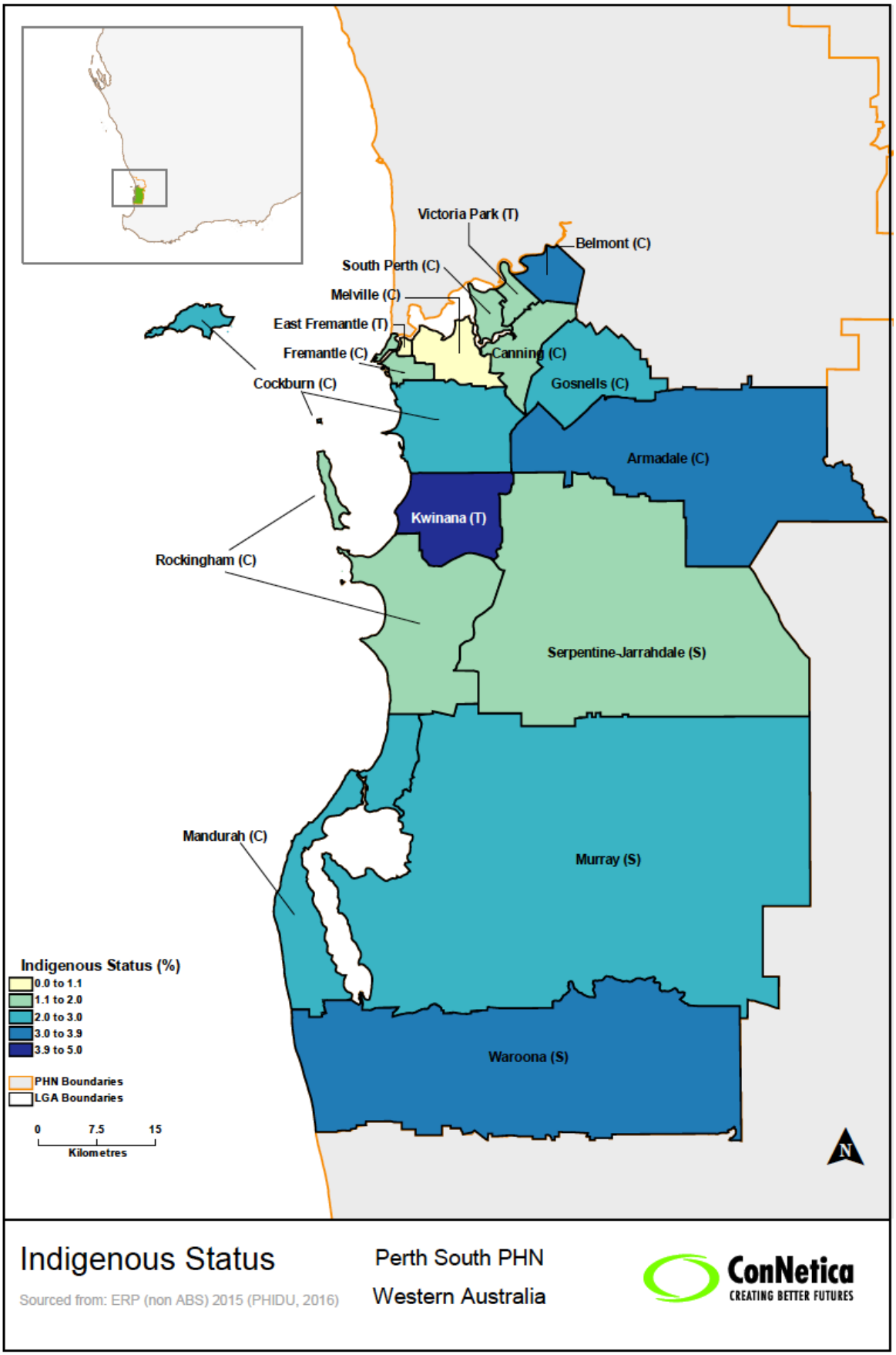



**FIGURE 57** INDIGENOUS STATUS BY LGA IN PSPHN

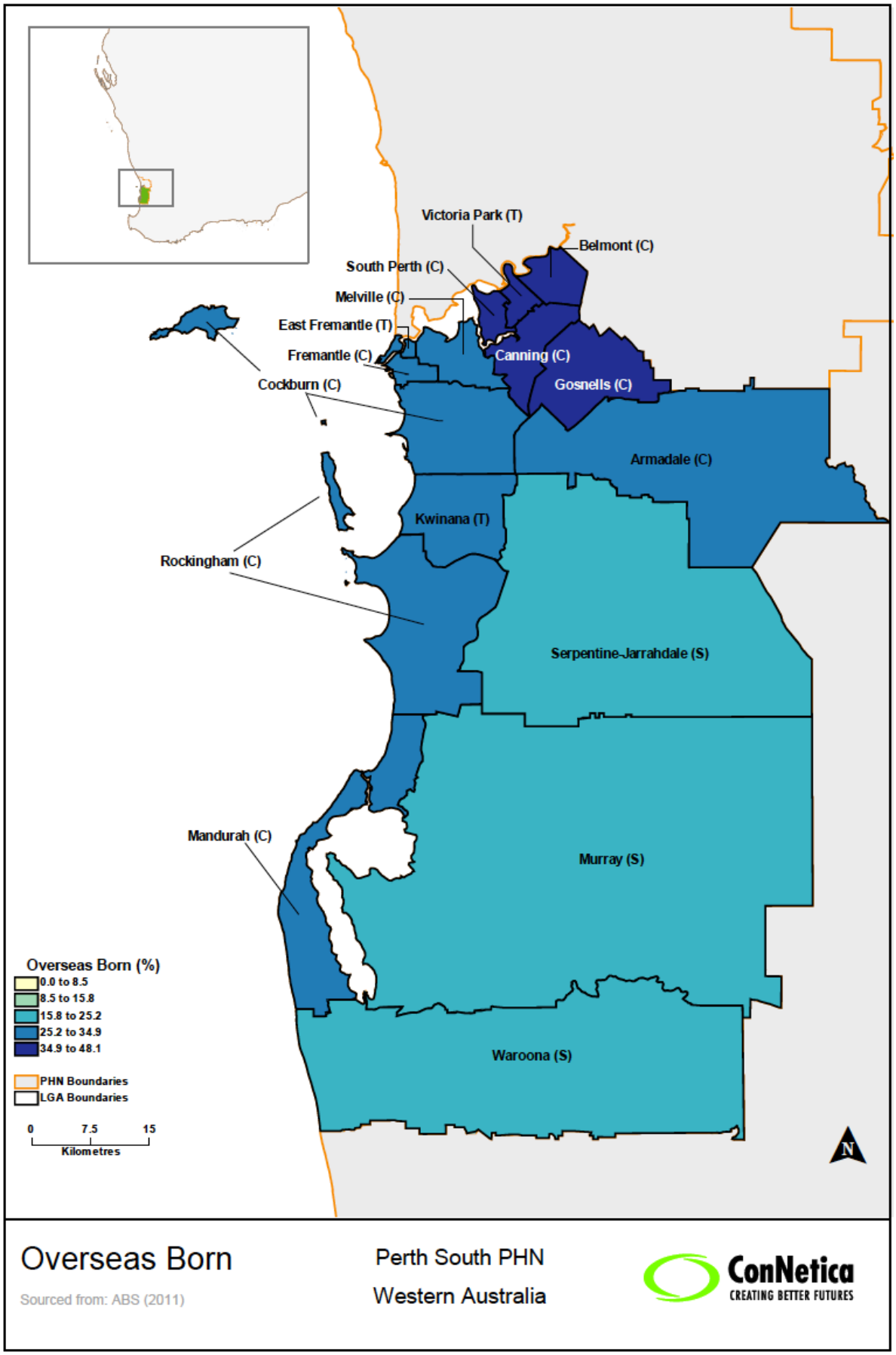



**FIGURE 58** PROPORTION OF POPULATION BORN OVERSEAS BY LGA IN PSPHN

## 10.2 Social Determinants of Health

Social determinants are increasingly recognised as playing a major role in the prevalence of mental illness and suicide in communities. The indicators presented in this report have been selected as they each have a relationship to mental health and intentional self-harm including suicide.

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.

For this report, key socio-economic indicators that have been shown to be associated with poor mental health outcomes have been presented (Table 65). One of the key measures 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.

The Index of Relative Socio-economic Disadvantage (IRSD) score is a measure of the relative disadvantage in a given geographic area (ABS, 2011c). The IRSD scores are based on standardised distribution across all areas and are an important measure for health service planning. Research shows that people who live in areas with lower socio-economic conditions tend to have poorer health outcomes than people in areas with average or higher conditions.

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 report, 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 65** KEY SOCIO-ECONOMIC FACTORS FOR PSPHN

| LGA | Single parent families (%)* | Needing Assistance (%)* | Early school leavers* (ASR per 100) | Un employment (%)‡ | Income <$400 / wk (%)† | IRSD Decile (score)§ |
|---|---|---|---|---|---|---|
| Armadale | 25.0⇧ | 3.8⇩ | 39.2⇧ | 8.5⇧ | 36.8⇧ | 7 (996)⇩ |
| Belmont | 24.0⇧ | 4.5 | 32.5⇩ | 6.4⇧ | 36.0⇧ | 6 (987)⇩ |
| Canning | 16.6⇩ | 3.5⇩ | 26.5⇩ | 4.0⇩ | 39.4⇧ | 9 (1034)⇧ |
| Cockburn | 18.9⇩ | 3.7⇩ | 34.9⇧ | 5.6 | 34.6⇧ | 9 (1035)⇧ |
| East Fremantle | 13.4⇩ | 3.8⇩ | 19.9⇩ | 2.8⇩ | 30.5⇩ | 10 (1088)⇧ |
| Fremantle | 24.5⇧ | 5.3⇧ | 25.9⇩ | 7.3⇧ | 35.3⇩ | 8 (1009)⇩ |
| Gosnells | 21.1⇧ | 3.6⇩ | 37.0⇧ | 7.1⇧ | 37.3⇧ | 8 (1004)⇩ |
| Kwinana | 26.0⇧ | 4.2⇩ | 42.4⇧ | 11.5⇧ | 38.1⇧ | 5 (968)⇩ |
| Mandurah | 27.7⇧ | 5.4⇧ | 39.3⇧ | 10.1⇧ | 43.5⇧ | 6 (978)⇩ |
| Melville | 15.3⇩ | 3.6⇩ | 23.1⇩ | 3.0⇩ | 35.2⇩ | 10 (1077)⇧ |
| Murray | 22.7⇧ | 4.4⇩ | 42.4⇧ | 9.3⇧ | 43.8⇧ | 6 (982)⇩ |
| Rockingham | 21.4⇧ | 4.0⇩ | 38.6⇧ | 7.5⇧ | 37.5⇧ | 8 (1012)⇩ |
| Serpentine-Jarrahdale | 16.3⇩ | 2.9⇩ | 42.0⇧ | 4.4⇩ | 35.1⇩ | 9 (1047)⇧ |
| South Perth | 17.5⇩ | 3.8⇩ | 19.5⇩ | 2.8⇩ | 32.7⇩ | 10 (1065)⇧ |
| Victoria Park | 19.0⇩ | 5.3⇧ | 24.5⇩ | 4.4⇩ | 34.7⇩ | 8 (1021)⇧ |
| Waroona | 23.4⇧ | 6.4⇧ | 47.5⇧ | 6.1⇧ | 43.6⇧ | 4 (948)⇩ |

| PSPHN | 20.7 | 4.0 | 32.8 | 5.8 | 37.1 | 1020 |
|---|---|---|---|---|---|---|
| WA | 19.9 | 4.5 | 32.8 | 5.6 | 35.5 | 1022 |
| Australia | 21.3 | 4.9 | 34.3 | 5.9 | 38.9 | 1000 |

Sourced from: Sourced from: * 2011(PHIDU, 2016); † ABS, 2011b; ‡ June quarter 2016 (CDE, 2016); § IRSD 2011 (ABS 2011c)

## Families

Nine LGAs within PSPHN have higher proportions of single parent families within their catchments compared with the average rate for both state (19.9%) and Australia as a whole (21.3%) (Figure 59).

## Human function

The proportion of the PSPHN population needing assistance with core activities (4%) is below the Australian (4.9%) average. However, within the PSPHN catchment there is significant variability with Waroona LGA reporting the highest proportion with 6.4% of the population and Serpentine-Jarrahdale LGA reporting the lowest proportion 2.9% (Figure 60).

## Education

Overall, the PSPHN population has a similar rate of the population who have left school prior to Year 10 or who did not go to school at all compared to both the state and national rates, being 32.8 and 34.3 per 100 respectively (Figure 61). However, almost half of the LGAs within the catchment do have lower rates of early school leavers compared to the state including Belmont (32.5), Canning (26.5), East Fremantle (19.9), Fremantle (25.9), Melville (23.1), South Perth (19.5) and Victoria Park (24.5).

## Employment

The unemployment rate for PSPHN, as measured by the June quarter 2016, is above the national average (5.9%). The highest rate of unemployment is in Kwinana at 11.5% and the lowest rate is in South Perth LGA at 2.8% (Figure 62).

## Income

The Murray LGA has the highest percentage of individuals with low income, defined as less than $400 per week, with 43.8% of the population identified in this category, above both the state and national rates of 35.5% and 38.9% respectively (Figure 63).

## Index of Relative Socio-economic Disadvantage

The most disadvantaged LGA in the PSPHN is Waroona (IRSD – 948). Other LGAs with scores below 1000 included: Armadale (996), Belmont (987), Kwinana (969) and Mandurah (978) (Figure 64).

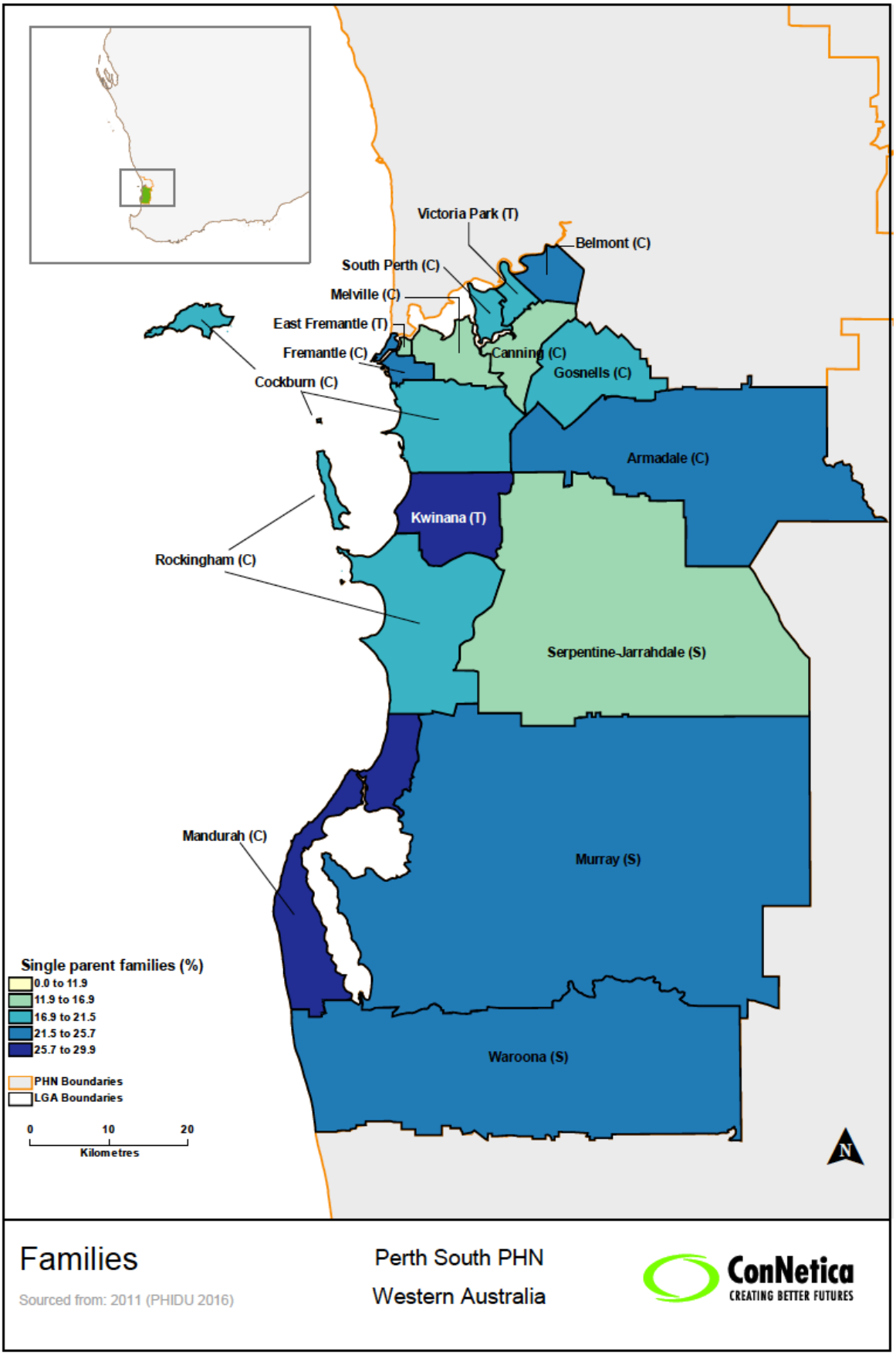



**FIGURE 59** PROPORTION OF SINGLE PARENT FAMILIES BY LGA IN PSPHN

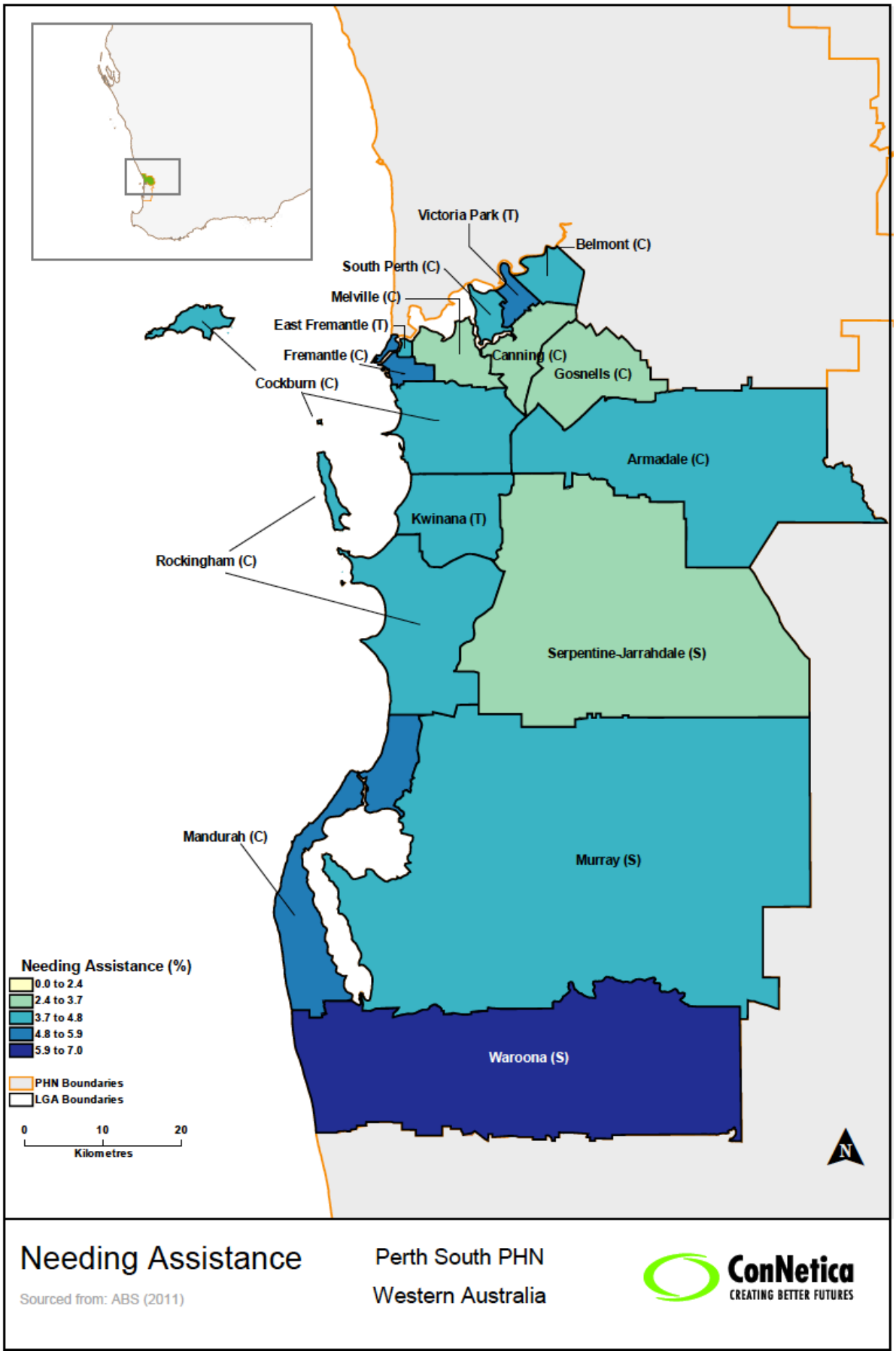



**FIGURE 60** PROPORTION OF THOSE NEEDING ASSISTANCE BY LGA IN PSPHN

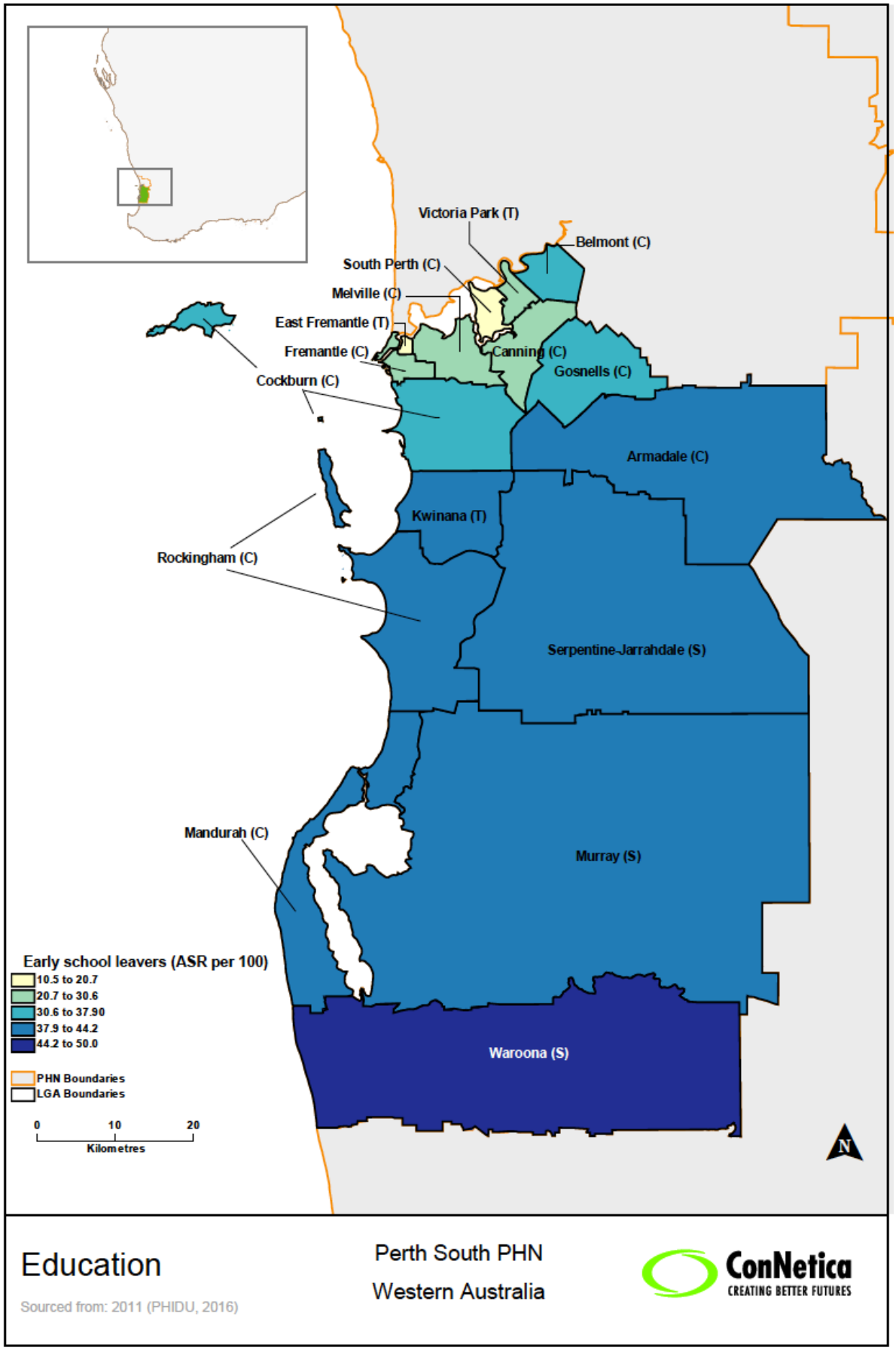



**FIGURE 61** PROPORTION OF EARLY SCHOOL LEAVERS BY LGA IN PSPHN

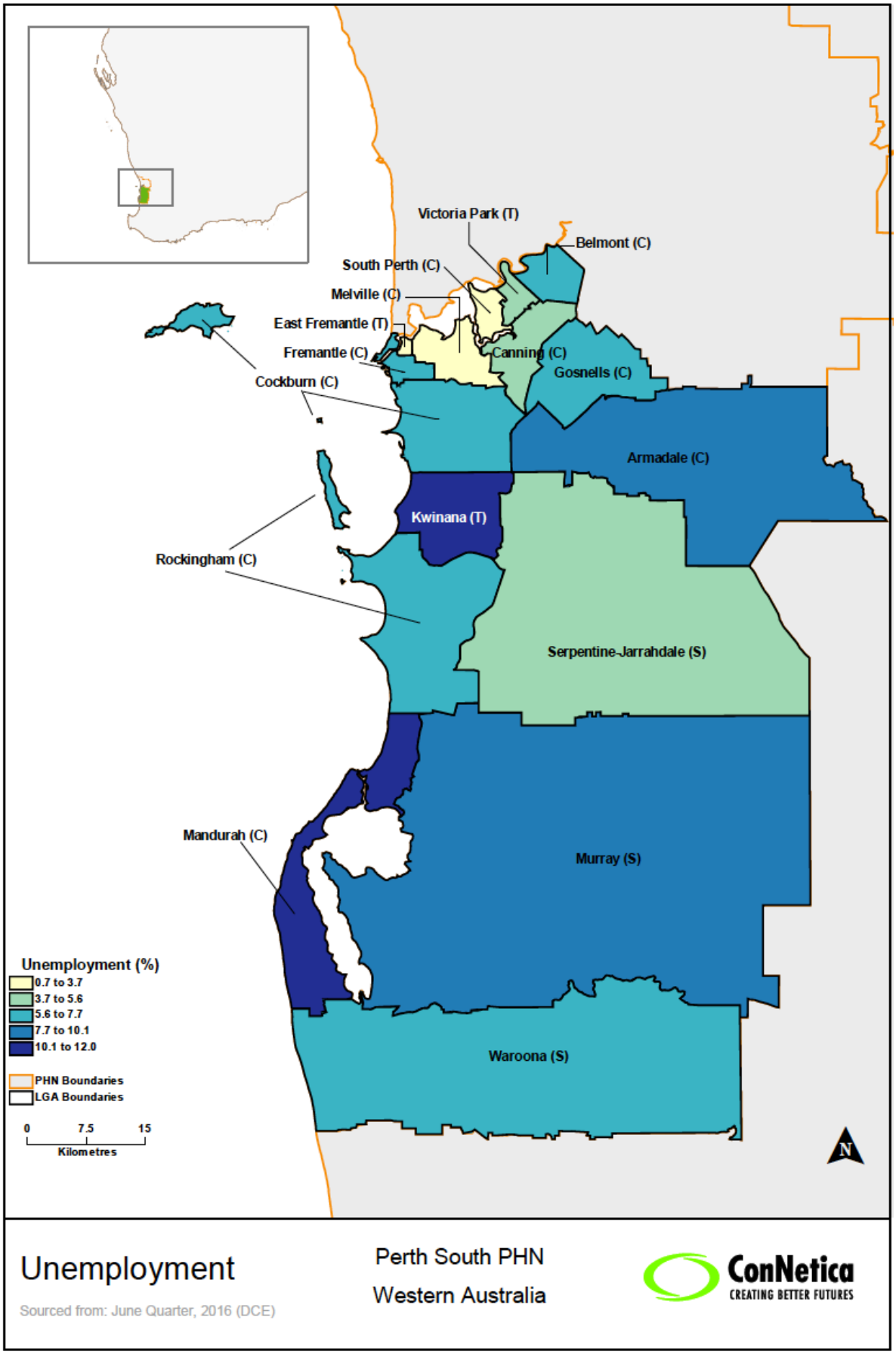



**FIGURE 62** PROPORTION OF UNEMPLOYMENT BY LGA IN PSPHN

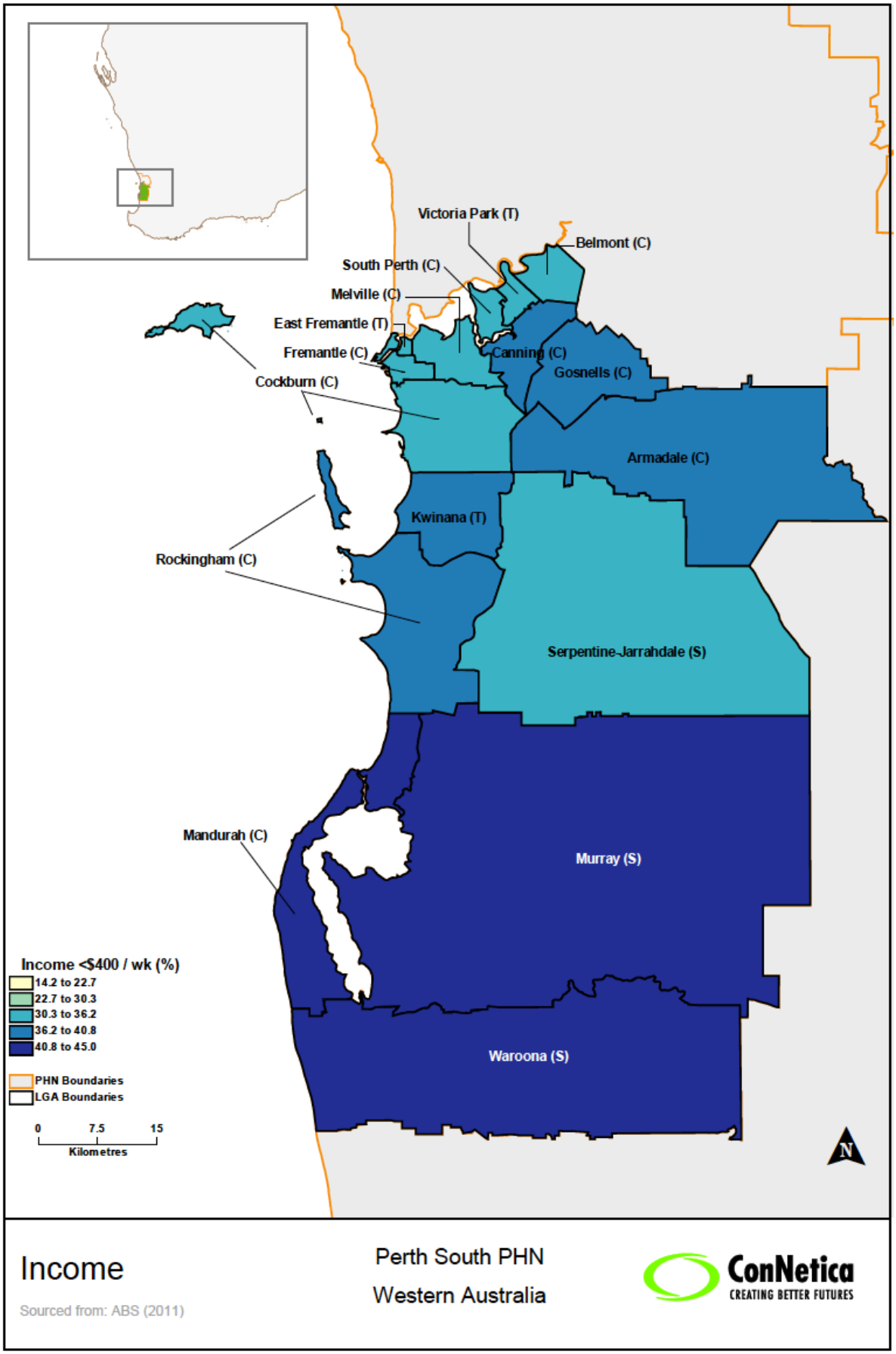



**FIGURE 63** INDIVIDUAL WEEKLY INCOME (<$400/WK) BY LGA IN PSPHN

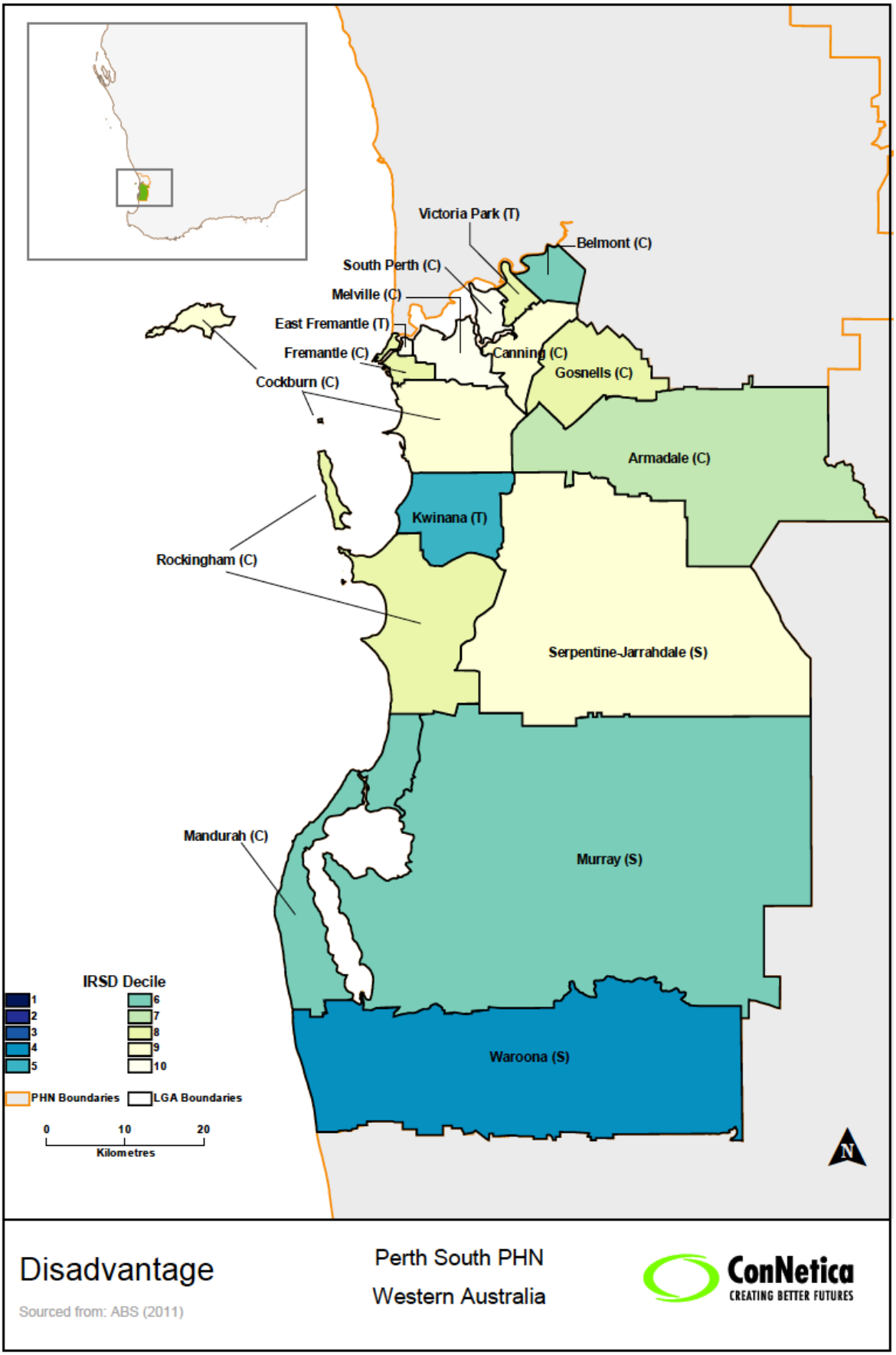



**FIGURE 64** INDEX OF RELATIVE SOCIAL DISADVANTAGE (IRSD) 2011 BY LGA IN PSPHN

## 10.3 Health and Mortality

A number of indicators of health status have been examined including self-report heath status, a population based indicators of psychological distress and some mortality measures (Table 66).

