The Integrated Atlas of Psychosocial Care in the Western Sydney Primary Health Network Region











Disclaimer:

This report has been prepared through a consultancy process using specific methods outlined in the Framework section of this report. The Project Team has relied upon the information obtained as being accurate with every reasonable effort made to obtain information from psychosocial service providers across the region. Psychosocial services provided by primary care providers, the private sector and by the Western Sydney Local Health District have not been included in this report. Information related to utilisation of services has not been included in this report.

The information, statements, statistics and commentary (together the "information") contained in this report have been prepared by the project team from publicly available information as well as information provided by the Primary Health Network and psychosocial service providers as described above across the Western Sydney catchment area.

The language used in some of the service categories mapped in this report (e.g. outpatient, day care, non- acute) may seem to be very hospital-centric and even archaic for advanced community based mental health services which are already recovery oriented and highly developed. However, these terms reflect the category nomenclature employed within the Description and Evaluation of Services and Directories in Europe for Long Term Care (DESDE-LTC) classification system rather than a description of services. The consistent application of standardised category labels, which have been used for some years in Europe for health service mapping studies, provides a common language for meaningful comparisons of service across regions (nationally and internationally).

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Acknowledgement

The comprehensive nature of the data collected for this report would not have been possible without the active support and commitment provided by Western Sydney Primary Health Network, and all the service providers who participated in this project. In particular, the project team would like to thank Shahana Ferdousi and Clint Marlborough for the support and assistance they have provided.

Suggested citation

Furst, M., Salinas-Perez, J.A., Hopman, K., Bagheri, N., Campos, W., Gillespie, J., Mendoza, J., Salvador-Carulla, L. (2019) *The Integrated Atlas of Psychosocial Care in the Western Sydney Primary Health Network Region* Centre for Mental Health Research, Australian National University

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Abbreviations

Abbreviation	Definition
ABS	Australian Bureau of Statistics
BSIC	Basic Stable Input of Care
CALD	Culturally and Linguistically Diverse
DESDE	Description and Evaluation of Services and Directories in Europe
DESDE-LTC	Description and Evaluation of Services and Directories in Europe for Long-Term Care
FTE	Full Time Equivalent
GIS	Geographical Information System
GP	General Practitioner
HASI	Housing and Accommodation Support Initiative
HREC	Human Research Ethics Committee
ICD-10	International Classification of Diseases, Tenth Revision
ICF	International Classification of Functioning, Disability and Health
IRSD	Index of Relative Socio-economic Disadvantage
LGA	Local Government Area
LHD	Local Health District
МН	Mental Health
MTC	Main Type of Care
NDIS	National Disability Insurance Scheme
NGO	Non-Government Organisation (or community service provider)
NMHC	National Mental Health Commission
NSW	New South Wales
PHaMs	Personal Helpers and Mentors
PHIDU	Public Health Information Development Unit
PHN	Primary Health Network
PIR	Partners in Recovery
SA1	Statistical Area Level 1
SA2	Statistical Area Level 1
SEIFA	Socio Economic Indexes for Areas
WS	Western Sydney
WSPHN	Western Sydney Primary Health Network

Executive Summary

The Australian mental health system has undergone profound change in recent years, both at national and regional level. Key reforms include the establishment of Primary Health Networks (PHNs) in 2014 to act in a commissioning role to improve regional co-ordination of health care; as well as the late inclusion of mental health into the progressive rollout out of the National Disability Insurance Scheme (NDIS). These changes have arisen in the context of a system described in a national review in 2014 as siloed and fragmented, with people unable to consistently access the appropriate level of support for their need (National Mental Health Commission, 2014). In its response to these and other challenges in the system, The Fifth National Mental Health and Suicide Prevention Plan (Commonwealth of Australia, 2017) has prioritised a person centred approach based on integrated regional planning and a stepped care model of service availability. In the complex mental healthcare landscape, PHNs, working in the space between policy makers and service providers, are well positioned to take a key role in the implementation of this vision. An important part of their role in this is the development of regional plans, key to which is the mapping of current service levels and workforce.

Integrated Atlases of Mental Health have already mapped and documented 20 PHN regions in Australia, including the Western Sydney region in 2014 (Salvador-Carulla et al., 2016), using the Description and Evaluation of Services and Directories for Long Term Care (DESDE- LTC) to provide a snapshot of service provision (Fernandez et al., 2015). The use of a standardised tool enables comparison, both with other jurisdictions and in the same jurisdiction over time. This second Atlas of the Western Sydney Primary Health Network (WSPHN) region will provide a picture of current psychosocial service provision in Western Sydney, as well as a comparison to that provided in 2014 in the first Integrated Mental Health Atlas of Western Sydney. It is the first in Australia to provide an analysis of the evolution of a system over time, and is particularly relevant given the period of intense change since the first Atlas in 2014. While this Atlas is focussed on psychosocial services, excluding care provided by the public health sector, this type of care and the Non-Government Organisation (NGO) sector as a whole is in the frontline of the impact of system reform.

Data collection for this atlas was from January 16 to April 30, 2019. Twenty-two services were interviewed, providing a total of 69 teams and 81 Main Types of Care (MTC). In addition, we identified 13 satellites or secondary sites where teams were providing care, bringing the total number of MTC in the region to 98. This can be compared to our findings in 2014 of 22 services providing 40 teams and 42 MTCs. This increase in availability, however, is evident in the number but not the diversity, of types of care available.

As anticipated, we have found evidence of significant and sometimes unexpected change in the system. Our main findings are an almost threefold increase in the availability of psychosocial services, and a trend towards more health related than social care. We found increased system complexity and fragility, with the presence of a number of satellite teams in the region being a pattern more characteristic of rural areas, and in fact not previously identified in urban region such as this; and with almost half of services lacking funding stability for more than 12 months. We found increases in availability of care for most population groups and in all branches of care, but particularly so in the areas of the Transition to Adulthood age group, services for Culturally and Linguistically Diverse (CALD) communities, and non-mobile health related Outpatient care. With a population younger than the national average and a relatively high rate of people in the region born overseas, services for these populations have been identified as priority areas for mental health care by the PHN (WentWest, 2018). The increase in overall availability appears to be partly attributable to the increased presence

of larger national organisations in the region, with new providers moving in and current providers increasing their service provision. Interestingly, despite this, we found no significant change in the number of smaller service providers in the region. On the other hand, similar to the previous Atlas, we found gaps in the provision of Daycare, particularly health related Day care, Residential care and Outpatient social care. We also identified gaps in some of the other priority areas identified by the PHN, namely those for the Lesbian, Gay, Bisexual, Transgender, Intersex and Queer (LGBTIQ) population, for older people and for people with mental illness experiencing homelessness.

Taken together, the information in this atlas can be used to provide an insight into the evolution of the mental health system during a time of great change. It provides one measure of the extent and direction of the change being experienced in a complex mental health care landscape.

1. Introduction

1.1 Context

The WSPHN is one of 31 PHNs in Australia, and one of 10 PHNs in New South Wales. It encompasses an area of 766 km² which includes five Local Government Areas (LGAs) and is in the outer western suburbs of Sydney. The boundaries of the WSPHN catchment extend from Auburn in the East to Blacktown in the West, and to the Hills in the North, encompassing an urban, outer urban and semi-rural population.

The Western Sydney region is one of the most multicultural regions in Australia with a dynamic and diverse ethnic mix ranging from long-established immigrant communities to recent arrivals and refugees (Salvador-Carulla et al., 2016). The region is also home to the largest urban Indigenous population in Australia. The Social Health Atlas of Australia indicates 1.5% of the population of the WSPHN region identify as an Aboriginal or Torres Strait Islander (13,384 people) with the main centre of Indigenous populations being Blacktown – South West (Torrens University Public Health Information Development Unit, 2019).

Examination of the sociodemographic profile of the WSPHN region shows that the region has areas of extreme social and economic disadvantage, characterised by high intergenerational unemployment, low education attainment rates, poor physical health and low income (WentWest, 2016). It is well recognised that the socio-economic conditions in which people live and their access to health and other services have a direct impact on the health status of the population. Effective commissioning of health care services is therefore essential for promoting population health and well-being for the WSPHN region.

In addition to the cultural and socio-economic diversity in the WSPHN region, the region is also expected to experience significant urban transformation over the next decade, with the planned and recently completed rail lines: the Metro NorthWest line linking Chatswood to the east with Rouse Hill along a corridor just north of the current urban hubs; and the Parramatta Light Rail, which will draw people more easily into the greater Parramatta area. These, as well as plans for the development of the Westmead precinct to become a world class health and education precinct; for the elevation of Parramatta to Sydney's second Central Business District; for urban transformation precincts in established areas such as Seven Hills, Wentworthville, Westmead, Granville and Auburn and the development of new areas such as the Marsden Park region in the west, has major implications for housing and employment growth and for the improvement pf accessibility in the region. Additionally, the development of the Western Sydney Airport or Aerotropolis is expected to bring 200,000 new jobs to the Western and South Western Sydney region and will see a development of important infrastructure, including the establishment of a planned Aerospace Institute, a new public high school and 60,000 new homes. The aerotropolis will provide housing diversity, increase affordability of housing and result in a growing and dynamic population in the region.

Commissioning services to meet the health needs of such a fast growing, dynamic and diverse population is a considerable task for the WSPHN. One specific area of challenge is that of ensuring that there are appropriate and adequate mental health services in the region. This is a challenge, not only because the WSPHN region has one of the highest rates of psychological distress in the country

(WentWest, 2016), but also because the mental health care system in Australia is rapidly changing as it undergoes major reform. One of the central tenets of this reform relies on PHNs successfully driving service changes through their commissioning role and as promoters of health care system integrators.

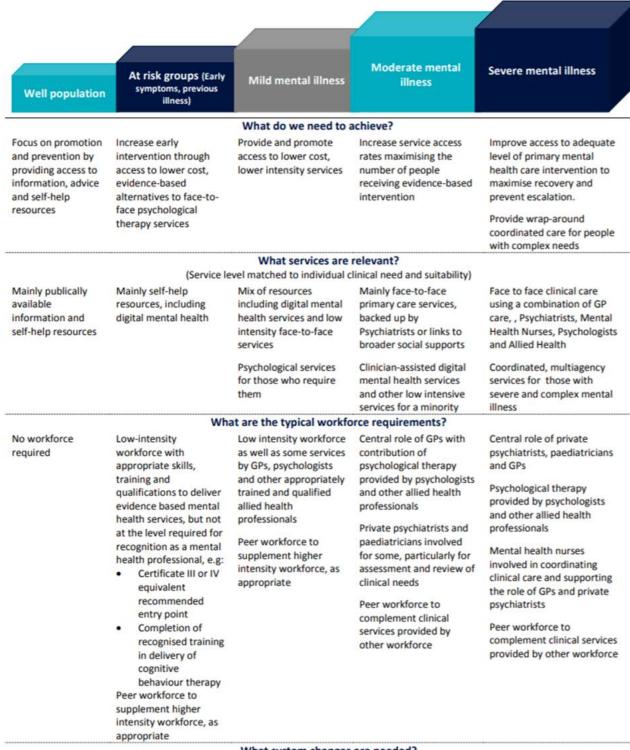
Running alongside the challenge of mental health care reform, PHNs are also having to negotiate the ways in which they and their services will interface with the NDIS. The NDIS is one of Australia's most significant social policy changes, and its roll out has impacted both disability and care service provision. The impact of these two major government policies on PHN service commissioning cannot be underestimated, and is explored in further detail in the respective sections below.

1.2 Mental Health Service Reform

The 2014 National Review of Mental Health Programmes and Services (National Mental Health Commission, 2014) identified that mental health services in Australia were not adequately meeting the needs of people with a lived experience of mental illness. The review highlighted that mental health services were not appropriately integrated, with evidence of fragmentation and siloing of services and programs. It also highlighted that consumers experiencing mental illness were unable to consistently access the appropriate level of support, resulting in a negative impact on their wellbeing and community participation. The review concluded that there was an urgent need for long-term sustainable reform within Australia's mental health care sector.

In its response to this review, the Australian Government acknowledged the need for action and initiated a collaborative and consultative process to develop a comprehensive plan for reform (Commonwealth Department of Health, 2015a). The resultant action plan, the Fifth National Mental Health and Suicide Prevention Plan 2017-2022 (the Fifth Plan) (Commonwealth of Australia, 2017) prioritised the need for: a person centred model of care, where consumers and carers could provide input into the planning and delivery of services; integrated regional planning of mental health care service delivery to ensure that local needs were addressed; promotion and development of digital mental health services; and the development of a stepped model of care for mental health services which allowed for a hierarchy of interventions from the least to most intensive matched to individual need, and which would assist in building more options and range into the mental health care system.

The stepped care model is fundamental to the Australian Government's mental health reform agenda. It focuses on promotion and prevention for healthy populations; increasing early interventions for at risk groups; providing and promoting access to lower cost and lower intensity services for individuals with mild mental illness; increasing service access and evidence-based intervention for individuals with moderate mental illness; improving access to primary mental health care intervention; and coordinated care for individuals with severe mental illness (Commonwealth of Australia, 2017). The Stepped Care guidance for PHNs provides further elaboration of the stepped care approach (Australian Government Department of Health, 2016) (see Figure 1). This conceptualisation represents a movement towards a top down approach for service planning, whereby progress is made by defining required elements to facilitate implementation. This contrasts with a bottom up approach which begins with a comprehensive understanding of the composition of available elements or services and focuses on the development of new elements.



What system changes are needed?

- Promote and support availability of self-help and digital mental health services as an alternative and/or adjunct to face-to-face services
- Increase capacity over time of clinician assisted digital mental health services
- PHN use of flexible funding to commission range of services to fill gaps
- Expand primary care system capacity to better meet needs of people with complex and chronic mental health conditions, including enhanced nursing support and coordinated care
- Program redesign and optimal targeting
- Integration between service levels

Figure 1. The Stepped Care Model in Primary Mental Health Care

Source: Stepped Care, PHN Primary Mental Health Care Flexible Funding Pool Implementation Guidance.

In the PHN Stepped Care Guidance Material a clear distinction is made between psychological services for those with mild mental illness; clinical services in primary care backed by psychiatrists for those with moderate mental illness; and clinical care for those who experience severe mental illness provided by General Practitioner (GP) care, psychiatrists, mental health nurses and allied health. It should be noted that this distinction, in the absence of a fully implemented integrated care system, could produce further fragmentation instead of preventing it.

It is therefore essential that the Australian Government's stepped care model be implemented as part of an integrated system of mental health care, without major gaps in health care pathways. This requires a systems thinking approach which identifies critical relationships and connections within a system. Such an approach provides a comprehensive way of anticipating synergies and mitigating problems and barriers, with direct relevance for creating policies that integrate the different systems of care (Aslanyan et al., 2010; De Savigny & Adam, 2009). The Integrated Mental Health Atlas of the WSPHN region (Salvador-Carulla et al., 2016) and this Atlas have mapped services for people with a lived experience of mental illness in the WSPHN region to identify service availability and gaps in the system. Use of the DESDE-LTC mapping system allows for the mapping of services across different sectors and systems (e.g. social, justice and employment). This information is crucial for the development of a successful, integrated system of mental health care.

The Australian Government's Fifth Plan also prioritises the achievement of outcomes in eight key areas aligned to the National Mental Health Policy:

- achieving integrated regional planning and service delivery
- effective suicide prevention
- coordinating treatment and supports for people with severe and complex mental illness
- improving Aboriginal and Torres Strait Islander mental health and suicide prevention
- improving the physical health of people living with mental illness and reducing early mortality
- reducing stigma and discrimination
- making safety and quality central to mental health service delivery
- ensuring that the enablers of effective system performance and system improvement are in place

In addition to the National Mental Health Plan, and at a more local level, the New South Wales (NSW) Mental Health Commission has developed Living Well: A strategic plan for mental health in NSW 2014-2024 (NSW Mental Health Commission, 2014). This plan sets out the direction of reform of the mental health system in NSW with key focuses on shifting mental health care from hospitals to the community, and from crisis driven responses towards prevention and early intervention. The plan also includes a set of actions required to lay the groundwork for change in the mental health sector.

Running in tandem to the reform of mental health care service delivery has been a substantial change in mental health care policy direction. This change has been towards the implementation of recovery oriented mental health care practice. Recovery oriented mental health care refers to the application of sets of capabilities that support people to recognise and take responsibility for their own recovery and wellbeing and to define their goals and wishes (Australian Health Ministers' Advisory Council, 2013). A central tenet of recovery oriented practice is the belief that opportunities for recovery are maximised when consumers and families have choice about, and access to, whatever aspects of recovery supports are needed to optimise their personal efforts to cope with, adapt to, or overcome and feel more in control of, the impact of the illness (O'Halloran, 2015). Embedment of the recovery

approach has not only led to significant change in the everyday practice of mental health clinicians but has also resulted in a fundamental review of skill mix within the mental health workforce, with an increase in input into services from those with expertise through experience (e.g. Peer Support Workers).

The policy shift towards recovery oriented mental health care and the ongoing implementation of the Fifth plan has resulted in significant transformation within the Australian mental health care system. The magnitude of changes such as these, along with disruption caused by the roll out of major social policy change (i.e. the NDIS), puts systems and the services within them under intense pressure. It is therefore imperative that PHNs, and other commissioning and planning authorities, gain a full understanding of the availability of services, service capacity (both placement and workforce) and the geolocation of these services that are available to meet the specific needs of people with a lived experience of mental illness within their regions.

1.3 PHN and NDIS Interface

Transition to the NDIS began in July 2016. The roll out of NDIS has been complicated in relation to mental health and psychosocial disability because of the following factors:

- this population was a late inclusion in the NDIS
- unclear roles and responsibilities
- complex nature of mental illness and psychosocial disability

The recently published "Mind the Gap – The National Disability Insurance Scheme and psychosocial disability" report (Smith-Merry, Hancock, Gilroy, Llewellyn, & Yen, 2018) and the Productivity Commission Review of the National Disability Agreement (Productivity Commission, 2019) have identified gaps in the implementation of the NDIS which are particularly apparent within the sphere of psychosocial disability. The Mind the Gap Report acknowledges that less than half the number of people with psychosocial disability initially predicted to enter the NDIS, have actually entered the scheme and, in addition, identified that there will remain significant numbers of people with a lived experience of mental illness who will have to rely on non NDIS community mental health services to meet their needs.