**TABLE 66** HEALTH AND MORTALITY OF PSPHN

| LGA | Fair/poor Health (ASR per 100)* | Psychological Distress (ASR per 100)* | Suicide (n)† | Suicide (ASR per 100,000)† | Road Toll (n)† | Road Toll (ASR per 100,000)† |
|---|---|---|---|---|---|---|
| Armadale | 15.1⇧ | 11.3⇧ | 54 | 16.7⇧ | 21 | 6.4⇧ |
| Belmont | 16.0⇧ | 11.6⇧ | 28 | 14.9⇩ | 8 | 4.2⇩ |
| Canning | 13.5⇩ | 10.9⇧ | 44 | 9.7⇩ | 17 | 3.7⇩ |
| Cockburn | 14.5⇧ | 10.2⇩ | 74 | 15.7⇧ | 22 | 4.7⇩ |
| East Fremantle | 11.8⇩ | 10.1⇩ | n/a | n/a | n/a | 0.0⇩ |
| Fremantle | 14.0⇧ | 11.0⇧ | 22 | 15.2⇧ | 7 | 5.0⇩ |
| Gosnells | 14.7⇧ | 11.6⇧ | 67 | 12.2⇩ | 37 | 6.6⇧ |
| Kwinana | 17.4⇧ | 11.2⇧ | 16 | 10.6⇩ | 7 | 4.5⇩ |
| Mandurah | 16.0⇧ | 13.3⇧ | 58 | 16.9⇧ | 17 | 4.9⇩ |
| Melville | 10.2⇩ | 9.8⇩ | 52 | 10.7⇧ | 14 | 2.8⇩ |
| Murray | 17.2⇧ | 11.1⇧ | 16 | 22.2⇧ | 5 | 6.7⇧ |
| Rockingham | 14.8⇧ | 10.8⇧ | 78 | 14.8⇧ | 27 | 5.1⇩ |
| Serpentine-Jarrahdale | 13.7 | 8.4⇩ | 9 | 9.6⇩ | 14 | 15.1⇧ |
| South Perth | 10.7⇩ | 10.2⇩ | 20 | 9.1⇩ | 7 | 3.1⇩ |
| Victoria Park | 14.7⇧ | 11.1⇧ | 15 | 7.9⇩ | 6 | 3.1⇩ |
| Waroona | 17.1⇧ | 12.1⇧ | n/a | n/a | n/a | n/a |
| **PSPHN** | **14.1** | **11.0** | **560** | **13.2** | **213** | **5.0** |
| WA | 13.7 | 10.5 | 1,581 | 13.7 | 769 | 6.7 |
| Australia | 14.6 | 10.8 | 11,874 | 11.2 | 5,441 | 5.1 |

Sourced from: * 2011-12 (PHIDU, 2016); †2010-14 (PHIDU, 2016)

### Health and Wellbeing

Estimates of self-reported health in the PSPHN catchment indicate that people in the Kwinana LGA reported significantly higher rates of fair or poor health (17.4 per 100) compared to both the Western Australian and Australian averages, 13.7 and 14.6 per 100 respectively (Figure 65). Conversely, South Perth (10.7) and Melville (10.2) LGAs had significantly lower rates than these averages. The LGA of Mandurah had a significantly higher rate of psychological distress (13.3 per 100) compared to both the state and national rates of 10.5 and 10.8 respectively (Figure 66).

### Mortality

Seven of the LGAs in the PSPHN catchment have significantly higher suicide rates compared to the Western Australia and Australian average rates of 13.7 and 11.2 per 100, 000 (Figure 67). The LGAs of Murray and Mandurah, with rates of 22.2 and 16.9 per 100,000 are significantly higher.

When compared to the road toll rates, almost all LGAs in the PSPHN catchment report rates which are at least half of the registered suicide rates. In fact, for some LGAs the suicide rate is over three times higher than the rate of death due to road traffic incidents, except for Serpentine-Jarrahdale, which had a road toll rate of 15.1 per 100,000, compared to a suicide rate of 9.6 per 100,000.

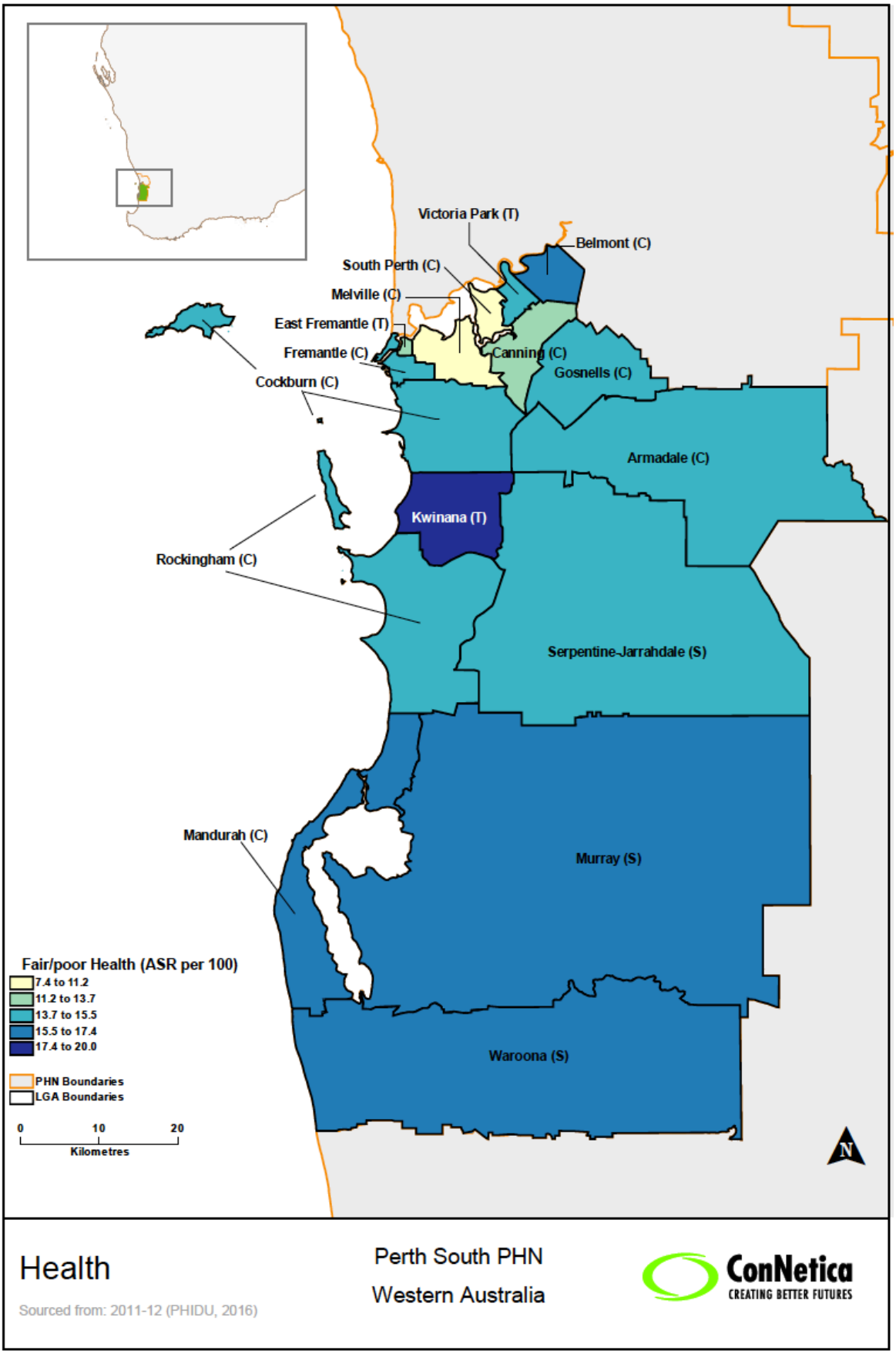



**FIGURE 65** FAIR/POOR HEALTH BY LGA IN PSPHN

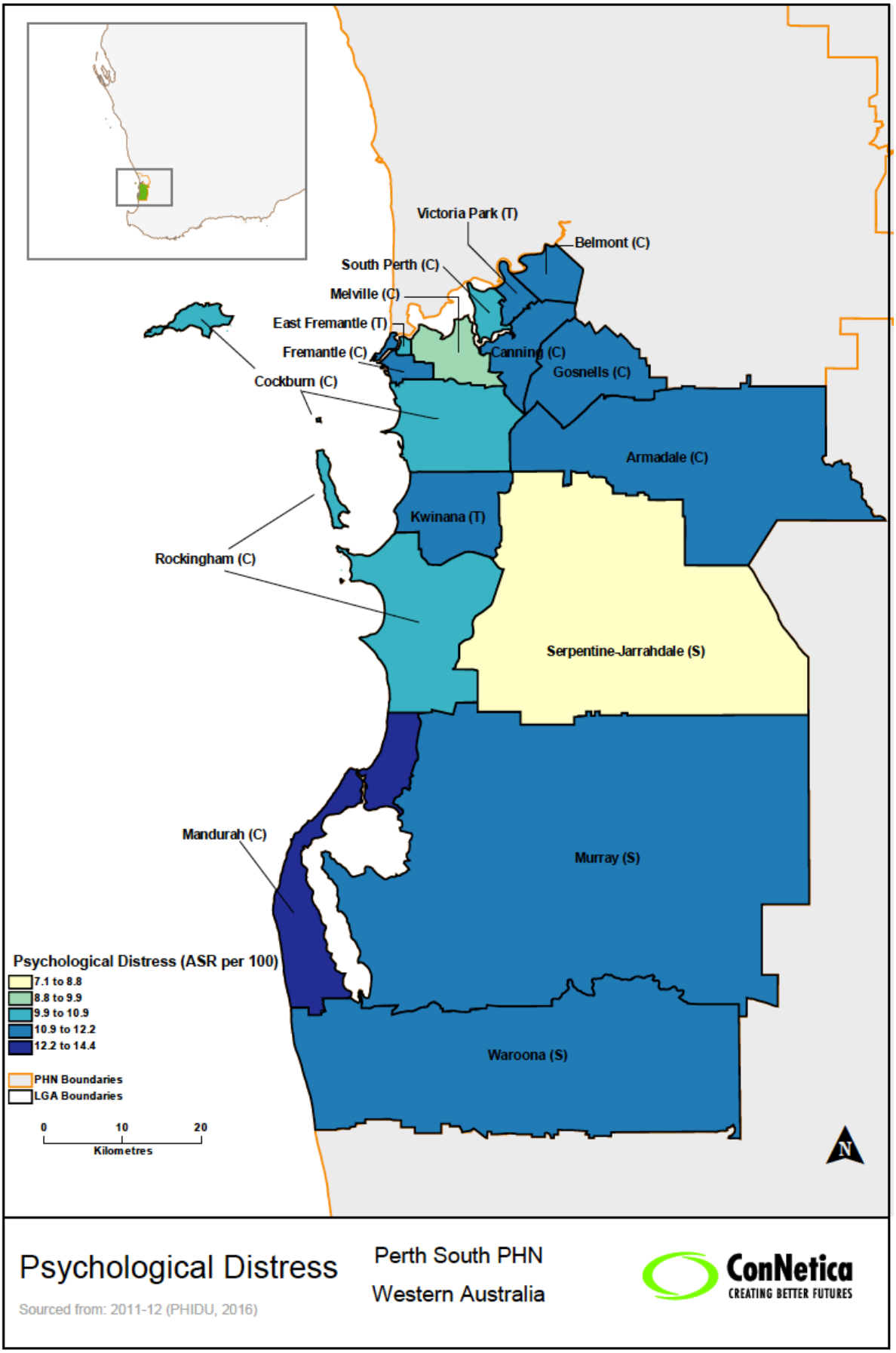



**FIGURE 66** PSYCHOLOGICAL DISTRESS BY LGA IN PSPHN

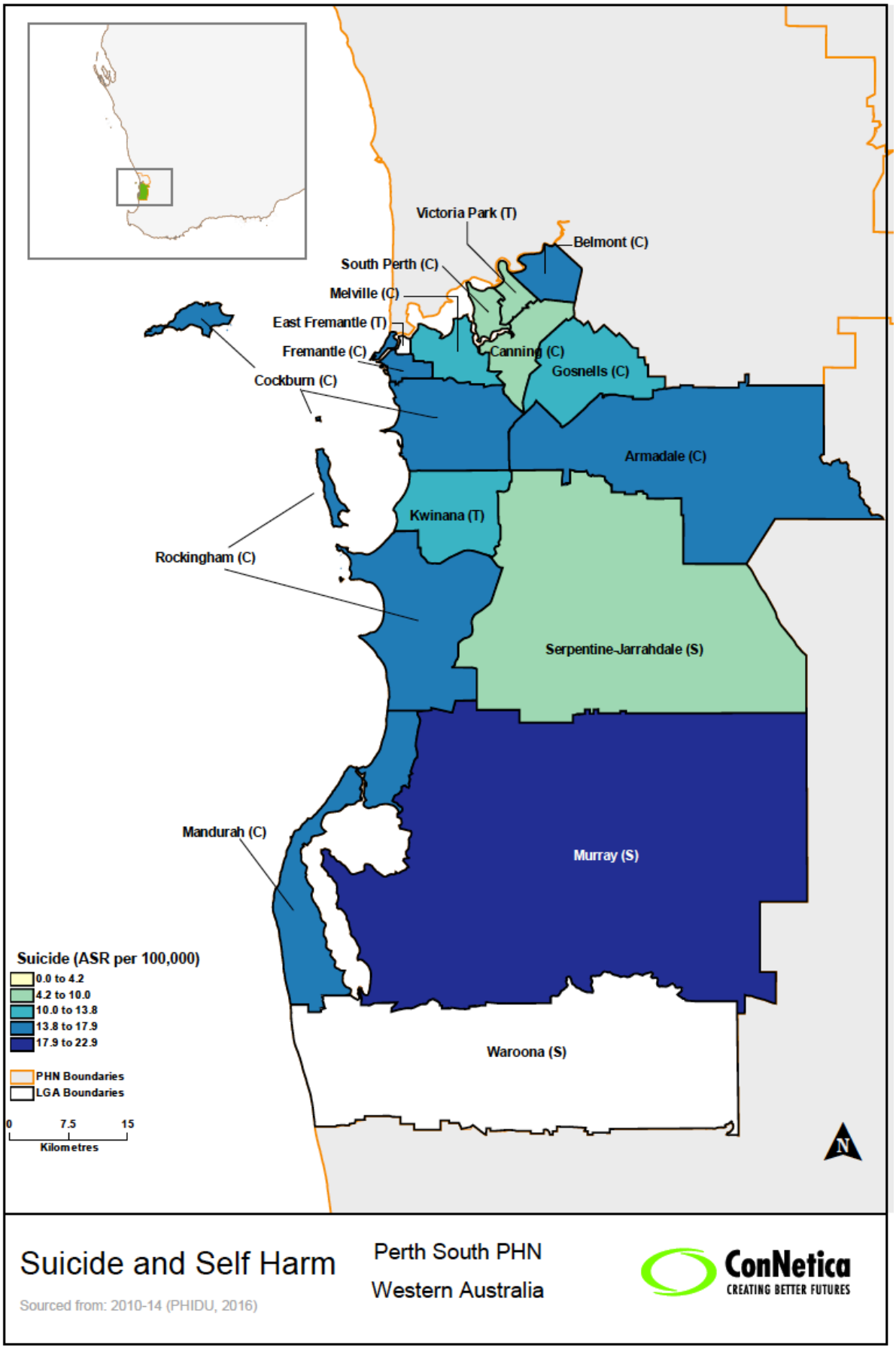



**FIGURE 67** SUICIDE BY LGA IN PSPHN

# 11. Mental Health Data - PSPHN

Publicly available population mental health and mental health service data is included in section 3.3 of Part One, where for comparative purposes, a brief overview of Australian and Western Australian prevalence and service data is given. The Prevalence and Treatment Data below is specific to PSPHN.

## 11.1 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, in particular 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. Where possible, in addition to the data below, the MHNIP services provided across PSPHN have been included in the Outpatient Services tables that follow.

Data extracted from the MHNIP data tables (Commonwealth of Australia, 2016) indicate that the number of patients serviced by MHNIP in the PSPHN catchment declined during the period from 2011/12 to 2014/15 (Figure 68).

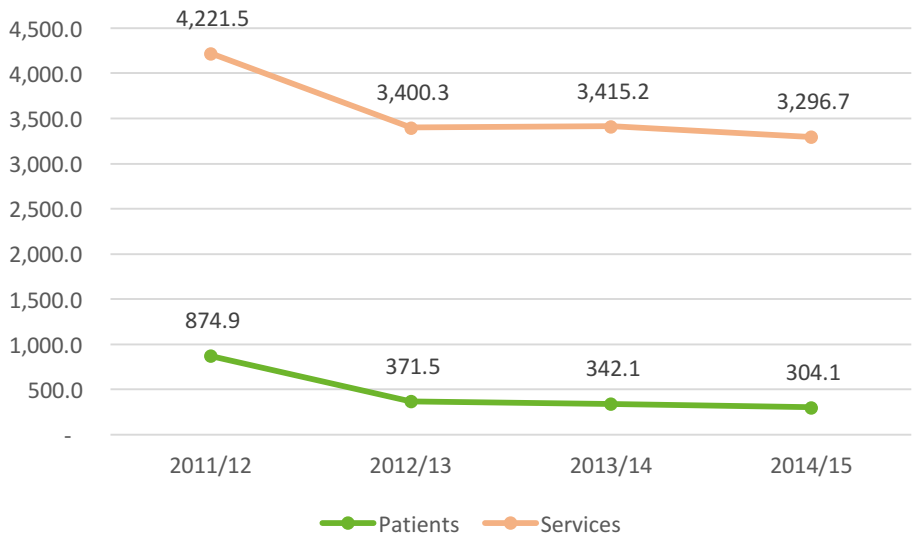



**FIGURE 68** MHNIP CLIENTS AND SERVICES, PSPHN CATCHMENT 2011/12 – 2014/15

## 11.2 Medical Benefits or Medicare Funded Services

Within the PSPHN catchment, the highest number of services were provided by General Practitioners (93,784 or 33.3%), servicing 55,205 patients (Table 67).

**TABLE 67** PSPHN MBS UTILISATION BY PROVIDER TYPE 2014-15

| Service Type | Gender | Patients (n) | Services (n) | Benefits Paid | Fees Charged |
|---|---|---|---|---|---|
| **Psychiatrists** | Male | 5,662 | 22,348 | $3,062,244 | $4,780,793 |
| | Female | 5,653 | 34,130 | $4,640,322 | $6,827,645 |
| | **Total** | **11,315** | **56,478** | **$7,702,566** | **$11,608,438** |
| **General Practitioners** | Male | 20,907 | 34,809 | $2,824,251 | $3,017,319 |
| | Female | 34,297 | 58,975 | $4,773,551 | $5,156,868 |
| | **Total** | **55,204** | **93,784** | **$7,597,802** | **$8,174,187** |
| **Clinical Psychologists** | Male | 5,742 | 26,483 | $3,435,267 | $4,447,958 |
| | Female | 9,288 | 44,869 | $5,832,998 | $7,522,673 |
| | **Total** | **15,030** | **71,352** | **$9,268,265** | **$11,970,631** |
| **Other Allied Health Providers** | Male | 5,092 | 20,552 | $1,846,228 | $2,550,725 |
| | Female | 9,140 | 39,646 | $3,464,170 | $4,655,827 |
| | **Total** | **14,232** | **60,198** | **$5,310,398** | **$7,206,552** |
| **Total** | | **67,874** | **281,832** | **$29,882,547** | **$38,966,272** |

Rockingham recorded the highest number of patients utilising MBS mental-health related services in 2014-15 (13,482 patients), however the highest number of services claimed during the same time period was in Melville (39,238 services) (Table 68). Overall, the lowest number of services were delivered Serpentine-Jarrahdale (6,752 services), which also had the lowest number of patients (1,795). General Practitioners provided the highest number of services in the Gosnells (14,691) and Rockingham (13,475), Psychiatrists in Melville (10,488), and Clinical Psychologists in Melville (13,566).

**TABLE 68** PSPHN MBS UTILISATION BY SA3 AND PROVIDER TYPE 2014-15

| SA3 | Provider Type | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Psychiatrists | | General Practitioners | | Clinical Psychologists | | Other Allied Health Providers | | Total | |
| | Patients (n) | Services (n) | Patients (n) | Services (n) | Patients (n) | Services (n) | Patients (n) | Services (n) | Patients (n) | Services (n) |
| Armadale | 717 | 3,178 | 5,481 | 9,823 | 1,106 | 5,018 | 1,450 | 6,045 | 8,871 | 24,064 |
| Belmont-Victoria Park | 842 | 4,640 | 3,050 | 5,097 | 1,163 | 5,470 | 665 | 2,910 | 5,721 | 18,117 |
| Bunbury | 747 | 2,913 | 5,836 | 8,661 | 791 | 6,388 | 2,569 | 9,800 | 6,977 | 24,731 |
| Canning | 1,078 | 5,616 | 4,970 | 8,839 | 1,331 | 6,388 | 1,171 | 5,001 | 6,127 | 25,844 |
| Cockburn | 1,366 | 6,337 | 5,726 | 9,158 | 2,272 | 10,823 | 1,386 | 6,149 | 7,255 | 32,467 |
| Fremantle | 686 | 3,749 | 2,796 | 4,505 | 1,308 | 6,652 | 717 | 6,652 | 3,609 | 18,274 |
| Gosnells | 1,187 | 5,506 | 7,664 | 14,691 | 1,419 | 6,424 | 1,826 | 8,110 | 8,963 | 34,732 |
| Kwinana | 349 | 1,543 | 2,237 | 3,634 | 444 | 2,011 | 516 | 2,078 | 2,635 | 9,266 |
| Mandurah | 989 | 4,312 | 5,904 | 9,227 | 541 | 2,324 | 1,936 | 7,155 | 6,976 | 23,016 |
| Melville | 1,891 | 10,488 | 5,515 | 9,271 | 2,666 | 13,566 | 1,282 | 5,913 | 8,871 | 39,238 |
| Rockingham | 1,201 | 5,431 | 8,355 | 13,745 | 1,518 | 6,495 | 2,408 | 9,888 | 13,482 | 35,559 |
| Serpentine-Jarrahdale | 245 | 1,124 | 1,527 | 2,529 | 296 | 4,830 | 456 | 1,767 | 1,795 | 6,752 |
| South Perth | 766 | 4,560 | 1,963 | 3,233 | 965 | 4,830 | 416 | 1,806 | 2,727 | 14,428 |
| **PSPHN** | **11,315** | **56,478** | **55,204** | **93,784** | **15,030** | **71,352** | **14,232** | **60,198** | **67,874** | **281,832** |
| Australia | 362,079 | 2,302,742 | 1,672,646 | 2,917,909 | 409,538 | 1,870,276 | 71,665 | 311,946 | 2,069,004 | 9,785,527 |

## 11.3 Access to Allied Psychological Services (ATAPS)

Access to Allied Psychological Services (ATAPS) is provided under the Better Access to Services strategy to enable patients to access assistance for short-term intervention. As such it is targeted at support and treatment for people who have mild to moderate mental illness.

A total of 10,903 clients accessed the ATAPS program in the PSPHN catchment over the period 2011/12 – 2014/15 (Figure 69). Both the number of clients and the number of sessions has continued to increase in the PSPHN catchment over the reported period.

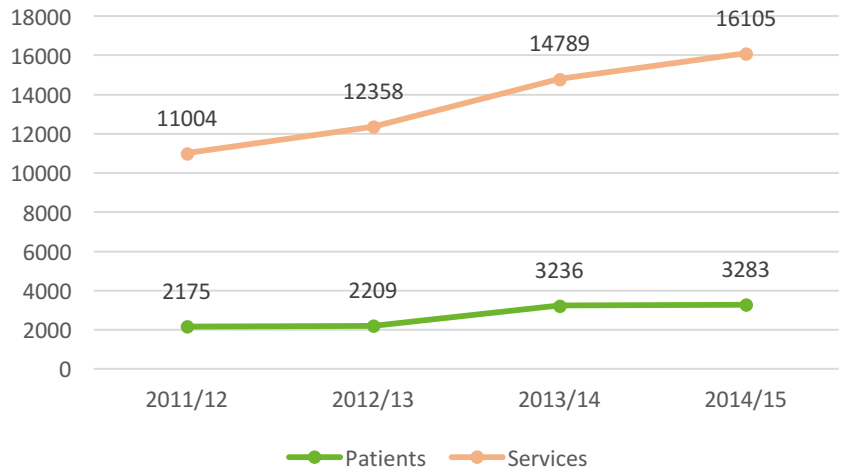



**FIGURE 69** ATAPS MDS TOTAL PATIENTS AND SESSIONS 2011/12 – 2014/15

The profile of ATAPs clients in 2014/15 demonstrates that the largest cohort accessing ATAPS services were those aged 25-34 years (20.1%), followed by people aged 18-24 years (17.3%) and 35-44 years (14.0%) (Table 69). This suggests either the need for or application of ATAPS services in the PSPHN catchment is highest amongst younger adults.

**TABLE 69** DISTRIBUTION OF ATAPS PATIENTS BY AGE GROUP

| Age Group (years) | Patients | |
|---|---|---|
| | Number | Percent |
| 0-4 | 16 | 0.5 |
| 5-11 | 297 | 9.0 |
| 12-17 | 357 | 10.9 |
| 18-24 | 569 | 17.3 |
| 25-34 | 659 | 20.1 |
| 35-44 | 460 | 14.0 |
| 45-54 | 436 | 13.3 |
| 55-64 | 321 | 9.8 |
| 65-74 | 129 | 3.9 |
| 75-84 | 32 | 1.0 |
| 85+ | 7 | 0.2 |
| **Total** | **3,283** | **100.0** |

Sourced from: Department of Health (2016b)

# 12. Mental Health Services - PSPHN

## 12.1 Introduction

In this section of the Atlas, the type, availability and location of service delivery teams (or BSIC) delivering mental health care in PSPHN are described.

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

There was a total of 192 BSIC identified that delivering 195 main types of care across 34 DESDE classifications of mental health care in PSPHN (Figure 70).

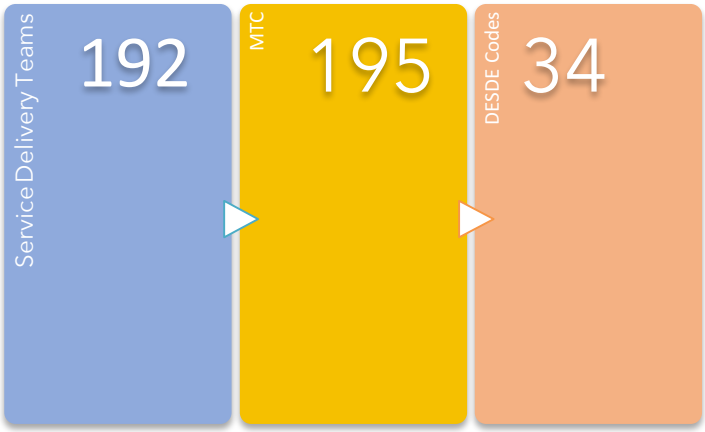



**FIGURE 70** SUMMARY OF SERVICES PROVIDING MENTAL HEALTH CARE IN PSPHN

70% of these are services for adults, 20% are for children and adolescents and 10% are for older adults. Most services were Outpatient services (64%), followed by Residential services (21%) (Figure 71). 102 MTC were provided by health services and 93 were provided by NGOs (Table 70).