As a result of these findings, a range of initiatives driven by government have been allocated to PHNs. These new tasks have meant that PHNs have had to adapt and grow their mental health service commissioning priorities.

One of the significant changes faced by PHNs has been the requirement to include psychosocial support services in their commissioning work. This was initially believed to be out of scope for PHNs, however by mid-2019, PHNs will be responsible for providing continuity of support services, aimed at clients from previous Commonwealth funded programs (Partners in Recovery, Day to Day Living and Personal Helpers and Mentor Service) who are found to be ineligible for the NDIS. In addition to this program PHNs have also been tasked with commissioning psychological services targeting the mental health care needs of people living in residential aged care facilities.

In this constantly changing context, it is crucial to provide policy and service decision makers with every tool and opportunity to make better, more informed choices about future planning and investments in mental health care. This Atlas is a resource for the WSPHN which provides a point in time documentation of WSPHN commissioned services. In combination with the Integrated Atlas of Mental Health of the WSPHN region (2016), this Atlas allows assessment of how services have changed over time and whether these changes have led to increased levels of care in locally identified areas of need.

1.4 Primary Health Networks

PHNs have been allocated a key role in driving mental health reform in Australia. PHNs were established in 2015 and were tasked with increasing the efficiency and effectiveness of health care services and improving coordination of health care to ensure that patients could receive the right care in the right place and the right time.

PHNs act as commissioners of primary mental health services and as such, are well positioned to enhance the regional integration of mental health services (PHN Advisory Council, 2018). PHN mental health commissioning is built on the following principles:

- co-design: develop and design relevant and sustainable mental health services in partnership with consumers, carers, families and communities, national and local stakeholders, service providers and clinicians - at all stages of the commissioning cycle
- commissioning and decommissioning: in accordance with leading practice, implement models of care based on national and international evidence, while maintaining the integrity of regional strategic priorities and required services
- partnership: PHNs are partners with local stakeholders, not simply government procurement agencies on a smaller scale, and will look to commission accordingly
- integration: utilise commissioning processes that optimally leverage and link with other local services
- market management: appropriately commission programmes through the stimulation of contestability in the service provider market, effective governance and robust probity processes

To assist PHN's in their role commissioning mental health services the Australian government has produced several resources and tools. Key documents include the PHN Needs Assessment Guide (Commonwealth Department of Health, 2015b), the PHN Advisory Panel strategic document: Reform and System Transformation- A Five Year Horizon for PHNs (PHN Advisory Panel on Mental Health, 2018); Regional Planning for Mental Health and Suicide Prevention- A Guide for Primary Health Networks (Integrated Regional Planning Working Group, 2018), the National Mental Health Service Planning Framework (University of Queensland, 2016) (NMHSPF version 2.0) with its associated Planning Support Tool. The NMHSPF is a population-based planning model and the NMHSPF-PST is a complex tool which provides multiple options to tailor output predictions to meet the needs of local mental health planners. Training in the use of the NHMFSP-PST is currently being delivered to PHNs nationally.

The Five Year Horizon plan, developed by the PHN Advisory panel, also provides a guide for PHNs in their role as commissioners of primary mental health care and as system integrators. The plan acknowledges that the PHN cannot achieve reform of the entire mental health system on its own, and

that all service sectors and stakeholders must contribute to the reform process. Specific challenges that are called out for PHNs in implementing mental health care include:

- balancing regional autonomy and national consistency
- shared responsibility between state and territory funded services
- estimated high level of unmet need for psychological support services
- impact of the roll out of NDIS for people with severe mental illness

In implementing a stepped care approach in their region, each PHN is required to undertake their own mental health needs assessment and planning process to determine the local service needs. This means that while all elements of a stepped care model are expected to be available, level of investment and focus may vary across PHNs according to identified gaps and priority areas. Innovation is desirable and PHNs are encouraged to share information about successful models across the national network (Australian Government Department of Health, 2016).

In 2017, the WSPHN collaborated with The Science of Knowledge to complete the region's mental health and suicide prevention needs assessment (WentWest, 2018). As a result of this assessment, the WSPHN developed both short term and longer term plans with an aim of regionally commissioning services that will build capacity and strengthen mental health and suicide prevention service activities across Western Sydney (Mendoza, 2019). The WSPHN approach has been built on:

- strengthening general practice
- evidence-informed policy built on comprehensive data
- applying best practice person-centred care
- engaging and learning from the best be they across Sydney or across the world
- leveraging the extensive and experienced mental health workforce
- applying systems approaches to the development of services and achieve the 'Quadruple Aim'1 in health care

The above needs assessment also identified 13 areas of emerging priority for the region. These areas included 10 priority target groups and 3 sectoral/system level priorities which are listed below.

Priority target groups:

- 1. Maternal and perinatal mental health
- 2. Children and young people
- 3. Dementia and aged care
- 4. Aboriginal and Torres Strait Islander peoples
- 5. Culturally and linguistically diverse (CALD) community (refugees and migrants)
- 6. People who identify as lesbian, gay, bisexual, transgender, intersex, or queer (LGBTIQ)
- 7. People experiencing homelessness
- 8. People experiencing mild to moderate mental illness
- 9. People experiencing comorbidities (i.e. mental illness and other health conditions)
- 10. People experiencing severe and complex mental illness

¹ Quadruple Aim – simultaneous achievement of 1) Improved population health outcomes, 2) Improved user experience of care and support ,3) Efficient use of resources and 4) Development of a sustainable and viable provider workforce

Sectoral/system level priorities

- 1. Suicide prevention
- 2. Variations in care -Stepped Care principles.
- 3. Organisational health literacy responsiveness. Understanding the diversity of mental health

The above priorities reflect national mental health priority areas as well as needs arising from the WSPHN's unique population. They encapsulate the needs of culturally diverse groups within the region as well as recognising some of the key outcomes from extreme social and economic disadvantage.

Over the next five years, PHNs must perform a balancing act of ensuring that their populations are adequately able to access all elements of the Australian Government's stepped care model as well as commissioning mental health services and programs that address regionally identified gaps and priority areas. To be successful this must occur within an integrated system of care.

Against this backdrop, Integrated Atlases of Mental Health are essential tools for PHNs. 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. The Integrated Atlases of Mental Health of the WSPHN and this second Atlas have provided the WSPHN with a unique opportunity to examine change in the PHN mental health system over time and to highlight variations of care, detect gaps in the system and examine the impact of mental health reforms. This information is vital for future integrated care planning.

Integrated Atlases of Health also include maps and graphics as a main form of presenting the data. The holistic service maps produced through an Integrated Atlas of Mental Health allow policy planners and decision makers to build bridges between the different sectors. This works towards the PHN Five Year Horizon plan objective of becoming system integrators to assist with achieving sustainable long term reform of the mental health care system.

1.5 Mental Health Atlases

In 2015, the WSPHN in partnership with the University of Sydney and Western Sydney University, developed the first ever Integrated Atlas of Mental Health in Australia (Salvador-Carulla et al., 2016). Since then a total of 20 atlases using this method have been completed across Australia enabling us to compare mental health needs and the range (or spectrum), capacity and distribution of services.

Findings from the first Integrated Atlas of Mental Health indicated that the WSPHN had many strengths in its mental health care system, with a high availability of mobile services and services targeting the needs of specific populations, such as older people, children and adolescents, young people in transition to adulthood (i.e. 16-25 years old) and multicultural services.

The first atlas also uncovered four major gaps in mental health care service provision in the region. These gaps were as follows:

- an absence of services providing acute day care (i.e. day hospitals) and non-acute day care (i.e. day centres providing structured activities to promote health and social inclusion).
- a lack of acute and sub-acute community residential care.

- low availability of specific employment services for people with a lived experience of mental ill health.
- a lack of comprehensive data related to availability of supported housing (housing linked to necessary, individualised supports) for people with mental health problems.

The follow-up information in this Atlas provides us with an opportunity to assess whether these strengths and gaps have remained in the system, and how the system has changed relative to National Mental Health Policy reform and the roll out of the NDIS.

The Integrated Mental Health Atlas of the WSPHN region (2016) and this Atlas have quantified and coded mental health services using a standardised classification known as the "Description and Evaluation of Services and Directories in Europe for long-term care" model (DESDE-LTC). A description of the DESDE-LTC system and the methodology used for this Atlas can be found in Annex 1. Annex 2 provides a description of the types of services found in Australia in relation to the DESDE coding system. The DESDE system classifies services based on actual service activity (i.e. what the service does) rather than on the service's name. The DESDE- LTC system is a classification system which uses a standardised coding methodology based on common terminology and a standardised procedure for data collection. This standardised approach allows service planners and researchers to complete meaningful comparisons of service systems across and within countries. Such comparisons allow for service gap analysis and monitoring of health systems.

In a recent review of the use of the DESDE system it was observed that the DESDE (and the earlier ESME system) have been used in 585 catchment areas and 34 different countries to describe services at local, regional and national levels. Authors of the review note that the DESDE/ESME-system's metric properties have been extensively analysed, and the usability of the system has been demonstrated around the world (Romero-López-Alberca, 2019).

The WSPHN's use of the DESDE model has allowed comparison of "like for like" services and thus has provided a unique opportunity to assess longitudinal change within the psychosocial service system of Western Sydney from 2014 to 2019. This is the first time, that we are aware of, that such an analysis has been conducted in Australia. The timing of the production of the two WSPHN Atlases has also afforded an opportunity to explore the evolution of a specific section of the mental health service system at time a when there has been significant reform to the delivery of mental health care and major changes in social policy (e.g. the roll out of the National Disability Insurance Scheme -NDIS).

As shown in Figure 2, the DESDE-LTC aggregates micro and meso level data to provide a bottom- up analysis of actual care provision. This contrasts with but complements the NMHSPF, which uses macro-level data to provide top-down models for ideal macro and meso-level provision. The NMHSPF predicts the mental health service activity and resource requirements for a given population, and can therefore be used to identify priority areas for mental health planning and service development when compared to existing services.

Levels of Care	Care INPUT THROUGHPUT		OUTPUT
MACRO Country/region	1A	1B	NMHSPF: Population based
MESO			planning
Local Health districts, catchment areas	2A	2B	2C
MICRO Service Settings, facilities, care teams	DESDE-I Provision service		3C
NANO Individual agents Users, carers, profs.	4A	4B	4C

^{*} Modified from Thornicroft & Tansella (1999) The Mental Health Matrix, Cambridge Univ. Press

Figure 2. Extended Tansella and Thornicroft Care Matrix. Comparison of NMHSPF and DESDE-LTC. Adapted from (Tansella & Thornicroft, 1998)

Whilst the Second Atlas provides important data for service planners and policy makers, it is important to note that it does not map all the services used by people with a lived experience of mental illness in the WSPHN region. The Atlas is only mapping psychosocial services that are universally accessible (either free or for a small out of pocket cost). For example, it does not include primary care services, Local Health District services, fee-for-service care, or services designed primarily for other target groups, such as people who are homeless, or who have an intellectual disability. Although very relevant, these services fall outside the scope of the Integrated Atlas of Psychosocial Care of the WSPHN region.

2. Western Sydney Primary Health Network and its Region

WentWest became the Western Sydney Primary Health Network in July 2015 as Medicare Locals transitioned nationally to Primary Health Networks. Prior to this, WentWest had already been providing support to the Western Sydney since 2002, including partnering with the health and hospital sector, health professionals, consumers and the broader community in its commitment to creating a more efficient and effective health care system within this diverse and rapidly evolving region.

2.1 Socio-economic and Socio-demographic Indicators

A series of indicators have been calculated to describe the area, based on information extracted from Australian Bureau of Statistics (ABS) census data (2016) and from the Social Health Atlases of Australia of Torrens University (PHIDU) (Torrens University Public Health Information Development Unit, 2019).

The following indicators have been used:

Table 1. Demographic indicators examined

	Numerator	Denominator	Unit	Source (dataset code)
Area (km²)	Area (km²)			ABS, 2016
Total population	Inhabitants (total)			ABS, 2016
Density ratio	Inhabitants (total)	Area (km²)		
Dependency ratio	Percentage of population aged below 15 years old and above 64 years old	Population aged between 15 and 64 years old	X 100	ABS (AGEP), 2016
Ageing index	Population aged below 15 years old	Population aged above 64 years old	X 100	ABS (AGEP), 2016
Indigenous status (%)	Population who identified themselves as being of Australian Aboriginal and/or Torres Strait Islander	Total population (without not stated)	X 100	ABS (INGP), 2016
Born overseas (%)	Population born overseas	Total population (without not stated)	X 100	ABS (BPLP), 2016

Single parent families (%)	Single parent families with children under 15 years old	Total families (without not applicable)	X 100	ABS (FMCF), 2016
Living alone (%)	Lone person in usual residence	Total population (without not applicable)	X 100	ABS (RLHP), 2016
Needing assistance (%)	Population who has needed for assistance with core activities	Total population (without not stated)	X 100	ABS (ASSNP), 2016
Year 12 of high school or equivalent completed (%)	Population with year 12 or equivalent as highest Year of School Completed	Population above 14 years old (without not stated or not applicable: <15 y.o.)	X 100	ABS (HSCP), 2016
Unemployment (%)	Unemployed population	Labour force (total X 100 population without not stated, not applicable or not in labour force)		ABS (LFSP), 2016
Income <\$500/wk. (%)	Population earning less than \$500 per week, including those on negative incomes	Population above 14 years old (without not stated or not applicable: <15 y.o.)	X 100	ABS (INCP), 2016
Dwellings with no internet connection (%)	Dwellings with no internet access	Total dwellings (without not stated or not applicable)	X 100	ABS (NEDD), 2016
IRSD Score	Decile of the Index of Relative Social Disadvantage Score (Australia=1000)			ABS (SEIFA), 2016
Psychological distress (%)	Estimated number of people aged 18 years and over with high or very high psychological distress, based on the Kessler 10 Scale (K10)	Population aged above 18 years old		Public Health Information Developme nt Unit, 2014-2015
Suicide rate	Avoidable deaths from suicide and self-inflicted injuries, persons aged 0 to 74 years (ICD-10 codes: X60-X84, Y87.0)	Population aged between 0 and 74 years old	X 100,0 00	Public Health Information Developme nt Unit, 2011-2015

The WSPHN region has higher than the national average rates in population density, unemployment and Year 12 completion. It has a younger than average population, and is home to a culturally and linguistically diverse population that is almost double the national rate of people born abroad. Although the region as a whole has an Index of Relative Socio-economic Disadvantage (IRSD) score marginally higher than the Australian average, the rate of psychological distress and of suicide mortality is slightly lower. These overall figures, however, mask the huge demographic and socioeconomic variability in the region. While the overseas born population is high across the whole region, it is most concentrated in the south, particularly in the Cumberland district where over half the population is born abroad, compared to 34.6% in the Hills Shire, and to the national average of 26.34%. The percentage of the population identifying as Indigenous in the Blacktown area is four times greater than that in Parramatta; and the Cumberland area has more than double the rate of unemployment, and triple the number of homes with no internet connection, than is the case in the Hills Shire. People living in the Blacktown and Cumberland areas experience higher levels of psychological distress, greater need for assistance with core activities, lower rates of connection to the internet, and higher socio-economic disadvantage than both the national average and that of people living in the neighbouring areas of The Hills and Parramatta(Torrens University Public Health Information Development Unit, 2019). Rates of social fragmentation, that is of social isolation and low community participation are highest around the southern urban centres, particularly Mount Druitt, but also in pockets scattered mostly across the south of the region.

The following table (Table 2) and maps (Figures 3-14) provide further socio-economic and demographic detail. The maps provide information at the level of Statistical Area 2 within Local Government Areas (LGAs).

Table 2. Description of the socio-economic characteristics of the region (2016)

PHN	Blackt	Cumbe	The	Parra	WS	Austra
	own	rland	Hills Shir e	matta		lia
Population	339,4 55	216,63 1	173, 560	249,95 9	979 <i>,</i> 605	24,20 6,201
Population density	1414. 11	3027.6 4	207 0.40	647.30	126 4.7	3.13
Women (%)	50.26 %	48.58%	50.6 4%	50.11 %	49.9 2%	50.39 %
Ageing index	45.09	54.33	64.4 6	68.35	55.8 0	80.33
Dependency index	49.35	46.24	53.6 9	44.57	48.1 5	51.66
Unemployment rate (%)	7.28%	9.48%	4.44 %	6.88%	7.07 %	5.88%
Lone parent (%)	8.91%	6.70%	4.12 %	5.15%	6.59 %	7.83%
Living alone (%)	4.63%	5.45%	3.65 %	6.82%	5.19 %	8.65%

Not married (%)	41.91 %	46.57%	34.8 2%	40.37 %	41.2 7%	52.31 %
Needs assistance for core activities (%)	5.44%	6.16%	3.33 %	4.35%	4.94 %	5.53%
Indigenous population (%)	2.94%	0.67%	0.63 %	0.73%	1.47 %	2.77%
Australian citizenship (%)	85.63 %	76.91%	89.7 5%	76.03 %	82.0 2%	88.49 %
Born abroad (%)	42.92 %	55.66%	34.6 0%	52.17 %	46.5 6%	26.34 %
Low English proficiency (%)	1.38%	3.80%	1.16 %	2.78%	2.23	2.85%
Year 12 of high school or equivalent completed (%)	59.60 %	62.12%	67.1 1%	74.48 %	65.4 0%	56.79 %
Personal income <\$500 per week (%)	41.60 %	49.95%	35.8 4%	40.16 %	42.0 3%	41.12 %
Dwellings with no internet connection (%)	12.66 %	15.80%	5.90 %	9.92%	11.3 7%	14.15 %
SEIFA Index of Relative Socio-economic Disadvantage (based on Australian score of 1000)	986	929	110 7	1039	100 4.6	1000
% of the population with high or very high psychological distress (K10)	13.55 %	12.42%	8.01 %	10.42 %	11.6 8%	11.72 %
Suicide mortality per 100000	8.84	6.44	6.67	6.18	7.42	11.52

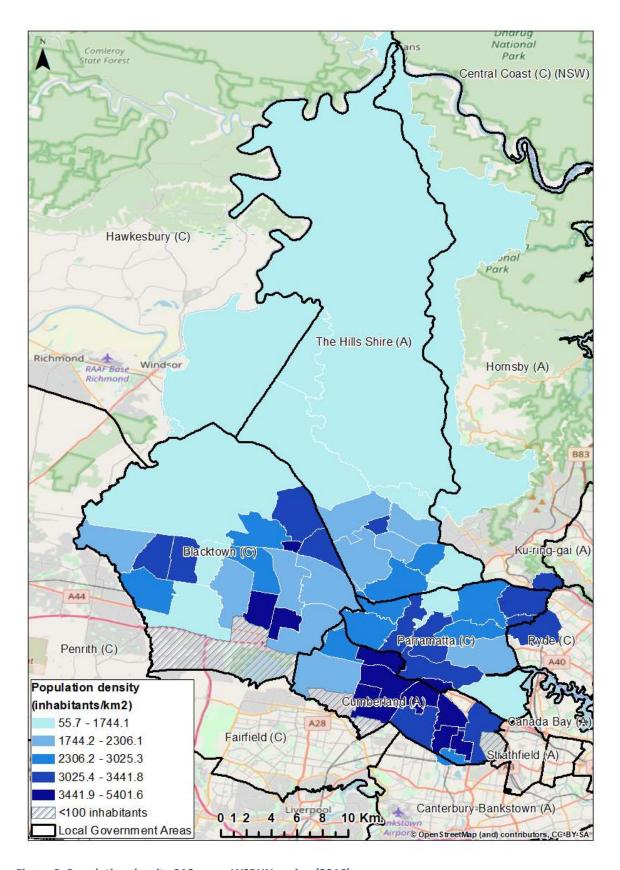


Figure 3. Population density SA2 areas WSPHN region (2016)

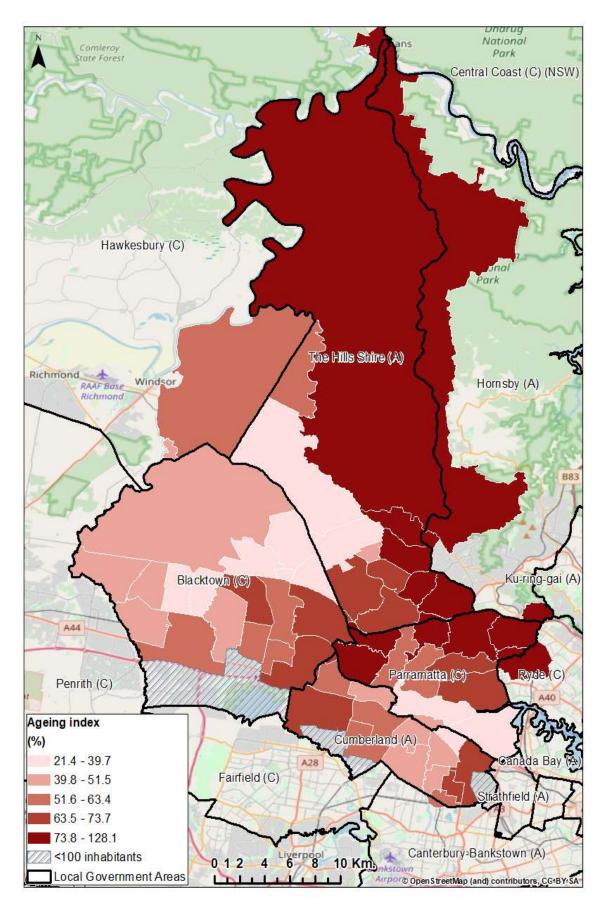


Figure 4. Ageing index SA2 areas WSPHN (2016)

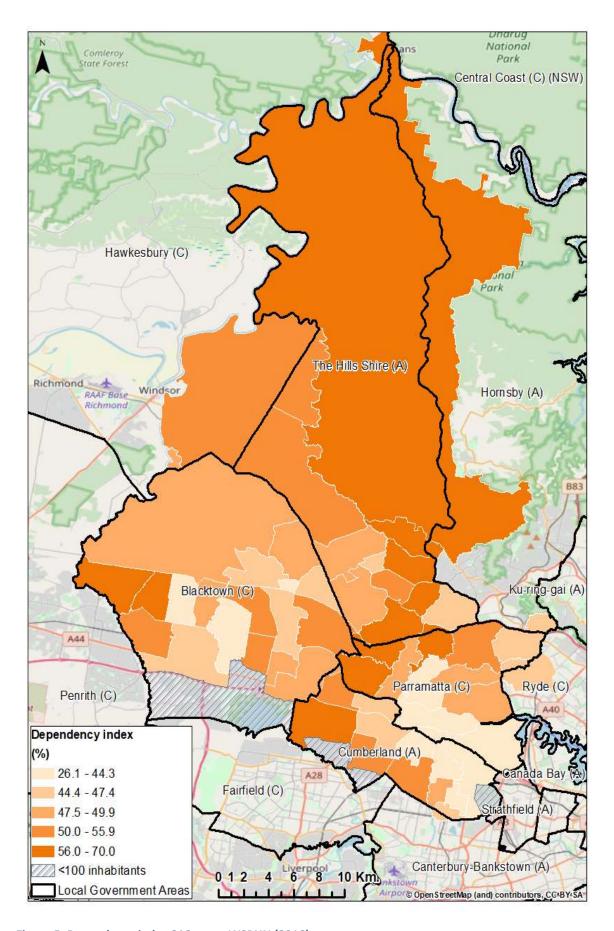


Figure 5. Dependency index SA2 areas WSPHN (2016)

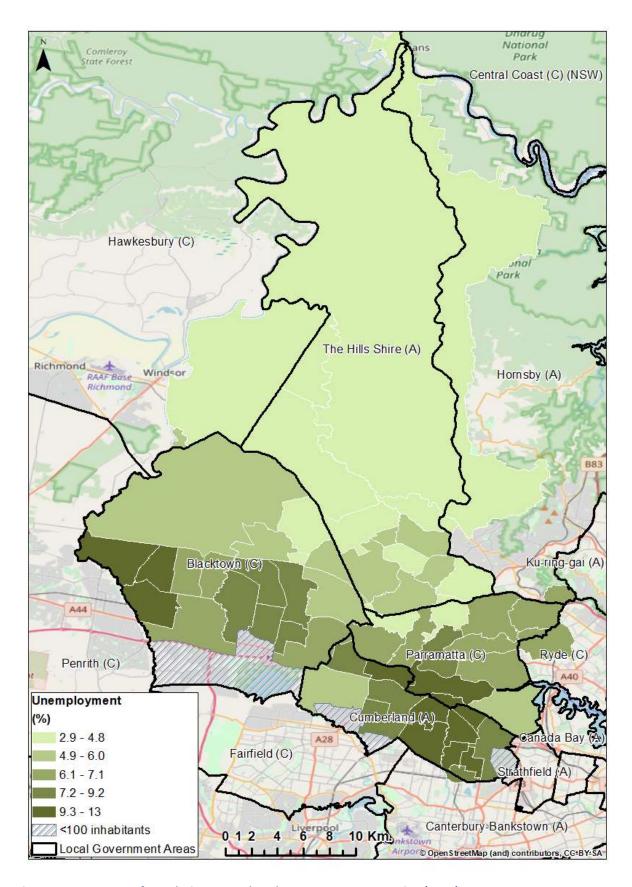


Figure 6. Percentage of population unemployed SA2 areas WSPHN region (2016)

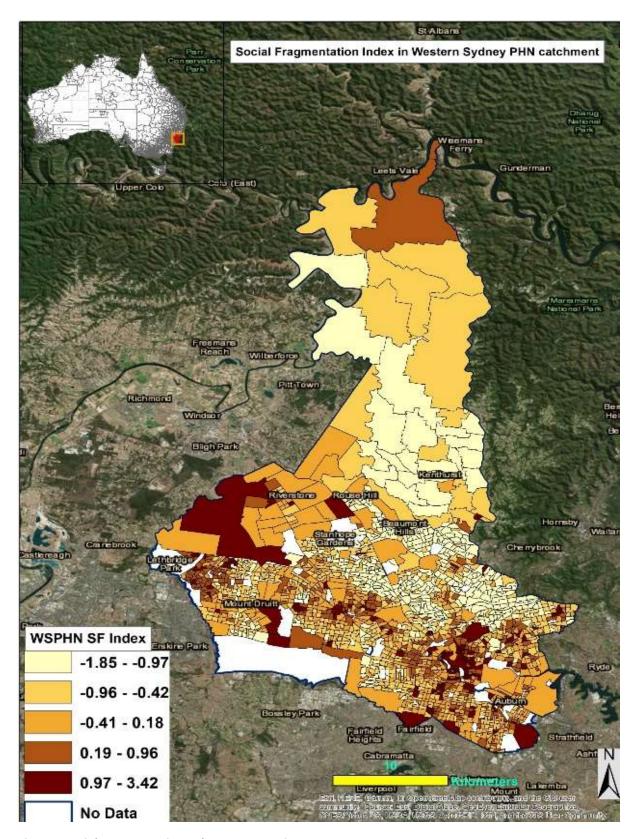


Figure 7 Social Fragmentation Index WSPHN region 2019.

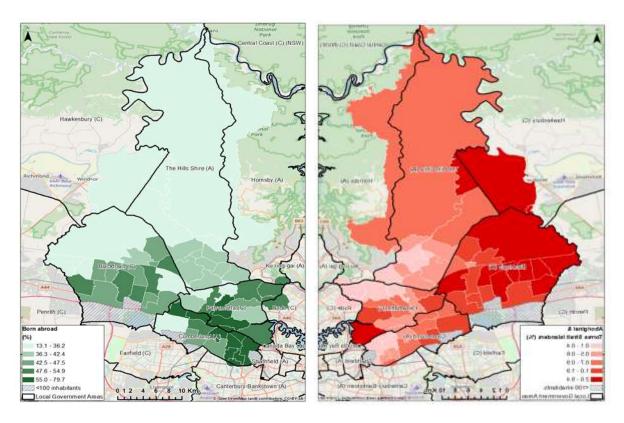


Figure 8. Percentage of population born abroad SA2 areas WSPHN region (2016)

Figure 9. Percentage of Aboriginal and Torres Strait Islanders SA2 areas WSPHN region (2016)

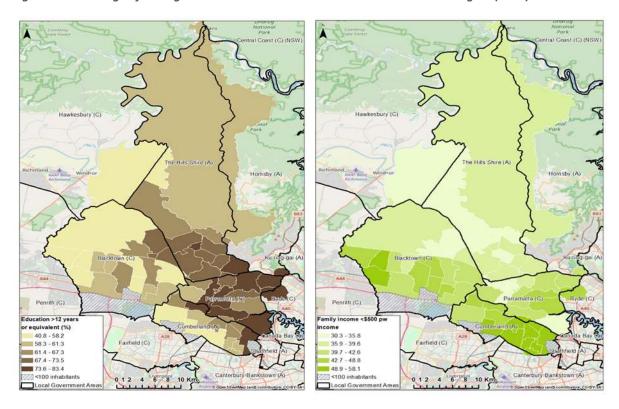


Figure 10. Percentage of population with year 12 education or equivalent SA2 areas WSPHN region (2016)

Figure 11. Percentage of population with income < \$500p/w SA2 areas WSPHN region (2016)

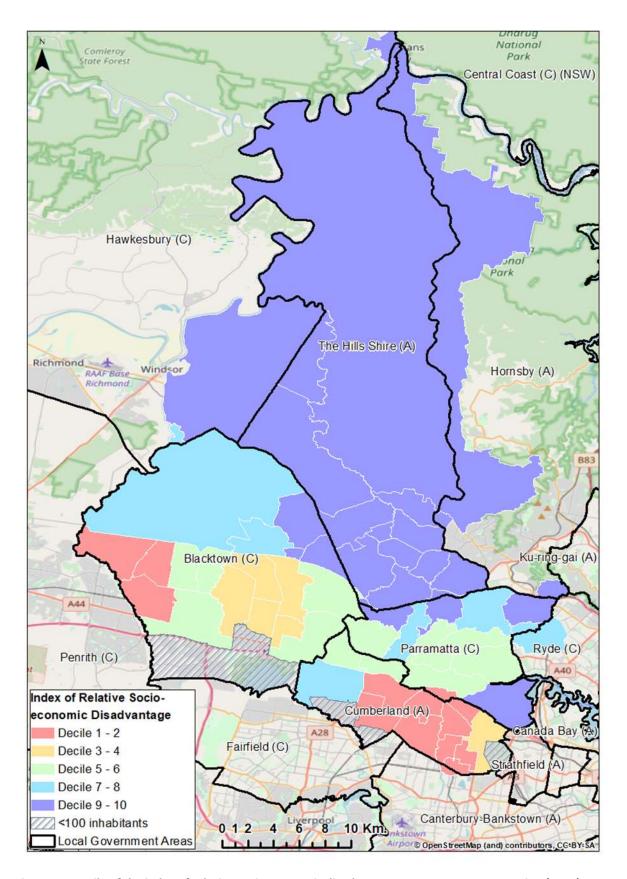


Figure 12. Decile of the index of relative socio-economic disadvantage SA2 areas WSPHN region (2016)

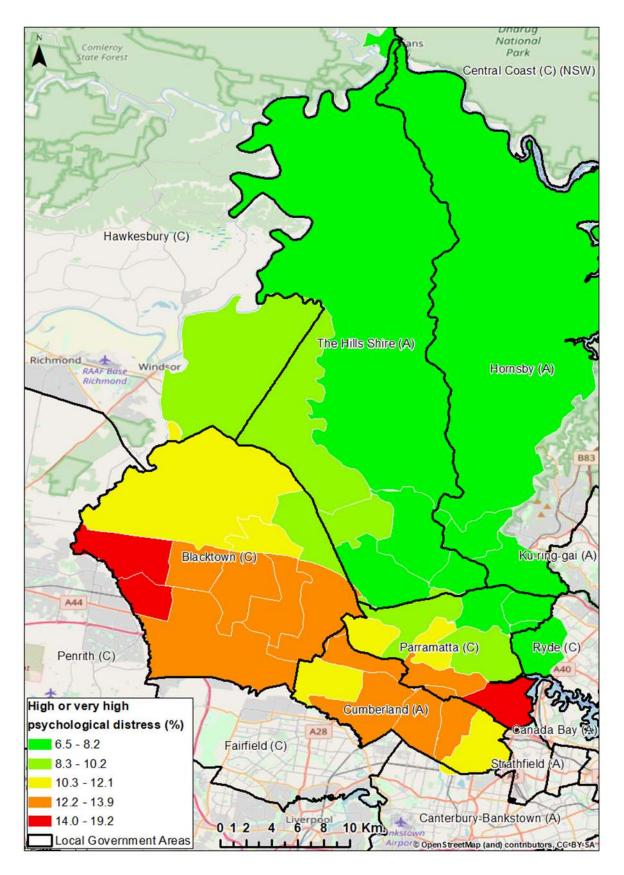


Figure 13. Percentage of the population with a high or very high rate of psychological distress (K10) SA2 areas WSPHN region (2016)

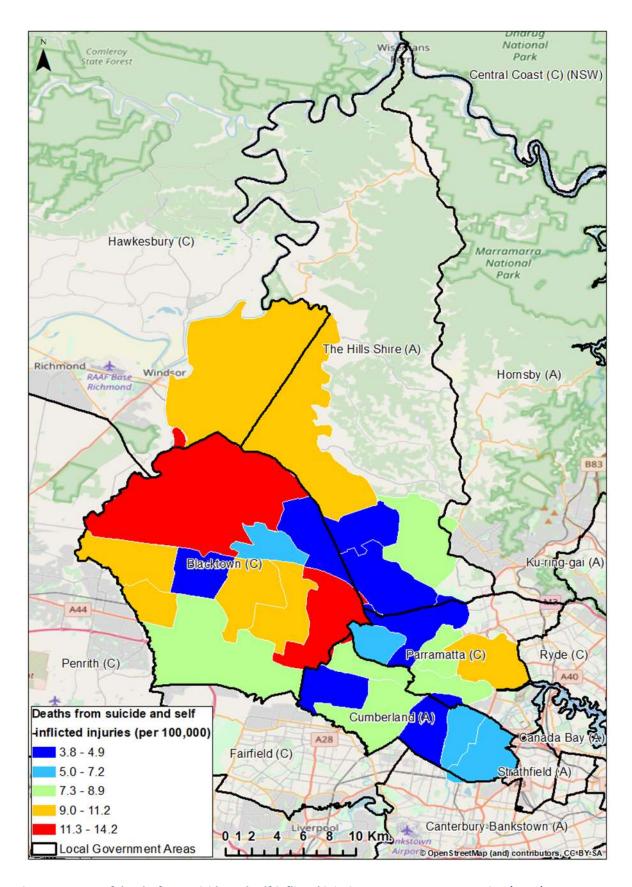


Figure 14. Rate of deaths from suicide and self-inflicted injuries SA2 areas WSPHN region (2016)

3. Description of Services Providing Support for People with a Lived Experience of Mental Illness in the WSPHN Region

3.1 General Description

Data on services providing psychosocial care for people with a lived experience of mental illness in the WSPHN region was collected from the 16th January to the 30th April 2019. Data was collected via 26 face-to-face or telephone interviews with 22 provider organisations. A total of 82 "Care Clusters", provided by 22 organisations, and comprising 69 Basic Stable Inputs of Care (BSICs -individual teams) and 13 Other Care Teams (OCTs-teams which were organisationally dependent on a primary team) were identified, providing 98 MTC (Main Types of Care) overall, 81 of which were provided by BSICs and 17 by OCTs (Figure 15). Eight BSICs and two OCTs provided more than one MTC. This can be compared to a total of 40 Care Clusters provided by 22 organisations identified in the first Atlas in 2014, which comprised 40 BSICs (no OCTs) providing 42 MTCs (Salvador-Carulla et al., 2016).

In the following graphs and tables, we provide data on the current psychosocial service provision as well as a comparison of service provision between 2014 and 2019, as identified by the relevant Atlases. As we found a large number of satellite teams (OCTs) in the 2019 Atlas, the 2019 data distinguishes between BSICs and OCTs, and between the Main Type of Care delivered by each. This distinction is important to avoid double counting of teams or of the care they provide when an individual team is divided between two or more locations, while still recognising their increased geographical availability. The main type of care provided by BSICs or primary teams is designated MTC, and an upper case letter is used in the code (for example O9.1); while the main type of care delivered by an OCT is designated OTC (Other Type of Care), with a lower case letter in the code (for example o9.1). Annex 1 provides a detailed explanation of the codes and coding system used in these tables.