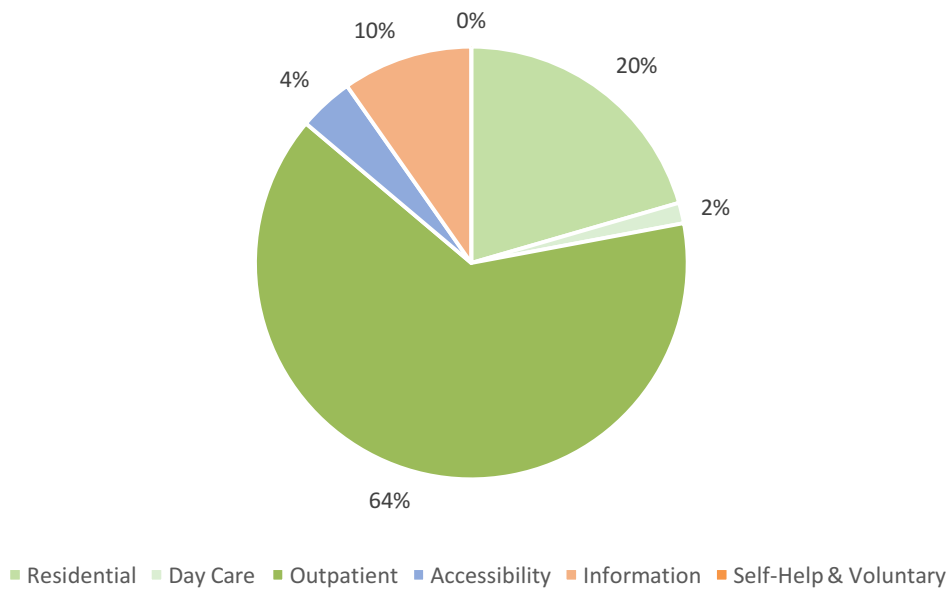



**FIGURE 71** MENTAL HEALTH MTC BY SERVICE TYPE

**TABLE 70** NUMBER OF MAIN TYPES OF MENTAL HEALTH CARE IN PSPHN

| Population Group | Service Type | R | D | O | A | I | S | TOTAL |
|---|---|---|---|---|---|---|---|---|
| Child & Adolescent | Health | 2 | 2 | 15 | 0 | 3 | 0 | 22 |
| | NGO/Other | 1 | 0 | 13 | 0 | 2 | 0 | 16 |
| | **Sub-total** | **3** | **2** | **28** | **0** | **5** | **0** | **38** |
| Adult | Health | 15 | 1 | 36 | 2 | 7 | 0 | 61 |
| | NGO/Other | 15 | 0 | 52 | 6 | 2 | 0 | 75 |
| | **Sub-total** | **30** | **1** | **88** | **8** | **9** | **0** | **136** |
| Older Adult | Health | 5 | 0 | 9 | 0 | 5 | 0 | 19 |
| | NGO/Other | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| | **Sub-total** | **7** | **0** | **9** | **0** | **5** | **0** | **21** |
| Total | Health | 22 | 3 | 60 | 2 | 15 | 0 | 102 |
| | NGO/Other | 18 | 0 | 65 | 6 | 4 | 0 | 93 |
| | **Total** | **40** | **3** | **125** | **8** | **19** | **0** | **195** |

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

## 12.2 Residential Care - Mental Health

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

#### *Children and Adolescents*

There are two teams delivering Acute Residential care in PSPHN for children and adolescents (Table 71). The Child and Mental Health Services (CAMHS) Inpatient Unit is a 12-bed ward for young people under the age of 17 years. The unit provides a state-wide specialised service and admissions are provided to both voluntary and involuntary patients. The Fiona Stanley Hospital runs a youth mental health Inpatient ward in Murdoch with eight beds.

The IPU provides assessment, diagnostic and treatment programs and provides the following services: mental health assessment, medical and psychiatric treatment, crisis intervention, psychological interventions. Young people usually come into the IPU by transfer from another service such as an emergency department, a service in the community, Princess Margaret Hospital or through a booked admission.

The service is staffed by mental health nurses, psychiatrists, medical officers, peer support workers, youth workers, clinical psychologists, occupational therapists, social workers and teachers to support school work. It will move to Perth Children's Hospital (PCH) when it is completed in 2017, and increase to 20 beds. There are currently no beds available at Princess Margaret Hospital although there is a consultation liaison position working there to support the transitioning of beds to the new Perth Children's Hospital. This position is found in the Outpatient Care section.

**There are 20 beds. The number of Acute Inpatient beds per 100,000 children and adolescents is 8.17 and the number of BSIC per 100,000 children and adolescents is 0.82.**

**TABLE 71** ACUTE INPATIENT MENTAL HEALTH CARE FOR CHILDREN AND ADOLESCENTS IN PSPHN

| Provider | Name | Suburbs | DESDE - 1 (beds) | Catchment |
|---|---|---|---|---|
| Fiona Stanley Hospital | FSH MH Youth Inpatient - Ward MHB | Murdoch | TA[F0-F99] - R2c (8) | N/S |
| Child and Adolescent Health Service (CAHS) Child and Adolescent MH Services WA (CAMHS) | CAMHS Inpatient Unit | Bentley | CX[F0-F99] - R2 (12) | Statewide |

#### *Adults*

There are 13 teams providing Acute Inpatient care across 167 beds in PSPHN for adults (Table 72).

None of these are based as far south as Mandurah.

Fiona Stanley Hospital has a Mother Baby Unit MBU Inpatient with eight beds included in this section.

**The number of Acute Inpatient beds per 100,000 adults is 28.09 and the number of BSIC per 100,000 adults is 2.19.**

**TABLE 72** ACUTE INPATIENT MENTAL HEALTH CARE FOR ADULTS IN PSPHN

| Provider | Name | Suburbs | DESDE - 1 (beds) | Catchment |
|---|---|---|---|---|
| Armadale Health Service | Adult Acute Inpatient mental health unit - Leschen | Armadale | AX[F0-F99] - R2 (19) | N/S |
| | Adult Acute Inpatient unit - Leschen HDU | Armadale | AX[F0-F99] - R1c (6) | N/S |
| | Karri Wing | Armadale | AX[F0-F99] - R2 (8) | N/S |
| Fremantle Hospital | W41: Acute Adult Inpatient, Four wards. MHAC | Fremantle | AX[F0-F99] - R2c (10) | N/S |
| | W42: Acute Adult Inpatient, Four wards. MHAC | Fremantle | AX[F0-F99] - R2 (18) | N/S |
| | W51: Adult Acute | Fremantle | AX[F0-F99] - R2 (20) | N/S |
| Royal Perth Group - Bentley Hospital | Bentley Ward 8 | Bentley | AX[F0-F99] - R2 (19) | N/S |
| | Bentley Ward 7 | Bentley | AX[F0-F99] - R2 (19) | N/S |
| | Bentley Ward 6 | Bentley | AX[F0-F99] - R2c (12) | N/S |
| Fiona Stanley Hospital | FSH Mother Baby Unit MBU Inpatient | Murdoch | AXF[F0-F99] - R2s (8) | N/S |
| | FSH MH Assessment Inpatient Unit | Murdoch | AX[F0-F99] - R2c (8) | N/S |
| Rockingham Peel Group | PaRK Inpatient Unit (Adult and Older Adult) MHAC | Cooloongup | AX[F0-F99] - R2c (4) | N/S |
| | MHAO | Cooloongup | AX[F0-F99] - R2 (16) | N/S |

### *Older adults*

Five teams were identified providing Acute Inpatient Residential services in PSPHN, again all within hospital and public health services (Table 73).

**The number of Acute Inpatient beds per 100,000 older adults is 47.31 and the number of BSIC per 100,000 older adults is 3.94.**

**TABLE 73** ACUTE INPATIENT MENTAL HEALTH CARE FOR OLDER ADULTS IN PSPHN

| Provider | Name | Suburbs | DESDE - 1 (beds) | Catchment |
|---|---|---|---|---|
| Armadale Health Service | Armadale Adult Older Acute Unit - Banksia Wing | Armadale | OX[F0-F99] - R2c (8)<br>OX[F0-F99] - O4.1I | N/S |
| Fremantle Hospital | Older Adult Acute Inpatient: Ward 43 | Fremantle | OX[F0-F99] - R2c (16) | N/S |
| Royal Perth Group - Mills Street Centre | Bentley Older Adult Inpatient, Wards 10A, 10B, 10C | Bentley | OX[F0-F99] - R2c (26) | N/S |
| Rockingham Peel Group | Older Adults Inpatient, MHEC | Cooloongup | OX[F0-F99] - R2c (4) | N/S |
| | Older Adults Inpatient, MHEO | Cooloongup | OX[F0-F99] - R2 (6) | N/S |

## Sub-Acute Inpatient Care (R4, R5, R6 and R7 DESDE Codes)

### *Children and Adolescents*

There was one service providing Sub-Acute Care for young people. Ngatti House provided by Life Without Borders, caters for children and adolescents in the PSPHN area in this category (Table 74).

**The number of BSIC per 100,000 Children and Adolescents is 0.41.**

**TABLE 74** SUB-ACUTE AND OTHER INPATIENT CARE FOR CHILDREN AND ADOLESCENTS IN PSPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| Life Without Barriers | Ngatti House | Fremantle | TA[F0-F99][Z59] R5 | Statewide |

### *Adults*

There were eight teams identified as providing Sub-Acute Residential Care in PSPHN, providing 156 beds (Table 75).

**The number of sub-Acute Inpatient beds per 100,000 adults is 26.24 and the number of BSIC per 100,000 adults is 1.35.**

**TABLE 75** SUB-ACUTE INPATIENT MENTAL HEALTH CARE FOR ADULTS IN PSPHN

| Provider | Name | Suburbs | DESDE - 1 (beds) | Catchment |
|---|---|---|---|---|
| Royal Perth Group - Mills Street Center | Bentley Acute Adult Inpatient - John Milne Centre | Bentley | AX[F0-F00] - R4 (12) | N/S |
| Hampton Road Residential | Hampton Road Step Down Unit | Fremantle | AX[F0-F99] - R5 (10) | N/S |

| | | | | |
|---|---|---|---|---|
| Roshana | BP Luxury Care | Maddington | AX[F0-F99] - R7 (44) | Statewide |
| | Burswood Care | Victoria Park | AX[F0-F99] - R7 (31) | N/S |
| St Bartholomew's House | Arnott Villas CSRU | Kelmscott | AX[F0-F99] - R7 (22) | Statewide |
| | Bentley Villas CSRU | Bentley | AX[F0-F99] - R7 (25) | Statewide |
| | Cannington Accommodation Unit - Transitional Housing | Cannington | AX[F0-F99] - R7 (6) | Statewide |
| | Medina Accommodation Unit- Transitional Housing | Medina | AX[F0-F99] - R7 (6) | N/S |

## Other Inpatient Services (R8, R9, R10, R1, R12 and R13 DESDE Codes)

There were nine teams identified as providing 'Other' Inpatient Residential mental health care in PSPHN, providing 169 beds (Table 76).

**The number of 'Other' Inpatient beds per 100,000 adults is 28.43 and the number of BSIC per 100,000 adults is 1.51.**

**TABLE 76** OTHER INPATIENT MENTAL HEALTH CARE FOR ADULTS IN PSPHN

| Provider | Name | Suburbs | DESDE - 1 (beds) | Catchment |
|---|---|---|---|---|
| Mind Australia | Community Step Up Step Down | Shoalwater | AX[F0-F99] - R8.1(10) | N/S |
| Richmond Wellbeing | Kelmscott community options | Kelmscott | AX[F0-F99] - R9.2 (8) | Murchison Ward Graylands + other hospitals |
| | Recovery House | Cannington | AX[F0-F99] - R9.2 (10) | State and nation wide referrals |
| | PaRK Service, Recovery in the community | Rockingham | AX[F0-F99] - R10.2 (10) | Peel, Rockingham, Kwinana |
| Armadale Health Service | Jacaranda House | Armadale | AX[F0-F99] - R11 (5) | N/S |
| Devenish Lodge | Devenish Lodge | East Victoria Park | AX[F0-F99] - R11 (41) | Statewide |
| Southern Cross Care WA | Community Options - Bentley two locations | Bentley | AX[F0-F99] - R11 (7) | Murchison Ward Graylands & other hospitals |
| Vincentcare | South Lake House | South Lake | AX[F0-F99] - R11 (3) | Statewide |
| Franciscan House | Franciscan House | Victoria Park | GX[F0-F99] - R12 (75) | East Metro |

### *Older Adults*

Two teams, both run by Southern Cross Care WA, cater for older adults in this category. Both services have an eight bed capacity and operate out of Success and Rossmoyne (Table 77).

**The number of BSIC per 100,000 older adult population is 1.58.**

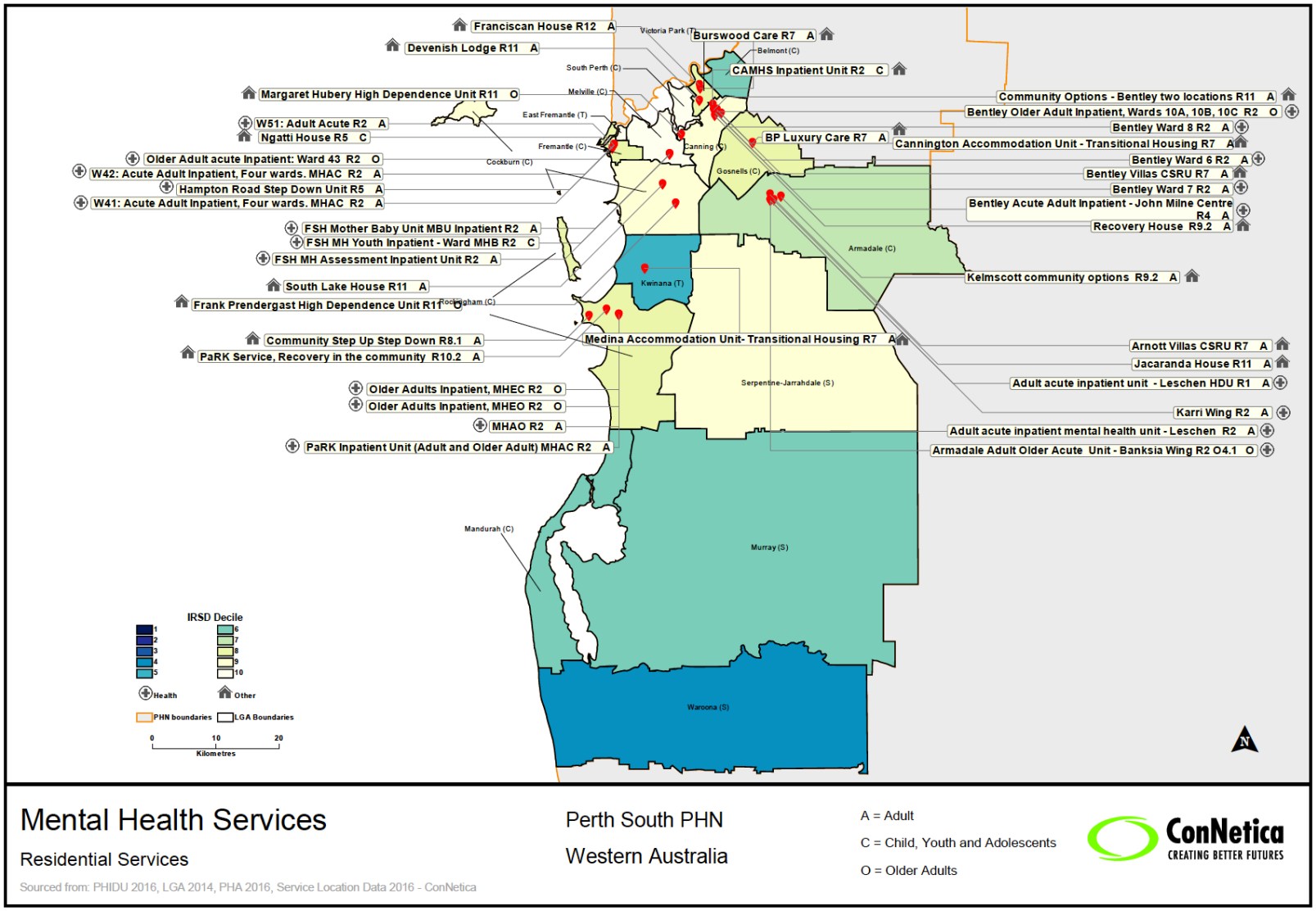
**TABLE 77** SUB-ACUTE AND OTHER INPATIENT MENTAL HEALTH CARE FOR OLDER ADULTS IN PSPHN

| Provider | Name | Suburbs | DESDE - 1 (beds) | Catchment |
|---|---|---|---|---|
| Southern Cross Care WA | Frank Prendergast High Dependence Unit | Success | OX[F0-F99] - R11 (8) | N/S |
| | Margaret Hubery High Dependence Unit | Rossmoyne | OX[F0-F99] - R11 (8) | N/S |

## Placement of Residential Services

The location of Residential services is found in Figure 72. As illustrated in the map, services are concentrated to the north or top part of the catchment, closer to the city centre.

No services identified in Murray, Waroona or Mandurah, parts of PSPHN identified as most disadvantaged and those with the highest levels distress and concerning levels of suicide.




Mental Health Services

Residential Services

Sourced from: PHIDU 2016, LGA 2014, PHA 2016, Service Location Data 2016 - ConNetica

Perth South PHN

Western Australia

A = Adult

C = Child, Youth and Adolescents

O = Older Adults

ConNetica
CREATING BETTER FUTURES

**FIGURE 72** RESIDENTIAL SERVICES IN PSPHN

## 12.3 Day Care - Mental Health

Day Care services are very limited, with only three identified, two being for children or adolescents and one for adults. This is consistent with what has been observed in other states of Australia and in the atlas for Country WA and PNPHN, and reflects a general shift away from day programs to working through Outpatient services to deliver a more integrated community based approach to social and cultural activities for people with mental illness.

### *Children and Adolescents*

Table 78 displays day care for children and adolescents in the PSPHN area. Touchstone is an intensive day treatment program for adolescents who self-harm, using a Mentalization Based Therapy (MBT) model. It runs for a six-month duration. Referrals are from within CAMHS. Based at Bentley Health Service site, it also provides two outreach groups running in locations in the community (Joondalup and Rockingham). Locations may change depending on where the need is greatest.

Pathways is a therapeutic day program. It is an evidence-based Tier 4 service providing educational and therapeutic services in an integrated manner to children with complex educational, social, behavioural, emotional and mental health issues. The Therapeutic Day Program is suitable for children aged from six years old through to twelve years. Referrals come from Tier 3 services such as CAMHS, Child Development Services and other specialised health services for children.

**The number of BSIC per 100,000 Children and Adolescents is 0.82.**

**TABLE 78** MENTAL HEALTH DAY CARE FOR CHILDREN AND ADOLESCENTS IN PSPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| Child and Adolescent Health Service (CAHS) Child and Adolescent MH Services WA (CAMHS) | Touchstone | Bentley | CA[F0-F99] - D1.1 | N/S |
| | Pathways | Bentley | CC[F98.9] - D1.2 | Statewide |

### *Adults*

The PaRK Intensive Day Therapy Unit in Rockingham, commonly known as the Catalpa Centre, has been in operation since 2005. It provides regular activities including cooking, art therapy and group and individual psychotherapy programs (Table 79).

**The number of BSIC per 100,000 adult population is 0.17.**

**TABLE 79** MENTAL HEALTH DAY CARE FOR ADULTS IN PSPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| Rockingham Peel Group | PaRK Intensive Day Therapy Unit | Rockingham | AX[F0-F99] - D1.1 | N/S |

### Placement of Mental Health Day Care in PSPHN

Figure 73 shows the location of Mental Health Day Care across PSPHN. The few services available are again located to the top or north of the catchment.

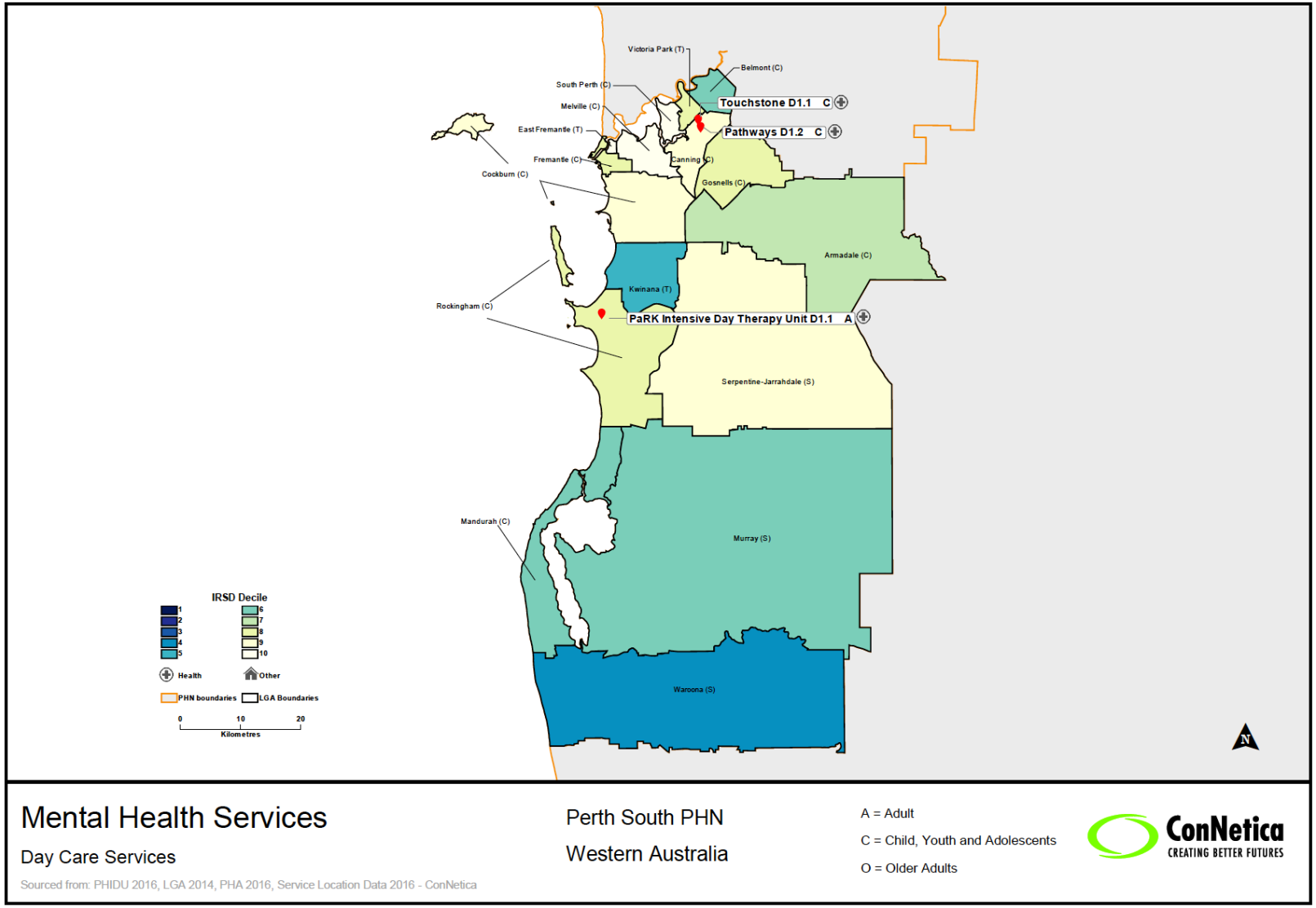



**FIGURE 73** DAY CARE SERVICES FOR PSPHN

## 12.4 Outpatient Care - Mental Health

Outpatient care is by far the largest category in the provision of mental health care in PSPHN (as it is across WA). Outpatient care is differentiated in four key ways:

- Between Acute and Non-Acute care
- Between Mobile and Non-Mobile care
- Between clinical (health) care and non-clinical (social) care and
- Between different levels of intensity; low, medium or high intensity.

### Acute Mobile Outpatient Care (O1 and O2 DESDE Codes)

#### *Children and Adolescents*

There were no services of this type identified for children and adolescents, or for older adults in PSPHN.

#### *Adults*

There were six teams identified as providing Acute Mobile Outpatient care to adults in the PSPHN catchment, two based in Armadale, and in Fremantle, Bentley, Mandurah and Rockingham. These teams are Assessment and Treatment teams (Table 80).

**The number of BSIC per 100,000 adults is 1.01.**

**TABLE 80** ACUTE MOBILE OUTPATIENT MENTAL HEALTH CARE FOR ADULTS IN PSPHN

| Provider | Name | Suburb | DESDE - 1 | Area |
|---|---|---|---|---|
| Armadale Health Service | ATT | Armadale | AX[F0-F99] - O2.1 | N/S |
| | Armadale ATT Triage | Armadale | AX[F0-F99] - O2.1 | N/S |
| Fremantle Hospital | Fremantle ATT Triage and ATT | Fremantle | AX[F0-F99] - O2.1 | N/S |
| Royal Perth Group - Mills Street Centre | Bentley Assessment and Treatment Team (ATT) | Bentley | AX[F0-F99] - O2.1 | N/S |
| Rockingham Peel Group | Peel ATT | Mandurah | AX[F0-F99] - O2.1 | N/S |
| | Rockingham Kwinana ATT | Rockingham | AX[F0-F99] - O2.1 | N/S |

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

#### *Children and Adolescents*

There were six teams identified as providing Non-Acute Mobile Outpatient care to children and adolescents in the PSPHN catchment (Table 81). Of the non-government provided sources, Cypress service, run by Anglicare WA, involves group work, support, counselling for children bereaved through suicide based in Rockingham. The Family Mental Health Support service is a carer focused service based in Cannington provided by MercyCare and is for children, young people and their families who are experiencing issues that are making them feel sad, upset or stressed. YouthReach South provides free and confidential counselling and support services to at-risk and marginalised young people aged 13-24 years.

Of the government service providers, CAMHS has two multisystemic therapy teams both based at Bentley but each with specific catchment areas, and FSH has a mental health youth community team.

**The number of BSIC per 100,000 children and adolescents is 2.45.**

**TABLE 81** NON-ACUTE MOBILE OUTPATIENT MENTAL HEALTH CARE FOR CHILDREN AND ADOLESCENTS IN PSPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| Child and Adolescent Health Service (CAHS) Child and Adolescent MH Services WA (CAMHS) | Multisystemic Therapy - North | Bentley | CX[F98.9] - O5.1 | N/S |
| | Multisystemic Therapy - South | Bentley | CA[F98.9] - O5.1 | N/S |
| YouthReach South | YouthReach South | Success | CY[F0-F99] - O5.1m | Perth South Metro |
| Fiona Stanley Hospital | FSH MH Youth Community | Murdoch | TA[F0-F99] - O6.1 | N/S |
| MercyCare | Family Mental Health Support Service | Cannington | CX[E310][F0-F99] - O6.2 | N/S |
| Anglicare WA | Cypress | Rockingham | CX[F0-F99] - O7.2u | Perth south metro |

### *Adults*

There were 28 teams identified as providing Non-Acute Mobile Outpatient care to adults in the PSPHN catchment (Table 82).

Four community teams were identified, based at Fremantle hospital, each with a different catchment area to support. There is also the Armadale Health Service adult CMH team and the Jarrah Road Centre Community Supported Rehabilitation Centre in East Victoria Park.

The types of Non-Acute Mobile Outpatient care provided to adults by non-government organisations in the PSPHN catchment is quite varied and a number of organisation have a number of teams serving different areas within PSPHN. For example, Ruah has four Inreach teams servicing different areas, with the role of providing individualised supports for clients with mental health issues in mapping and planning their recovery, achieving their goals and engaging in the community.

JOC Wellness and Recovery has three Individual Support Service teams (Fremantle, Manduarah, Rockingham) that provide tailored support to the individual client to support their recovery.

Four different providers of Independent Living Strategy services were identified in PSPHN; these teams are provided by NEAMI, Life Without Barriers, Community First International and Richmond Wellbeing. Richmond Wellbeing also has a PHaMs team in PSPHN and a PIR team in Cannington. Black Swan Health also has a PIR team in Fremantle. Community First International and Helping Minds also have a PHaMs team. The Health Promotion and Exercise Physiology team at Richmond Wellbeing is unique and builds on the mounting evidence around the role of healthy lifestyles and physical activity in supporting mental health recovery.

In total, there are three Carer specific programs identified. No Aboriginal or CALD specific programs in this classification across PSPHN were identified.

**The number of Non-Acute, Mobile Outpatient Mental Health Care BSIC for adults in PSPHN is 4.71.**

**TABLE 82** NON-ACUTE MOBILE OUTPATIENT CARE FOR ADULTS IN PSPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| Fremantle Hospital | Assertive Community Treatment Teams ACTT | Fremantle | AX[F0-F99] - O5.1 | N/S |
| Richmond Wellbeing | PIR | Cannington | AX[F0-F99] - O5.1 | Bentley, Armadale |
| | ICLS | Cannington | AX[F0-F99] - O5.2.1 | Perth Metropolitan |
| NEAMI National | Intensive Community living Strategy ICLS Team | Bentley | AX[F0-F99] - 05.2.2<br>AX[F0-F99] - A4.2.1 | North Metro, South Metro and Bunbury |
| | NDIA Team Bentley | Bentley | AX[F0-F99] - O5.2.2<br>AX[F0-F99] - A4.2.1 | N/S |
| Perth Home Care Services (AVIVO) | Avivo Mandurah | Mandurah | AX[e310][F0-F99] - O5.2 | Peel region |
| | Avivo South Metropolitan | Jandakot | AX[e310][F0-F99] - O5.2 | South Metro |
| Armadale Health Service | Adult Community Mental Health Services | Armadale | AX[F0-F99] - O6.1 | N/S |
| Fremantle Hospital | Fremantle Community Mental Health Team | Fremantle | AX[F0-F99] - O6.1 | N/S |
| | Melville Community Team | Fremantle | AX[F0-F99] - O6.1 | N/S |
| | Cockburn Community Team | Fremantle | AX[F0-F99] - O6.1 | N/S |
| Richmond Wellbeing | PhaMS | Cannington | AX[F0-F99] - O6.2 | Cannington and Midland regions |
| Ruah | RUAH Inreach program – Fremantle | Fremantle | AX[F0-F99] - O6.2 | Fremantle |
| | RUAH Inreach program – Armadale | Maddington | AX[F0-F99] - O6.2 | Armadale |

| | | | | |
|---|---|---|---|---|
| | RUAH Inreach program – Rockingham | Rockingham | AX[F0-F99] - O6.2 | Kwinana, Rockingham |
| | RUAH Inreach program – Mandurah | Mandurah | AX[F0-F99] - O6.2 | Mandurah |
| Community First International | Personal Helpers & Mentors | Mandurah | AX[F0-F99] - O6.2 | Peel (Mandurah), Rockingham and Kwinana Bunbury and Vasse |
| JOC Wellness and Recovery | Individual Support Services | Fremantle | AX[F0-F99] - O6.2 | Shenton Park (6008) provides outreach from Fremantle to Mirrabooka . (6160 + 6061) |
| | Individual Support Services | Rockingham | AX[F0-F99] - O6.2 | Kwinana /Rockingham (6167 + 6168) |
| | Individual Support Services | Mandurah | AX[F0-F99] - O6.2 | Mandurah provides outreach to Pinjarra |
| Community First International | Individualised Community Living Strategy Mandurah - 2 clients | Mandurah | AX[F0-F99] - O6.2 | Albany, Bunbury, Perth South. Access Housing manages the properties. |
| Helping Minds | PHaMs - Cockburn | Success | AX[F0-F99] - O6.2 | N/S |
| Black Swan Health | Partners in Recovery - Fremantle | Fremantle | AX[F0-F99] - O6.2 | Fremantle Medicare Local catchment |
| Life Without Barriers | ICLS | Bibra Lake | AX[F0-F99] - O6.2 | Statewide |
| Southern Cross Care WA | Community Mental Health | Rivervale | AX[F0-F99] - O6.2 | Perth Metro |
| Royal Perth Group - Jarrah Road Centre | Jarrah Road Centre Community Supported Rehabilitation Program (CSRP) | East Victoria Park | AX[F0-F99] - O7.1 | N/S |
| Richmond Wellbeing | Carer and Respite services | Cannington | GX[e310][F0-F99] - O7.2 | Perth Metropolitan |
| | Health Promotion and exercise physiology | Cannington | AX[F0-F99] - O7.2 | All RW sites and services. |

### *Older adults*

There were five teams identified as providing Non-Acute Mobile Outpatient care for older adults in the PSPHN catchment (Table 83). These are all community mental health services provided by the Health Sector.