Figure 15. Summary of psychosocial services in WSPHN region 2014 and 2019

Figure 16 shows the distribution of the Main Types of Care in 2019 provided by BSICs (teams) according to target population, while Figure 17 shows the distribution of the Main Types of Care in 2019 provided according to target population when we also include the care provided at satellite or secondary locations (OCTs) as additional MTCs. In 2019, 61.73% of the total service provision provided by BSICs (or 57.14% of the total service provision provided by BSICs and OCTs combined) is for adults in general without a target specific population; 12.35% of support provided by BSICs (or 15.31% of that provided by BSICs and MTCs combined) is for those transitioning to adulthood; 4.94% of MTCs provided by BSICs (or 4.08% of BSICs and OCTs combined) is for children and adolescents, and 20.99% of support provided by BSICs (or 23.47% by BSICs and OCTs combined) is for non- age related specific groups, including carers, CALD communities, gender specific care, and veterans.

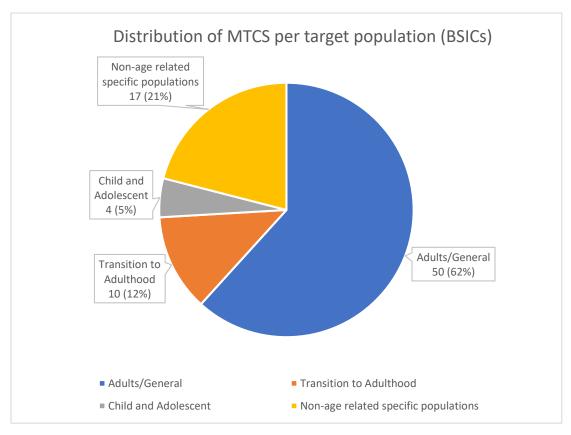


Figure 16. Distribution of MTCs according to target population (BSICs) WSPHN region (2019)

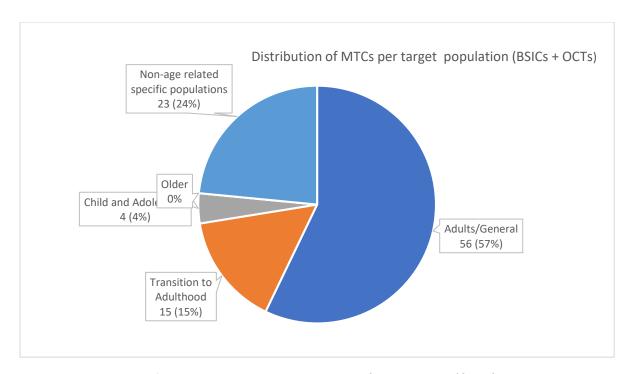


Figure 17. Distribution of MTCs according to target population (BSICs and OCTs)(2019)

Figure 18 shows the difference in the balance of care provided to different specific age- related and other populations between 2014 and 2019. This has shown a significant shift, with service availability for the Transition to Adulthood age group and for Culturally and Linguistically Diverse populations in particular (represented in Non-age related specific populations) increasing both in number and in the percentage of the total number of services available. This has also meant that general services for adults have decreased in relation to other population groups.

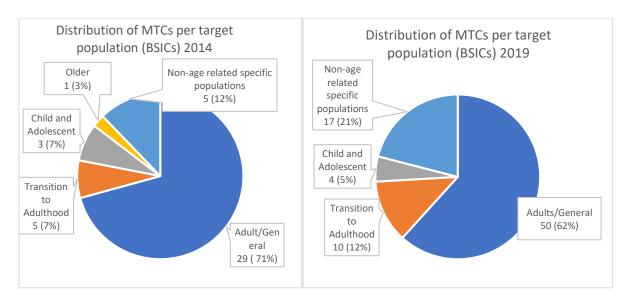


Figure 18. Distribution of MTCs according to target population (BSICs) WSPHN region 2014 and 2019

Figures 19 & 20 show the distribution of MTCs according to the main branches of care defined in the DESDE classification system: Figure 19 provides this in relation to BSICs only, and Figure 20 includes

the same information, but as in the previous graphs, this time including the MTCs provided by secondary or satellite team locations as additional MTCs. Sixty three percent of MTCs provided by BSICs were Outpatient services, with 14% providing Accessibility care, 7% Daycare, 6% Information or Guidance and Assessment, and Self-help/Volunteer care and Residential care providing 5% each. If we also include the MTCs attached to the satellite teams or OCTs (figure 20), 68% of care provided is Outpatient care, 11% Accessibility, 7% Daycare, 6% Residential care, and Information or Guidance and Assessment, and Self-help or Volunteer care each comprise 5% of the total service provision.

Distribution of the MTCs by type of care (BSICs)

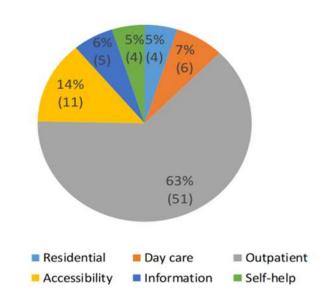


Figure 19. Distribution of MTCs according to types of care WSPHN region 2019 (BSICs)

Distribution of the MTCs by type of care (BSICs + OCTs)

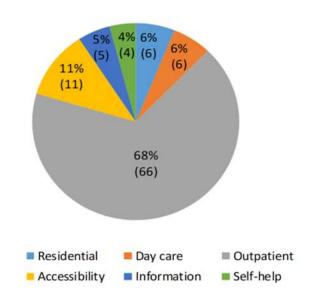


Figure 20. Distribution of MTCs according to types of care WSPHN region 2019 (BSICs and OCTs)

Figure 21 provides a comparison of the distribution of MTCs provided by BSICs in 2014 and 2019 according to the main branches of care. Outpatient care comprised a larger percentage of the services available in 2019 than was the case in 2014: this increase in Outpatient care has meant that all other branches of care, while increasing in number, have nevertheless decreased in relation to overall service availability.

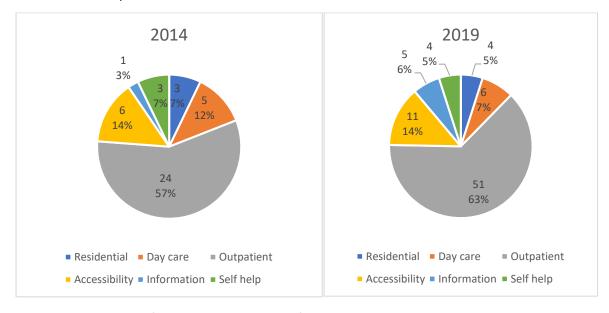


Figure 21. Distribution of MTCs according to type of care WSPHN region BSICs comparison 2014 and 2019

Table 3. MTCs (total) according to target population and sector

				Specific po	opulations		
мтс	Definition	Adults	Children and adolescents	Transition to adulthood	Older adults	Non-age related specific populations	Total
		NGO	NGO	NGO	NGO	NGO	тот
RESIDENT	IAL: Facilities that prov	ide beds overnigh	nt for purposes re	elated to the clinic	cal and social ma	nagement of thei	r long term care
R8.2	Non-acute, non-24 physician cover, time limited, 24 hours support, over 4 weeks	2	0	1	0	0	3
R9.1	Non-acute, non-24 physician cover, time limited, 24 hours support	0	0	0	0	0	0
R9.2	Non-acute, non-24 physician cover, time limited, daily support, over 4 weeks	0	0	3	0	0	3
TOTAL R		2	0	4	0	0	6

				Specific po	opulations		
мтс	Definition	Adults	Children and adolescents	Transition to adulthood	Older adults	Non-age related specific populations	Total
		NGO	NGO	NGO	NGO	NGO	тот
	Facilities that involve clinical and social diff		staff and users f	or some purpose	related to manag	ement of their co	ondition and its
D2.2	Non-acute, work, high intensity, other work	1	0	0	0	0	1
D4.2	Non-acute, education related care, high intensity, health related care	1	0	0	0	0	1
D5.1	Non-acute, non structured care, high intensity	4	0	0	0	0	4
TOTAL D		6	0	0	0	0	6

					Specific p	opulations							
мтс	Definition	Adults			Children and adolesce nts	Transiti on to adultho od	Older adults	Non-age populati	related ons	specific	Total		
		DEF	NGO	TOTAL	NGO	NGO	NGO	DEF	NGO	TOTAL	DEF	NGO	тот
	IENT: Facilities in ed clinical and so			t betweer	staff and	users for	some pu	irpose rel	ated to m	anagemer	nt of thei	r conditio	n and its
02.1	Acute, home and mobile, limited hours, health related care	0	0	0	0	2	0	0	0	0	0	2	2
05.2	Non-Acute, Home & Mobile, High Intensity, other care	0	3	3	0	0	0	0	0	0	0	3	3
05.2.2	Non-Acute, Home & Mobile, High Intensity, other care, 3 to 6 days a week care	0	4	4	0	0	0	0	0	0	0	4	4
06.1	Non-Acute, Home & Mobile, Medium Intensity	0	0	0	0	2	0	0	0	0	0	2	2
O6.2	Non-Acute, Home & Mobile, Medium Intensity, other care	0	0	0	2	1	0	0	1	1	0	4	4
08.1	Non-Acute, non-mobile, High intensity , health related care	0	0	0	0	0	0	0	4	4	0	4	4
09.1	Non-Acute, non-mobile, Medium intensity , health related care	0	3	3	1	6	0	1	10	11	1	20	21
09.2	Non-Acute, non-mobile, Medium intensity , other care	0	4	4	1	0	0	2	3	5	2	8	10
010.1	Non-acute, non-mobile, low intensity, health related care	0	14	14	0	0	0	0	1	1	0	15	15

O10.2	Non-Acute, Home & Mobile, Medium Intensity, other care	0	1	1	0	0	0	0	0	0	0	1	1
TOTAL O		0	29	29	4	11	0	3	19	22	3	63	66

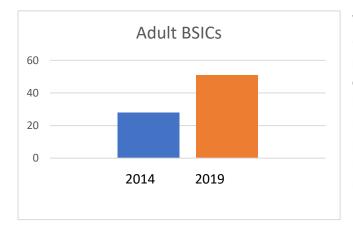
				Specific po	opulations		
мтс	Definition	Adults	Children and adolescents	Transition to adulthood	Older adults	Non-age related specific populations	Total
		NGO	NGO	NGO	NGO	NGO	тот
ACCESSIBII	.ITY: Facilities which m	nain iam is to prov	vide accesibility a	ids for users wiw	th long term care	needs	
A4	Case Coordination	6	0	0	0	0	6
A5.3	Other accessibility care - Social and culture related	0	0	0	0	1	1
A5.4	Other accessibility care - Work related	4	0	0	0	0	4
TOTAL A		10	0	0	0	1	11
	TION AND GUIDANCE: es not entail subseque				formation and or	assessment of the	neir needs. This
11.1	Professional assessment and guidance related to health care, health related	5	0	0	0	0	5
TOTAL I		5	0	0	0	0	5
	RY CARE: Facilities which						
S1.3	Non-professional staff outpatient care	3	0	0	0	0	3
S2.3	Professional staff outpatient care	1	0	0	0	0	1
TOTAL S		4	0	0	0	0	4

3.2 Main Types of Care by Target Population

The following section classifies each of the services identified within the WSPHN region according to its target population (age related or specific population group) and by the main DESDE branches of care (Residential, Day, Outpatient, Accessibility, Information and Guidance, and Self-Help/Volunteer). There are a small number of teams that deliver services across more than one type of care, e.g. their MTC may be Residential, however they also may deliver a secondary type of care, e.g. Outpatient Care. In these instances, the team is listed only **once** in the section that represents the primary (or first) MTC that has been identified for the team, e.g. Residential Care. Any additional types of care delivered by this team are also listed in the same table, but counted in the appropriate section.

A graph showing the comparison of the number of BSICs identified in 2019 compared to 2014 findings is included in each section.

3.2.1 Adult Services



We identified 51 BSICs (teams) and 5 OCTs (secondary or satellite teams) in 2019 providing a total of 56 MTCS for adults, compared to the 2014 total of 28 MTCs. An increase in MTCs was identified across all main branches of care and includes 15 MTCs provided at satellite locations. The largest increases were in the provision of Outpatient health non-mobile care, Accessibility and Daycare services.

Figure 22. Adult BSICs 2014 and 2019

3.2.1.2 Adult Residential

There was one adult residential BSIC (team), providing one MTC, identified in WSPHN in 2019, compared to no teams of this type identified in 2014. This was the HASI Plus service, based in Carlingford, provided by Parramatta Mission for people with chronic severe mental illness. A residential service for women with children is described in the gender specific services section (Table 21).

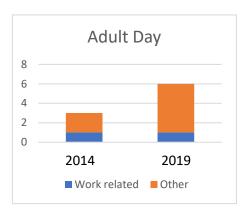
Table 4. Adult Residential Services WSPHN region 2019 – Availability and capacity

Provider	Name	Main DESDE Code	Beds/Places	FTE	Town / Suburb	Area of Coverage
Parramatta Mission	Housing and Accommodation Support Initiative (HASI) Plus	AX[F00-F99]- R8.2	20	20.8	Carlingford	NA

Table 5. Adult Residential Services WSPHN region 2019 – Workforce capacity

Provider	Name	Total FTE	Support Workers
Parramatta Mission	HASI Plus	20.8	20.8

3.2.1.3 Adult Day Services



We identified six BSICs (teams) providing Daycare services. This compares to three Daycare teams in 2014. The number of work related daycare services has remained the same in both time periods.

Figure 23. Adult Day BSICs 2014 and 2019

One Door is a new provider in the region providing two new teams: Frangipani House, which provides day support five days a week to people with moderate to severe mental illness; and Western Sydney Recovery College, which provides an adult education model to assist people in their recovery, as well as increasing the knowledge and understanding of mental health with consumers, carers, members of the public, mental health workers, or anyone who comes in touch with people with mental health issues such as domestic violence counsellors, financial counsellors. Educators include professionals and people with lived experience.

Prestige Packing Company is a training and employment service based in Harris Park provided as part of Flourish's business and social enterprises. Day2Day, which was delivered by Richmond PRA (now Flourish) in the 2014/15 Atlas, is delivered in 2019 by Parramatta Mission, which also delivers WSLARS. Both Day2Day and WSLARS provide centre based day activities, including living skills training.

Embark Cottage is a day centre for people aged 16 years and over: it provides support which includes group activities and outings. It is available 10 days a fortnight.

Table 6. Adult Day Services WSPHN region 2019 - Availability and capacity

Provider	Name	Main DESDE Code	Beds/Places	FTE	Town / Suburb	Area of Coverage
Flourish (formerly PRA & RF)	Embark Cottage	AX[F00-F99]-D5.1gv		0.8	Blacktown	WSLHD

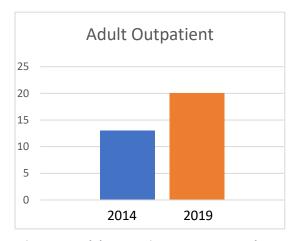
Flourish (formerly PRA & RF)	Prestige Packing Co	AX[F00-F99]-D2.2	120	1.4	Merrylands	0
One Door Mental Health	Frangipani House	AX[F00-F99]-D5.1v	80/wk	5.0	Parramatta	WSPHN but -extends to Northmead area
One Door Mental Health	Western Sydney Recovery College	AX[F00-F99][e310]- D4.2v		1.6	Blacktown	WSPHN
Parramatta Mission	Day2Day	AX[F00-F99]-D5.1gv		3.4	Parramatta	NA
Parramatta Mission	WSLARS	AX[F00-F99]-D5.1gv		1.6	Parramatta	NA

The following table shows the workforce of the Day services in the WSPHN region. These services are staffed primarily by mental health workers, with other staff providing this care including educators, peer workers and some additional direct support provided by managers.

Table 7. Adult Day Services WSPHN region - Workforce capacity

Provider	Name	Total FTE	Educator	MH Workers	Peer Worker	Others
Flourish (formerly PRA & RF)	Embark Cottage	0.8		0.8		
Flourish (formerly PRA & RF)	Prestige Packing Co	1.4		0.4	1.0	
One Door Mental Health	Western Sydney Recovery College	1.6	0.4			1.2
One Door Mental Health	Frangipani House	5.0		4.0		1.0
Parramatta Mission	WSLARS	1.6		1.6		
Parramatta Mission	Day2Day	3.4		3.4		

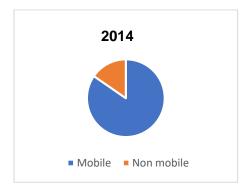
3.2.1.4 Adult Outpatient



We identified 20 BSICs (teams) and six OCTs (secondary teams or satellites) in the WSPHN region, compared to 13 BSICs in 2014. The balance of care has also changed, from predominantly social care to predominantly health related care, and from mostly mobile care to mostly non-mobile care.

Figure 24. Adult Outpatient BSICs 2014 and 2019

These changes are attributable partly to the number of non- mobile health related satellite teams provided by the Primary Care Psychiatric Liaison Service (PCPLS) and Catholic Care Social Services, and partly due to the recoding of Partners in Recovery teams from Outpatient mobile social care in 2105, to Accessibility in this Atlas. New providers to the region (NEAMI and One Door) providing this type of care are also a factor, as well as the new Western Sydney Connections Helpline, provided by the PHN.



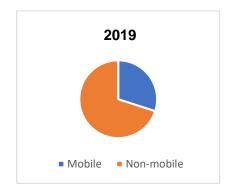


Figure 25. Adult Outpatient BSICs Mobility 2014 & 2019

There was no acute outpatient care for adults identified. Seventeen teams (13 BSICs, four OCTs) provided health related care, and nine teams (eight BSIC, one OCT) provided social care. Six teams (five BSIC, one OCT) all of which provided social care, were mobile.

Mobile outpatient care is delivered by Flourish (Housing and Accommodation Initiative-HASI), NEAMI (HASI and Community Living Supports (based on the same model of care and has the same funding body as HASI)), and Aftercare (Western Sydney Community Outreach (formerly PHaMS)).

Other social outpatient care for adults is provided by Catholic Care (Solo Parents) and Junaya Family Development Services. "Solo Parents", part of Family Relationship Counselling provided by Catholic Care Social Services, focusses on bereavement, grief and loss, working with adults struggling with separation and/ or loss of a spouse. Junaya's Family Development Groups include several groups aimed across all ages: specifically children, youths, and parents, including for example Circle of

Security (parents), Love Bites (youths) and Chillax (children with ADHD). An additional two MTCs provided by this team are located in the Child and Adolescents' Table.

Health related outpatient care is provided by Flourish (PCPLS), Catholic Care Social Services (Family Relationship Counselling and Gambling Counselling Counselling), and Parramatta Mission (Like Minds). The Primary Care Psychiatric Liaison Service, provided by Flourish, is a new model of care by which a psychiatrist works in ten participating GP practices on set days, building capacity, allowing the GP to nominate a suitable patient and providing support workers in a co-ordinating role. Catholic Care Social Services also provide health related outpatient care, with psychologists and other professionals providing mental health care primarily in the context of early intervention through their Family Relationship Counselling and Gambling Counselling. The Western Sydney Connections Helpline can provide a series of phone based counselling sessions. Co-located with the LHD at Seven Hills, and similar to the headspace model, Like Minds is a new service providing centre based counselling, support with physical health, and collaboration with community groups to adults with mild to moderate mental illness.

Programs available to people in Western Sydney but not meeting DESDE classification criteria include the fitness related Brightside and Uplift programs, run by the Parramatta YMCA but located just outside the region in Penrith and Camden; and the Mental Health Intervention Team, run by NSW Police and involving the training of currently active police specifically in mental health issues and communicating with people in mental health crisis.

Primary Mental Health Care Service and PMHC Suicide Prevention Service

There are 117 providers under the Primary Mental Health Care Service (PMHC), which replaces the ATAPS program in WSPHN. As this program is an activity provided by private services, it is not included in the mapping. Under this program, clients are eligible for 12 sessions a year and up to 18 sessions in exceptional circumstances. People who are at risk of suicide can access 12 sessions over a 2 month period. PMHC provides free access to psychological services by selected and appropriately qualified mental health professional for people who identify with specific disadvantaged or marginalised groups that experience barriers to accessing psychological services. It is a refined and expanded service from the previous ATAPS service model with increased flexibility to meet the needs of the individual consumer and address priority population groups. To expand this service, WSPHN is now commissioning over 35 mental health professionals who can respond within 48 hours and provide an appointment within 72 hours to referrals for people identified with an elevated risk of suicide.

Table 8. Outpatient Services WSPHN region 2019 - Availability

Provider	Name	Main DESDE Code	Other DESDE code(s)	Mobile	FTE	Town / Suburb	Area of Coverage
Aftercare	Western Sydney Community Outreach (formerly (PHaMs)	AX[F00-F99]- O5.2v		✓	8.5	Seven Hills	LGAs of Hills, Blacktown, part of Auburn*.
Catholic Care Social Services	Gambling Counselling	GX[F60- F69][e310]- O9.1			3.0*	Blacktown	No set geographical boundary of coverage

Catholic Care Social Services	Gambling Counselling	GX[F60- F69][e310]- o10.1t		NA	Parramatta	No set geographical boundary of coverage
Catholic Care Social Services	Gambling Counselling	GX[F60- F69][e310]- o10.1t		NA	Mt Druitt	No set geographical boundary of coverage
CatholicCare Social Services	Family Relationship Counselling	GX[Z55- Z65][e310]- O9.1g		4.0*	Blacktown	No set geographical boundary of coverage
CatholicCare Social Services	Family Relationship Counselling	GX[Z55- Z65][e310]- o10.1gt		NA	Parramatta	No set geographical boundary of coverage
CatholicCare Social Services	Family Relationship Counselling	GX[Z55- Z65][e310]- o10.1gt		NA	Mt Druitt	No set geographical boundary of coverage
CatholicCare Social Services	Solo Parents	AX[Z55-Z65]- o9.2s		1.0	Parramatta	No set geographical boundary of coverage
Connections Western Sydney Helpline	Helpline	AX[F00-F99]- O10.2ebv		NA	0	WSPHN region
Flourish (formerly PRA & RF)	Housing and Accommodation Support Initiative (HASI)- Western Sydney	AX[F00-F99]- O5.2.2	✓	19.0	Seven Hills	WSLHD
Flourish (formerly PRA & RF)	Primary Care Psychiatric Liaison Service	AX[ICD][F00- F99]- O10.1qtlv		0.6	Toongabbie	WSPHN region
Flourish (formerly PRA & RF)	Primary Care Psychiatric Liaison Service	AX[ICD][F00- F99]- O10.1qtlv		0.6	Greystanes	WSPHN region
Flourish (formerly PRA & RF)	Primary Care Psychiatric Liaison Service	AX[ICD][F00- F99]- O10.1qtlv		0.6	Castle Hill	WSPHN region
Flourish (formerly PRA & RF)	Primary Care Psychiatric Liaison Service	AX[ICD][F00- F99]- O10.1qtlv		0.6	Carlingford	WSPHN region
Flourish (formerly PRA & RF)	Primary Care Psychiatric Liaison Service	AX[ICD][F00- F99]- O10.1qtlv		0.6	Riverstone	WSPHN region
Flourish (formerly PRA & RF)	Primary Care Psychiatric Liaison Service	AX[ICD][F00- F99]- O10.1qtlv		0.6	Blackett	WSPHN region
Flourish (formerly PRA & RF)	Primary Care Psychiatric Liaison Service	AX[ICD][F00- F99]- O10.1qtlv		0.6	Glendenning	WSPHN region
Flourish (formerly PRA & RF)	Primary Care Psychiatric Liaison Service	AX[ICD][F00- F99]- O10.1qtlv		0.6	Seven Hills	WSPHN region
Flourish (formerly PRA & RF)	Primary Care Psychiatric Liaison Service	AX[ICD][F00- F99]- O10.1qtlv		0.6	Whalan	WSPHN region
Flourish (formerly PRA & RF)	Primary Care Psychiatric Liaison Service	AX[ICD][F00- F99]- O10.1qtlv		0.6	Mount Druitt	WSPHN region

Junaya	Junaya Family Development Services	GX[Z55- Z65][e310]- O9.2g	CC[Z55- Z65][e310]- O6.2bm CA[Z55- Z65][e310]- O6.2bm		4.0	Blacktown	Blacktown LGA area.
NEAMI Merrylands	Community Living Supports	AX[F00-F99]- O5.2.2		✓	16.0	Merrylands	WSLHD
NEAMI Seven Hills	Community Living Supports	AX[F00-F99]- O5.2.2t		✓	16.0	Seven Hills	WSLHD
NEAMI Western Sydney	Housing and Accommodation Support Initiative (HASI)	AX[F00-F99]- O5.2.2		√	18.0	Lidcombe	WSLHD area-(Auburn, Lidcombe, Parramatta, Guildford)
Parramatta Mission	Like Minds	AX[F00-F99]- O9.1			3.7	Seven Hills	NA
Parramatta Mission	Personal Helpers and Mentors (PHaMs)	AX[F00-F99]- O5.2v		√	6.0	Parramatta	WS LGA

^{*} An Inner West team also have some of the Auburn PHaMS clients.

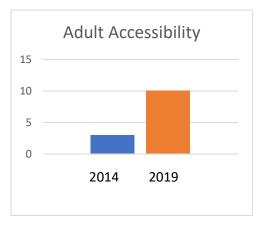
There are four health professionals providing Outpatient care: two psychiatrists working in the PCPLS team and two psychologists at Catholic Care. Additionally, Catholic Care provide other tertiary qualified professionals such as social workers and counsellors. Support workers and mental health workers comprise much of the workforce, with a significant number of peer workers in the system.

Table 9. Adult Outpatient Services - Workforce capacity

Provider	Name	Total FTE	Psychiatrists	Psychologists	Employment support	MH Workers	Support Coordinator	Support Workers	Counsellor	Peer Worker	Aboriginal Worker	Tertiary professionals	Others
Aftercare	Western Sydney Community Outreach (formerly PHaMs)	8.5						7.5		1.0			
Catholic Care Social Services	Family Relationship Counselling	4.0										4.0	
Catholic Care Social Services	Family Relationship Counselling	NA											
Catholic Care Social Services	Family Relationship Counselling	NA											
Catholic Care Social Services	Gambling Counselling	3.0		2.0					1.0				
Catholic Care Social Services	Gambling Counselling	NA											
Catholic Care Social Services	Gambling Counselling	NA											
Catholic Care Social Services	Solo Parents	1.0							1.0				
Connect ions Western Sydney Helpline	Helpline	NA											
Flourish (formerly PRA & RF)	HASI-Western Sydney	19.0				9.5				9.5			
Flourish (formerly PRA & RF)	PCPLS	0.6	0.2				0.2			0.2			
Flourish (formerly PRA & RF)	PCPLS	0.6	0.2				0.2			0.2			
Flourish (formerly PRA & RF)	PCPLS	0.6	0.2				0.2			0.2			

Plourish (Formerly PRIA & PCPLS										
Ref Pour Ref Ref	Flourish (formerly PRA & RF)	PCPLS	0.6	0.2		0.2		0.2		
Ref Polis Community PRA Ref Re	Flourish (formerly PRA & RF)	PCPLS	0.6	0.2		0.2		0.2		
Ref. PCPLS 0.0 0.2 0	Flourish (formerly PRA & RF)	PCPLS	0.6	0.2		0.2		0.2		
Ref For For So So So So So So So	Flourish (formerly PRA & RF)	PCPLS	0.6	0.2		0.2		0.2		
Ref. FOR Color	Flourish (formerly PRA & RF)	PCPLS	0.6	0.2		0.2		0.2		
Junaya Junaya Family Development Services 4.0 NEAMI Merrylands Community Living Supports 16.0 NEAMI Seven Hills Community Living Supports 16.0 NEAMI Western Sydney HASI 18.0 1.0 14.0 1.0 2.0 Parramatta Mission PHaMs 6.0	Flourish (formerly PRA & RF)	PCPLS	0.6	0.2		0.2		0.2		
NEAMI Merrylands Community Living Supports 16.0 NEAMI Seven Hills Supports 16.0 13.0 1.0 2.0 NEAMI Western Sydney HASI 18.0 1.0 1.0 2.0 Parramatta Mission PHaMs 6.0 6.0	Flourish (formerly PRA & RF)	PCPLS	0.6	0.2		0.2		0.2		
NEAMI Seven Hills Community Living Supports 16.0 NEAMI Western Sydney HASI 18.0 1.0 Parramatta Mission PHaMs 6.0	Junaya	Junaya Family Development Services	4.0				3.0		1.0	
NEAMI Western Sydney HASI 18.0 1.0 14.0 1.0 2.0 Parramatta Mission PHaMs 6.0										
Parramatta Mission PHaMs 6.0 6.0	NEAMI Merrylands		16.0				13.0	1.0		2.0
		Living Supports Community Living								
Parramatta Mission Like Minds 3.7 0.1 3.6	NEAMI Seven Hills	Living Supports Community Living Supports	16.0		1.0		13.0	1.0		2.0
	NEAMI Seven Hills NEAMI Western Sydney	Living Supports Community Living Supports HASI	16.0		1.0		13.0	1.0		2.0

3.2.1.5 Adult Accessibility Services



Ten Accessibility BSICs were identified, compared to three teams in 2014. The business enterprises arm of Flourish provides Disability Employment Service (DES) workers at Embark Cottage and at Prestige Packing Company in Harris Park. WISE Employment also provide accessibility to employment; the majority of their clients have a mental illness, and at Mt Druitt, in house Resilience programs and an occupational rehabilitation service as a bridge to stabilization and employment are provided. One Door provides the Hospital2Home service, providing post discharge peer support for 13 weeks for people following a mental health admission at Cumberland or Blacktown Hospitals.

Figure 26. Adult Accessibility BSICs 2014 and 2019

Partners In Recovery (PIR)

A significant factor in this increase is the recoding of the five PIRs as Accessibility services. These were coded as Outpatient mobile in the previous atlas according to the care they were delivering at the time. These have now been recoded as Accessibility, the type of care for which they were primarily intended. Their previous coding was due to the additional support they had been required to provide at that time. In this Atlas, PIR have also been provided with an additional Guidance and Assessment code, as they are now supporting clients with assessments for NDIS applications. PIR will no longer be available after June 30, 2019.

Table 10. Adult Accessibility Services WSPHN region 2019 - Availability

Provider	Name	Main DESDE Code	Other DESDE code(s)	FTE	Town / Suburb	Area of Coverage
AfterCare	Partners in Recovery	AX[F00-F99]-A4v	AX[F00-F99]-I1.1v	5.0	Seven Hills	WS PHN region
Flourish (formerly PRA & RF)	Disability Employment Service - Embark Cottage	AX[F00-F99]-A5.4		0.1	Blacktown	NA
Flourish (formerly PRA & RF)	Disability Employment Service-Harris Park	AX[F00-F99]-A5.4		0.5	Harris Park	NA
Flourish (formerly PRA & RF)	Partners In Recovery	AX[F00-F99]-A4v	AX[F00-F99]-I1.1v	4.8	Seven Hills	WSPHN region
Mission Australia	Partners In Recovery	AX[F00-F99]-A4v	AX[F00-F99]-I1.1v	NA	Blacktown	WS PHN region

One Door Mental Health	Hospital 2 Home	AX[F00-F99]- A4kbv		2.3	Blacktown	Primarily WS PHN region
Parramatta Mission	Partners In Recovery	AX[F00-F99]-A4v	AX[F00-F99]-l1.1v	5.8	0	WSPHN region
Wise Employment	Mt Druitt/Blacktown	AX[F00-F99]-A5.4		5.0	Mt Druitt	Inclusive from Rouse Hill - Minchinbury-Greystanes- Baulkham Hills-Mt Druitt
Wise Employment	Parramatta	AX[F00-F99]-A5.4		5.0	Parramatta	No limit
Wise Employment	Partners In Recovery	AX[F00-F99]-A4v	AX[F00-F99]-I1.1v	NA	Auburn	WS PHN

The Accessibility Services workforce is comprised mostly of case managers and employment support workers, with some peer workers, reflecting the main types of accessibility care provided as being PIR and access to employment.

Table 11. Adult Accessibility Services WSPHN region 2019 - Workforce capacity

Provider	Name	Total FTE	Case Manager	Employment support	Peer Worker
AfterCare	Partners in Recovery	5.0	5.0		
Flourish (formerly PRA & RF)	Disability Employment Service Embark Cottage	0.1		0.1	
Flourish (formerly PRA & RF)	Disability Employment Service Harris Park	0.5		0.5	
Flourish (formerly PRA & RF)	Partners In Recovery	4.8	4.8		
Mission Australia	Partners In Recovery	NA			
One Door Mental Health	Hospital 2 Home	2.3			2.0
Parramatta Mission	Partners In Recovery	5.8	5.8		
Wise Employment	Mt Druitt/Blacktown	5.0		5.0	
Wise Employment	Parramatta	5.0		5.0	
Wise Employment	Partners In Recovery	NA			

3.2.1.6 Adult Guidance and Information/Assessment Services



Partners In Recovery (PIR) services have been provided with this code as an additional MTC in this atlas. To assist clients of PIR applying to transition to the NDIS, WSPHN has contracted additional services such as Occupational Therapists to provide some of the assessments that are required of NDIS applicants. These services are located in the Accessibility Services tables (Tables 10 & 11).

Figure 27. Adult Guidance and Information/Assessment MTCs from BSICs 2014 and 2019

3.2.1.7 Adult Self- help and Voluntary services



Four BSICs of this type of care were identified, compared to three teams in 2014. The Australian Resource Centre For Post Traumatic Stress Disorder (ARC4 PTSD) supports, advocates for and educates Australians living with PTSD and their families/carers. All staff are volunteers; it has an Advisory Board which includes clinicians (psychologist, psychotherapist) and other areas of interest.

Figure 28. Adult Self-Help/Volunteer BSICs WSPHN region 2014 and 2019

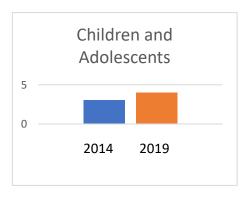
The ARC4 PTSD service includes a 12 week support group program. It provides a "link in the support chain", for people with PTSD: counselling and information regarding support in their area and in other practical support matters. Information is provided across 5 areas: LGBTIQ, military, 1st responders, Indigenous, and children (<12 years, <18 years, <25 years). FTEs include Harvey, the therapy dog. GROW provides weekly meetings which provide peer support with recovery and relapse prevention. The 12 step program used by Alcoholics Anonymous is also used here. Vinnies Compeer program is a service which matches volunteers with people with mental health issues for 1:1 social meeting/friendship/ support. All people providing support are volunteers. The usual period of time in the program is 12 months, but people may choose to continue or to change support person or to exit at that time. The Blacktown Anxiety Support Group meets monthly for adults with anxiety issues, their friends and family. The service is free and is staffed by two volunteers.

Table 12. Adult Self-Help/Volunteer Services WSPHN region 2019 - Availability and workforce capacity

Provider	Name	Main DESDE Code	FTE	Town / Suburb	Area of Coverage
Australian Resource Centre Post Traumatic Stress Disorder	ARC4PTSD	GX[F43][e310]-S2.3eg	2.8	Richmond	No limit

GROW	GROW	AX[F00-F99]-S1.3gv	0.2	Blacktown	WSLHD area (approximately)
St Vincent de Paul	Compeer program	AX[F00-F99]-S1.3	NA	Blacktown	Western Sydney is covered by the area co-ordinator
WayAhead-Mental Health Association NSW	Blacktown Anxiety Support Group	AX[F40-F48]-S1.3gv	2.0	Blacktown	No limitation

3.2.2 Children and Adolescent services



Three BSICS providing four MTCs were identified. Three MTCs of this type were identified in 2014. Act For Kids is a provider which has moved into the region. It is a therapy centre providing integrated therapy from different disciplines including Speech and Language Therapy, Occupational Therapy and psychology. It supports children 17 years and under who have had relational trauma: neglect, trauma, abuse.