**The number of BSIC per 100,000 older adults is 3.94.**

**TABLE 83** NON-ACUTE MOBILE OUTPATIENT MENTAL HEALTH CARE FOR OLDER ADULTS IN PSPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| Armadale Health Service | Older Adults Community MH Service | Armadale | OX[F0-F99] - O6.1 | N/S |
| Fremantle Hospital | Alma St Seniors Outpatient Community MH Service | Fremantle | OX[F0-F99] - O6.1 | N/S |
| Royal Perth Group - Mills Street Centre | Bentley Older Adult Community Service | Bentley | OX[F0-F99] - O6.1 | N/S |
| Rockingham Peel Group | Peel Community MH (Adult) | Mandurah | OX[F0-F99] - O6.1 | N/S |
| | Peel and Rockingham Connect & Recovery Modules (CARM) (OA) | Rockingham | OX[F0-F99] - O6.1 | N/S |

## Placement of Non-Acute Mobile Outpatient Mental Health Care across PSPHN

Figure 74 shows the location of Non-Acute Non-Mobile Outpatient Mental Health Care across PSPHN. This highlights that Mobile services are based predominantly in the north or top end of the PSPHN catchment, aligned with the more traditional catchments, clustered around the large teaching hospitals. Furthermore, no Mobile services are based in Waroona, Murray, Kwinana, Serpentine-Jarrahdale and Belmont, most of which report higher levels of disadvantage than other areas of PSPHN.

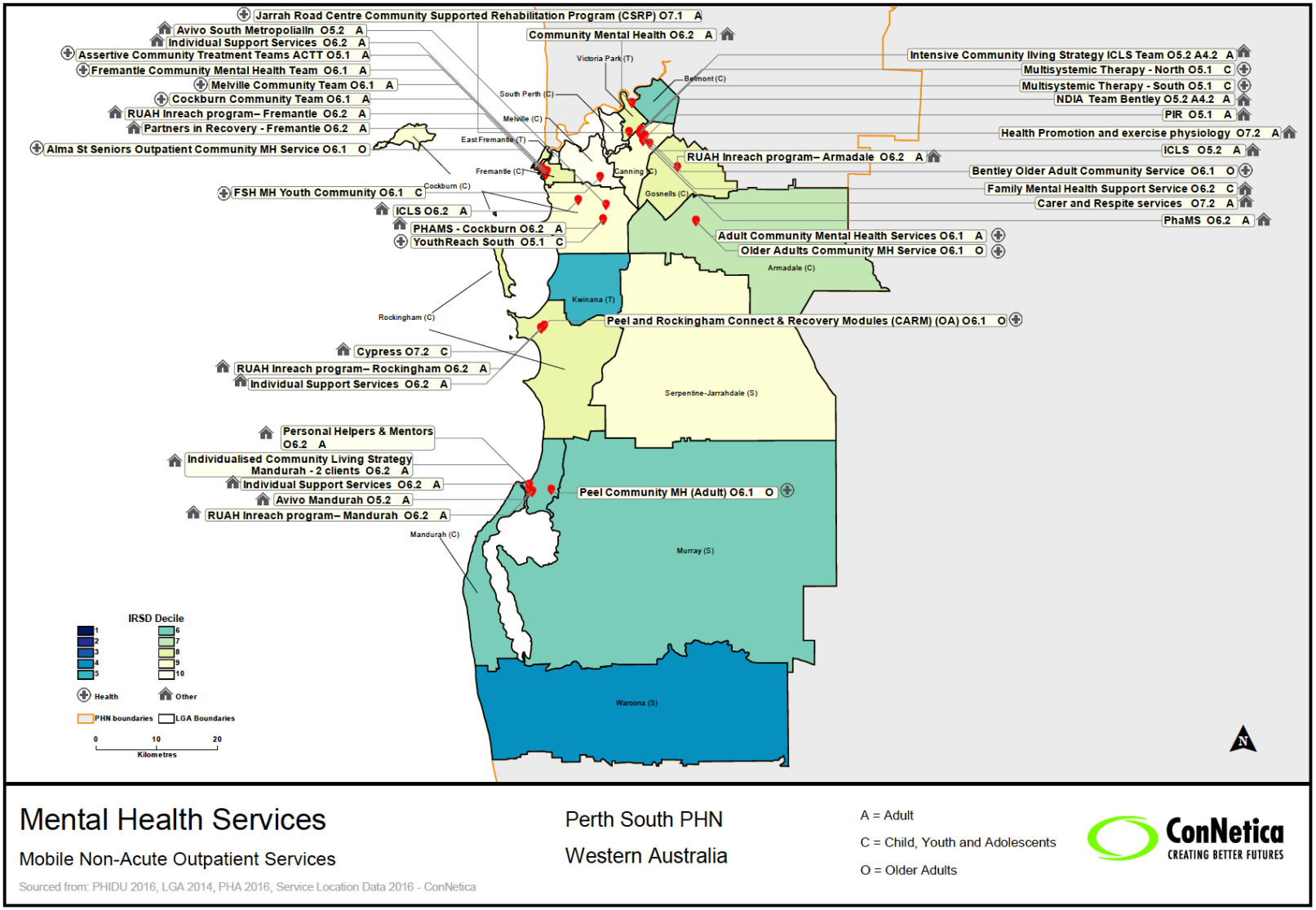



**FIGURE 74** NON-ACUTE MOBILE OUTPATIENT CARE IN PSPHN

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

### *Children and Adolescents*

There were three teams identified as providing Acute Non-Mobile Outpatient care for children and adolescents in the PSPHN catchment (Table 84).

The Peel and Rockingham Kwinana Early Episode Psychosis (EEP) program provides services for people aged 18-40 years experiencing their first episode of psychotic symptoms. Access to the Early Episode Program is provided for up to two years. The Early Episode Psychosis program also extends to the Peel District and is a working partnership between Ruah and Peel Community Mental Health Service. This is included in the adult section below as it was specified as covering 18-40 year olds.

**The number of BSIC per 100,000 children and adolescents is 1.23.**

**TABLE 84** ACUTE NON-MOBILE OUTPATIENT MENTAL HEALTH CARE FOR CHILDREN AND ADOLESCENTS IN PSPHN

| Provider | Name | Suburb | DESDE - 1 | Area |
|---|---|---|---|---|
| Fiona Stanley Hospital | FSH Adult MH Perinatal Liaison | Murdoch | CC[F0-F99] - O4.1I | N/S |
| Rockingham Peel Group | Peel and Rockingham - EEP | Rockingham | TA[F0-F99] - O4.1 | N/S |
| Fremantle Hospital | Fremantle Early Episode Psychosis Team | Fremantle | TA[F0-F99] - O4.1 | N/S |

### *Adults*

There were 13 teams identified as providing Acute Non-Mobile Outpatient care for adults in the PSPHN catchment. These teams include Early Episode Psychosis programs which cater for ages 18-40 (Table 85).

As noted above the Early Episode Psychosis (EEP) Program is undertaken in collaboration with Ruah, which has two teams providing this service, one in Rockingham and one in Mandurah. The EEP is quite unique in WA and is dedicated to early detection and intervention for people in the early stages of psychosis. It provides a holistic, professional service that works on mutual respect and understanding and promotes recovery.

The only other team run by a non-government organisation in this category is Anglicare's Abor team, based in Gosnells. Arbor is a suicide Response Service for bereaved people, families & communities.

Two Community Treatment teams were identified, one based in Gosnells and the other in Bentley. Three of the other teams provide liaison type services, one at Fremantle Hospital, and two run by the Rockingham Peel group for Peel and Rockingham ED.

It is pertinent to note that the Tele Psychiatry services based at FSH actually provides its service to rural and remote areas of WA.

**The number of BSIC per 100,000 adults is 2.19.**

**TABLE 85** ACUTE NON-MOBILE OUTPATIENT MENTAL HEALTH CARE FOR ADULTS IN PSPHN

| Provider | Name | Suburb | DESDE - 1 | Area |
|---|---|---|---|---|
| Anglicare WA | Arbor | Gosnells | GX[E95][F0-F99] - O4.2 | Gosnells |
| Ruah | Early Episode Psychosis Program - Rockingham | Rockingham | AX[F20-F29] - O4.2 | Kwinana, Rockingham |

| | | | | |
|---|---|---|---|---|
| Ruah | Early Episode Psychosis Program - Mandurah | Mandurah | AX[F20-F29] - O4.2 | Mandurah |
| Armadale Health Service | Community Treatment Team | Gosnells | AX[F0-F99] - O4.1 | N/S |
| Fremantle Hospital | Consultant Liaison Service | Fremantle | AX[F0-F99] - O4.1I | N/S |
| Fremantle Hospital - Alma Street Centre | Alma Street Triage (ATT) | Fremantle | AX[F0-F99] - O4.1 | N/S |
| Royal Perth Group - Mills Street Centre | Bentley Clinical Treatment Team (CTT) | Bentley | AX[F0-F99] - O4.1 | N/S |
| Fiona Stanley Hospital | Tele psychiatry for rural and remote areas | Murdoch | GX[F0-F99] - O4.1e | N/S |
| Rockingham Peel Group | Peel ED Liaison | Mandurah | AX[F0-F99] - O4.1I | N/S |
| | Rockingham ED MH Liaison | Cooloongup | AX[F0-F99] - O4.1I | N/S |
| Armadale Health Service | Armadale GP Liaison Adult and Adult triage | Armadale | AX[F0-F99] - O4.1I | N/S |
| Fiona Stanley Hospital | FSH Adult MH Liaison Outpatients and FSH Adult MH Liaison | Murdoch | AX[F0-F99] - O4.1I | N/S |
| Fremantle Hospital | Mental Health GP Liaison Clinic Adult & GP Liaison Triage | Fremantle | AX[F0-F99] - O4.1I | N/S |

### *Older Adults*

There was just one team identified as providing Acute Non-Mobile Outpatient care to older adults in the PSPHN catchment. It is a consultation and liaison service operated at Fremantle Hospital (Table 86).

**The number of BSIC per 100,000 older adults is 0.79.**

**TABLE 86** ACUTE NON-MOBILE OUTPATIENT MENTAL HEALTH CARE FOR OLDER ADULTS IN PSPHN

| Provider | Name | Suburb | DESDE - 1 | Area |
|---|---|---|---|---|
| Fremantle Hospital - Older Adult | Consultation Liaison Elderly (OA) | Fremantle | OX[F0-F99] - O4.1I | U/S |

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

### *Children and Adolescents*

There were 18 teams identified as providing Non-Acute Non-Mobile Outpatient care for children and adolescents in the PSPHN catchment (Table 87). This includes five Department of Health CAMH teams based in different locations and with their own unique catchment area; as well the Complex Attention and Hyperactivity Disorders Service (CAHDS); a specialist assessment and consultation service for children aged up to 18 with persistent complex attention difficulties and co-morbid conditions, and their families.

The CAMHS Eating Disorders team is currently based at Princess Margaret Hospital. This specialist team provides an evidenced-based, multidisciplinary service for children and young people with eating disorders. It offers assessment, treatment and follow-up on an Inpatient and Outpatient basis, via individual, group and family therapy. The service will eventually operate out of PCH and will

provide provides inreach into PCH Ward 17 (General Adolescent Ward) when Inpatient admission is required.

There is a variety of Non-Acute Non-Mobile Outpatient services provided by NGOs for children and adolescents in the PSPHN catchment. These include the Wanslea CUSP program team which works with children and young people up to 18 years who are experiencing an emotional disturbance or vulnerable to the development of a mental health issue. Wanslea also has two Carer focused COPMI (Children of Parents with a Mental Illness) teams, providing support for children and families where a parent experiences mental illness.

CentreCare's Counselling for Adolescent and Parents Service (CAPS) provides support for young people aged 12-18 and their parents/caregivers to find creative solutions to conflicts and challenges they may be experiencing. Whilst this might not generally fall within the scope of the Atlas, this team's work is predominantly focused on counselling relating to depression, anxiety, self-harm and has a strong early intervention focus.

Youth Focus has three teams providing services (two in Burswood and one in Rockingham); including a peer support program based in Burswood.

There are two Headspaces in the region, one in Fremantle and one in Rockingham.

**The number of BSIC per 100,000 children and adolescents is 7.35.**

**TABLE 87** NON-ACUTE NON-MOBILE OUTPATIENT MENTAL HEALTH CARE FOR CHILDREN AND ADOLESCENTS IN PSPHN

| Provider | Name | Suburbs | DESDE-1 | Catchment |
|---|---|---|---|---|
| Child and Adolescent Health Service (CAHS) Child and Adolescent MH Services WA (CAMHS) | Complex Attention and Hyperactivity Disorders Service (CAHDS) | Bentley | CX[F90.1] - O8.1 | Statewide |
| | Eating Disorders Program | Bentley | CA[F50] - O8.1lh | Statewide |
| Fiona Stanley Hospital | FSH MH Youth Outpatient | Murdoch | TA[F0-F99] - O9.1 | N/S |
| 360 Health and Community | Headspace Fremantle | Fremantle | CY[F0-F99] - O9.1 | N/S |
| | Headspace Rockingham | Rockingham | CY[F0-F99] - O9.1 | N/S |
| Child and Adolescent Health Service (CAHS) Child and Adolescent MH Services WA (CAMHS) | Armadale Community CAMHS | Armadale | CX[F0-F99] - O9.1 | N/S |
| | Bentley Family Clinic | Bentley | CX[F0-F99] - O9.1 | N/S |
| | Fremantle CAMHS | Fremantle | CX[F0-F99] - O9.1 | N/S |
| | Peel CAMHS | Mandurah | CX[F0-F99] - O9.1 | N/S |
| | Rockingham CAMHS | Rockingham | CX[F0-F99] - O9.1 | N/S |

| | | | | |
|---|---|---|---|---|
| CentreCare | CAPS (Counselling for adolescents and parents) | Cannington | TA[F10-F19] - O9.2 | N/S |
| | CAPS (Counselling for adolescents and parents) | Gosnells | TA[F10-F19] - O9.2 | N/S |
| Youth Focus | Burswood CST's | Burswood | CY[F0-F99] - O9.2 | N/S |
| | Rockingham Youth Focus | Rockingham | CY[F0-F99] - O9.2 | N/S |
| Wanslea Family Services Inc | COPMI | Mandurah | CX[e310][F0-F99] - O10.2g | Perth North and South |
| | CUSP | Armadale | CX[e310][F0-F99] - O10.2Gg | Services are limited to the Local Government areas of Gosnells, Armadale and Wanneroo |
| | COPMI | Cloverdale | CX[e310][F0-F99] - O10.2g | Perth North and South |
| Youth Focus | Youth Program - Peer Support | Burswood | CY[F0-F99] - O10.2g | N/S |

### *Adults*

There were 41 teams identified as providing Non-Acute Non-Mobile Outpatient care for adults in the PSPHN catchment, as detailed in Table 88 below.

There is a wide range of BSIC within this category. Amongst government providers of services, there are a number of GP Liaison services affiliated with the major hospitals in the catchment, and a multi-cultural mental health service based at Fremantle hospital.

The majority of teams are based in non-government organisations and vary in focus and target group. For Aboriginal people, the Derbal Yerrigan DYHS in Maddington supports individuals, family or groups with counselling for grief, trauma and other issues. Uniting Care West provides the Community Connections service which assists socially isolated people in making community connections, and one of the few OCD specific services in the State is MIFWA's facilitated and peer supported OCD support group.

Richmond Wellbeing runs Recovery Outreach Support – Mental Health Services, which assists people moving out of Residential settings.

A number of services were identified that provide support to Carers of people with mental health issues. These included three Anglicare Connect for Life teams that provide respite and support for mental health Carers; four mental health carer support teams run by Helping Minds and a carer respite service run by Life Without Barriers.

**The number of BSIC per 100,000 adults is 6.89.**

**TABLE 88** NON-ACUTE NON-MOBILE OUTPATIENT MENTAL HEALTH CARE FOR ADULTS IN PSPHN

| Provider | Name | Suburb | DESDE-1 | Catchment |
|---|---|---|---|---|
| Fremantle Hospital | Multicultural Mental Health Service | Fremantle | AX[F0-F99] - O9.1sl | N/S |
| Royal Perth Group - Mills Street Centre | Mills Street Outpatients | Bentley | AX[F0-F99] - O9.1 | N/S |
| Fiona Stanley Hospital | FSH MBU Outpatient | Murdoch | AX[F0-F99] - O9.1 | N/S |
| | FSH Older Adult Drug and Alcohol (OA) | Murdoch | AX[F0-F99] - O9.1 | N/S |
| Rockingham Peel Group | Peel and Rockingham Seniors MHS (OA) | Rockingham | AX[F0-F99] - O9.1 | N/S |
| | Rockingham Kwinana CMNTY PSY Service (Adult) | Rockingham | AX[F0-F99] - O9.1 | N/S |
| Rockingham Peel Group | Rockingham - ACT | Rockingham | AX[F0-F99] - O9.1 | N/S |
| ArcheHealth | Headspace Armadale | Armadale | CY[F0-F99] - O9.1 | N/S |
| Women's Health and Wellbeing Services | Perinatal mental health | Gosnells | AXF[F53] - O9.1 | Women within the South East Metro Area of Perth and country |
| Mental Health Nurse Incentive Program | St John of God Raphael Centre | Fremantle | AX[F53] - O9.1 | N/S |
| | MH Nurse | Palmyra | AX[F0-F99] - O9.1 | N/S |
| 360 Health and Community | NDIS - Hills Trial Site Region | Medina | AX[F0-F99] - O9.2 | N/S |
| Derbarl Yerrigan | DYHS Maddington - Counselling | Maddington | GXIN[F0-F99] - O9.2 | N/S |
| Richmond Wellbeing | Recovery outreach support – mental health services | Cannington | AX[F0-F99] - O9.2u | Perth Metropolitan |
| NEAMI National | Day to Day living team Bentley | Bentley | AX[F0-F99] - O9.2g | South Metro WA |

| | | | | |
|---|---|---|---|---|
| Helping Minds | WA NDIS Cockburn/Kwinana, lower south west and the ranges (Armadale, Murray, Serpentine-Jarrahdale) | Success | GX[F0-F99] - O9.2u | Cockburn/Kwinana, lower South West and the ranges (Armadale, Murray, Serpentine-Jarrahdale) |
| | MH Carer Support - Mandurah | Mandurah | GX[e310][F0-F99] - O9.2 | N/S |
| | MH Carer Support - Rockingham | Rockingham | GX[e310][F0-F99] - O9.2u | N/S |
| | MH Carer Support - Fremantle | Fremantle | GX[e310][F0-F99] - O9.2 | N/S |
| | MH Carer Support - Armadale | Armadale | GX[e310][F0-F99] - O9.2 | N/S |
| Fremantle Women's Health Centre | Counselling Team - Perinatal | Fremantle | AXF[F53] - O9.2 | South west metro region - local government areas of Fremantle, East Fremantle, Cockburn and Melville |
| Life Without Barriers | Carers Respite | Bibra Lake | AX[e310][F0-F99] - O9.2 | East Metropolitan |
| South Coastal Women's Health Services Association | Perinatal and Men's Health Support Programs | Rockingham | AXF[F53] - O9.2u | Rockingham |
| Fremantle Hospital | Physiotherapy - Adult | Fremantle | AX[F0-F99] - O10.1 | N/S |
| Fiona Stanley Hospital | CNS GP Liaison | Murdoch | AX[F0-F99] - O10.1l | N/S |
| Rockingham Peel Group | Peel GP Liaison Adult | Mandurah | AXF0-F99] - O10.1l | N/S |
| | Rockingham GP Liaison Adult | Rockingham | AX[F0-F99] - O10.1l | N/S |
| Gosnells Women's Health Service | Perinatal Mental Health | Gosnells | AXF[F0-F99] - O10.1 | N/S |
| Fremantle Hospital | Integrated Therapy Services (ITS) | Fremantle | AX[F0-F99] - O10.2 | N/S |
| Rockingham Peel Group | Peel Living Skills Centre | Mandurah | AX[F0-F99] - O10.2 | N/S |
| | Kwinana Living Skills Centre | Calista | AX[F0-F99] - O10.2 | N/S |

| | | | | |
|---|---|---|---|---|
| Anglicare WA | Connect for Life | Rockingham | AX[F0-F99] - O10.2 | Rockingham |
| | Connect for Life | Mandurah | AX[F0-F99] - O10.2 | Mandurah |
| | Connect for Life | Armadale | AX[F0-F99] - O10.2 | Armadale |
| Mental Illness fellowship of WA | OCD Program | Booragoon | AX[F42.9] - O10.2g | North Metro |
| Uniting Care West | Community connections | Victoria Park | AX[F0-F99] - O10.2u | Perth Metro Area |
| NEAMI National | Peer Frontiers | Bentley | AX[F0-F99] - O10.2gu | Perth Metro |
| Hearing Voices WA | We Hear WA | Cannington | GX[F0-F99] - O10.2g | N/S |
| Even Keel Support Association | Even Keel Support Group | South Fremantle | AX[F31] - O10.2g | N/S |
| | Even Keel Support Group | Riverton | AX[F31] - O10.2g | N/S |
| | Even Keel Support Group | Cannington | AX[F31] - O10.2g | N/S |

### *Older Adults*

Two teams were identified as providing Non-Acute Non-Mobile Outpatient care for older adults in the PSPHN catchment (Table 89). One of these is a carer support program provided by the Rockingham Peel Group (South Metro Mental Health) and the other an Integrated Therapy Services program for older adults at Fremantle Hospital.

**The number of BSIC per 100,000 older adults is 1.58.**

**TABLE 89** NON-ACUTE NON-MOBILE OUTPATIENT MENTAL HEALTH CARE FOR OLDER ADULTS IN PSPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| Fremantle Hospital | Integrated Therapy Services - Older Adult | Fremantle | OX[F0-F99] - O10.1 | N/S |
| Rockingham Peel Group | Peel and Rockingham Carer Support (OA) | Rockingham | OX[e310][F0-F99] - O10.2 | N/S |

## Other Outpatient Care (O11)

There was just one BSIC identified in this classification for Children and Adolescents, the Lighthouse Men's project based in Burswood (Table 90).

**The number of BSIC per 100,000 children and adolescents is 0.41.**

**TABLE 90** OTHER OUTPATIENT MENTAL HEALTH CARE FOR CHILDREN AND ADOLESCENTS IN PSPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| Youth Focus | Young Men's Project - Inc Lighthouse | Burswood | CY[F0-F99] - O11 | N/S |

## Placement of Non-Acute, Non-Mobile Outpatient services in PSPHN

Figure 75 shows the location of Non-Acute Non-Mobile Outpatient services across the PSPHN region. This highlights that Non-Acute Non-Mobile teams are prevalent across the region:

- Non-Mobile services are again based predominantly in the north or top end of the PSPHN catchment, aligned with the more traditional catchments, clustered as they are around the large teaching hospitals.
- Again, as was the case with the Mobile Outpatient services, there are no Non-Mobile services based in Waroona and Serpentine-Jarrahdale.

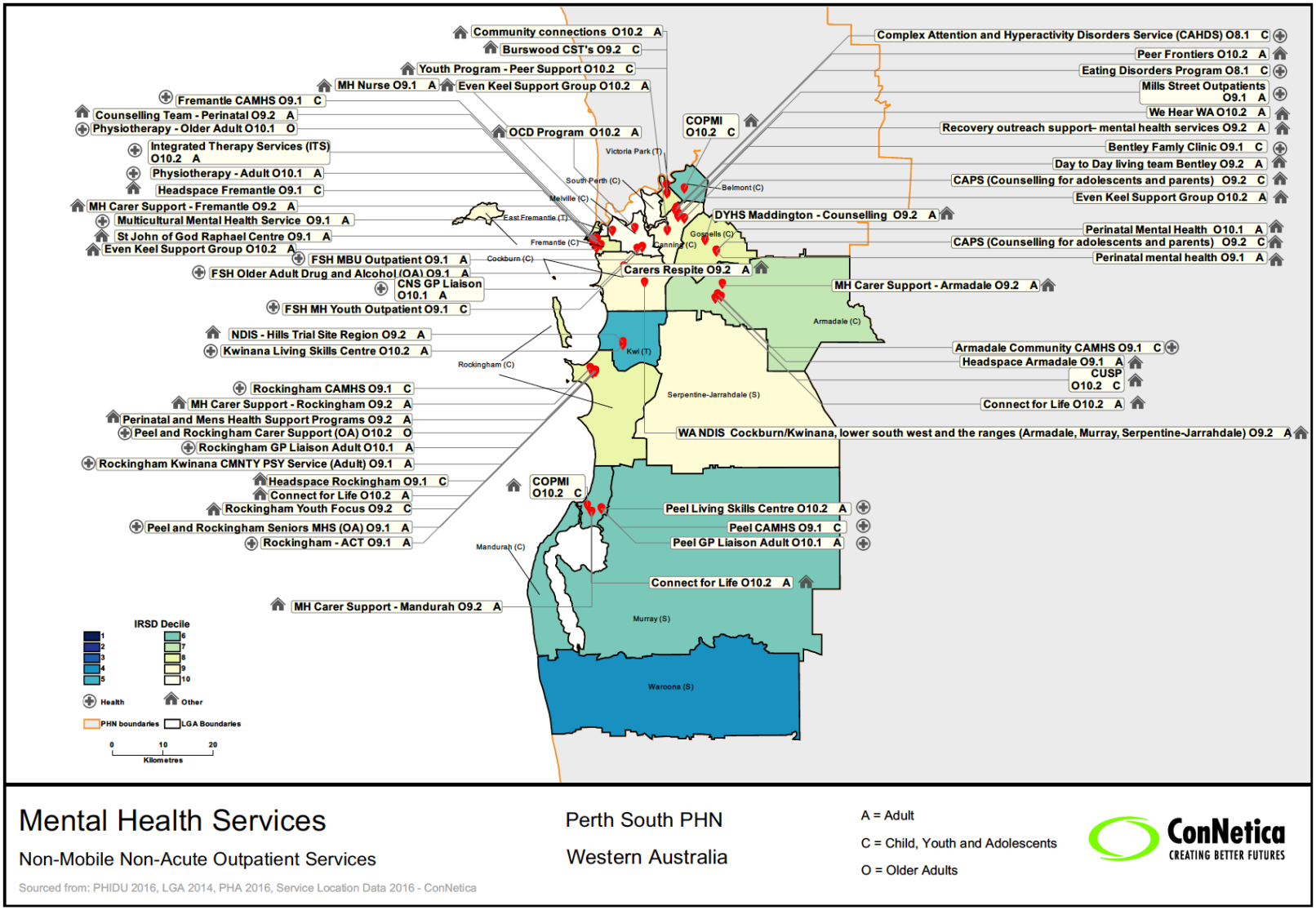



**FIGURE 75** NON-ACUTE NON-MOBILE OUTPATIENT CARE IN PSPHN

## 12.5 Information and Guidance Services

### *Children and Adolescents*

There were five teams identified as providing information and guidance services in the PSPHN catchment, with three of these based at Fiona Stanley Hospital (Table 91).

**The number of BSIC per 100,000 children and adolescents is 2.04.**

**TABLE 91** MENTAL HEALTH INFORMATION AND GUIDANCE CARE FOR CHILDREN AND ADOLESCENTS IN PSPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| Fiona Stanley Hospital | FSH Adult MH Perinatal Liaison Triage | Murdoch | CC[F0-F99] - I1.1 | N/S |
| | FSH MH Youth Triage | Murdoch | TA[F0-F99] - I1.1 | N/S |
| | FSH CAMHS MH Liaison Triage & MH Liaison & FSH CAMHS MH ED Liaison Triage & Outpatients Liaison' | Murdoch | CX[F0-F99] - I1.1l | N/S |
| Youth Focus | Education Program | Burswood | CY[F0-F99] - I2.1.1 | N/S |
| GP Down South | 3 Tier Youth Mental Health | Mandurah | CA[F0-F99] - I2.1.1g | Peel |

### *Adults*

There were nine teams identified as providing information and guidance services for adults in the PSPHN catchment (Table 92). Most of these services are triage teams. Notably there are no services south of Murdoch.

**The number of BSIC per 100,000 adults is 1.51.**

**TABLE 92** MENTAL HEALTH INFORMATION AND GUIDANCE CARE FOR ADULTS IN PSPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| Hampton Road Residential | Hampton Road Service Triage - Milpara | Fremantle | AX[F0-F99] - I1.1e | N/S |
| Mills Street Centre | Triage Services | Bentley | AX[F0-F99] - I1.1e | N/S |
| Royal Perth Group - Mills Street Centre | Bentley Triage Co-Response WA Police | Bentley | AX[F0-F99] - I1.1 | N/S |
| Fiona Stanley Hospital | FSH Adult MH ED Liaison Triage | Murdoch | AX[F0-F99] - I1.1 | N/S |
| | FSH MBU Triage | Murdoch | AX[F0-F99] - I1.1e | N/S |

| | | | | |
|---|---|---|---|---|
| | FSH Adult Drug and Alcohol Triage | Murdoch | AX[F0-F99] - I1.1e | N/S |
| | FSH Adult MH Liaison Triage | Murdoch | AX[F0-F99] - I1.1e | N/S |
| NEAMI National | Statewide Health Promotion Office | Bentley | GX[F0-F99]I2.1.1u | Statewide |
| Fremantle Multicultural Centre | Marina Korica | Fremantle | AX[F0-F99] - I2.1.1e | Perth Metro Area |

### *Older Adults*

There were five teams identified as providing information and guidance services for older adults in the PSHN catchment, and are triage and/or mental health liaison type services (Table 93).

**The number of BSIC per 100,000 older adults is 3.94.**

**TABLE 93** MENTAL HEALTH INFORMATION AND GUIDANCE CARE FOR OLDER ADULTS IN PSPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| Armadale Health Service | Elderly Triage Older Adults | Armadale | OX[F0-F99] - I1.1 | N/S |
| Fremantle Hospital - Adult | Elderly Triage | Fremantle | OX[F0-F99] - I1.1 | N/S |
| Fremantle Hospital - Alma Street Centre | Fremantle Elderly Triage (OA) | Fremantle | OX[F0-F99] - I1.1 | N/S |
| Fiona Stanley Hospital | FSH Older Adult MH Liaison Triage (OA) & Older Adult MH Liaison & Older Adult MH ED Liaison, FSH Older Adult MH ED Liaison Triage (OA) | Murdoch | OX[F0-F99] - I1.1 | N/S |
| Rockingham Peel Group | Peel and Rockingham Seniors Triage (OA) | Rockingham | OX[F0-F99] - I1.1 | N/S |

## 12.6 Accessibility Services

### *Adults*

There were six teams identified as providing Accessibility services in the PSPHN catchment (Table 94). Two of these are part of Fremantle Hospital. Of the four non-government provided services, St Patricks runs a specialist service that helps people with persistent mental illness who are also at-risk of homelessness to secure long-term housing. The service locates housing for people with serious mental illnesses and then supports those individuals so that they can sustain their tenancies successfully. The Richmond Wellbeing Jinarra service is an outreach support service that specifically helps Aboriginal people to get access to the NDIS.

**The number of BSIC per 100,000 adults is 1.01.**

**TABLE 94** MENTAL HEALTH ACCESSIBILITY CARE FOR ADULTS IN PSPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| Richmond Wellbeing | Jinarra | Cannington | GXIN[F0-F99] - A4.2.3u | Midland, Cockburn, Kwinana |
| Community First International | Partners in Recovery | Mandurah | AX[F0-F99] - A4.2.1 | N/S |
| Fremantle Hospital - Adult | Community Liaison Team | Fremantle | AX[F0-F99] - A5 | N/S |
| Fremantle Hospital - Alma Street Centre | Alma Street MH Wellness Clinic | Fremantle | AX[F0-F99] - A5.1 | N/S |
| NEAMI National | Consumer Participation Officer | Bentley | GX[F0-F99] - A5.3u | Statewide |
| St Patrick's Community Support Centre | Mental Health Housing Service | Fremantle | AX[F0-F99][Z59] - A5.5 | Maylands, Perth CBD, Fremantle |

## 12.7 Self-Help and Voluntary Services

There were no BSIC identified of this type across PSPHN.