Figure 29. Services for Children and Adolescents BSICs WSPHN region 2014 and 2019

Junaya Family Development Services provides Early Intervention support to vulnerable and at risk children and youths, as well as children with learning disabilities, and their families, and Family Development Groups. The 12 week Early Intervention and Prevention Program includes support such as home visiting, information and advice and case planning to children aged 0-12 years and 12-18 years and their families. These are described in the Adult Outpatient table (Table 8) as second MTCs to their Family Development Groups. Mission Australia provide three tiers of service for children and their families in the region, including short term one off case management, intensive case management for children with multiple and complex issue, and community early intervention through involvement in community events and group activities in schools tailored towards issues associated with mental health problems- such as bullying and anger management.

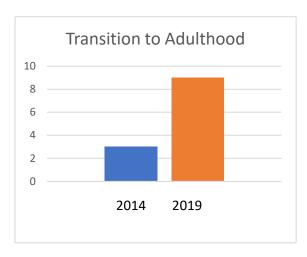
Table 13. Child and Adolescent Services WSPHN region 2019 - Availability

Provider	Name	Main DESDE Code	FTE	Town / Suburb	Area of Coverage	NMHSPF
Act For kids	Act For Kids	CX[Z55-Z65]-O9.1	4.2	Blacktown	Not formally defined	
Mission Australia	Family Mental Health Support Service Blacktown	CX[F00-F99][e310]-O9.2mv	3.0	Mt Druitt	Blacktown LGA	

Table 14. Child and Adolescent Services WSPHN region 2019 - Workforce capacity

Provider	Name	Total FTE	Psychologists	Occupational therapists	Speech therapists	MH Workers
Act For kids	Act For Kids	4.2	2.6	0.6	1.0	
Mission Australia	Family Mental Health Support Service Blacktown	3.0				3.0

3.2.3 Transition to Adulthood services



We have identified 11 teams (nine BSICs, two OCTs) providing 15 MTCS to the Transition to Adulthood age group. This is a significant increase from 2014, when three MTCs were identified. Two BSICs are residential: Kurinda, provided by Aftercare, provides residential support for people aged 14-24 with a diagnosed mental illness. Support provided includes goal setting, promoting independence, and living skills. The average length of stay is 1.5-2 years; but this is dependent on factors such as support needs and age.

Figure 30. Transition to Adulthood Services from BSICs WSPHN region 2014 and 2019

Support at Kurinda ranges from high support through to independent: people move through these levels of support as appropriate to their need. BEAT (Blacktown Early Access Team) and headspace provide clinical support and residents must be linked in with a clinical service. The other residential service is the Young People's Program which is part of the Specialised Homelessness service provided by Mission Australia. This program has large properties in Doonside (2), Mt Druitt (1) and Hills District (2). Properties are staffed over extended hours but not 24 hours. A high percentage of those who are accommodated in the Doonside and Mt Druitt properties have mental health issues and are overseen by the Mental Health Team.

The headspace program has expanded significantly, with three teams across the region, as well as the Early Psychosis Program operating from Mt Druitt and Parramatta. The Early Psychosis Program provides three MTCs at each centre including a Continuing Care Team, Mobile and Assessment Team and Functional Recovery Team. The Mobile and Assessment Team provides acute initial assessment and re-assessment following change, can provide care within 72 hours and is available 365 days. The Functional Recovery Team is run by a psychologist. Its core areas are vocational support, educational support, with GP programs and various psycho-social programs based on need: for example, relationships, or transport training. They work closely with other teams and include peer workers. The

Continuing Care Team is based at each site and provides long term case management and psychological intervention.

The Youth Team at Cumberland Multicultural Community Centre provides an Adolescent Counselling Service targeted at the 12-18 year old age group, and their families. Flourish provides Youth Community Living Supports service, an early intervention team which provides mostly outreach support to help young people stay in school, go back to school, keep up with homework, and maintain social connections. The service is for young people aged 16-25 years, who must be linked with case management.

Table 15. Transition to Adulthood Services WSPHN region 2019 - Availability

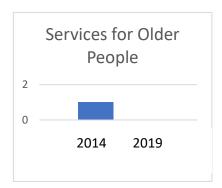
Provider	Name	Main DESDE Code	Other DESDE code(s)	Beds/Places	FTE	Town / Suburb	Area of Coverage
Aftercare	Kurinda Adolescent Service	CY[F00-F99]- R8.2		10	9.0	Seven Hills	No limit
Cumberland Multicultural Community Services	Youth Team Adolescent Counselling and support	CY[Z55- Z65][e310]- O9.1			3.0	Granville	Cumberland LGA
Flourish (formerly PRA & RF)	Youth Community Living Supports	TA[F00-F99]- O6.2			3.5	Seven Hills	Blacktown LGA area
Mission Australia	Specialised homelessness service-Young People's Program	TA[Z59][F00- F99] R9.2			3.0	Doonside	NA
Mission Australia	Specialised homelessness service-Young People's Program	TA[Z59][F00- F99]-R9.2t			NA	Hills	NA
Mission Australia	Specialised homelessness service-Young People's Program	TA[Z59][F00- F99]-R9.2t			NA	Mt Druitt	NA
Parramatta Mission	headspace Castle Hill	CY[F00-F99]- O9.1			2.4	Castle Hill	NA
Parramatta Mission	headspace Mt Druitt	CY[F00-F99]- O9.1			7.9	Mount Druitt	NA
Parramatta Mission	headspace Parramatta	CY[F00-F99]- O9.1			5.7	Parramatta	NA
Parramatta Mission	headspace Youth Early Psychosis Program	CY[F20-F29]- o6.1mt	CY[F20-F29]- o9.1gqt CY[F20- F29]-o2.1t		15.0	Parramatta	NA
Parramatta Mission	headspace Youth Early Psychosis Program	CY[F20-F29]- O6.1m	CY[F20-F29]- O9.1gq CY[F20- F29]-O2.1		25.0	Mt Druitt	residence within one hour of Mt Druitt

The workforce in services for this age group is varied, as would be expected from the variety of services, and includes both health and social related support. Headspace provides most of the workforce here with a variety of tertiary qualified professionals, including a large number of health professionals.

Table 16. Transition to Adulthood Services WSPHN region 2019 - Workforce capacity

Provider	Name	Total FTE	GP	Psychologists	Employment support	MH Workers	Peer Worker	Others
Aftercare	Kurinda Adolescent Service	9.0				9.0		
Cumberland Multicultural Community Services	Youth Team Adolescent Counselling and support	3.0		2.0				1.0
Flourish (formerly PRA & RF)	Youth Community Living Supports	3.5				2.0	1.5	
Mission Australia	Specialised homelessness service- Young People's Program- Doonside	3.0						3.0
Mission Australia	Specialised homelessness service- Young People's Program-Hills	NA						
Mission Australia	Specialised homelessness service- Young People's Program-Mt Druitt	NA						
Parramatta Mission	headspace Castle Hill	2.4	1.0		0.2			1.2
Parramatta Mission	headspace Mt Druitt	7.9			0.2			7.7
Parramatta Mission	headspace Parramatta	5.7			0.3			5.4
Parramatta Mission	headspace Youth Early Psychosis Program Parramatta	15.0						15.0
Parramatta Mission	headspace Youth Early Psychosis Program Mt.Druitt	25.0						25.0

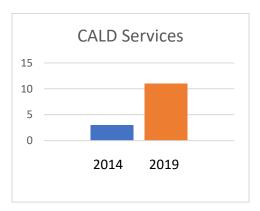
3.2.4 Services for Older People



We did not identify any services specifically providing mental health care to people aged 65+ in the region. One team of this type was identified in 2014. The Mens' Shed in Granville provides opportunities for men, especially older men to socialize, work on projects and participate in outings and supports some people with mental health issues, however it does not specifically provide mental health support.

Figure 31. Services for Older People MTCs from BSICs WSPHN region 2014 and 2019

3.2.5 Services for Culturally and Linguistically Diverse populations



We have identified 16 MTCs provided by 12 teams (11 from BSICs, five from OCTs) for people from Culturally and Linguistically Diverse (CALD) populations, significantly more than was identified in 2014. The NSW Service for the Treatment and Rehabilitation of Torture and Trauma Survivors (STARTTS) provides 15 of the 16 MTCs, including both health and social related care.

Figure 32. Services for CALD populations BSICs WSPHN region 2014 and 2019

STARTTS provides culturally relevant psychological treatment and support and community interventions, to help people and communities heal the scars of torture and refugee trauma, and rebuild their lives in Australia. STARTTS also fosters a positive recovery environment through the provision of training to services, advocacy and policy work. In the WSPHN region, STARTTS teams are based at Auburn and Blacktown. The Direct Services BSIC we have coded at Auburn operates functionally as three teams. One Door provides the other CALD BSIC, the Auburn Bilingual Mental Health Support Worker Program. Bilingual support workers help connect people with services and also provide education sessions with community groups in their own language. Additionally, the Western Sydney Community Outreach team, provided by Aftercare (Table 8), includes a humanitarian support worker who works with refugees and migrants.

Table 17. Services for CALD Communities WSPHN region 2019 – Availability

Provider	Name	Main DESDE Code	Other DESDE code(s)	FTE	Town / Suburb	*Area of Coverage
One Door Mental Health	Auburn Bilingual Mental Health Support Worker Program	AX[F00-F99]- A5.3v		1.8	Auburn	Auburn and surrounding suburbs, Cumberland LGA
NSW Service for the Treatment and Rehabilitation of Torture and Trauma Survivors (STARTTS)	Clinical Team Auburn	AX[F43][Z55- Z65]-O9.1	CC[Z55-Z65]- O9.1g GX[Z55- Z65]-O9.1s	5.2*	Auburn	Statewide
STARTTS	Clinical team Blacktown	AX[F43][Z55- Z65]-o9.1t	CC[Z55-Z65]- o9.1gt GX[Z55- Z65]-o9.1st		Blacktown	Statewide
STARTTS	Community Services- Community Development	GX[Z55-Z65]- O9.2g		3.0	Auburn	Statewide
STARTTS	Community Services- Families in Cultural Transition	GX[Z55- Z65][e310]- O9.2bg		2.5		Statewide
STARTTS	Community Services- School Liaison Team	CX[Z55-Z65]- O9.1gv		1.0	Auburn	Statewide
STARTTS	Community Services- School Liaison Team	CX[Z55-Z65]- o9.1gtv		1.0	Blacktown	Statewide
STARTTS	Community Services-Youth Team	CY[Z55-Z65]- O9.2g		1.5	Auburn	Statewide
STARTTS	Direct Services Auburn	GX[Z55-Z65]- O9.1		16.8	Auburn	Statewide
STARTTS	Direct Services Blacktown	GX[Z55-Z65]- O9.1		5.3	Blacktown	Statewide
STARTTS	Neurofeedback	AX[F43]-O8.1		1.0*	Auburn	Statewide
STARTTS	Neurofeedback	AX[F43]-o8.1t			Blacktown	Statewide

^{*}Workforce is aggregate of primary and satellite team

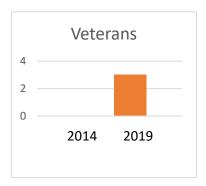
A varied workforce provides care to this diverse population, many of whom have significant trauma in their backgrounds. The workforce includes health professionals, culturally specific mental health workers, allied health and other workers such as Life Coaches, Traditional Chinese Medicine Therapists and nutritionists

Table 18. Services for CALD communities WSPHN region 2019 - Workforce capacity

Provider	Name	Total FTE	Educator	Psychiatrists	Psychologists	Social Worker	Physiotherapists	MH Workers	Counsellor	Registrar	Others
One Door Mental Health	Auburn Bilingual Mental Health Support Worker Program	1.8				1.0					0.8
STARTTS	Clinical Team Auburn	5.2*		0.2	1.0		1.0		0.4	0.2	2.4
STARTTS	Clinical team Blacktown	NA									
STARTTS	Community Services- Community Development	3.0									3.0
STARTTS	Community Services- Families in Cultural Transition	2.5									2.5
STARTTS	Community Services- School Liaison Team Auburn	1.0	0.5		0.5						
STARTTS	Community Services- School Liaison Team Blacktown	1.0				1.0					
STARTTS	Community Services- Youth Team	1.5						1.5			
STARTTS	Direct Services Auburn	16.8							16.8		
STARTTS	Direct Services Blacktown	5.3							5.3		
STARTTS	Neuro-feedback	NA									
STARTTS	Neuro-feedback	1.0*			1.0						
*14/orl	force is aggregate of pr	iman, and c	atallita taar	nc							

^{*}Workforce is aggregate of primary and satellite teams

3.2.6 Veterans' Services



Three BSICs (teams) providing mental health support specifically to veterans were identified. These were provided by Open Arms. Open Arms (formerly Veterans and Families Counselling Service) is based in Surry Hills, with services in Bondi, Parramatta and Liverpool. The target population for the service is war veterans and their families, with eligibility including anyone who has served for one day of continuous military service.

Figure 33. Services for Veterans from BSICs WSPHN region 2014 and 2019

Open Arms provides four streams: Counselling, Complex Case Management (based in Surry Hills, so not included here), a Peer Support stream and a Group Program stream. These are separate teams, although counsellors, who must be either a registered or clinical psychologist or social worker with mental health accreditation, may work across these streams where needed. All streams are available to people in the Western Sydney region as part of the wider Sydney area of coverage.

Table 19. Services for Veterans WSPHN region 2019 – Availability

Provider	Name	Main DESDE Code	FTE	Town / Suburb	Area of Coverage
Open Arms	Counselling Stream	GX[F00- F99][e310]-O9.1	0.6	Parramatta	Sydney area
Open Arms	Peer Support Stream	AX[F00- F99][e310]- O9.2ke	3.0	Parramatta	Sydney area
Open Arms	Group Program Stream	AX[F00- F99][e310]-O9.2g	NA	Parramatta	Sydney area

Table 20. Services for Veterans WSPHN region 2019 - Workforce capacity

Provider	Name	Total FTE	Psychologists	Peer Worker
Open Arms	Counselling Stream	0.6	0.6	
Open Arms	Group Program Stream	NA		
Open Arms	Peer Support Stream	3.0		3.0

3.2.7 Gender specific Services



Three gender specific BSICs (teams), providing four Main Types of Care (MTCs) were identified. All were providing care specifically for women, or women and girls. Flourish provide the Women and Children's Program for women with mental health issues (diagnosis not necessary), who are homeless or at risk of homelessness, with children in their care. This program has been operating since 2008. Flourish manages the tenancies in six villas owned by the Land and Housing Corporation to provide short term intensive residential support (formerly Charmain Clift Cottages).

Figure 34. Gender Specific MTCs from BSICs WSPHN region 2014 and 2019

Support is both individual and group, and includes a psychiatric clinic held once a fortnight onsite, with a perinatal psychiatrist and Clinical Nurse Consultant (CNC) from Westmead Hospital Psychiatric Department. Flourish also provide a lower level of support to women in transitional accommodation (18 month leases) owned by Womens' Housing and Wentworth Housing, as well as outreach support to women in their own or private accommodation. The WASH House in Mt Druitt provides ten sessions of counselling as well as case co-ordination to women in the Blacktown LGA area. Women supported by this service have a history of trauma, including but not limited to domestic violence, sexual assault; also, homelessness, anxiety, depression. The Blacktown Women's and Girls' Health Centre provides holistic support to women and girls living or working in the Blacktown LGA region. This includes counselling and case management, family planning, domestic violence support, naturopathy, masseur services, and legal support among other services. Presenting issues for counselling include domestic violence, trauma, sexual assault, disordered eating, transitional issues, relationship issues; with school age girls includes bullying, school non- compliance.

Table 21. Gender Specific Services WSPHN region 2019 - Availability

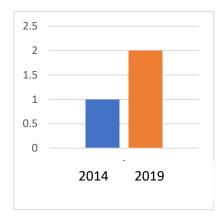
Provider	Name	Main DESDE Code	Other DESDE code(s)	Beds/Places	FTE	Town / Suburb	Area of Coverage
Blacktown Women's and Girl's Health Centre	Counselling	GX[F][Z55-Z65]- O9.2m			2.0	Blacktown	Blacktown LGA region
Flourish (formerly PRA & RF)	Women and Children's Program (formerly Charmian Clift Cottages)	GX[F][F00- F99][Z59][e310]- R8.2	GX[F][F00- F99][Z59][e310]- O5.2	6 villas	13.2	Blacktown	Statewide
Women's Activities and Self Help House	WASH House	AX[F][Z55-Z65]- O9.2bmv			2.3	Mount Druitt	Blacktown LGA

The workforce for gender specific services in WSPHN includes health and social related professionals, with a range of professional backgrounds including social work, early childhood education, alcohol and other drugs and psychology.

Table 22. Gender Specific Services WSPHN region 2019 - Workforce capacity

Provider	Name	Total FTE	Psychiatrists	Nurses	Counsellor	Peer Worker	Tertiary professionals
Blacktown Women's and Girl's Health Centre	Counselling	2.0			2.0		
Flourish (formerly PRA & RF)	Women and Children's Program (formerly Charmian Clift Cottages)	13.2	0.1	0.1		4.0	9.0
WASH HOUSE	Women's Activities and Self Help House	2.3			2.3		

3.2.8 Perinatal Services



We identified three teams providing three MTC (two BSICs, one OCT) supporting women and their families during the perinatal period, compared to one service identified in 2014. St John Of God Health Care Social Outreach provides Raphael Services which supports vulnerable, marginalized and/or disadvantaged women, their partners and families from pre-conception until the index child reaching four years of age, particularly during the ante-natal period. Raphael Services provide pre-conception counselling, pre-and post-natal counselling, and grief counselling for the loss of a baby. They have a strong awareness of intergenerational impact.

Figure 35. Perinatal Services MTCs from BSICs WSPHN region 2014 and 2019

Women referred to the Raphael Service by their GP are provided with a therapist following assessment by a psychiatrist with multidisciplinary team consultation. Raphael Services have also now established a satellite service at Mt Druitt which operates two days a week. St John of God Health Care is shortly to launch a national 1800 support line targeting fathers.

The other BSIC, Gidget Foundation, has recently moved into the region from their home base in North Sydney. Gidget Foundation supports families during the perinatal period: from conception to 12 months post natal, including those experiencing miscarriages, terminations, or stillbirths for 12 months after the event. Fathers can also be referred: a referral for the mother is not a prerequisite for the father to be referred. Referral is via GP for 10 sessions using Better Access and can continue

where further support is required. In Western Sydney, the service is currently available 2 days a week, although availability will be extending to 6 days a week.

Perinatal care in WSPHN region comprises mostly health related professionals, including psychiatry, psychology and nursing care, as well as social work.

Table 23. Perinatal Services WSPHN region 2019 – Availability

Provider	Name	Main DESDE Code	FTE	Town / Suburb	Area of Coverage
Gidget Foundation	Gidget House- Merrylands	GX[F53][e310]-O10.1	0.4	Merrylands	No limit
St John of God Health Care (Social Outreach) NSW	Raphael Services	AX[F53][e310]-O8.1v	4.6	Blacktown	WSPHN region
St John of God Health Care (Social Outreach) NSW	Raphael Services	AX[F53][e310]-o8.1vt	0.6	Mt Druitt	WSPHN region

Table 24. Perinatal Services WSPHN region 2019 - Workforce capacity

Provider	Name	Total FTE	Psychiatrists	Psychologists	Nurses	Social Worker
Gidget Foundation	Gidget House- Merrylands	0.4		0.4		
St John of God Health Care (Social Outreach) NSW	Raphael Services (Mt Druitt)	0.6		0.6		
St John of God Health Care (Social Outreach) NSW	Raphael Services (Blacktown)	4.6	1.0	1.4	1.2	1.0

3.2.9 Services for Carers

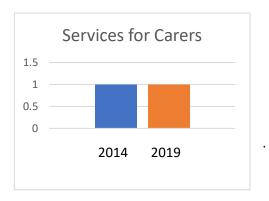


Figure 36. Services for Carers from BSICs WSPHN region 2014 and 2019

We found one BSIC providing one MTC for carers in the region. This was the same team as that identified in the 2014 atlas: The Family and Carer Mental Health Program delivered by Parramatta Mission. This team provides mobile psychosocial support linking people with GPs, education, and navigating the mental health system. It also provides counselling.

Table 25. Services for Carers WSPHN region 2019 - Availability and workforce capacity

Provider	Name	Main DESDE Code	FTE	Support Workers	Others	Town / Suburb	Area of Coverage
Parramatta Mission	Family and Carer Mental Health Program	AX[F00-F99][e310]- O6.2m	4.0	2.0	2.0	Seven Hills	0

3.3 Digital services

WSPHN provides some region specific digital services. Clevertar is an Online recovery based coaching services provided by WSPHN. Clevertar can assist with people to make behaviour modifications relating to their experiences of depression and/or anxiety. Mindguide, also provided by WSPHN, is the website and phone app of the newly developed online local mental health service directory for Western Sydney. It is an online navigation tool providing current information and details in relation to mental health services specific to Western Sydney.

4. Mapping the Psychosocial Services

In this section we present a series of maps illustrating data on the supply of mental health services in relation to selected demand-related indicators and the spatial accessibility metric.

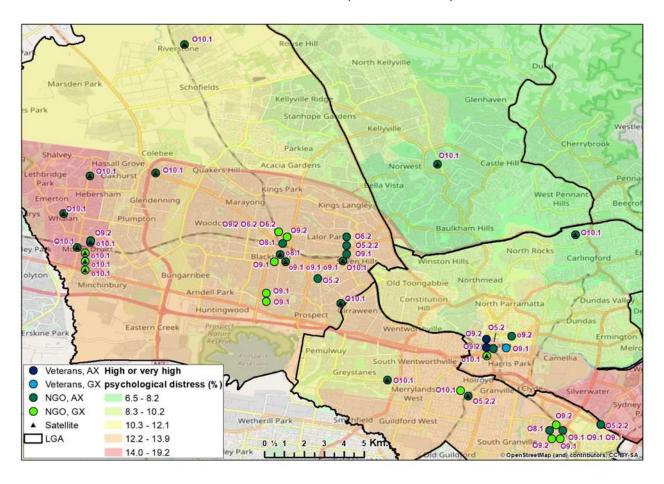


Figure 37. Psychological Distress with Outpatient Services for Adults

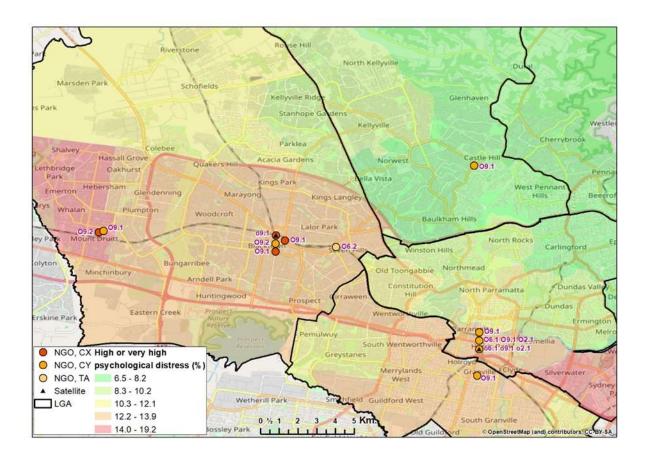


Figure 38. Psychological Distress with Outpatient Services for Children. Adolescents and Transition to Adulthood

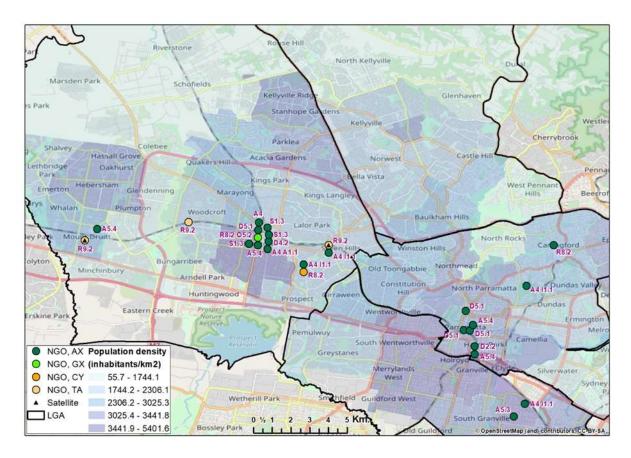


Figure 39. Population Density with Residential, Day, Accessibility and Self-Help Services

5. Workforce Capacity

In this section we present an overview of the workforce capacity in the WSPHN region. This data should be interpreted with caution as we did not get any response from some service providers. In addition, the different terminology used by the providers complicates the analysis (e.g. support facilitator, non-clinical care manager, linker facilitator, community worker). More research is needed in order to understand what the main differences between these positions are. This should be viewed as a first approximation of the data.

Of the 324.6 professional or vocational staff able to be counted, 17.9 (5.5%) were professionals with health qualifications of at least 3 years' training (AHPRA eligible professions). Another 58.9 (18%) had professional tertiary qualifications such as social work, education and occupational therapy. This group included additional psychologists who were not able to be included in the previous group as they were provided as part of an aggregate figure of professionals. 8.4 % (n= 27.2) of the workforce were paid peer workers, while the remaining 260.6 (80.3%) of the workforce was comprised of vocationally qualified professionals such as case managers, support facilitators, mental health workers, counsellors, employment support workers, and Aboriginal support workers. It also included the small number of specific professionals such as traditional Chinese medicine practitioners, music therapists, Life Training coaches, and intake workers. Some of these may also have tertiary qualifications as the minimum requirement (Certificate 4) is often stated to be exceeded.

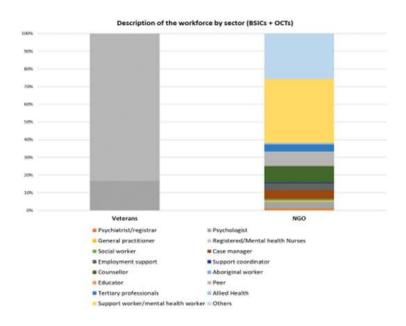


Figure 40. Description of the Mental Health Workforce (BSICs and OCTs) WSPHN Region by sector

We were able to identify Full Time Equivalents (FTEs) of 67 of the 81 teams (82.7%). In some cases, we were able to identify the total workforce of a team, but not how it was divided between satellites. Most teams (36) are small (1-5 FTE). The number of very small teams (FTE<1) (16) however, includes several satellites, whose workforce are fractions of larger teams. Two teams had more than 20 staff.

Table 26. Psychosocial Team Size

Team size (number of staff)	Number of teams BSIC
Extra small (<1 FTE)	17 (includes 11 satellites)
Small (1-5 FTE)	36 (includes 2 satellites and 3 teams whose total number is divided between 1 or more satellites)
Medium (6-20 FTE)	11 (includes 3 satellites)
Large (>20 FTE)	2

6. Relationship of Service Provision With Identified PHN Priority Areas

The following table correlates specific services with priority areas identified by WSPHN (WentWest, 2018). As can be seen, the provision of care in several priority areas has increased between 2014 and 2019. Services providing support for people with mild to moderate illness and moderate to severe illness in particular are relevant to the provision of stepped care.

Table 27. Services Corresponding to WSPHN Priority Areas

WSPHN identified priority target groups	2014 (Services for specific populations in	2019 (Services for specific populations in
Maternal and perinatal mental health	italics) St John of God Health Care (Social Outreach)-Raphael Services	italics) St John of God Health Care (Social Outreach)-Raphael Services Gidget Foundation
Children and young people	Junaya Family Development Service Mission Australia Family Mental Health Support Service headspace Kurinda Adolescent Service Blacktown Women's and Girls' Health Service Hills Community Care Mental Health respite 2Realise	Junaya Family Development Service Mission Australia Family Mental Health Support Service headspace Kurinda Adolescent Service Blacktown Women's and Girls' Health Service Act For Kids Cumberland Youth Team Flourish Youth Community Living Support STARTTS Flourish Women and Children's program headspace Youth Early Psychosis Program
Dementia and aged care	Men's Shed	
Aboriginal and Torres Strait Islander peoples		
Culturally and linguistically diverse (CALD) community (refugees and migrants)	STARTTS SydWest Multicultural Services Inc	STARTTS One Door Auburn Bilingual Mental Health Support Worker Program
People who identify as lesbian, gay, bisexual, transgender, intersex, or queer (LGBTIQ)		
People experiencing homelessness		Mission Australia Specialised Homelessness Service-Young People's Program
People experiencing mild to moderate mental illness-	CatholicCare Black Dog Reach Program Compeer headspace St John of God Health Care (Social Outreach)-Raphael Services WASH House Blacktown Women and Girls' Health Centre STARTTS Men's Shed Enterpraise	CatholicCare Social Services Family Relationship Counselling CatholicCare Social Services Gambling Counselling St Vincent de Paul Compeer headspace St John of God Health Care (Social Outreach)-Raphael Services WASH House Blacktown Women's and Girls' Health Centre STARTTS Western Sydney Connections Helpline

People experiencing comorbidities	UnitingCare Mental Health Family and Carer Program Uniting Care Financial Counselling Hearing Voices Mental Health Association Support group SydWest Multicultural Services Inc	Cumberland Multicultural Community Services: Youth Team Disability Employment Services- Flourish Disability Employment Services-WISE Employment GROW Western Sydney Recovery College Like Minds Blacktown Anxiety Support Group Open Arms One Door Bilingual Mental Health Support Worker Program ARC4PTSD GIDGET Foundation Primary Mental Health Care Service Primary Care Psychiatric Liaison
(i.e. mental illness and other health conditions)-		Service Elaison
People experiencing severe and complex mental illness	Partners in Recovery Kurinda Adolescent Service Personal Helpers and Mentors(PHaMs) WSLARS/Day2Day Embark Cottage Housing and Accommodation Support Initiative (HASI)	Partners in Recovery Primary Care Psychiatric Liaison Service Kurinda Adolescent Service Personal Helpers and Mentors (PHaMS) Western Sydney Community Outreach (formerly PHaMs) WSLARS Day2Day Housing and Accommodation Support Initiative (HASI) HASI Plus STARTTS clinical team including Neurofeedback Flourish Women and Children's Program Residential Mission Australia Youth Residential headspace Youth Early Psychosis Program One Door Hospital2 Home One Door Frangipani House Youth Community Living Support
Suicide prevention		PMHC Suicide Prevention Service Hospital2 Home

7. Organisational Challenges

7.1 Fragility of the System

Thirty eight, or 38.8% of the total 98 MTCs have been assigned a "v" code to indicate that they do not have organisational stability: i.e. they do not have assured funding beyond 12 months. We have identified that more than half of all adult MTCs are in this position. Day services and those providing Information and Guidance/Assessment have the highest rate of "v" codes. The Transition to

Adulthood age group, which has had one of the highest increases in provision, is also the most stable, with no services assigned this code.

Table 28. MTCs Assigned "v" Codes

Type of Care (BSICs +OCTs)	Number of v codes	Percentage of care of that type with a "v" code		
Residential (Adult)	0	0%		
Day (Adult)	5	83.3%		
Outpatient (Adult)	14	44.8%		
Accessibility (Adult)	6	60%		
Self Help/Volunteer (Adult)	2	50%		
Information/Guidance/Assessment (Adult)	5	100%		
Adult Total	32	57%		
Children and Adolescents	1	25%		
Transition to Adulthood	0	0%		
Non- Age Related Specific Populations	5	21.7%		
Total	38	38.8%		

7.2 Impact of the NDIS

Twelve service providers provided a comment on the effect of the transition to the NDIS on their service provision and service users. Their comments reflected the ongoing uncertainty and anxiety being felt in the mental health sector regarding the impact of the NDIS.

Table 29. Numbers of Service Providers Interviewed and their Perception of Working with the NDIS

Number of service Providers interidentified viewed and contacted number identified and contacted) Service Providers interinterior interior viewed and contacted and contacted)	Number of MTCs Main coded Types of with "v" Care of qualifier BSICs indicating provided funding by service instability	Service providers commenting on the NDIS transition (% of total number of	Experience and/or expectations with NDIS				
	contacted)	providers	(% of MTCs	service providers interviewed)	Mostly negative	Mostly positive	Neutral/not affected
29	22 (76%)	81	27 (33%)	12	9	1	2

Table 30. NDIS Qualitative Data from Interviews with Service Providers

Interview Themes	Qaulitative Comments
Compatibility of NDIS with needs	Problems with NDIS concept of permanence (1 provider)
of people with mental illness	Not designed for the particular needs and characteristics of people with
	mental illness (1 provider)
Challenges for mental health	Difficult to recruit skilled workers and loss of current staff (3 providers)
workforce	Additional time in upskilling and training new staff (1 provider)
	Less job satisfaction due to change in business model (1 provider)
	More administrative based work so requiring different skill set of staff
	(2 providers)
Eligibility and planning issues	Poor knowledge of planners in psychosocial disability (3 providers)
	Some improvement in planners' knowledge (2 providers)
	People needing support not being found eligible, inconsistency of
	approvals (5 providers)-where person has a comorbidity, it is usually the
	comorbid condition that makes them eligible (1 provider)
	Lengthy process is a disincentive (1 provider)
	People having eligibility revoked in follow up plans (1 provider)
	Staff and services are trying hard to work around the system for their
	clients: for example, focusing on comorbidity, getting people to
	describe themselves on their worst day (2 providers) Additional assessment staff employed to provide assessments (1
	provider)
	Issues with Support Facilitators not being allowed to planning meetings
	despite consent being given by participant (1 provider)
	Long waiting lists cited for childrens' services (1 provider)
Service access and delivery	Less flexibility to work outside the box and also in order to lock-in
	supports to secure staffing (1 provider)
	Fewer services to link to (1 provider)
	Essentially transitioning people into a "bank" (1 provider)
	Less capacity building (1 provider)
	Poor access to case management (2 providers)
	Co-ordination of supports not providing the same level of support as
	support facilitators (1 provider)
	Anxiety around ongoing funding (1 provider)
	Funding doesn't allow for overheads (1 provider)
	Services trying to plug gaps (1 provider)
	Has made system more competitive than collaborative (1 provider)
	Concerns around regulation of the new less experienced and small
	providers (1 provider)
	"Only consistent thing has been inconsistency"" with situation still
	unclear, esp around PIR clients (1 provider)
	Difficulties with addressing issues with government (1 provider)
	One important service providing support to mothers with Learning
	Disability lost (1 provider)
Change of service model	The change from a recovery model to a business model has changed the
	relationship between service users and staff (3 providers)
	In some cases, service users accustomed to being powerless have
	issues being able to manage having access to significant funds and
	issues around entitlement and having staff at their "beck and call" (1
	provider)
	P

8. Analysis of The Gap and the Evolution of Care Provision from 2014 to 2019 in the WSPHN Region

To understand the balance between the different types of care offered in an area, a radar tool is used to visually depict the mix of service types (pattern of care) in each particular area. Each of the 23 points on the radius of the diagram represents the number of MTC for a particular group of care types per 100,000 adults. To examine the patterns of care, services are first grouped by the MTC and then subsequently grouped by acuity, mobility and other distinguishing factors.