## 12.8 Patterns of Mental Health Care – PSPHN

Figure 76 displays the mix of service types across the PSPHN region. The pattern of mental health care is characterised by a large number of Non-Acute Mobile Outpatient and Non-Acute Non-Mobile Outpatient NGO services. This is complimented by a spike in Acute hospital beds and to a lesser extent, health Outpatient services.

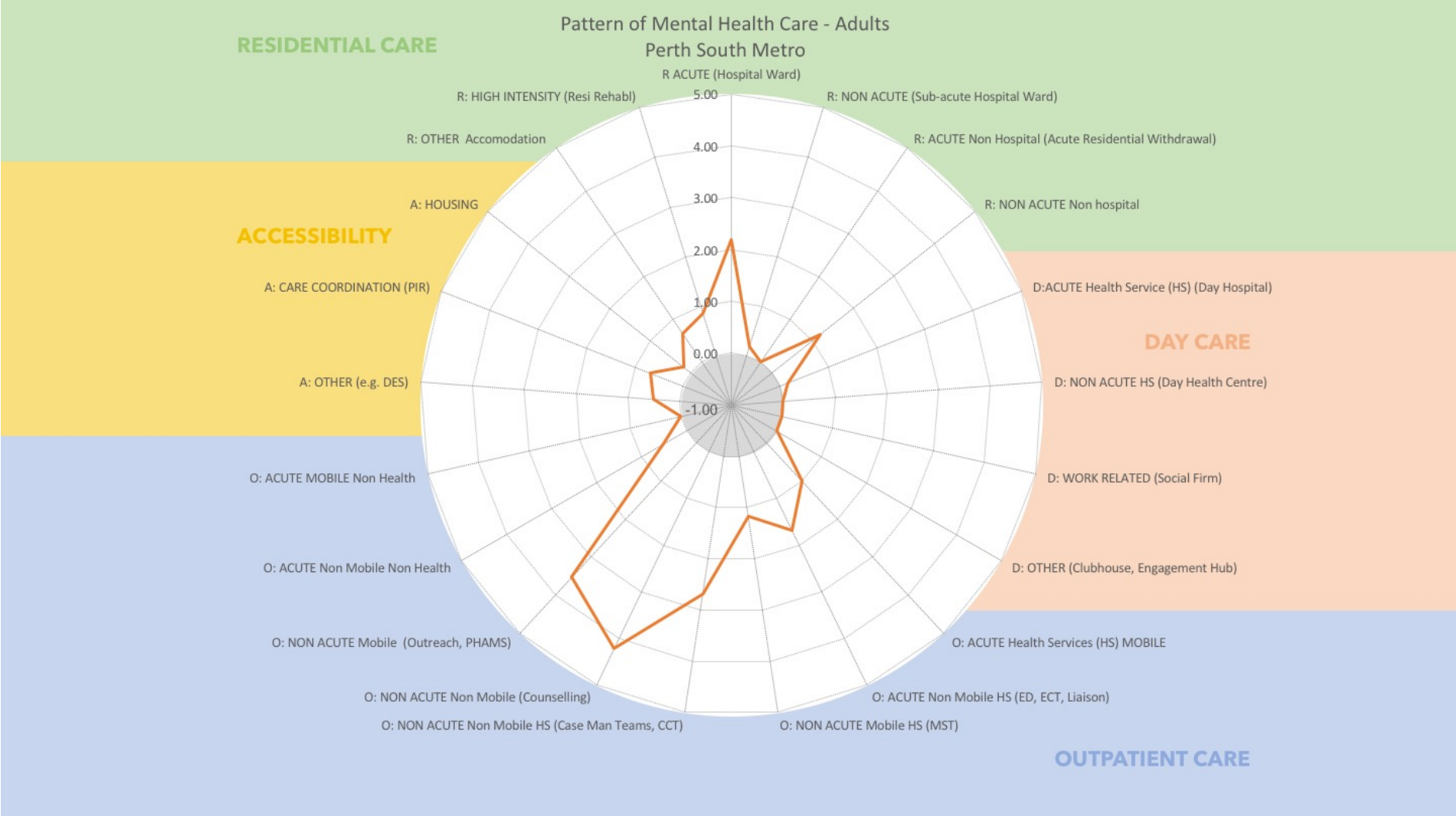



**FIGURE 76** PATTERN OF MENTAL HEALTH CARE IN PSNPHN

## 12.9 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. Data was collected for 302 of the 847 teams identified in this project (36%), a symptom of working into the system at a time of intense structural change. FTE data was sometimes not able to be provided, and at times what was provided was more an estimation or lacked specificity. As such, the data presented here should not be relied upon but rather used as an approximation of the workforce characteristics.

Data in relation to PSPHN mental health workforce FTE was collected for 28% or 53 of the 192 mental health BSIC across PSPHN. FTE data was not released for the Perth South Metropolitan Health Service. As such data presented here should be treated with caution, especially as it is understood the health sector teams make up a substantial part of the mental health workforce and consist of the largest teams in terms of team sizes.

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 (<5 FTE), medium (from 6-20 FTE) and large (20 plus FTE). As seen in Table 95 below, most mental health teams are extra small, small or medium in size, but as discussed the health sector teams are not included here which distorts the results.

**TABLE 95** MENTAL HEALTH TEAM SIZE

| Teams | Not Stated | X-Small (<1 FTE) | Small (1-5 FTE) | Medium (6-20 FTE) | Large (>20FTE) | Total |
|---|---|---|---|---|---|---|
| **Total** | 139 | 12 | 18 | 17 | 6 | 192 |
| **%** | - | 23% | 34% | 32% | 11% | 100%* |

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

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

# 13. Alcohol and Other Drug Data - PSPHN

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 in relation to the service mapping for the PSPHN region. For comparative purposes, a brief overview of Australian and WA prevalence and service data is also provided.

Table 96 displays the estimated percentage of adult aged persons consuming alcohol at risky levels. PSPHN overall is higher than the national estimated rate, with Kwinana and Waroona recording the highest levels, and Melville the lowest.

**TABLE 96** ESTIMATED POPULATION AGED 18 YEARS AND OVER CONSUMING ALCOHOL AT RISKY LEVELS

| LGA | Alcohol consumption at risk to health (n) | Alcohol consumption at risk to health (ASR per 100)* |
|---|---|---|
| Armadale | 3,737 | 7.4 |
| Belmont | 2,169 | 7.2 |
| Canning | 4,617 | 6.4 |
| Cockburn | 5,304 | 7.2 |
| East Fremantle | 434 | 7.2 |
| Fremantle | 1,662 | 7.3 |
| Gosnells | 6,439 | 7.4 |
| Kwinana | 1,815 | 7.9 |
| Mandurah | 4,228 | 7.7 |
| Melville | 4,854 | 6.0 |
| Murray | 863 | 7.8 |
| Rockingham | 5,938 | 7.3 |
| Serpentine-Jarrahdale | 1,018 | 7.4 |
| South Perth | 2,295 | 6.5 |
| Victoria Park | 2,134 | 7.1 |
| Waroona | 218 | 7.9 |
| **PSPHN** | **47,723** | **7.1** |
| Australia | 792,499 | 4.7 |

Alcohol related hospitalisations have increased slightly between 2008 and 2012 (Figure 77), whilst other drug related hospitalisations have remained constant throughout this time (Figure 78). In line with the rest of the state, PSPHN calls to the ADIS have increased for methamphetamine and cannabis related drug use (Figure 79).

**FIGURE 77** ALCOHOL-RELATED HOSPITALISATIONS

**FIGURE 78** OTHER DRUG-RELATED HOSPITALISATIONS

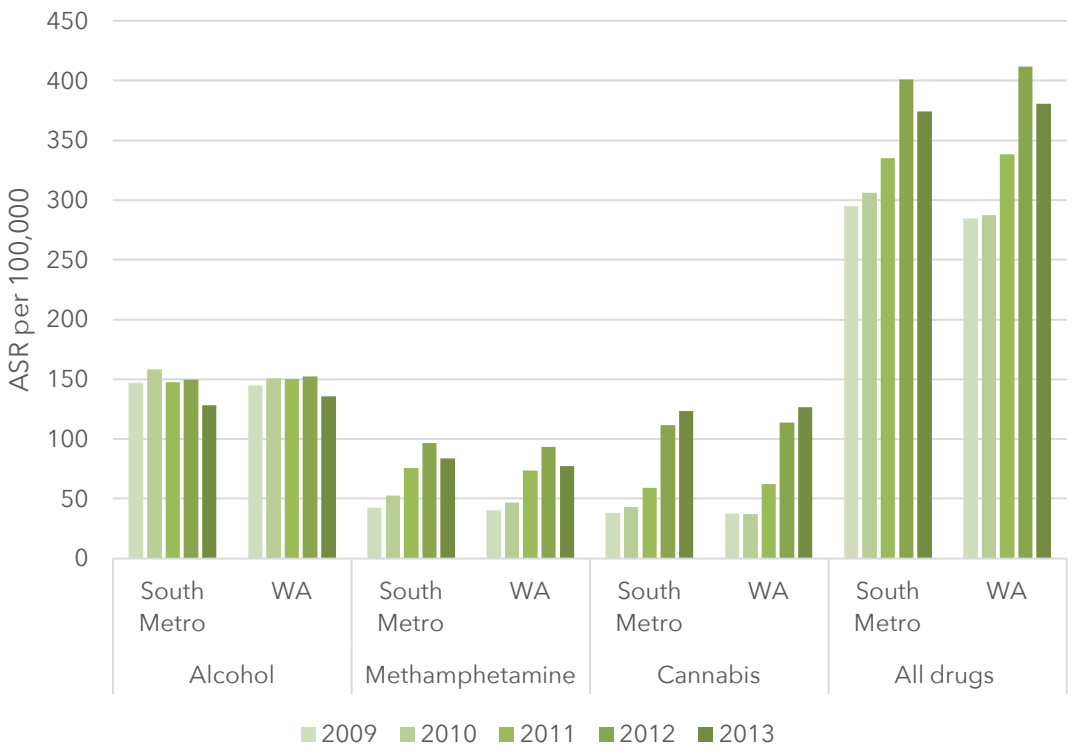



**FIGURE 79** RATE OF CALLS TO ADIS BY PRIMARY DRUG OF CONCERN

# 14. Alcohol and Other Drug Services - PSPHN

In this section of the Atlas the type, availability and location of BSIC delivering Alcohol and Other Drug Care across the PSPHN is described; that is, services where the primary presentation is specifically for AOD Issues.

Each of the key DESDE classifications are outlined, then in turn, a description is provided of the services available under each type for children and adolescents, adults and then older adults.

Services for specific population groups will be highlighted within each of the relevant service categories, as well as in summary at the end of the chapter. Gender specific services are indicated using an additional letter added to the age code in the DESDE formula. For example, a mother-baby unit has a DESDE code - AXF[F00-F99] - R2, where the F is used to indicate this is a gender specific service. Where a service is clearly funded for and dealing with dual diagnosis clients, it will have both the mental health (F0-F99) and the (F10-F19) ICD code.

For simplicity, where services are described as catering for all age groups (GX), they are included within the Adult sections as in practice it is mostly adults that utilise these services. These are readily identifiable by the GX at the start of the DESDE code. Where possible additional information is added to the tables to assist the reader to interpret the DESDE codes that have been applied.

Where a BSIC has two MTC codes, that is the team provides two distinct service types, it will be included in both service type tables.

There was a total of 39 BSIC identified that deliver 41 MTC of AOD care in PSPHN, across 12 different classifications, as detailed in Figure 80 below:

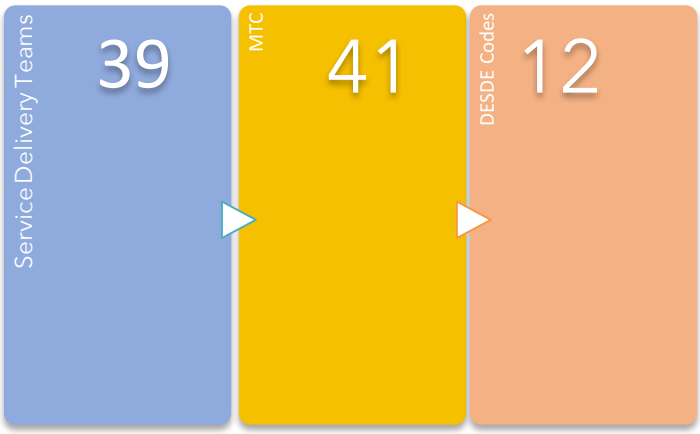



**FIGURE 80** SUMMARY OF SERVICES PROVIDING CARE FOR AOD ACROSS PSPHN

Outpatient care teams, including outreach services made up 56% of the MTC, Information and Guidance 24% and Residential Accommodation 15% (Figure 81).

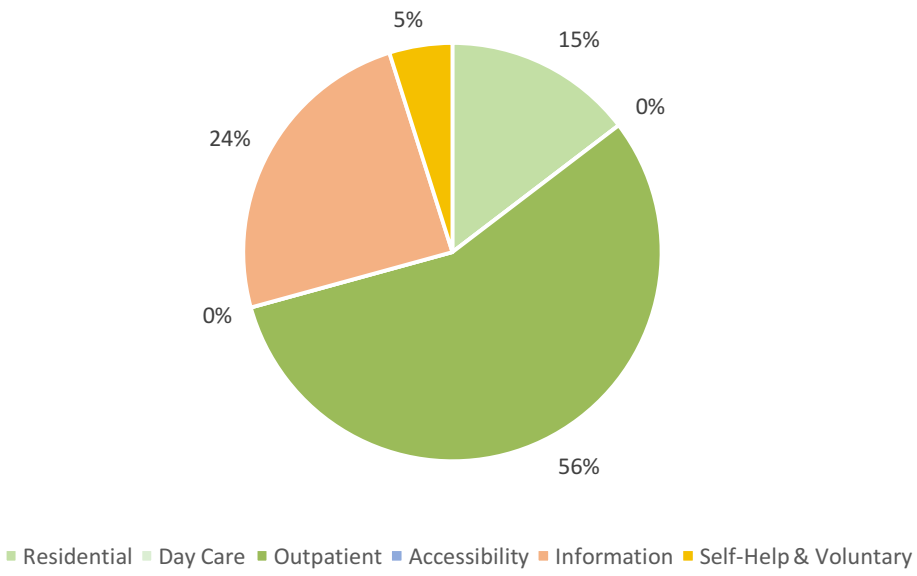



**FIGURE 81** AOD CARE BY MTC SERVICE TYPE PSPHN

AOD services are predominantly delivered to adults and largely by the NGO sector. Table 97 displays the main types of care broken down by NGO and health services. The majority were run by NGOs, with only four services run by a health provider.

**TABLE 97** NUMBER OF MAIN TYPES OF ALCOHOL AND OTHER DRUG CARE IN PSPHN

| Population Group | Service Type | R | D | O | A | I | S | TOTAL |
|---|---|---|---|---|---|---|---|---|
| Child & Adolescent | Health | 0 | 0 | 1 | 0 | 1 | 0 | 2 |
| | NGO/Other | 0 | 0 | 2 | 0 | 3 | 0 | 5 |
| | **Sub-total** | **0** | **0** | **3** | **0** | **4** | **0** | **7** |
| Adult | Health | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| | NGO/Other | 6 | 0 | 19 | 0 | 5 | 2 | 32 |
| | **Sub-total** | **6** | **0** | **20** | **0** | **5** | **2** | **33** |
| Older Adult | Health | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| | NGO/Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | **Sub-total** | **0** | **0** | **0** | **0** | **1** | **0** | **1** |
| Total | Health | 0 | 0 | 2 | 0 | 2 | 0 | 4 |
| | NGO/Other | 6 | 0 | 21 | 0 | 8 | 2 | 37 |
| | **Total** | **6** | **0** | **23** | **0** | **10** | **2** | **41** |
| | **%** | **15%** | **0** | **56%** | **0** | **24%** | **5%** | **100%** |

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

## 14.1 Residential Care - AOD

There were no Acute or Sub-Acute Inpatient AOD beds identified across PSPHN.

### Other Inpatient Services (R8 – R14 DESDE Codes)

#### *Adults*

There were four organisations identified as providing other AOD care in PSPHN (Table 98). These organisations provide five BSIC. Salvation Army provided two services including The Bridge Program and Transitional Housing in Gosnells. Note those with undisclosed addresses were not added to the placement of services map.

**The number of beds per 100,000 adults is 19.18 and the number of BSIC per 100,000 adults is 0.84.**

**TABLE 98** SUB-ACUTE INPATIENT AOD CARE FOR ADULTS IN PSPHN

| Provider | Name | Suburb | DESDE - 1 (beds) | Catchment |
|---|---|---|---|---|
| Palmerston | Therapeutic Community (The Farm) | N/D | AX[F10-F19] - R8.2 (32)<br>AX[F10-F19] - O9.2g | Statewide |
| Salvation Army | The Harry Hunter Rehabilitation Centre | Gosnells | AX[F10-F19] - R8.2 (50) | Statewide |
| Palmerston | Transitional Housing (THASP) | N/D | AX[F10-F19] - R10.2u (10) | N/S |
| Salvation Army | The Bridge Program – Extended Care (Undisclosed Addresses) | Gosnells | AX[F10-F19] - R10.2 (15) | Statewide |
| | Transitional Housing | Gosnells | AXF[F10-F19] - R10.2 (4)<br>AXM[F10-F19] - R10.2 (3) | N/S |

### Placement of AOD Residential services across PSPHN

Residential AOD services for this category are not mapped as the majority were undisclosed locations.

## 14.2 Day Care - AOD

No Day Care AOD services were identified in PSPHN.

## 14.3 Outpatient Care - AOD

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

#### *Adults*

There only team identified as providing Acute Non-Mobile AOD service for adults in the PSPHN catchment was the Adult Drug and Alcohol service at Fiona Stanley Hospital (Table 99).

**The number of BSIC per 100,000 adults is 0.17.**

**TABLE 99** ACUTE NON-MOBILE AOD OUTPATIENT CARE ADULTS, DESDE CODES O3 AND O4

| Provider | Name | Suburb | DESDE - 1 | Area |
|---|---|---|---|---|
| Fiona Stanley Hospital | FSH Adult Drug and Alcohol | Murdoch | AX[F10-F19] - O4.10 | N/S |

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

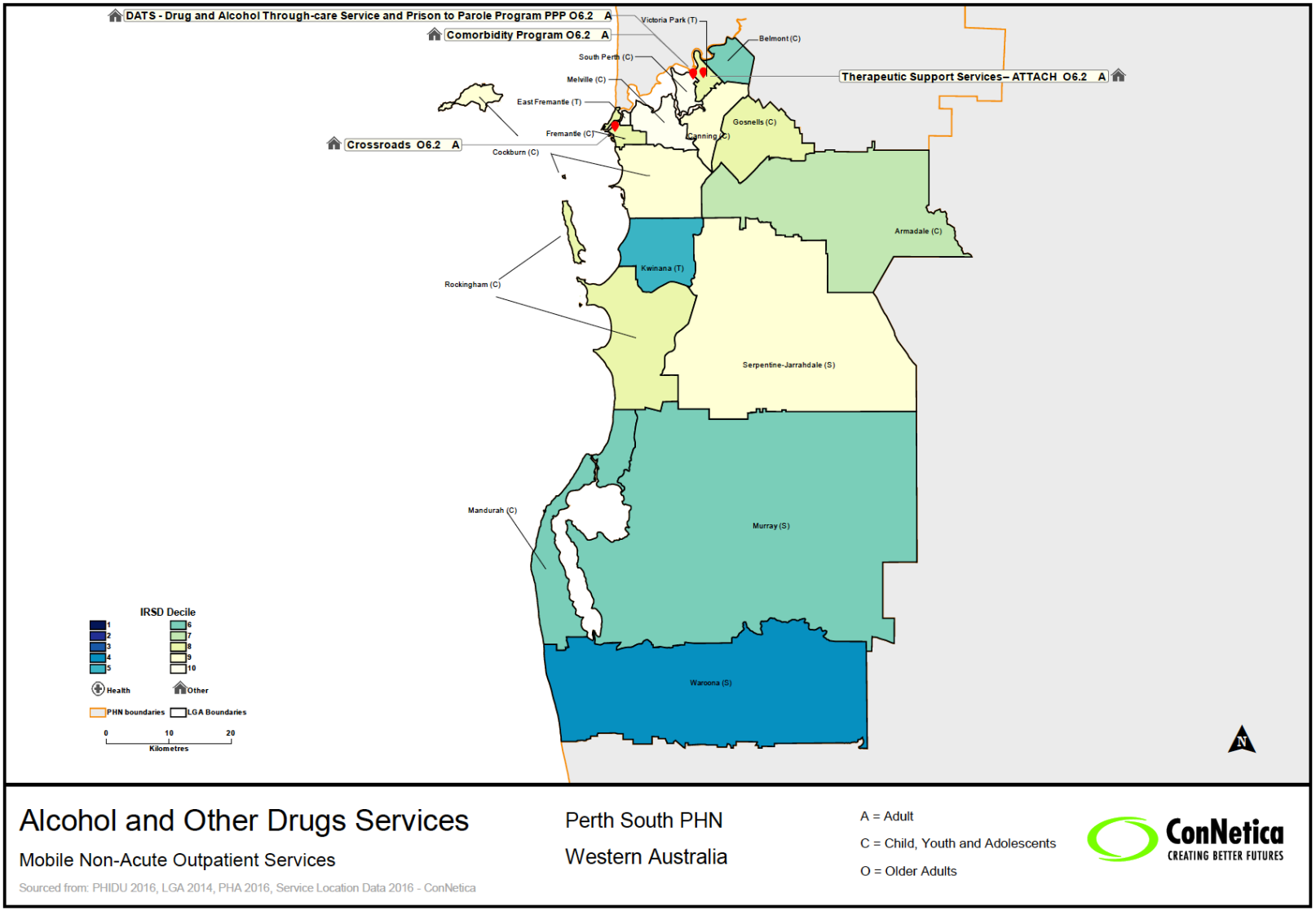
#### *Adults*

There were five teams identified as providing a Non-Acute, Mobile Outpatient AOD service for adults in the PSPHN catchment, all of which are provided by non-government organisations (Table 100). These include the Art & Play and Comorbidity services provided by Holyoake, the Therapeutic Support Service provided by Uniting Care West and Crossroads run by St Patrick's Community Support Centre. These services are located towards the top end (or north end) of the PSPHN catchment as detailed in Figure 82 below. None are located in the AOD areas of specific concern in Waroona and Kwinana.

**The number of BSIC per 100,000 adults is 0.84.**

**TABLE 100** NON-ACUTE MOBILE OUTPATIENT AOD CARE FOR ADULTS IN PSPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| St Patrick's Community Support Centre | Crossroads | Fremantle | AX[F10-F19] - O6.2m | Maylands, Perth CBD, Fremantle |
| Uniting Care West | Therapeutic Support Services – ATTACH | Victoria Park | AX[F10-F19] - O6.2 | Victoria park, Armadale, Mirrabooka, Midland |
| Holyoake | DATS - Drug and Alcohol Through-care Service and Prison to Parole Program PPP | Victoria Park | AX[F10-F19] - O6.2 | Metro and Outer Metro Prisons |
| | Comorbidity Program | Victoria Park | AX[F10-F19][F0-F99] - O6.2 | All |
| | Art & Play Mother and Child Service | Victoria Park | GX[F10-F19] - O7.2 | Metro Perth |




Alcohol and Other Drugs Services

Mobile Non-Acute Outpatient Services

Sourced from: PHIDU 2016, LGA 2014, PHA 2016, Service Location Data 2016 - ConNetica

Perth South PHN

Western Australia

A = Adult

C = Child, Youth and Adolescents

O = Older Adults

ConNetica
CREATING BETTER FUTURES

**FIGURE 82** AOD NON-ACUTE MOBILE OUTPATIENT CARE IN PSPHN

## Non-Acute Non-Mobile Outpatient Care

### *Children and Adolescents*

There were three teams identified as providing a Non-Acute Non-Mobile Outpatient AOD service for children and adolescents in the PSPHN catchment (Table 101). The CAMHS alcohol and drug team is the only government provided service of these three. The Mission Australia youth detention counsellor provides information, education and counselling to young people aged 12-17 in juvenile detention centres due to substance abuse related offensive behaviour. Holyoake also has a youth and justice team based in Victoria park but serving a wide area through to Rockingham.

**The number of BSIC per 100,000 children and adolescents is 1.23.**

**TABLE 101** NON-ACUTE NON-MOBILE OUTPATIENT AOD CARE FOR CHILDREN AND ADOLESCENTS IN PSPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| Fiona Stanley Hospital | FSH CAMHS Drug and Alcohol | Murdoch | CX[F10-F19] - O9.1 | N/S |
| Mission Australia (WA) | Youth Detention Counsellor | Canning Vale | CYIN[F12] - O9.2j | East Perth |
| Holyoake | Youth and Justice Program | Victoria Park | CA[F0-F19] - O9.2j | Metro to Rockingham. |

### *Adults*

There were 13 teams identified as providing a Non-Acute Non-Mobile Outpatient AOD service for adults in the PSPHN catchment (Table 102). These services are run by NGOs.

Palmerston has a Community Alcohol and Drug service in 4 locations in the PSPHN region all of which offer a similar service, namely, assessment, referral, counselling and support. Each centre has an integrated model of care in partnership with Next step, except Mandurah, which doesn't offer medical support but does have a needle exchange. Fremantle also runs cannabis intervention sessions. Additionally, Palmerston has Smart Recovery groups based in four locations within the PSPHN. These are weekly groups led by peer workers and aim to help individuals gain control over their addictive alcohol or drug behaviour, achieve a balanced lifestyle and lead meaningful lives.

Holyoake has a service specifically targeted at people in the justice system, the Pathways responsible living program which is specifically linked to Karnet prison (male).

There is one Aboriginal specific service, an AOD Counselling and Care Coordination service run by Moorditj Koort Aboriginal Health & Wellness Centre in Medina.

The Holyoake Drumbeat program has also been added here. This program was originally designed as an early intervention program for 'at risk' youth in the Wheatbelt region of Western Australia. The design of the program deliberately targeted known 'risk factors' and seeks to strengthen 'protective factors' in order to reduce the likelihood of problematic drug and alcohol use by participants in the program.

**The number of BSIC per 100,000 adults is 2.19.**

**TABLE 102** NON-ACUTE NON-MOBILE OUTPATIENT AOD CARE FOR ADULTS IN PSPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| Palmerston | South Metro Community Alcohol and Drug Service - Fremantle | Fremantle | AX[F10-F19] - O9.2 | Fremantle |
| | South Metro Community Alcohol and Drug Service - Mandurah | Mandurah | AX[F10-F19] - O9.2 | Mandurah |
| | South Metro Community Alcohol and Drug Service - Rockingham | Rockingham | AX[F10-F19] - O9.2 | Rockingham |
| | South East Metro Community Alcohol and Drug Service - Thornlie | Thornlie | AX[F10-F19] - O9.2 | Thornlie |
| Hope Community Services | Armadale Counselling Service | Armadale | AX[F10-F19] - O9.2 | Generally south east metro corridor |
| Holyoake | Victoria Park Team | Victoria Park | AX[F10-F19] - O9.2 | Metro Perth |
| Palmerston | Smart Recovery Groups | Fremantle | GX[F10-F19] - O10.2g | N/S |
| | Smart Recovery Groups | Rockingham | GX[F10-F19] - O10.2g | N/S |
| | Smart Recovery Groups | Mandurah | GX[F10-F19] - O10.2g | N/S |
| | Smart Recovery Groups | Thornlie | GX[F10-F19] - O10.2g | N/S |
| Holyoake | Pathways to Responsible Living | Victoria Park | AX[F10-F19] - O10.2jg | Karnet Prison |
| Moorditj Koort Aboriginal Health & Wellness Centre | AOD Counselling and Care Coordination | Medina | GXIN[F10-F19] - O10.2m | N/S |
| Holyoake | Drumbeat AOD Early Intervention | Victoria Park | GX[F10-19] - O10.2 | Statewide |

## Placement of Non-Mobile AOD services across PSPHN

Figure 83 shows the location of Non-Acute Non-Mobile Outpatient AOD services across PSPHN. The services are spread across the top of the region, with no services located in Serpentine-Jarradale, Murray or Waroona.

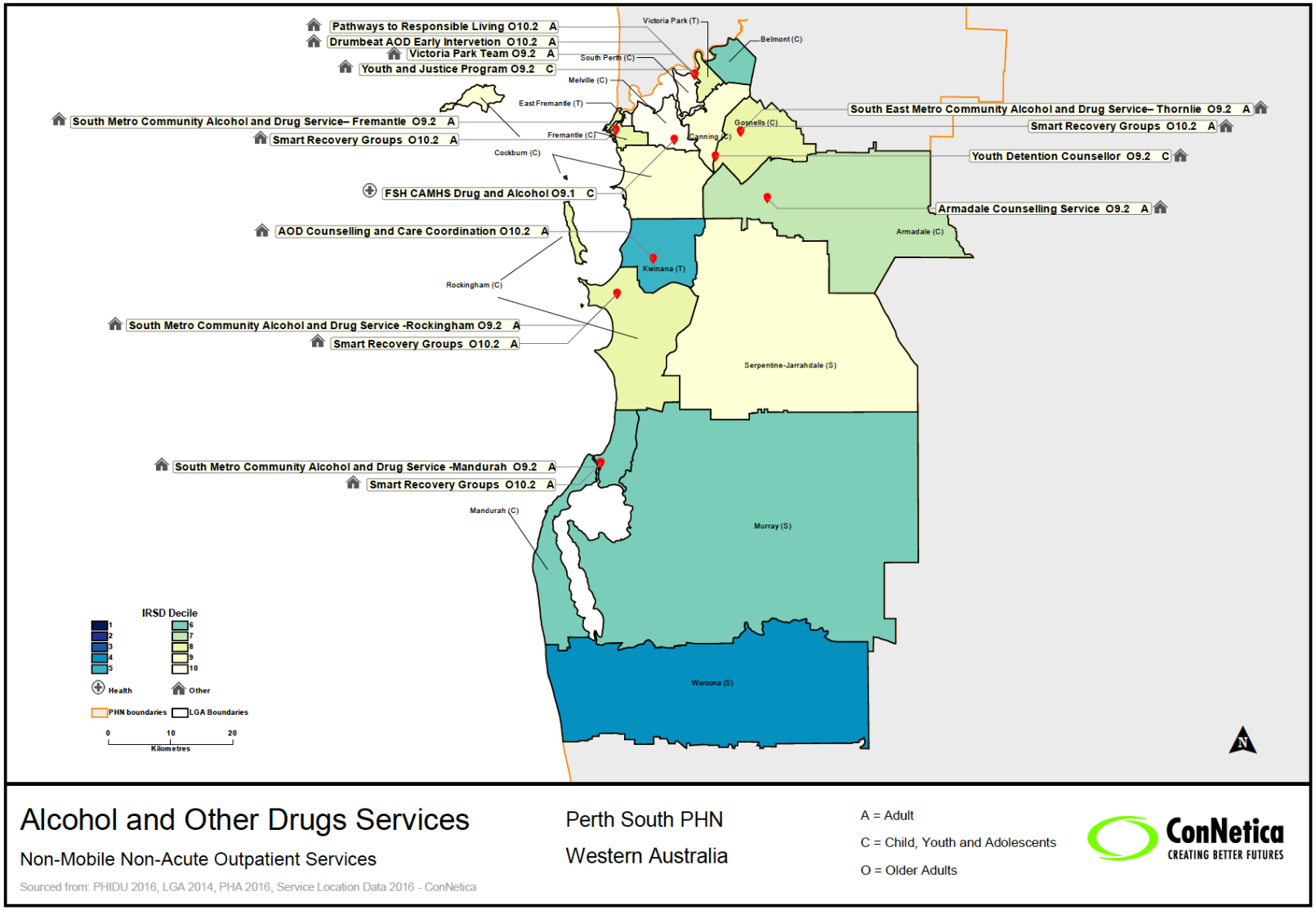



**FIGURE 83** NON-ACUTE NON-MOBILE AOD OUTPATIENT CARE IN PSPHN

## 14.4 Information and Guidance Services

### *Children and Adolescents*

There were three teams identified as providing Information and Guidance AOD services for children and adolescents in the PSPHN catchment (Table 103). One of these is only run at a particular time of year, to align with 'schoolies week', whilst the other is an ongoing CAMHS drug and alcohol triage program based at Fiona Stanley Hospital.

**The number of BSIC per 100,000 children and adolescents is 1.23.**

**TABLE 103** INFORMATION AND GUIDANCE AOD CARE FOR CHILDREN AND ADOLESCENTS IN PSPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| Fiona Stanley Hospital | FSH CAMHS Drug and Alcohol Triage | Murdoch | CX[F10-F19] - I1.1 | N/S |
| Hope Community Services | Street Van and Diversion Service | Roleystone | CX[F10-F19] - I2.1.1 | Local young people from LGA's of Roleystone 6111 Armadale 6112 Kwinana 6167 |
| Hope Community Services | School Leavers Program | Rottnest Island | TA[F10-F19] - I2.1.1 | School Leavers holidaying in Rottnest or Dunsborough |

### *Adults*

There were two teams identified as providing information and guidance AOD services for adults in the PSPHN catchment (Table 104). Both teams are run by Hope Community Services but in two different locations (Armadale and Kwinana) and seek to provide information about the consequences of alcohol and drug misuse, harm minimisation services, brief intervention and referral to clinical services where appropriate.

**The number of BSIC per 100,000 adults is 0.34.**

**TABLE 104** INFORMATION AND GUIDANCE AOC CARE FOR ADULTS IN PSPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| Hope Community Services | Street Van and Diversion Service | Armadale | AX[F10-F19] - I2.1.1t | N/S |
| | Street Van and Diversion Service | Kwinana | AX[F10-F19] - I2.1.1t | N/S |

### *Older Adults*

There was only one team identified as providing information and guidance AOD services for older adults in the PSPHN catchment, this being a triage team based at FSH (Table 105).

**The number of BSIC per 100,000 older adults is 0.79.**

**TABLE 105** INFORMATION AND GUIDANCE AOD CARE FOR OLDER ADULTS IN PSPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| Fiona Stanley Hospital | FSH Older Adult Drug and Alcohol Triage (OA) | Murdoch | OX[F10-F19] - I1.1 | N/S |

## 14.5 Self-Help and Voluntary Services

### *Adults*

There are two teams identified as providing Self-Help and Voluntary AOD care in the PSPHN catchment, both for adults. The Holyoake peer connect program runs from Victoria Park and the Families 4 Families WA program run by Mental Health Matters 2 runs from Baldivis (Table 106). The Holyoake team services the Wheatbelt and Midland regions as well as PSPHN.

**The number of BSIC per 100,000 adults is 0.34.**

**TABLE 106** SELF-HELP AND VOLUNTARY AOD CARE FOR ADULTS IN PSPHN

| Provider | Name | Suburbs | DESDE - 1 | Catchment |
|---|---|---|---|---|
| Holyoake | Holyoake Connect Peer program | Victoria Park | GX[F10-F19] - S1.3u | Midland and Wheatbelt |
| Mental Health Matters 2 | Families 4 Families WA | Baldivis | AX[F10-F19] - S1.3 | Perth central |

## 14.6 Patterns of AOD Care – PSPHN

Figure 84 displays the pattern of AOD care in PSPHN. Care is primarily delivered by Non-Acute Non-Mobile NGO services, with a small amount of other Residential accommodation services and Acute health providers.

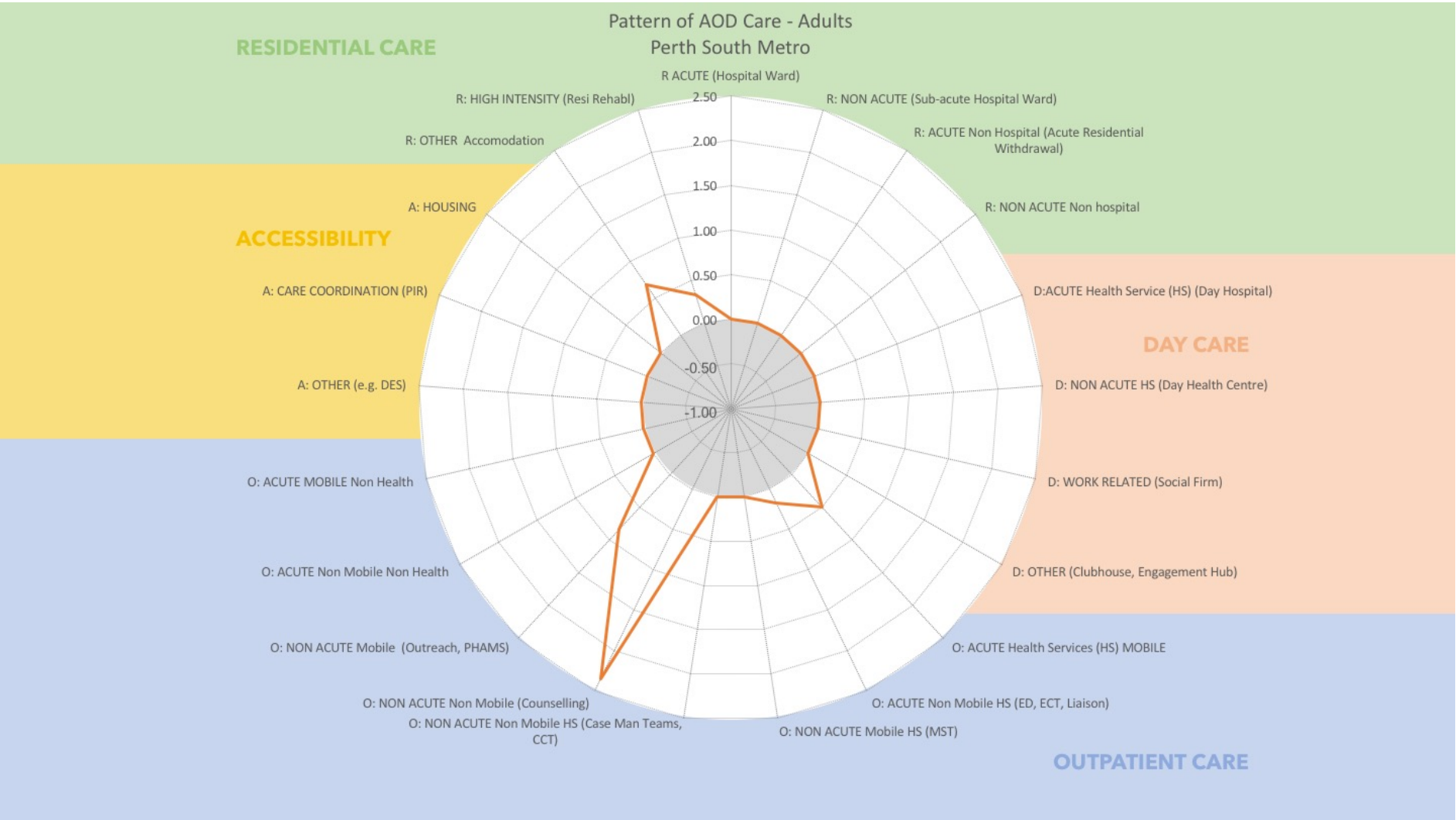



**FIGURE 84** PATTERN OF AOD CARE IN PSPHN

## 14.7 Workforce Capacity – AOD PSPHN

### Introduction

During the data gathering process for this Atlas, stakeholders were asked to report the full time equivalent (FTE) staffing levels for each BSIC. Data was collected for 302 of the 847 teams identified in this project (36%), which may relate to this Atlas being completed at a time of intense structural change. FTE data was sometimes not able to be provided, and at times what was provided was more an estimation or lacked specificity. As such, the data presented here should not be relied upon but rather used as an approximation of the workforce characteristics.

Data in relation to PSPHN AOD workforce FTE was collected for 54% or 20 of the 37 AOD service delivery teams (BSIC) across PSPHN. As such data presented here should be treated with caution.

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 (<5 FTE), medium (from 6-20 FTE) and large (20 plus FTE). As displayed in Table 107 below, most AOD teams are extra small, small or medium in size.

Teams working in NGOs are generally smaller than those working in the health sector.

**TABLE 107** AOD TEAM SIZE

| Teams | Not Stated | X-Small (<1 FTE) | Small (1-5 FTE) | Medium (6-20 FTE) | Large (>20FTE) | Total |
|---|---|---|---|---|---|---|
| **Total** | 17 | 6 | 8 | 6 | 0 | 37 |
| **%** | - | 30% | 40% | 30% | 0% | 100%* |

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

# 15. Private Hospital Services

The following tables provide information on private hospital services, primarily located in the PNPHN region. Most services consist of day group therapy programs which address several specific and generalist mental health disorders. A few services cover both mental health and AOD conditions.

These services would not normally be mapped as part of an Integrated Mental Health Atlas as they are fee for service providers and thus not universally accessible, a requirement for inclusion. They are provided here on request as supplementary information and are not included in the spider or other summary data presented in the Atlas. Note, it was unclear as to whether many of the day program activities here are delivered by separate staff teams, but for the purposes of this analysis they are included as such. It was beyond scope to investigate these further.

## Residential Care in Private Hospitals - Mental Health

### *Adult Services*

Table 108 details private hospital Acute Inpatient mental health services for adults, all located in the PNPHN area. These Inpatient wards are located at the Abbotsford Private Hospital, the Hollywood Clinic and The Marian Centre.

## Residential Care in Private Hospitals - AOD

### *Adult Services*

There is one private hospital providing a Non-Acute other Inpatient service (Table 109). This can be found at the Hollywood Clinic.

## Day Care in Private Hospitals - Mental Health and AOD

### *Child and Adolescent Day Care Services*

There is one day care program for children and adolescents at The Marian Centre, a CBT program in the PNPHN area (Table 110).

### *Adult Services*

Adult Day Care makes up the majority of private hospital activity (Table 111). The Hollywood Clinic runs a number of day programs focussing on eating disorders of varying intensity. Abbotsford Private Hospital runs a number of group therapy programs focussing on CBT, emotional regulation, mindfulness and Dialectical Behaviour Therapy (DBT).

**TABLE 108** PRIVATE HOSPITAL ACUTE INPATIENT MENTAL HEALTH CARE FOR ADULTS IN WESTERN AUSTRALIA

| Name | Organisation | Suburb | DESDE-1 | Region |
|---|---|---|---|---|
| Abbotsford Private Hospital | Inpatient programs | Perth | AX[F00-F99][F10-F19] - R3 | Perth North |
| Hollywood Clinic | Inpatient Wards | Perth | AX[F00-F99] - R3 | Perth North |
| The Marian Centre | Inpatient treatment | Perth | AX[F00-F99] - R3 | Perth North |

**TABLE 109** PRIVATE HOSPITAL OTHER INPATIENT MENTAL HEALTH CARE FOR ADULTS IN WESTERN AUSTRALIA

| Name | Organisation | Suburb | DESDE-1 | Region |
|---|---|---|---|---|
| Hollywood Clinic | Eating Disorders Program Inpatient | Perth | AX[F50] - R12 | Perth North |

**TABLE 110** PRIVATE HOSPITAL MENTAL HEALTH DAY CARE FOR CHILDREN AND ADOLESCENTS IN WESTERN AUSTRALIA

| Name | Organisation | Suburb | DESDE-1 | Region |
|---|---|---|---|---|
| The Marian Centre | Adolescent CBT | Perth | TA[F00-F99] - D8.1h | Perth North |

**TABLE 111** PRIVATE HOSPITAL MENTAL HEALTH AND AOD DAY CARE FOR ADULTS IN WESTERN AUSTRALIA

| Name | Organisation | Suburb | DESDE-1 | Region |
|---|---|---|---|---|
| Abbotsford Private Hospital | Depression and Anxiety Two Week Program | Perth | AX[F00-F99] - D4.1h | Perth North |
| | Blackwood River Clinic | Southampton | AX[F00-F99][F10-F19] - D4.1h | South West |

| | | | | |
|---|---|---|---|---|
| Hollywood Clinic | Trauma Recovery Program | Perth | AX[F43] - D4.1h | Perth North |
| The Marian Centre | Enhanced Coping Skills | Perth | AX[F00-F99] - D4.1h<br>AX[F0-F99] - I2.1h | Perth North |
| Abbotsford Private Hospital | Depression and Anxiety Weekly Group (Post Two Week Program) | Perth | AX[F00-F99] - D8.1h | Perth North |
| | Mindfulness (Weekend Intensive) | Perth | AX[F00-F99] - D8.1h | Perth North |
| | Introduction to CBT (Weekend Intensive) | Perth | AX[F00-F99] - D8.1h | Perth North |
| | Managing Psychological Distress (Open access skills based programs) | Perth | AX[F00-F99] - D8.1h | Perth North |
| | Dialectical Behaviour Therapy (Advanced) | Perth | AX[F00-F99] - D8.1h | Perth North |
| | Mindfulness and Self-Compassion (Graduate mindfulness group) | Perth | AX[F00-F99] - D8.1h | Perth North |
| | Emotional Resilience (Post-intensive trauma group) | Perth | AX[F00-F99] - D8.1h | Perth North |
| | Interpersonal Communication and Relationships (Post-intensive group) | Perth | AX[F00-F99] - D8.3h | Perth North |
| | Strive and Thrive (Post-intensive trauma group) | Perth | AX[F00-F99] - D8.1h | Perth North |
| | Women's Group (Evening Program) | Perth | AX[F00-F99] - D8.3h | Perth North |

| | | | | |
|---|---|---|---|---|
| | Men's Group (Evening Program) | Perth | AX[F00-F99] - D8.3h | Perth North |
| | Family and Carer's Group (Evening Program) | Perth | AX[e310] - D8.3h | Perth North |
| Hollywood Clinic | Art Therapy | Perth | AX[F10-F19] - D8.4h | Perth North |
| | Eating Disorders Program Outpatient | Perth | AX[F50] - D8.1h | Perth North |
| | Bulimia Program | Perth | AX[F50] - D8.1h | Perth North |
| | Mood and Anxiety Management Program | Perth | AX[F39] - D8.1h | Perth North |
| | DBT Program | Perth | AX[F00-F99] - D8.1h | Perth North |
| | Schema Therapy Program | Perth | AX[F00-F99] - D8.1h | Perth North |
| | Seniors Program | Perth | AX[F00-F99] - D8.3h | Perth North |
| | Eating Disorders Program Inpatient | Perth | AX[F50] - D4.1h | Perth North |
| | Eating Disorders Program Inpatient | Perth | AX[F50] - D4.1h | Perth North |
| | Eating Disorders Program Inpatient | Perth | AX[F50] - D8.1h | Perth North |
| | Eating Disorders Program Inpatient | Perth | AX[F50] - D8.1h | Perth North |
| | Eating Disorders Program Inpatient | Perth | AX[F50] - D8.3h | Perth North |
| | Eating Disorders Program Inpatient | Perth | AX[F50] - D8.1h | Perth North |

| | | | | |
|---|---|---|---|---|
| Perth Clinic | General Program | Perth | AX[F00-F99] - D8.1h | Perth North |
| | Cognitive Behaviour Therapy (CBT) | Perth | AX[F00-F99] - D8.1h | Perth North |
| | Dialectical Behaviour Therapy (DBT) | Perth | AX[F00-F99] - D8.1h | Perth North |
| | Mindfulness Based Therapy (MBT) | Perth | AX[F00-F99] - D8.1h | Perth North |
| The Marian Centre | DARE Program (Depression and Anxiety Resilience Education) | Perth | AX[F00-F99] - D8.1h<br>AX[F00-F99] - D4.1h | Perth North |
| | Mindful Living Program - Mindfulness Based Cognitive Therapy (MBCT) | Perth | AX[F00-F99] - D8.1h | Perth North |
| | Reframe and Reclaim (R&R) PTSD Program | Perth | AX[F43] - D8.1h<br>AX[F00-F99] - D4.1h | Perth North |
| | Complex Trauma Program | Perth | AX[F43] - D8.1h | Perth North |
| | Activity Based Therapy program | Perth | AX[F00-F99] - D8.1h | Perth North |
| Abbotsford Private Hospital | Supporters Group | Perth | AX[e310] - D8.1h | Perth North |

# 16. 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.

Comparisons allow for the contrast the patterns of care to be visualised 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. Comparison, 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 Perth North and Perth South PHN Regions;
- The Integrated Mental Health Atlas of the Australian Capital Territory PHN Region;
- The Integrated Mental Health Atlas of Western NSW PHN;
- The Integrated Chronic Care Atlas of Dubbo and Coonamble; and,
- The Integrated Mental Health Atlas of Northern Sydney PHN.

## 16.1 National Comparatives

### Perth North PHN and Perth South PHN

Figure 85 and Figure 86 display the patterns of care for mental health and AOD services comparing the PNPHN and PSPHN areas. The patterns of care for mental health in these two areas broadly reflect one another. There are however, small differences. PNPHN has a larger number of high intensity Residential beds compared with PSPHN, and a larger number of Non-Acute Mobile health service providers per 100,000 adult population. PSPHN however has a high number of Non-Acute Non-Hospital based Residential Care.

The AOD pattern of care for both PHN areas largely follow a similar shape. PNPHN and PSPHN show a large number of NGO Outpatient services per 100,000 population, with PNPHN having a larger presence of accommodation and high intensity Residential beds. The patterns of care gravitate toward these designated services to the exclusivity of most other classifications.

### Brisbane North

The Brisbane North PHN (BNPHN) region covers an area of over 4,000 square kilometres and at the 2011 census recorded a population of just over 855,000 persons. The region has a younger

age profile than the Australian average but is consistent with the Queensland age profile with approximately 7% under the age of five and nearly 34% under the age of 25 years. Just under 13% of the population were aged 65 years or more.

The BNPHN region includes large areas of very low population density (less than 37 persons per square km), with a number of smaller pockets of high density (over 2,264 persons per square km) concentrated around the Brisbane River suburbs and inner north. This mix of high density urban, medium density urban, low density semi- urban (acreage) and very low density rural presents challenges for health service planning.

The strengths in the mental health service system in BNPHN, particularly with the addition of the PIR and ATAPS services, included

- An adequate number of Acute Care beds
- A high degree of mobility for Outpatient Care, and
- Existing service locations and catchments are relatively well aligned to geographic areas of higher population need, meaning that overall there is a good level of accessibility to those services.

The gaps identified in both the spectrum of care available and the capacity relative to population needs in BNPHN were

- Hospital Sub-Acute Care
- Non-hospital Acute and Sub-Acute Care
- Acute and Non-Acute Health Care Day-related, and
- Low availability of Day Care centres related to employment.

### Western Sydney

Western Sydney includes the area of the former WentWest Medicare Local, now the Western Sydney PHN (WSPHN). Western Sydney (WS) Local Health District (LHD) is a large region with a population of over 800,000 inhabitants and with a younger age structure than the Australian average. It is one of Australia's fastest growing and most multicultural urban populations, with a diverse ethnic mix, ranging from long-established immigrant communities to recent arrivals. Unfortunately, it also has areas of extreme social and economic disadvantage, characterised by high unemployment, low education attainment rates, and poor physical health.

Data on services providing care for people with a lived experience of mental ill-health in Western Sydney was collected between mid-October 2014 to the end of February 2015 by members of the project team (Salvador-Carulla et al, 2016a).

The area studied included Parramatta, Blacktown and Mt Druitt. There were three major gaps in the provision of services identified in the Western Sydney Atlas were

- Non-hospital Acute and Sub-Acute Care
- Acute and Non-Acute Health Care Day-related, and
- Low availability of Day Care centres related to employment.

### Central and Eastern Sydney

The pattern of care in Central and Eastern Sydney is characterised by three key gaps in service provision being

- Non-hospital Acute and Sub-Acute services
- Medium and long-term accommodation services, and

- Acute and Non-Acute health related day care programs (Salvador-Carulla et al, 2016b).

There is however, a sound level of mobile services of both Non-Acute and Acute types, and a high level of employment services for those with a lived experience of ill-mental health (Salvador-Carulla et al, 2016b).

### Comparing PNPHN, PSPHN, CWAPHN, Brisbane North PHN and Western Sydney PHN

In Figure 87 the patterns of mental health care for PNPHN and BNPHN are overlayed. The overlay illustrates a similar pattern comparative to that of PNPHN and PSPHN. PNPHN has a higher number of high intensity Residential beds per 100,000 compared to BNPHN, along with a greater number of Non-Acute Non-Mobile NGO and health service providers. Day programs are however much more prominent in BNPHN.

The pattern of mental health care comparative between PSPHN and WSPHN again highlights the greater coverage per 100,000 adults in the PSPHN region (Figure 88). Once again, Non-Acute Non-Mobile Outpatient care is prominent in the PSPHN region compared with WSPHN. PSPHN also has over double the Acute Residential bed rate per 100,000 adults than observed in WSPHN.

Interestingly, the pattern of mental health care of CESPHN favourably compares to the PSPHN pattern (Figure 89). The Acute Residential bed rate per 100,000 adults are similar between these two regions, with CESPHN also showing a higher number of Non-Acute Non-Mobile health services in their region. A stark difference can be seen in the rate of Non-Acute Non-Mobile counselling services however. Similar to BNPHN, day care is represented clearly in CESPHN, with no services identified in PSPHN.

Finally, Figure 90 illustrates the patterns of care for mental health between CWAPHN against the sub-regions of the Midwest and the Kimberley. This comparative pattern shows the level of variability found in service rates per 100,000 adults in rural regions throughout WA. The Midwest region is characterised by a reliance on Non-Acute Mobile and Non-Acute Non-Mobile NGO service providers. Conversely, the Kimberley region has a significantly large number of Non-Acute Mobile and Acute Non-Mobile health service providers. This is important to keep in mind when viewing the composite CWAPHN pattern of care given the significant variability from region to region.

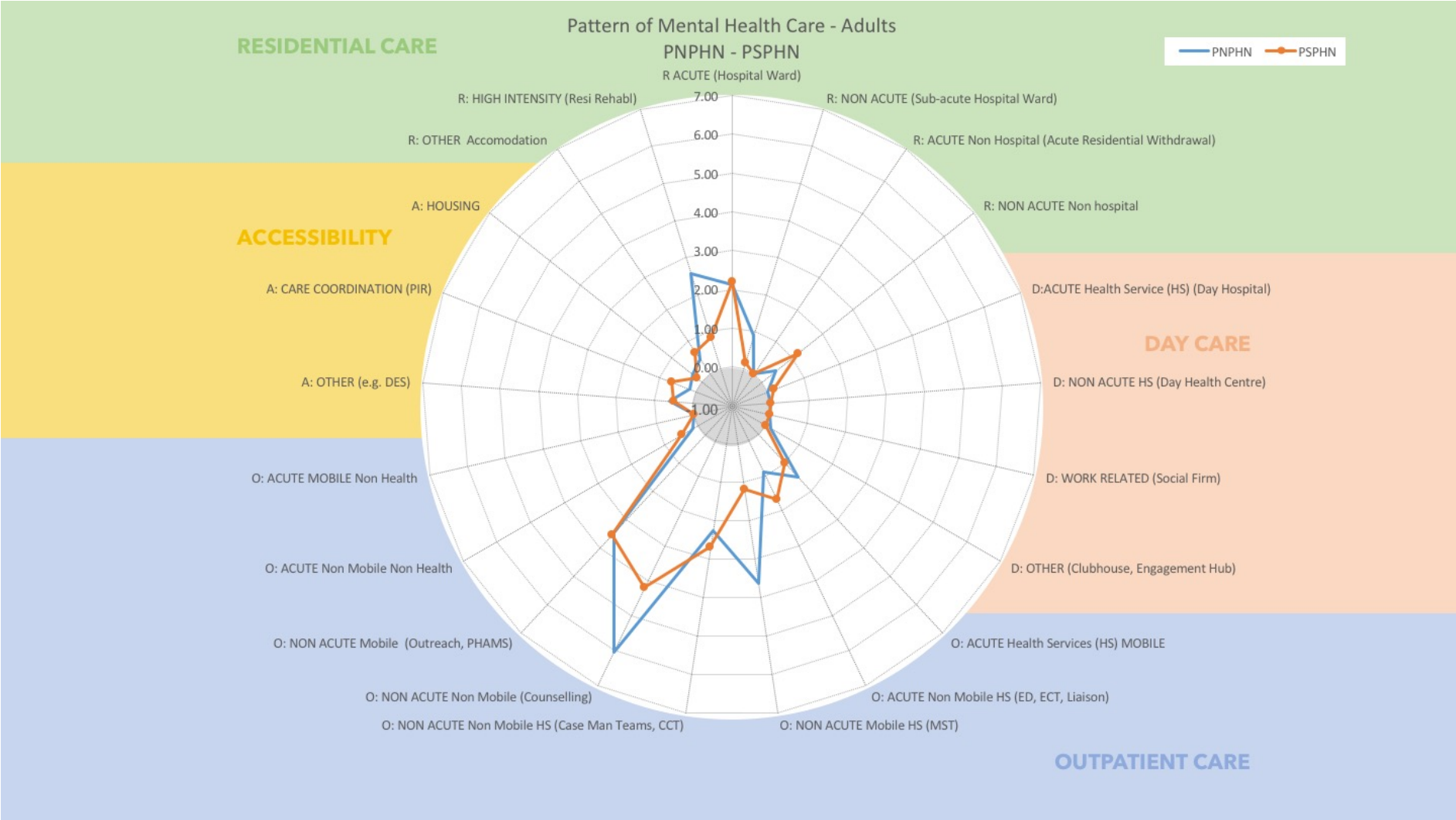



**FIGURE 85** PATTERNS OF CARE FOR MENTAL HEALTH - PNPHN AND PSPHN

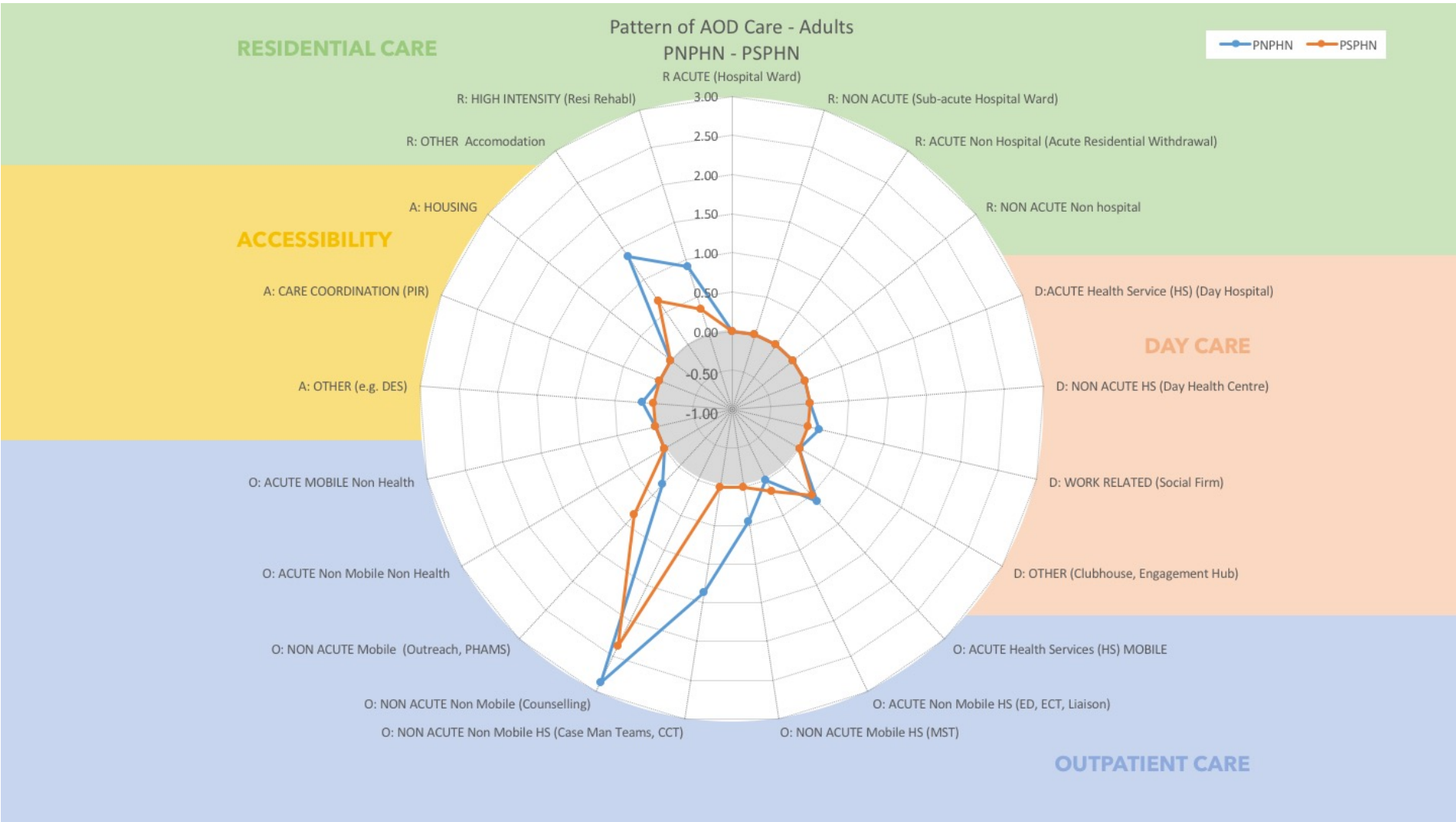



**FIGURE 86** PATTERNS OF CARE FOR AOD - PNPHN AND PSPHN

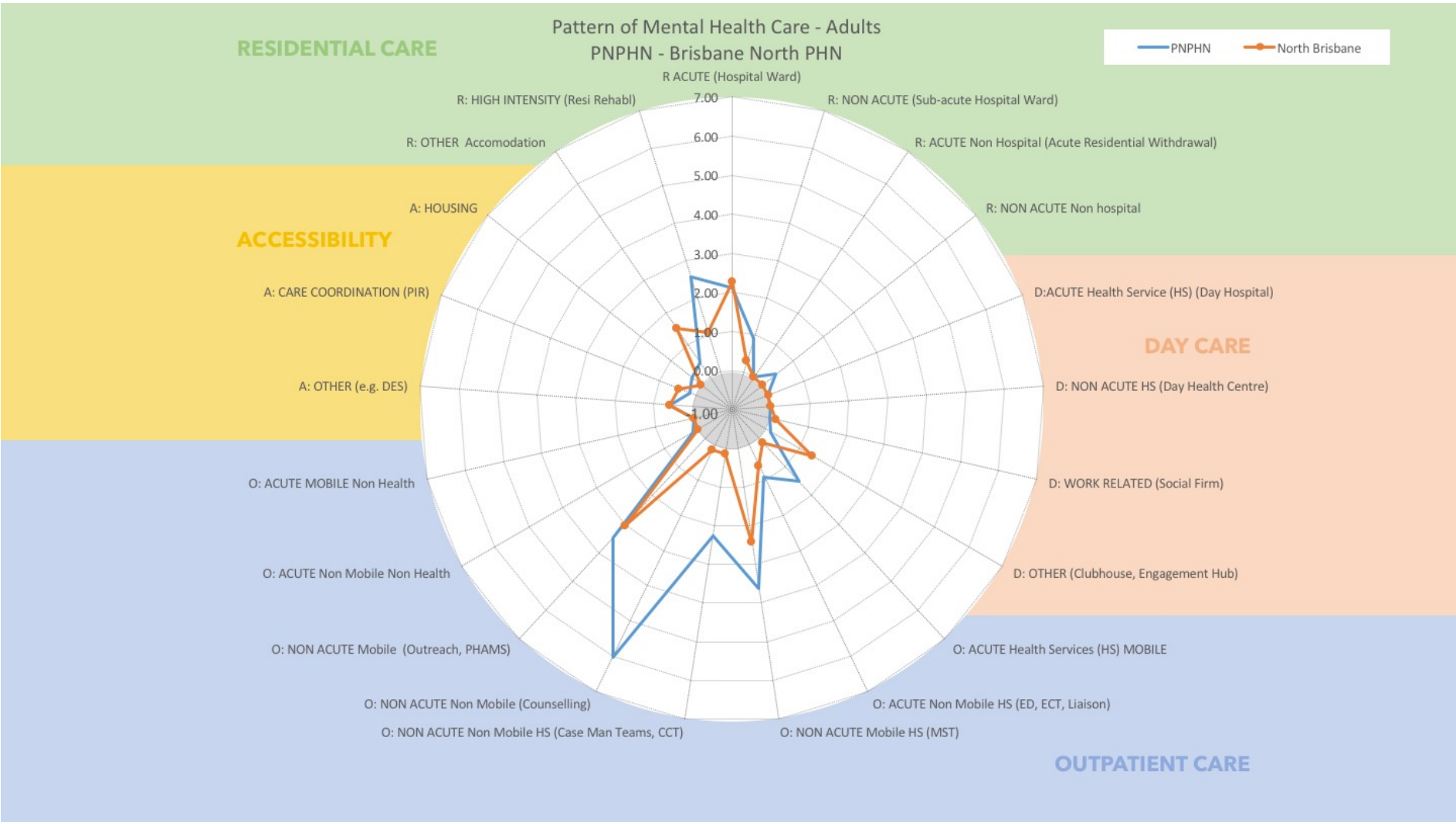



**FIGURE 87** PATTERNS OF CARE FOR MENTAL HEALTH - PNPHN AND BRISBANE NORTH PHN

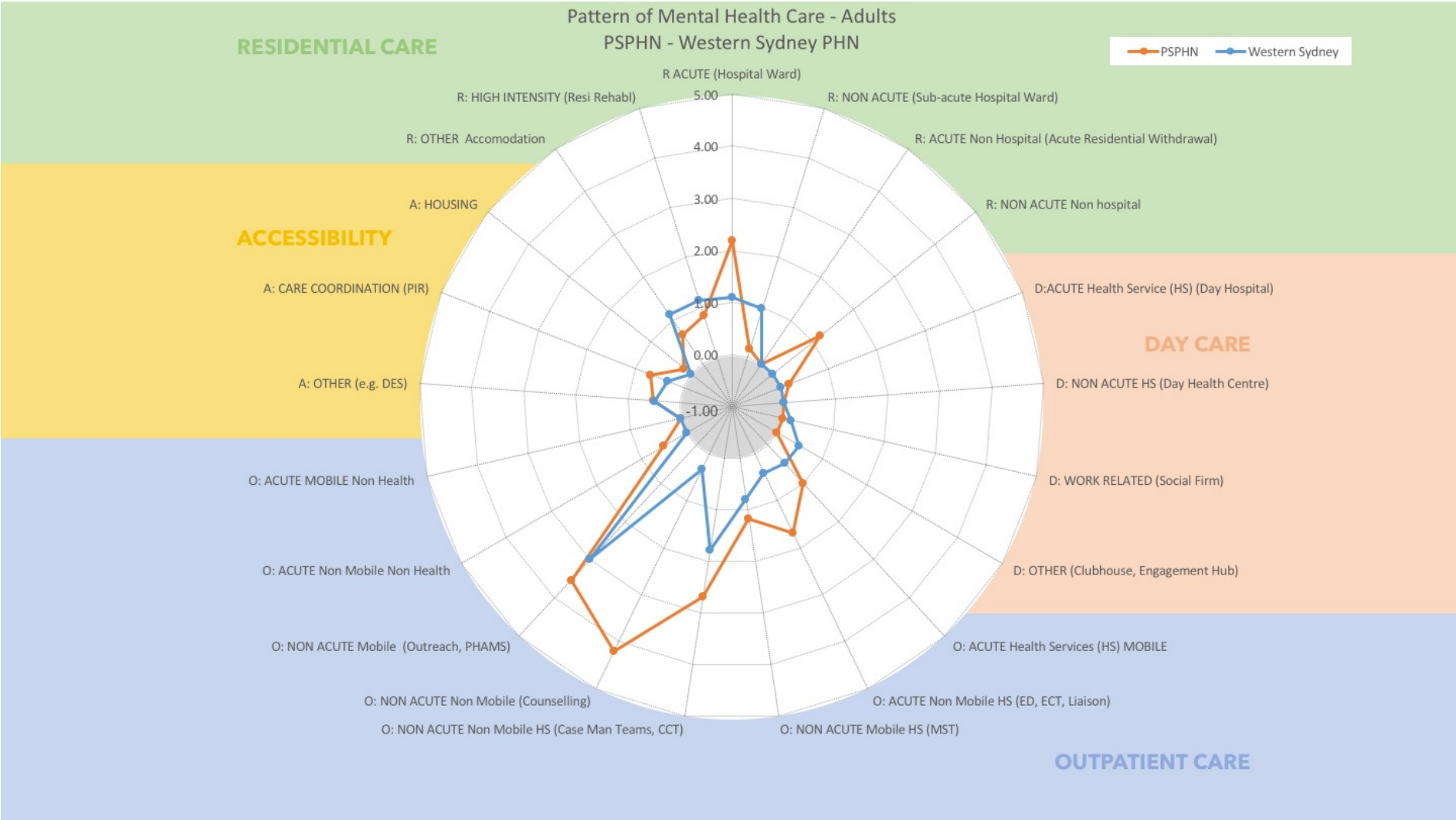



**FIGURE 88** PATTERNS OF CARE FOR MENTAL HEALTH - PSPHN AND WESTERN SYDNEY PHN

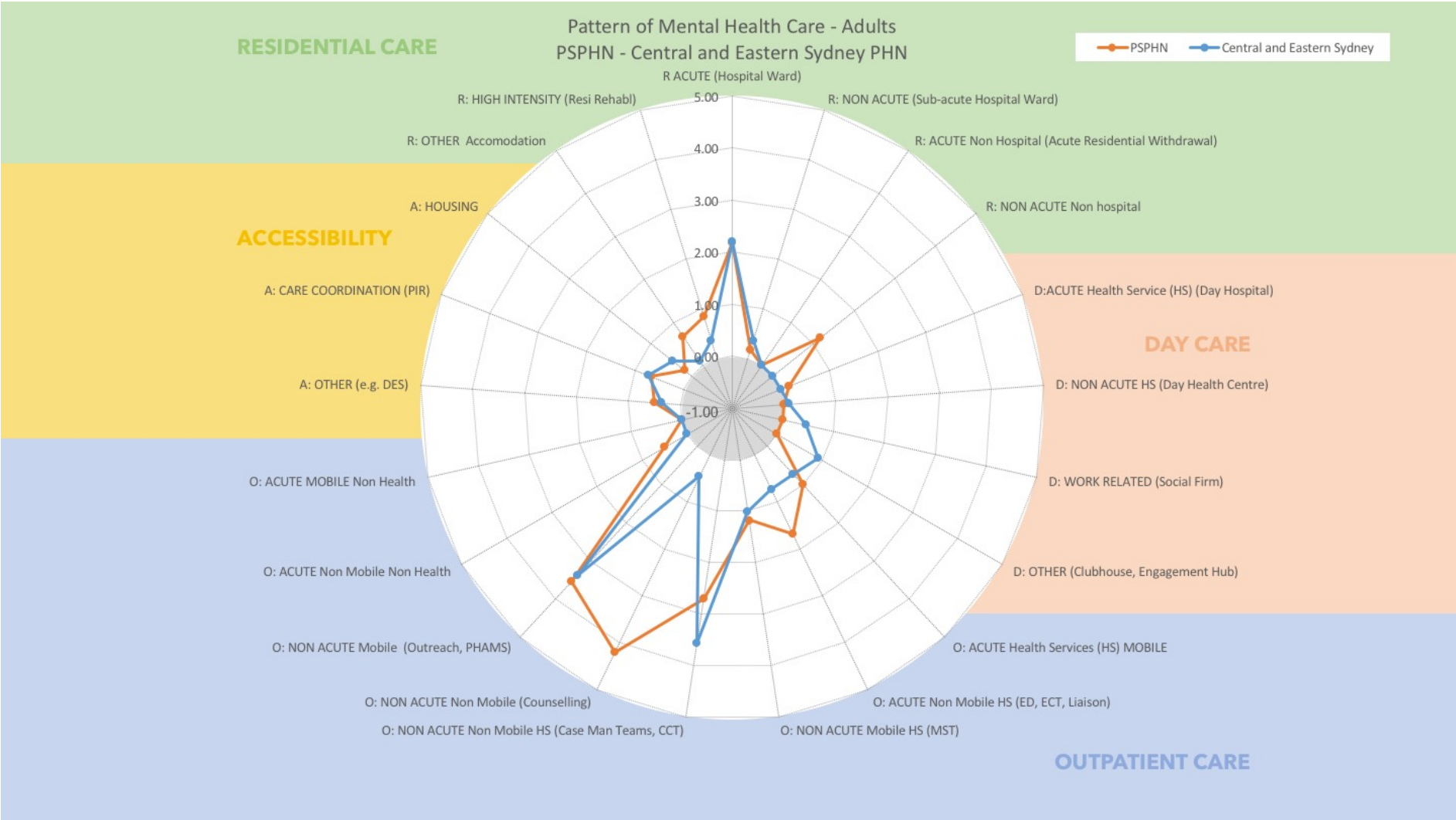



**FIGURE 89** PATTERNS OF CARE FOR MENTAL HEALTH - PSPHN AND CENTRAL AND EASTERN SYDNEY PHN

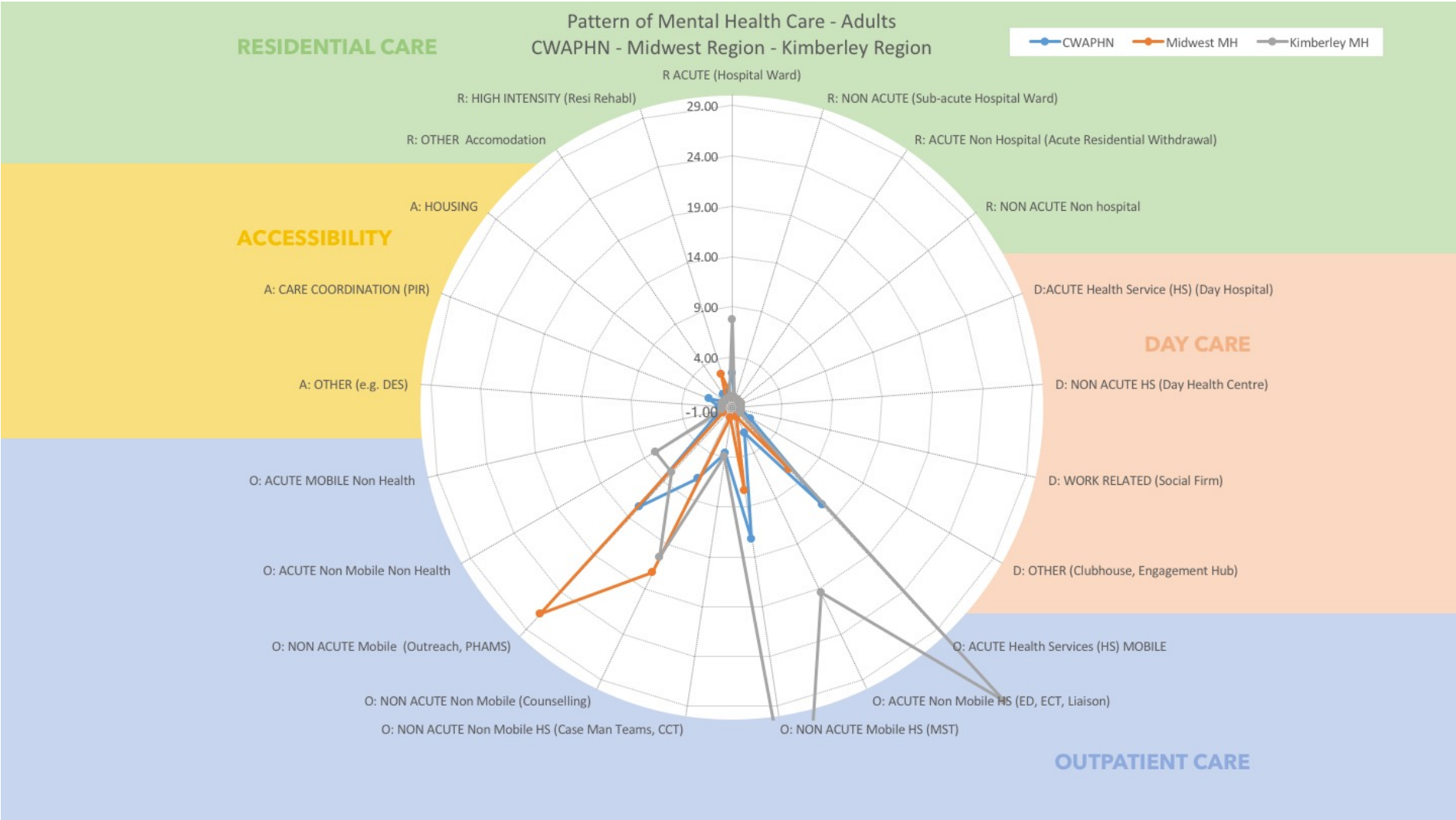



**FIGURE 90** PATTERNS OF CARE FOR MENTAL HEALTH - CWAPHN, MIDWEST REGION AND KIMBERLEY REGION

## 16.2 Placement Capacity - National Comparisons

Figure 91 displays the number of beds per 100,000 adults across a number of already mapped geographies across Australia, compared with PNPHN, PSPHN and Country WA.

PNPHN has a rate of 30.69 beds per 100,000 population in the Acute Inpatient category, higher than any other Australian region that has been mapped apart from PSPHN with 28.11 per 100,000 adult population. CWAPHN however has the second lowest bed rate in this category, with South West Sydney being the lowest.

As can be clearly seen, PNPHN has a significant number of high intensity hostel type beds in the PHN area. This rate is up to three times higher than South Eastern Melbourne PHN and approximately 60 times higher than that of CESPHN.

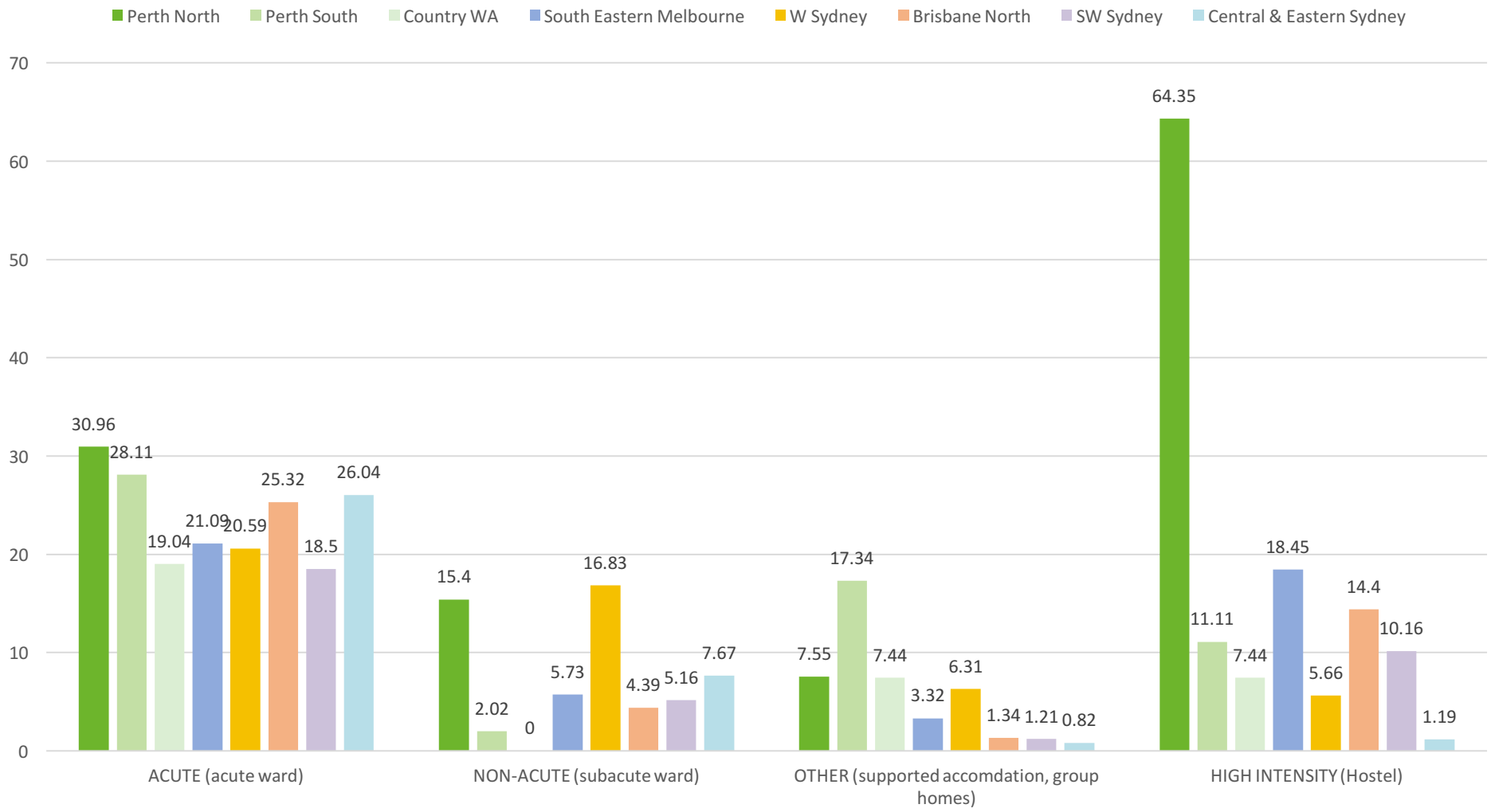



**FIGURE 91** MENTAL HEALTH BEDS PER 100,000 ADULTS – NATIONAL COMPARATIVE

## 16.3 International Comparatives

### Finland

The main characteristic of the Northern Europe Community Mental Care Model is the high availability of different types of services – the spectrum of care. Norway has one of the highest per capita health care expenditures. Both Finland and Norway raise funds for mental health mainly from general taxes.

The Finnish area (Helsinki and Uusimaa Hospital District) is owned and governed by 26 municipalities. Each municipality is free to provide the public services as a municipal activity, or to purchase the services from an external provider. Primary care is organised by the municipalities, and represents the main access point for people with mental health problems while specialised care is organised by the hospital districts. More than 40% of the households of the area of Helsinki and Uusimaa are occupied by just one person (Salvador-Carulla, 2016a).

It should be noted that accessibility care was not mapped in Helsinki and Uusimaa.

### Barcelona

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. In the area of Girona the mental health system is organised according to two different levels, Hospitalisation and Community Care. Hospitalisation is located in the “Marti i Julia Hospital Park” in Salt that belongs to Institut d’Assistència Sanitària (IAS). The 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 that fulfils a gatekeeping function.

The area depicts high levels of unemployment, as well as high immigration rates (Salvador-Carulla, 2015b).

In Barcelona, there is much more depth of day care, specifically work related day care, in Barcelona, this being due to a strong emphasis there on work related mental health support such as social firms.

### Norway

The provision of mental health services in Norway is organized within Health Authorities (HF), each one including several institutions/hospitals (Salvador-Carulla, 2015b). The area in Norway (Sør-Trøndelag) covers 25 municipalities and it is the catchment area of the St Olavs Hospital HF. 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 socio and economic characteristics, Sør-Trøndelag las a low population density (15.60/km$^2$). It also has a very low unemployment index (Salvador-Carulla, 2015b).

### Comparing PNPHN, PSPHN, CWAPHN, Barcelona, Finland and Norway

Figure 92 overlays the patterns of care for mental health of the PNPHN area with that of Barcelona and Finland. There are quite striking differences between the Australian region and the European areas that have been mapped. The major differences primarily lie in the provision of Day Care services. In Finland, and particularly in Barcelona, Day Care programs related to work or employment are

substantially represented in their respective patterns of care. PNPHN does not provide any Day Care programs related to work or employment. In comparison with Finland, PNPHN has much less Sub-Acute residential beds per 100,000 adult population, and a significantly lower bed rate for accommodation and high intensity Residential types of care.

In Figure 93 PSPHN is overlayed with Barcelona and Finland. Unexpectedly, there are similar observations that can be made when comparing the patterns of mental health care between these regions. PSPHN is again represented well in the Outpatient care services, but lacks Day Care programs when compared with Finland and Barcelona. Finland again shows a high bed rate in the accommodation and high intensity service types compared with the PSPHN area.

The final comparison pattern of care can be seen in Figure 94. CWAPHN, Far West NSW and Norway are overlayed to compare the pattern of care in mental health. It can be clearly seen that Non-Acute Non-Mobile health services are much more prominent in the Far West NSW and Norway areas. Acute health services are however better represented in the CWAPHN region.

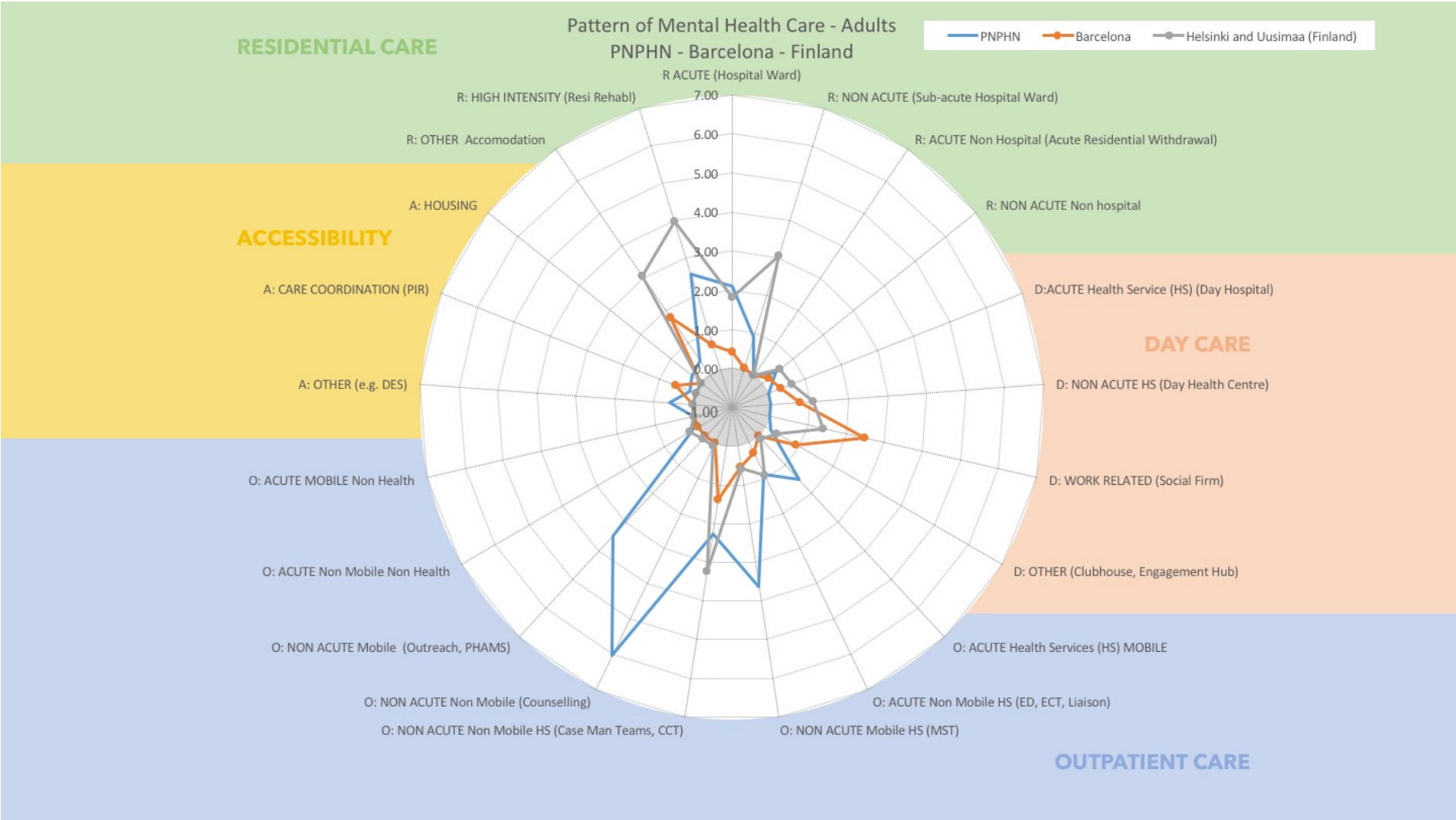



**FIGURE 92** PATTERNS OF CARE FOR MENTAL HEALTH - PNPHN, BARCELONA AND FINLAND

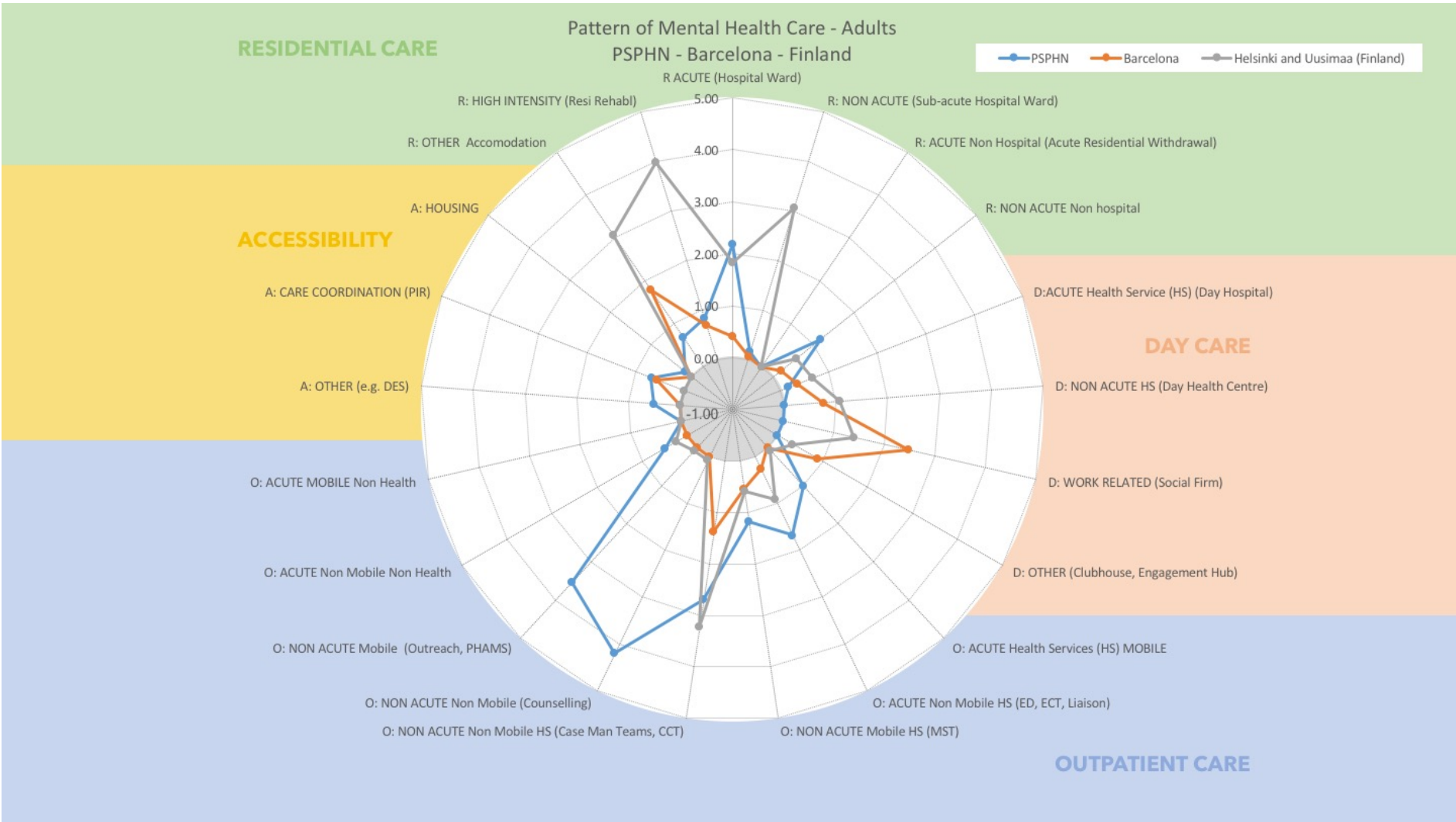



**FIGURE 93** PATTERNS OF CARE FOR MENTAL HEALTH - PSPHN, BARCELONA AND FINLAND

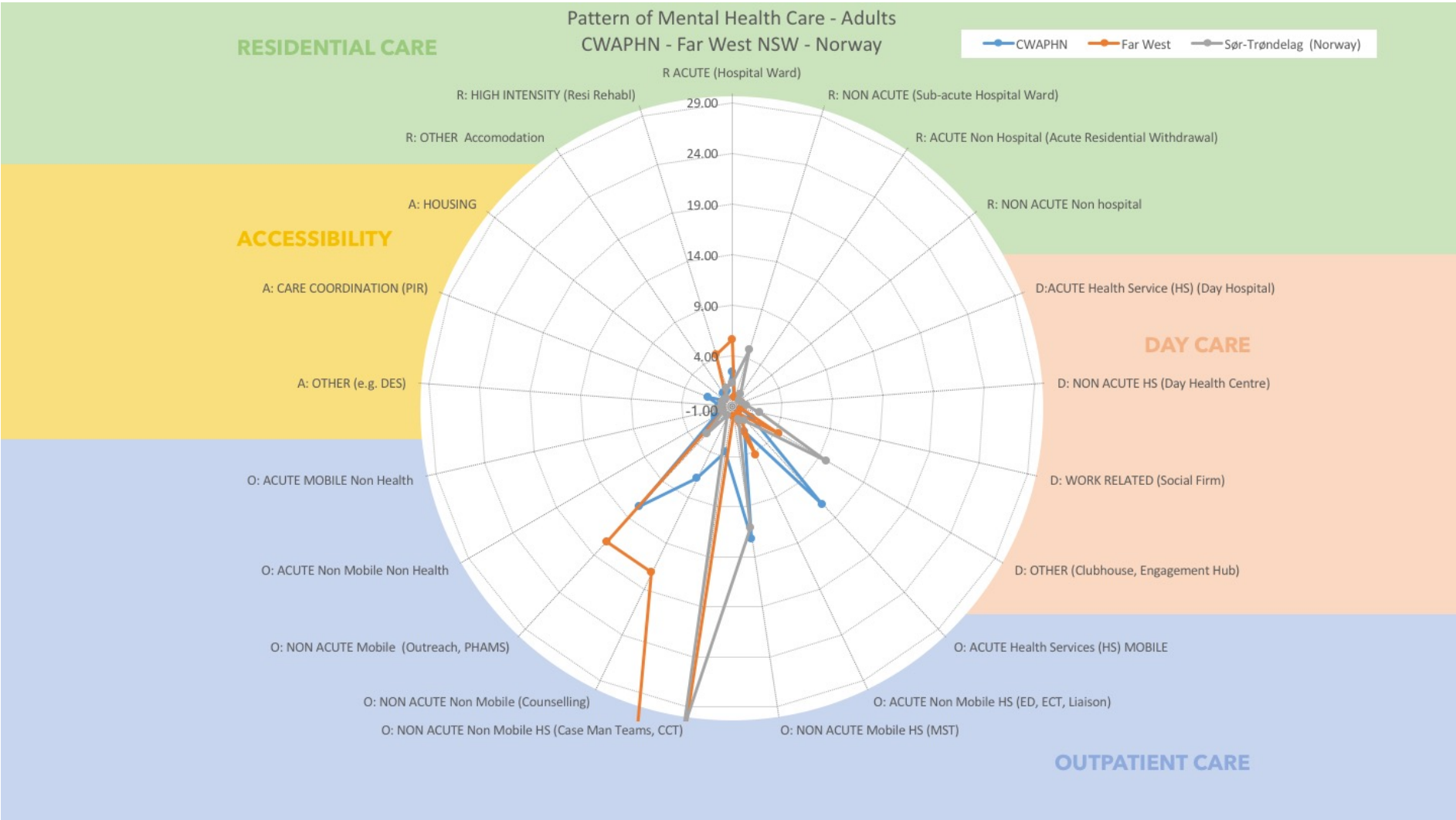



**FIGURE 94** PATTERNS OF CARE FOR MENTAL HEALTH - CWAPHN, FAR WEST NSW AND NORWAY

## 16.4 Placement Capacity – International Comparisons

Figure 95 displays the number of beds per 100,000 adults across a number of already mapped geographies internationally, compared with PNPHN, PSPHN and Country WA.

In terms of the availability of beds, there are large differences across countries related to the availability of beds per 100,000 adults. These rates mirror the different models of mental health care and the overall investment in mental health care.

The bed rate per 100,000 adult population is quite similar across all regions for Acute Residential beds. Norway and Finland however are characterised by a large number of Sub-Acute Residential beds per 100,000 adult population, dwarfing all other mapped areas. All three WA PHNs have a lower number of supported accommodation beds per 100,000 adult population when compared with the mapped regions in Finland and Italy.

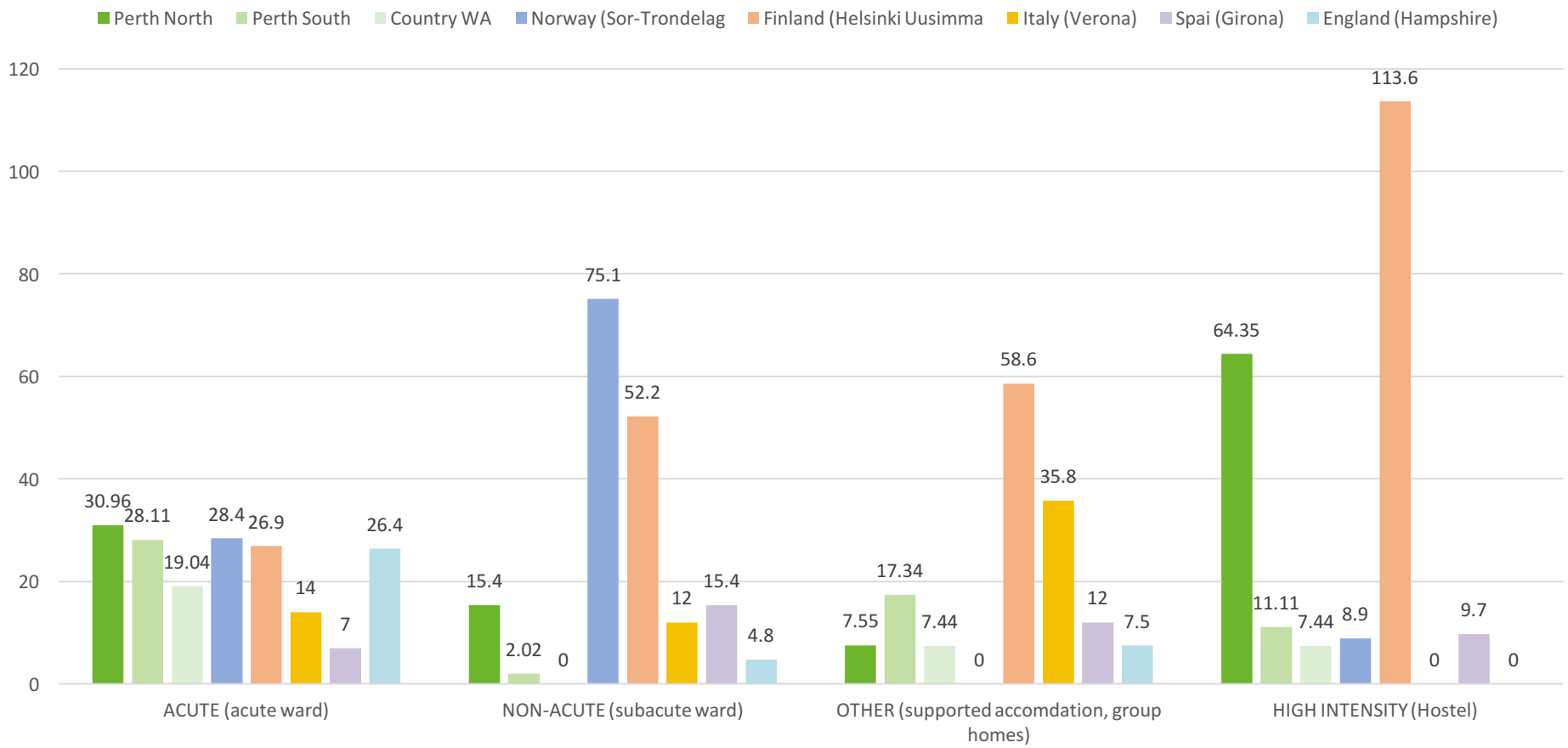



**FIGURE 95** MENTAL HEALTH BEDS PER 100,000 ADULTS - INTERNATIONAL COMPARATIVE

# 17. Discussion

The mental health care system in Australia and more especially within WA, is at the precipice of a significant shift in its structure. This could be described as a 'perfect storm' of change. Changes occurring at both state and Federal level include:

- The restructure of the Metropolitan Health Districts to add East Metropolitan Health Service to the North and South Metropolitan Health Services
- The transitioning of some mental health services previously funded at the federal level to be instead commissioned by PHNs
- The rolling out of the NDIS, and
- The response to the National 'Ice' Taskforce's Final Report.

Such magnitude of change and wide disparities between and within regions puts systems and the people and organisations within them under intense pressure. Within this context, the planning challenges facing WA can be better understood.

This Atlas has been created to provide a deeper understanding of the range, types and locations of mental health and AOD services across Western Australia. It overlays this data with socio-economic factors to provide insight into gaps and identify possible areas of over or under supply.

The Integrated Atlas of Mental health and AOD of Western Australia is a technical document. The data presented within it, including the visual representations of the placement and mix of services, is intended to be used as a service planning tool. Atlases are not service directories or gazettes. Atlases should be considered an important component (but not the only component) of a suite of decision support tools, such as local needs analysis. Utilised in this way, they help to identify gaps, duplications and potential barriers to care and facilitate direct comparisons with other mapped regions within Australia and overseas.

This Atlas project essentially involved the creation of three Atlases, PNPHN, PSPHN and CWAPHN (broken into seven sub-regions). This is believed to be the largest mental health mapping exercise undertaken so far across the world. Not surprisingly, given the size and nature of the state of Western Australia, there is a large variability between and indeed within regions. For example, with a population of just over half a million people, the population density in Country WA is just 0.22 people per square kilometre as compared with PNPHN (358.2) and PSPHN (190).

The scale of the task and the disparities between and within regions, along with the unique nature of regional services presented some interesting challenges when mapping and classifying services.

Classification necessarily involves having to make informed judgements about the 'best' or 'most appropriate' fit (in terms of the DESDE code) for a team. In order to classify a team three key characteristics about their work need to be understood:

- Acuity: Is their work Acute?
- Mobility: Are they Mobile? That is, do they drive to visit the people they are working with in their own homes or, do those people come to them at a fixed location, such as a clinic, instead?
- Intensity: How much time do they spend with people? For example, medium intensity work involves seeing a client between once a fortnight and three times a week.

One challenge faced when doing this was incomplete or inconclusive information. Where information was lacking about a team, prior experience and feedback from the stakeholders and project reference group have been drawn upon to reach classification decisions. Experience from Atlas projects in other

areas around the world informs the process of stakeholder engagement, and has shown that data collection improves as stakeholders see the Atlas and gain knowledge and confidence in the results of the process. In addition to this, it must also be acknowledged that the complexity of the work of many of the remote teams is difficult to capture succinctly.

Services provided by the Health sector (e.g. through WACHS) are highly integrated and flexible in nature. Indeed, so is the work of many of the NGO teams. By way of their locations, these teams must necessarily be flexible and adaptive. Many teams cover both mental health and AOD although they will generally have staff with specialised qualifications in one or the other. They must at times be the 'jack of all trades'. As such, describing their work as 'Acute' or 'Non-Acute' and ascribing a level of intensity to their service can be subjective. By nature of their location and remoteness, many of these services must provide both Acute and Non-Acute care. Whereas in the City there may be separate clinical teams such as ATT, ICOT and CTT, in the remote regions this work is done by instead by one team. These teams generally work standard business hours, whilst the City Acute teams will frequently offer extended hours and some even provide a 24-hour service. In Country areas, out of hours care is instead provided by emergency departments or GPs (where available) and via the RuralLink telephone service. Emergency services such as police and ambulance are also frequently required to provide assistance in acute or crisis situations.

Generally, the work of a team is described with one DESDE MTC code. However, to acknowledge and support this complexity, in the Country WA Atlas two DESDE codes have been allocated to 46 of the mental health BSIC.

This is done to best reflect the flexible and broad nature of the service these teams provide. As an example, an Outpatient Non-Acute Mobile team doing a little (<20%) Acute work would generally be given a code of O6.1a. But in this Atlas these teams have been given two DESDE codes, classifying them as 'Acute' O2.1, as well as 'Non-Acute' O6.1. Out of the 213 teams identified across CWAPHN, 46 (21.5%) have been allocated a secondary MTC code. This should be factored in when considering the patterns of care or 'spider' diagrams. The key difference between these teams classified as O2 and metropolitan teams with this classification is in the hours of service provided.

Intensity of care also varies across the spectrum of low to high intensity, but for the purposes of this exercise 'medium' intensity is used where stakeholders indicated a range of intensity was normal for their locations.

WA has a complex service system, particularly in remote areas, with a large volume of services in remote areas such as the Kimberley and in Geraldton, in the Midwest.

Across the regions there were differences in the balance of care provided by the health sector vs. the NGO sector. The percentage provided by the health sector was highest across the Kimberley region (54%) and the Wheatbelt (53%) and lowest across the Midwest (21%) and Goldfields (31%). This is partly a reflection of the location of Inpatient mental health units. This can be visualised when comparing the pattern of care ('spider') diagrams between regions. Across PNPHN, 30% of teams are provided by the health sector. Across PSPHN this rises to 45%.

In terms of workforce characteristics, team sizes can have significant impact on service availability and potentially quality. Smaller teams are particularly vulnerable to staff absences or vacancies. They may also be under considerable demand pressure. Across the regions, the largest teams were found in the Kimberley and the Wheatbelt. A deeper analysis of the rural and remote workforce including staff qualifications, staff turnover, vacancy rates and client volumes would be recommended to gain a deeper understanding to better support capacity building for CWAPHN services.

In terms of beds, mental health units exist in the South West (Bunbury), Kimberley (Broome), Goldfields (Kalgoorlie) and Great Southern Regions (Albany). Residential MTC numbers per 100,000 adults are

considerably smaller than Outpatient MTC, ranging from between zero (there are none in the Wheatbelt), to 5.1 in the Goldfields, 4.9 in the Midwest and a high of 7.76 in the Kimberley.

Where there are no mental health units in an area, or where there are limited beds, there will be admissions made to the general hospital wards for mental health treatment. It also may be the case that patients are frequently transported from regional areas for treatment elsewhere. In some cases, patients are transferred to Perth instead of the nearest regional hospital with a mental health unit. This is because transportation between remote areas can be difficult. Whilst the Royal Flying Doctor service might fly an acutely unwell patient to a regional hospital, when it comes to returning home, it can be a long an arduous journey as many regions are not connected by direct flights.

It is important to consider this when viewing the patterns of care, as the beds utilised out of region are not able to be reflected in these diagrams. It might also be noticed that there is a stronger clinical outpatient presence in areas where is no acute inpatient units, such as for example in the Midwest region. Care transfer rates can provide more detail on the extent of this movement and a deeper analysis of the patient flows, utilisation and care transfer rates would enhance the analysis presented in this Atlas. This is especially important, as care transfer rates for mental health related issues may far exceed those of other conditions such as chronic diseases, and there may be a strong variation in these rates between regions.

Utilisation analysis would also assist in gaining a deeper understanding of the patient flows and capacity of the NGO sector, including the Aboriginal Controlled Community Organisations (ACCO) and the Aboriginal Medical Services (AMS). In some areas, such as the Kimberley there is an extremely large volume of services, reflected in the 139.63 Outpatient MTC per 100,000 adults. The next closest region to this figure is the Wheatbelt with 62.63 and Midwest with 58.84 (Figure 96). This is a characteristic common amongst other remote regions mapped in Australia and Overseas.

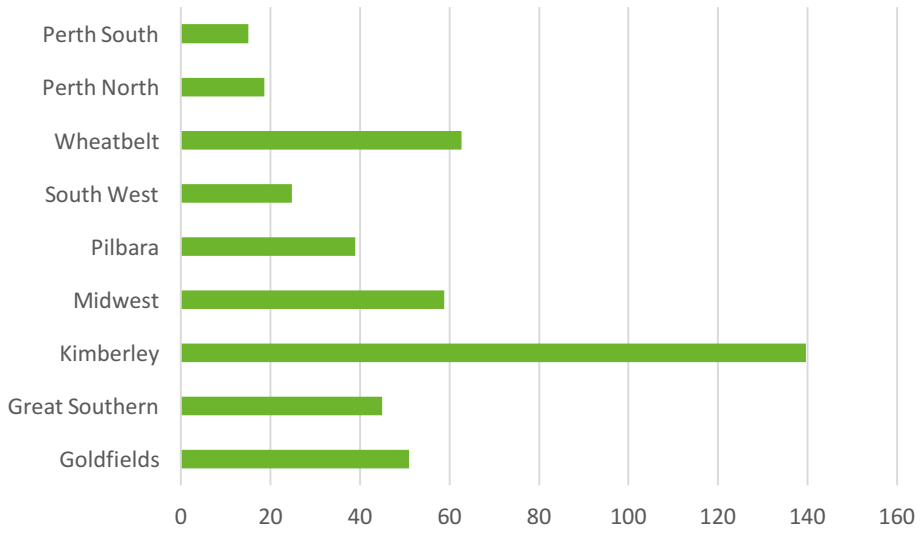



**FIGURE 96** OUTPATIENT MTC PER 100,000 ADULT POPULATION

There is no generally accepted 'perfect' system of care for mental health or AOD. Indeed, nor should there be. Needs, environments and circumstances vary significantly between regions and indeed even within regions, especially regions as large as those in CWAPHN. This should be reflected in regional and sub-regional variations in care. What is generally accepted is that in considering future system structure, it should rely less heavily on Acute Inpatient care and provide more resource in Sub-Acute beds, better service integration, early intervention and prevention and community based Outpatient

care. Whilst sometimes contentious, it is also considered that more day programs, particularly those specifically targeted at providing supported employment, vocational training and assistance, structured programs and social opportunities, be provided.

In terms of early intervention and prevention programs, these are generally excluded from Integrated Atlases of Mental Health and AOD as they are applied to the general population and do not involve the provision of direct care. A table has been provided comprising of early intervention and prevention services in Appendix C of Volume II of this Atlas.

The Integrated Atlases of Mental Health and AOD of Western Australia has revealed some important differences between the three WA PHNs and other locations in the world. These observations can be used to focus discussion on the planning of an equitable, sustainable and effective system of mental health and AOD care into the future. Key findings include:

### PNPHN and PSPHN

- PNPHN has more breadth in its bed-based mental health care with significantly more high intensity Residential beds (provided by psychiatric hostels), but also provides some Sub-Acute hospital and Non-Acute community beds as well as sufficient levels of Acute Inpatient beds
- PSPHN has relatively more Non-Acute Non-hospital mental health Residential care than PNPHN
- The key differences between mental health care in PNPHN and PSPHN as compared with Barcelona and Finland are that metropolitan Perth has less Non-Acute bed based Residential mental health care
- PNPHN has relatively more Non-Acute AOD Residential beds than PSPHN
- PNPHN has relatively more Outpatient care BSIC than PSPHN
- NGO service provision: Both PNPHN and PSPHN have relatively more Non-Acute Non-Mobile Outpatient AOD and mental health care delivered by non-clinical services (NGOs) than all other types of Outpatient care
- Health sector service provision: Both PNPHN and PSPHN have relatively more Non-Acute Non-Mobile Outpatient care provided by the health sector as compared with Western Sydney PHN, Barcelona, Finland and Brisbane North PHN
- In metropolitan Perth very little AOD care is delivered by the clinical system, indicating a possible deficiency in the provision of clinical AOD care
- Services in both PNPHN and PSPHN are predominantly focused towards central Perth in the long-established areas rather than the far reaches of the regions in the newer, faster growing areas of higher socio-economic need
- Day programs are lacking in both PNPHN and PSPHN
- Both PNPHN and PSPHN have relatively more Non-Acute Non-Mobile Outpatient care provided by the health sector as compared with other areas of Australia and overseas
- PNPHN has more breadth in its bed-based mental health care with significantly more high intensity residential beds (provided by psychiatric hostels), but also provides Sub-Acute hospital and Non-Acute community beds as well as sufficient levels of Acute Inpatient beds.

## Country WA region

The following key points highlight variations between the two metropolitan PHNs and across the seven regions within the CWAPHN:

- Large variation in service provision and population characteristics between regions
- Substantially more of all types of Outpatient care (for both AOD and mental health) than PNPHN and PSPHN
- When viewed as a whole, CWAPHN has moderately acceptable levels of Acute beds but there are substantial deficiencies in some regions. There is no Acute Inpatient care in Midwest, Pilbara and Wheatbelt regions. The Midwest has beds allocated to it at Graylands Hospital but volume of use of these by Midwest residents was not analysed
- There are no Sub-Acute hospital beds in any of the regions
- Midwest has a relatively stronger reliance on NGO providers for Non-Acute Outpatient care
- Kimberley has a relatively stronger reliance on Health sector providers for Mobile Outpatient care (both Acute and Non-Acute)
- Existing service locations and catchments are relatively well aligned to geographic areas of higher population need, meaning that overall there is a good level of accessibility to those services
- Relative to other remote parts of the world such as remote parts of Norway and Far West NSW, CWAPHN has relatively less Non-Acute Outpatient care, relatively more Acute Outpatient care delivered by clinicians
- There relatively little AOD care provided in the South West region
- There are no AOD beds in the Great Southern region
- There is a relatively strong number of AOD residential rehabilitation beds in the Midwest and Wheatbelt regions
- AOD care appears more well balanced in the Pilbara, Goldfields and Kimberley regions.

In summary, the Atlas reveals key differences in the provision of mental health and AOD services across Metropolitan Perth and within and across Country WA, when compared with other regions in Australia and other countries around the world. These are:

- A lack of services providing day care
- A lack of sub-acute inpatient care
- High variability in patterns of care across Country regions
- Regional imbalances in patterns of care requiring further analysis, and
- A concentration of metropolitan services towards the inner-city areas rather than the outer suburban growth corridors.

# 18. 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 do 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, remote hospitals (without mental health units) and population health teams. To fully appreciate the depth and complexity of these services, it would be necessary to do further analysis on the activities 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 private hospitals mapped in this Atlas were included separately from the main data as a complementary exercise to add additional depth to the analysis.

The assessment of services was made through a process of face to face interviews, emails and telephone interviews. Some information may not have been provided, some information may have been misinterpreted, or contain inaccuracies and some assumptions may have been required to finalise a code or classification. Three drafts of this Atlas have been created and feedback was actively encouraged over several months to ensure the data contained here is as accurate as it can be.

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 WA. In July 2016, the East Metropolitan Health Service was created from parts of the South and North Metropolitan Services. In addition to this, the roll out of the NDIS 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 Western Australia. It is acknowledged that there are services that residents of WA 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 exploring 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.

# 19. Future Steps

This Atlas comprehensively maps 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 Western Australian population.

Western Australia is a large state, with a wide variation in characteristics between region and indeed within regions. 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 state, 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 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.

**Analysis of services for specific target groups**. The scale of suicide in remote regions and the complexity of Aboriginal services warrants deeper analysis. An Atlas of Aboriginal Services would be complementary to this current Atlas and provide a deeper analysis of the service system that supports these communities.

**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, Type 2 Diabetes, 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.

**More information on service utilisation would add further depth to current data set and analysis**. What else could be added to future mapping exercises? Waiting lists, volumes?

**Further exploration of financing mechanisms and financing flows could be conducted.** This would allow important areas such as the Better Access Program, Community Mental Health services provided by NGOs 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.

# 20. 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 Atlas of Mental Health and Alcohol and Other Drugs for Western Australia 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 WAPHA 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 Care across the region.

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

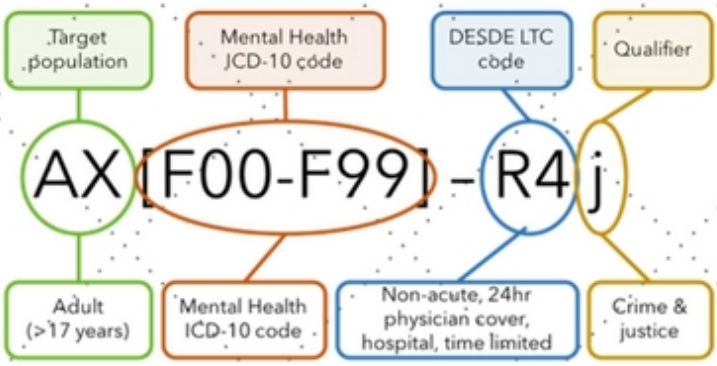
360 Health and Community
55 Central Inc
AADS - Aboriginal Alcohol and Drug Service
Abbotsford Hospital
Aboriginal Alcohol and Drug Service
Aboriginal community engagement project
Access Housing Australia
Advanced Personnel Management
Aftercare
Alive and Kicking
Allambee Counselling
Amana Living
Amity Health
Anglicare WA
Anglicare Kimberley
Armadale Health Service
Association for Service to Torture and Trauma Survivors (ASeTTS)
Attford Mental Health Services
atWork Australia
Avivo Perth Home Care Services
Baptistcare
Bay of Isles Community Outreach Inc
Bega Garnbirringu Health
Beyond Blue
Black Swan Health
Bloodwood Tree Association
Boab Health Service
Bridgetown Community Mental Health Clinic
Bunbury Acute Psychiatric Unit (Inpatient)
Bunbury Community Mental Health Service
Busselton Community Mental Health
CAMHS - Child and Adolescent Mental Health Services
Carnarvon Community Mental Health Services
Carnarvon Family Support Services
CentraCare
Casson Homes
Central Agcare Family Counselling
Central West Mental Health Service
CentreCare
Chrysalis Support Services
City Older Adult MHS
Clan WA
Clarkson CMH
Collie Family Centre Incorporated
Community Alcohol Drug Service
CADS
Community First International
Community Living Association
Community Mental Health - Katanning
Connect Groups Support Groups Association WA
Consumers of Mental Health WA
Aussie Optomism Curtin University of Technology
Cyrenian House
DADAA Limited
DAWN (drug and alcohol withdrawal network) - St John of God
Department of Psychological Medicine, King Edward Memorial Hospital
Department of Child Protection and Family Support
Department of Health, Government of Western Australia
Depression Network - Albany
Derbarl Yerrigan Health Service
Devenish Lodge
Duchess Medical Centre
Employment Plus
Enable South West
Escare
Even Keel Bipolar Disorder Support Association Inc
Exmouth Community Mental Health Services
Family Violence Prevention Legal Service
Fiona Stanley Hospital
Forrest Personnel - Partners in Recovery Wheatbelt
Foundation Housing Limited
Franciscan House (Meski Unit Trust)
Fremantle Hospital
Fremantle Multicultural Centre Inc
Fremantle Womens Health Centre Inc
Fresh Start
Fusion (WA)
Garl Garl Walbru Aboriginal Association
Geraldton Community Mental Health Services
Geraldton Regional Aboriginal Medical Service GRAMS
Geraldton Sobering Up Centre
Gingin Community Mental Health
Goldfields Esperance – Community Mental Health Services
Goldfields Individual and Family Support Association GIFSA
Goldfields Kalgoorlie/Boulder - Community Mental Health Services
Goldfields Rehabilialtion Services Inc.
Goldfields Women's Health Care Centre
GP Down South
GRAMS
Graylands Hospital
Great Southern Community Housing Association Inc
GROW
Hampton Road Residential
Headspace Geraldton
Headspace Kimberley - Kimberley Aboriginal Medical Service
Headspace National WA
Hearing Voices WA
Helping Minds ARAFEMI
Hollywood Clinic
Holyoake
Hope Community Services
Incest Survivors Association
Inner City Community MHS
Ishar Multicultural Centre Womens Health
JOC Wellness and Recovery
Joondalup Health Campus
Jude's Mental Health Services
Junjujarra (Spinifex)
Kaata Koorliny Employment and Enterprise Corporation (KEEDAC)
Karratha Mental Health and Drug Service
Kimberley Aboriginal Medical Services Ltd
Kimberley Mental Health and Drug Service
King Edward Memorial Hospital Womens Health Clinical Care Unit
Lamp Incorporated
Life Without Barriers
Lifeline WA
Lower West (Selby) Older Adult Mental Health Service
Northam Community Mental Health
Margaret River Community Mental Health Clinic
Mawarnkarra Health Service Aboriginal Corporation
Max Solutions/Employement
Meekatharra Community Mental Health Services
Men's Outreach Service
Mental Health Advocacy Service
Mental Health Commision
Mental Health Matters 2
Mental Health Nurse Incentive Program
Mental Illness Fellowship WA (MIFWA)
MercyCare

Merredin Community Mental Health Satellite Office
MHERL - Mental Health Emergency Response Line
Mi NetWorks
Midland Community Mental Health Service
Midland Hospital
Midlands Womens Health Care Place
Midwest Yellow Ribbon
Milliya Rummara Aboriginal Corporation
Mills Street Center
Mirrabooka CMH
Mission Australia (WA)
Mission Pilbara
Morawa Family Counselling
NEAMI National
Newman Mental Health and Drug Service
NextStep Drug and Alcohol Services
Ngaanyatjarra Health
Ngangganawili Aboriginal Health Service
Ngnowar Aerwah Aboriginal Corporation
Nindilingarri Cultural Health Service
North Metro Mental Health
Nyoongar Outreach Services
One Tree
Ord Valley Aboriginal Health Service
Osborne Park CMH
Osborne Park Hospital Campus Outcare
Ozhelp Foundation
Palmerston
Pathways South West & MIFWA
Peel Youth Services
Perth Clinic
Perth Inner City Youth Service
Pilbara Mental Health and Drug Service: Hedland Health Campus (WACHS)
Pilbara Population Health Unit WACHS
Port Hedland Mental Health and Drug Service
Red Cross
Regional Mens Health Initiative
Relationships Australia
Richmond Wellbeing
RISE Network Inc
Rockinghm Peel Group
Romily House
Roshanna Pty Ltd
Royal Perth Group - Bentley Hospital
Royal Perth Group - Jarrah Road Centre
Royal Perth Group - Mills Street Center
Royal Perth Hospital - East Perth
Ruah
Rural Health West
Salisbury Home
Salvation Army
SAMHS Statewide specialist Aboriginal Mental HealthService
Saranna Early Childhood Education and Care Centre
School Drug and Education and Road Aware
School of Indigenous Studies at the University of Western Australia
Selby Lodge
Shalom House
Share & Care Community Services Group Inc
Silver Chain - Pilbara
Sir Charles Gairdner Hospital
South Coastal Womens Health Services Association
South Metro Mental Health Services
South West Aboriginal Medical Service
South West Aboriginal Mental Health Service Team
Southern Aboriginal Corporation
Southern Cross Care WA
Spinifex Health Service
Spirits of the Streets Choir
St Bartholomews House
St John of God
St Judes Mental Health Services (Pu-Fam Pty Ltd)
St Patrick's Community Support Centre
St Vincent de Paul (vincentcare)
State Forensic
Statewide and Teritary MHS
Street Net Youth Service - Peel
Strong Families
Subiaco Adult CMHS
SW Community Drug and Alcohol Service
Swan City Youth Service
Tenacious House
Tender Care (Home Health Pty Ltd)
The Albany Youth Support Association
The Compassionate Friends Mandurah
The Marion Centre
The Passages Resource Centre
The Samaritans
Uniting Care West
WA Aids Council (WAAC)
WANDAS (Women and New Born Drug and Alcohol Service)
WA School of Nursing (WASON)
WA Substance users association (WASUA)
WAAMH
WACHS - Western Australia Country Health Services
WANADA
Wanslea Family Services Inc
Waratah Support Centre
Warnum Drug and Alcohol
Warringarri Aboriginal Corporation
Western Australian AIDS Council
WGPN Rural Community Support Service
Wheatbelt Aboriginal Health Service
Wheatbelt AgCare Community Services Inc
Wheatbelt Community Legal Centre
Wheatbelt GP Network
Wheatbelt Men's Health (Inc.)
Regional Men's Health Initiative
Wheatbelt Mental Health Service
Wirraka Maya Health Services Aboriginal Corporation (WMHSAC)
Women and Newborn Drug and Alcohol Service (WANDAS)
Women's Health and Wellbeing Services
Women's Health Resource Centre
Women’s Health and Family Services
Worklink - Goldfields Employment agency
Yaandina Family Centre
Yorgum
Youth Focus
Youth Reach South
Yura Yungi Aboriginal Medical Centre

# Appendix B

## DESDE-LTC Quick Reference Guide

# DESDE-LTC Quick Reference Guide




## Age Codes

**GX** All age groups
**NX** None/Undetermined
**CC** Only children (0-11 years)
**CA** Only adolescent (12-16 years)
**CX** Child & adolescents (<18 years)
**CY*** Adolescents and young adults (12-25 years)
**TA** Period from adolescent to adult (16-24 years)
**AX** Adults (18-65 years)
**TO** Period from adult to older adult (60-70 years)
**OX** Older adult (>64 years)

In analysis section, age codes are grouped as follows:
**Children and adolescents** (including young adults) - Codes CC, CA, CX, CY and TA
**Adults** (including services with no age specification) - Codes AX and GX
**Older adults** - Codes TO and OX

* CY is a new DRAFT code utilised in this Atlas based on the unique service characteristics in Victoria

## 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 .

**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, telemonitoring)

**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 MTCs ("O" or "D") provided within the hospital setting

**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

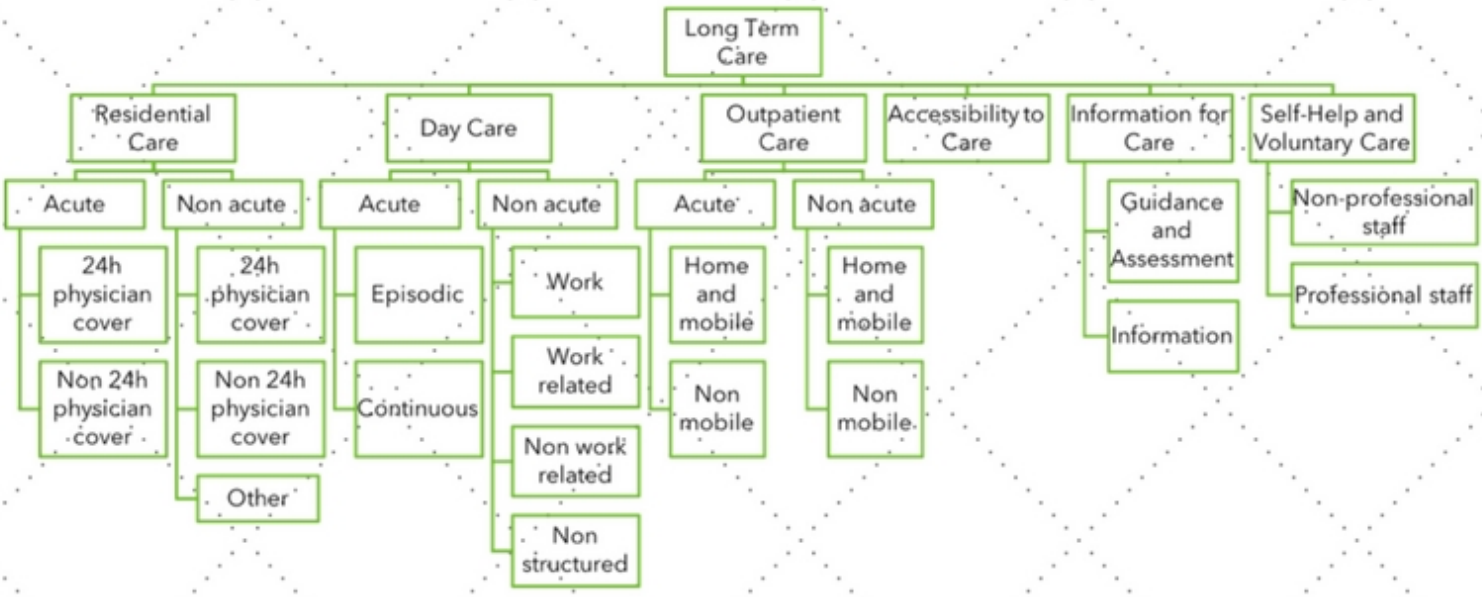
**m - Management** – Describes an MTC where management, planning, coordination or navigation of care a core part the provision of their outpatient care

**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

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

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# 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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