Table 31. Service Group for Pattern of Care Analysis

Group	DESDE codes
R: ACUTE HOSPITAL	1 11111
	R1, R2, R2.1, R2.2, R3.0
R: NON ACUTE HOSPITAL	R4, R6
R: ACUTE NON HOSPITAL	R0, R3.1, R3.1.1, R3.1.2
R: NON ACUTE NON HOSPITAL	R5, R7
R: OTHER NON HOSPITAL	R9, R9.1, R9.2, R10, R10.1, R10.2, R12, R13, R14
R: HIGH INTENSITY NON HOSPITAL	R8, R8.1, R8.2, R11
D: ACUTE HEALTH	D0, D0.1, D0.2, D1, D1.1, D1.2
D: NON ACUTE HEALTH	D4, D4.1, D8, D8.1
D: WORK RELATED	D2, D2.1, D2.2, D3, D3.1, D3.2, D6, D6.1, D6.2, D7,
	D7.1, D7.2
D: OTHER	D4.2, D4.3, D4.4, D5, D5.1, D5.2, D8.2, D8.3, D8.4, D9,
	D9.1, D9.2, D10
O: ACUTE MOBILE HEALTH	01, 01.1, 02, 02.1
O: ACUTE NON MOBILE HEALTH	03, 03.1, 04, 04.1
O: NON ACUTE MOBILE HEALTH	05, 05.1, 05.1.1, 05.1.2, 05.1.3, 06, 06.1, 07, 07.1
O: NON ACUTE NON MOBILE HEALTH	08, 08.1, 09, 09.1, 010, 010.1
O: NON ACUTE NON MOBILE NON HEALTH	08.2, 09.2, 010.2
O: NON ACUTE MOBILE NON HEALTH	05.2, 05.2.1, 05.2.2, 05.2.3, 06.2, 07.2
O: ACUTE NON MOBILE NON HEALTH	03.2, 04.2
O: ACUTE MOBILE NON HEALTH	01.2, 01.2.1, 01.2.2, 02.2
O: OTHER NON ACUTE	011
A: OTHER	A0, A1, A2, A3, A5, A5.1, A5.2, A5.3,
A: CARE COORDINATION	A4, A4.1, A4.1.1, A4.1.2, A4.2, A4.2.1, A4.2.2, A4.2.3
A: EMPLOYMENT	A5.4
A: HOUSING	A5.5

Overall, service availability in the WSPHN region has increased since 2014, although the pattern of care is very similar, meaning the increase has been in number rather than types of services. The exception to this expansion is in Outpatient mobile non- acute care, which has decreased since 2014, a change partly attributable to the recoding of PIR teams from Outpatient in 2014 to Accessibility in 2019. Correspondingly, Accessibility care has seen one of the largest increases in availability. The other notable increase in availability is in Outpatient non- acute non- mobile, an increase significantly contributed to by the Flourish PCPLS team which operates in 10 General Practices across the region.

The gaps identified in 2014 for adults with mental illness were:

- 1) Non-hospital acute and sub-acute care
- 2) Acute and non-acute health care day-related

3) Low availability of day care centres related to employment

In 2019, we have identified gaps in the provision of

- 1) Residential care for adults
- 2) Accessibility to housing;
- 3) Acute and non- acute work and health related daycare
- 4) Acute social related outpatient care

Regarding services for other age groups, services for adolescents and young adults have increased in availability, while the rate of services for children is the same. While one service for older people was identified in 2014, we were not able to identify any care of this type in 2014. Service availability for specific populations has increased, with a good rate of availability of CALD services, and an additional perinatal service identified. We identified services for veterans in this atlas. Services for carers remain the same as that in 2014. Figures 41 and 42 show the balance of care of all MTCs (BSICs and OCTs), and of MTCs of BSICs only, across the main branches of care in WSPHN in 2019, illustrating the gaps in Day and Residential care, and the imbalance between social and health related Outpatient care. Figure 43 provides a visualisation of the changes in care in BSICs in 2014 and 2019. We can see in this figure the overall increase in care, particularly Accessibility and health related Outpatient care, as well as the shift from social to health related Outpatient care.

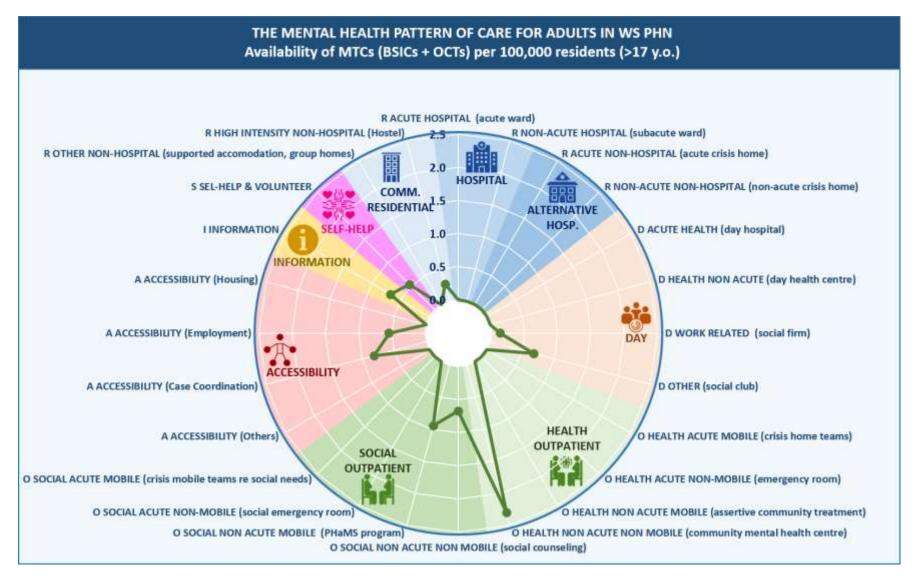


Figure 41. Pattern of availability of MTCs (BSICs + OCTs) in WSPHN region for adults with a lived experience of mental illness 2019

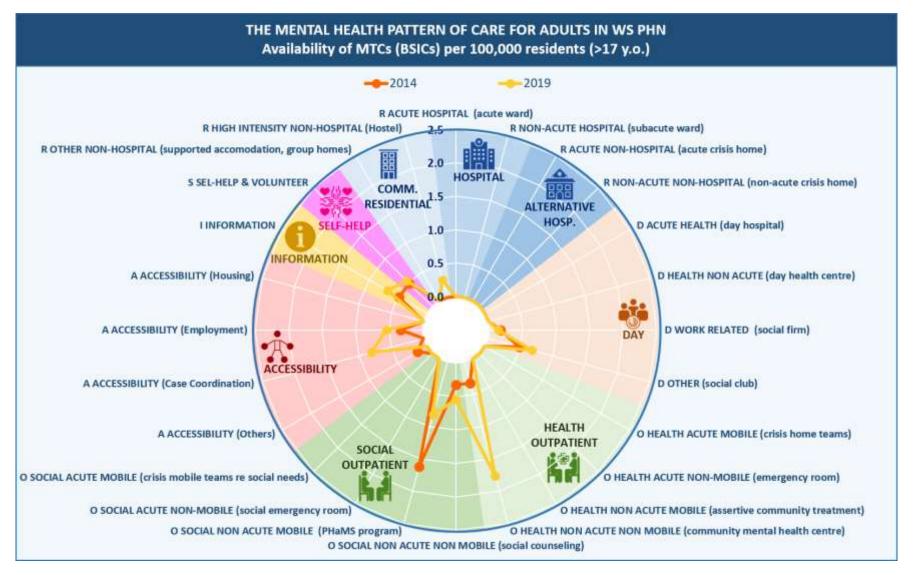


Figure 42. Pattern of Availability of MTCs (BSICs) in WSPHN region for adults with a lived experience of mental illness 2014 and 2019

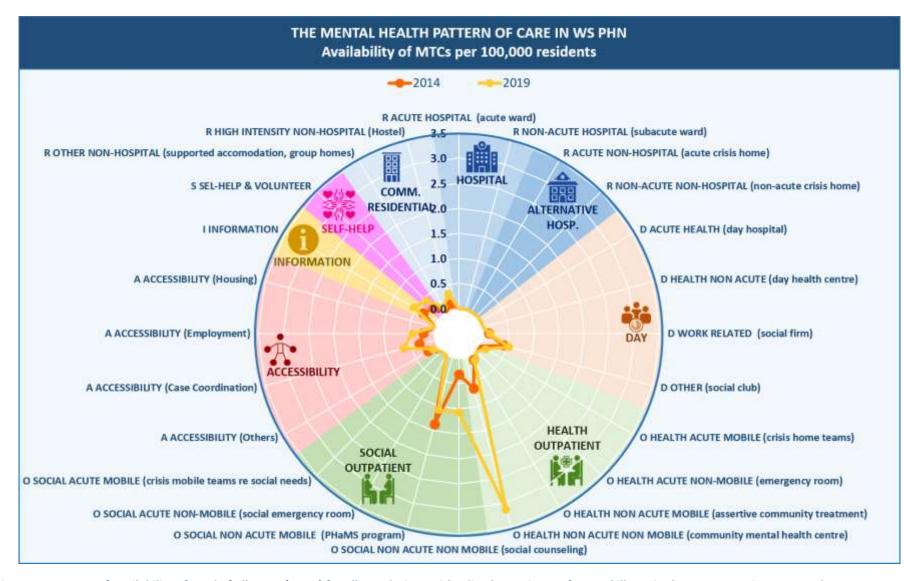


Figure 43. Pattern of availability of total of all MTCs (BSICs) for all populations with a lived experience of mental illness in the WSPHN region 2014 and 2019

9. Discussion

This is the first Atlas in Australia providing an analysis of the evolution of a mental health system with a focus on psychosocial services, where, due to the recent major system reform of the establishment of Primary Health Networks (PHNs) and the introduction of the National Disability Insurance Scheme (NDIS), a high degree of change could be expected. The use of Integrated Atlases in the assessment of system change and development has previously been tested in some areas of Europe: for example, in Catalonia, from 2002 to 2010 (Fernandez et al., 2015). Evaluating system reform requires detailed knowledge of the existing system structure in order to monitor how these services change over time. This type of monitoring has previously contributed to the development of regional and national mental health action plans both in mental health and in intellectual disability (Romero-López-Alberca, 2019).

In this context, it is important to take a systems approach, considering those qualities of complex systems which are inherent to healthcare, particularly mental health care. Core characteristics of complex systems include the number and range of elements and of levels of interaction, and the openness of elements in the system to the effects of the behavior of other elements (Plsek & Greenhalgh, 2001). The ever-shifting nature of the environment both within and external to a mental health system, the capacity of elements within the system to respond and adapt effectively to the changes around them, or to "self-organise" or "self-adapt", becomes crucial to their survival, and to the overall resilience of the system. Resilience in health systems, while an imprecise concept, has been broadly viewed as an ability to absorb disruption. It encompasses certain characteristics, including self-regulation, adaptiveness, integration, diversity, and self-awareness (Turenne et al., 2019). Thus, monitoring how a system evolves, especially during periods of intense or continual disruption such as that which has characterized mental health care in recent times, provides those interested in the effectiveness of its functioning and its overall direction with important indicators as to where they should direct their attention.

WSPHN region. The WSPHN region is an enormously diverse area in the midst of rapid growth and change, demographically, socio-economically and in its infrastructure. Coupled with the impact of significant reforms underway in the mental health arena, this presents great challenges for service planning to meet current and anticipated community need. The new and planned infrastructure in the region has the potential to provide improved employment and economic opportunities and increase accessibility to services, particularly through the upgraded transport network. At the same time, rapid growth could place significant strain on existing services, including core services such as housing and health. Development of the area just to the north of the current population centres of Parramatta, Blacktown and Mt. Druitt, and of the largely non-residential area of Marsden Park has implications for the distribution of services, geared for current demographic conditions. The rapid pace of change in the area as a whole, including the urbanisation of previously rural areas and the potential for increased housing demand leading to higher density housing, has implications for the mental wellbeing of the region's residents: the development of universally accessible green spaces, in projects like the Parramatta green grid, will be important. Understanding the basic structure of the system: what services are available, where they are, and what they are doing; and monitoring how this changes over time in response to changing policy and demand can provide important information to planners to underlie other information, such as service utilisation and finance flows, to meet the needs of this region as it moves forward.

Demographic characteristics. The region is characterised by generally high, but unevenly distributed rates of population density and of people born abroad, particularly from non- English speaking locations; as well as high rates of social indicators relevant to mental health such as unemployment, low incomes, Index of Relative Socio-economic Disadvantage and psychological distress. These population characteristics are more concentrated in the urban areas around Parramatta, Blacktown and Mt Druitt. The region overall has a high CALD community, but with significant geographic variation: for example, 27% of the population in the Hills Shire were born in non-English speaking countries, while in the Cumberland area, the figure is 49%. when it comes to mortality for people from ethnic minorities with severe mental illness. Similarly with unemployment and other relevant indicators: the more prosperous area of Canada Bay in the east has an unemployment of 2.7%, IRSD of 1074 and rate of psychological distress of 8.4, while Mt Druitt in the west has an unemployment rate of 19.8%, IRSD of 824 and rate of psychological distress of 19.2(Torrens University Public Health Information Development Unit, 2019). Social fragmentation, or the degree to which people are able to access their community and feel a sense of belonging therein, is also highest around the main population centres, the south western area and in the far north of the region. Interestingly, areas of high own-group ethnic density such as those in the Cumberland area may have a protective factor countering the effects of social fragmentation for ethnic minorities with severe mental illness (Das-Munshi et al., 2019). The region also has an atypical age profile, being generally younger than the Australian and NSW averages, although again this is highly dependent on location within the region.

Service accessibility. The geolocation of services generally aligns with the above population characteristics, with most services located in the southern, highly populated and less advantaged urban areas. Services for specific population groups which have shown the highest increases in availability are those for the Culturally and Linguistically Diverse (CALD) population, located particularly around Auburn in the highly diverse Cumberland area; and for the older adolescent/young adult age group, many of which are located in the south western area including Mt Druitt, which has the lowest ageing index in the region. It is important also to bear in mind that residents particularly in the northern area of the region, may have established links with closer services in neighbouring PHNs.

Service availability. We have identified an overall increase in the number of psychosocial teams delivering care to adults with lived experience of mental illness in WS, with new providers moving into the area and increases in the number of teams provided by some of the larger providers. We have also newly identified a large number of satellite teams: ie teams that operate from an additional location to their primary location, or that operate by moving from location to location. Interestingly, only one service provider included in the first Atlas in 2014 was identified as having closed down. However, there has been a shift in the provision of care away from social care to more health related care. This is reflected in the high rate of availability of adult Outpatient health related non-mobile care and relatively high rate of health professionals in the sector, and in the decrease in social care in relation to health related care. The largest increase in service availability across the main branches of care is in non-mobile Outpatient care and Accessibility services; however increases were identified across all

main branches of care with the exception of mobile social Outpatient care (where the decrease in number of teams was related to a changed coding of PIR and corresponding increase in Accessibility).

Increases in service availability were identified in all age groups with the exception of those for older people. However, as elsewhere the population is ageing, with the rate of people aged 65 and over projected to increase from 5.7% in 2015 to 7.6% in 2025 (WentWest, 2016) and we were unable to identify any services providing support specifically to this age group. Additionally, the increase in services for the "Transition to Adulthood" age group without any increase in the care for younger children, raises questions about whether this age group is being considered as a core age group rather than as a transitional population moving from children's to adults' services, and about the degree of integration between children's and adult services. Notably, despite the marked increase in number of services, service diversity, or the number of different types of care remained very similar. This is also evident in the identified gaps in service availability being similar to that in 2014. The increase in number but not diversity of services may have implications for the resilience of the system. However, despite the identified gaps in the provision of adult residential care for adults and accessibility care related to housing; work and health related daycare; and acute social related outpatient care, some new types of service were identified, such as the Recovery College, the Primary Psychiatric Care Liaison Service as well as area specific digital or online services not coded in the DESDE system such as the Clevertar app and the MindGuide online directory.

The footprint of the larger national organisations has increased, providing 64% of all psychosocial teams in 2014 and 77% in 2019, due to the above noted entry of large providers into the region and expansion of service provision by some of the existing larger providers. This is a change which has been predicted as part of the NDIS impact. Smaller services however, have survived: in some of these, the financing sources are independent of the funding changes occurring with policy reform.

Satellite teams. We have found a total of 23 satellite teams (10 coded as BSICs, and 13 as OTCs, or secondary locations for care teams) in the WSPHN region, a pattern of care more commonly found in rural areas, and one which we have not previously identified in an urban area. This incorporates additional complexity into the system and merits further investigation, particularly in relation to accessibility and efficiency, and in view of the impact on accessibility of impending additions to public transport in the region. However, it is important to also note that accessibility issues may be complex and related not only to physical access. For example: the areas of Auburn and Blacktown, which are both serviced by public transport, also show the highest rate of people with barriers to accessing transport and services (Torrens University Public Health Information Development Unit, 2019).

Workforce. The trend towards a more health related psychosocial system was evident in the workforce, as noted above, with around a quarter of the workforce having tertiary qualifications; this can be compared to Central and Eastern Sydney (Hopman et al., 2016) where less than 10% of the NGO workforce were clinical professionals. The presence of services with a high clinical professional profile in the region such as the headspace Early Psychosis program contribute significantly to this, but it is also evident in the number of psychologists generally in the sector. However, role delineation was often unclear, with many roles potentially occupied by any of a range of professionals, as well as those vocational roles with a minimum requirement of a Certificate IV being at times filled by tertiary qualified professionals. This raises questions about the roles played by specific professional groups and how their skills are employed in mental health. Peer workers were available in many services, comprising 8.4% of the workforce. Their inclusion in care teams has been is considered important in

improving the recovery orientation outcomes for consumers (Smith-Merry, Mellifont, Gillespie, & Salvador-Carulla, 2016).

Partners In Recovery (PIR). The winding down of PIR since the previous Atlas and its imminent demise at the time of this report will mean a significant reduction in accessibility services in an already complex system. Studies on the effectiveness of PIR in this region show that despite issues with program stability caused by changing government priorities (Smith-Merry, Gillespie, Hancock, & Yen, 2015). This service has assisted in reducing the level of unmet need and promoting recovery (Hancock, Scanlan, Gillespie, Smith-Merry, & Yen, 2018). Our coding of PIR, which in 2014 was related to the extension of its role in the region to include outpatient care as needed, in this atlas is due to its addition of an assessment capacity to assist people with the transition to the NDIS. This capacity to respond to changing community need is a demonstration of self-adaptation within the system as outlined in the introduction to this discussion: that is, while the service may have deviated to some extent from its ascribed core function, it has been able to identify and effectively respond to changing need in its environment.

Relationship of service provision with identified PHN priorities. Service availability for the key population groups identified by the PHN as being of priority have increased since 2014: these include services to young people, services to the CALD population and perinatal care. Additionally, services targeting people experiencing mild to moderate and moderate to severe illness have also increased, although it is important to bear in mind the number of these with "v" codes, indicating a lack of organisational stability (see below). However, we were unable to identify any psychosocial services for the other prioritised populations of older people, the LGBTIQ community, or for adults experiencing mental illness who are homeless. Services for the ATSI population are provided in a separate annex to this report.

Organisational Challenges:

(i) Fragility of the system. Thirty-eight MTCs, or 39% of the 98 MTCs identified have been assigned a "v" code to indicate that they do not have organisational stability, reflecting a lack of robustness in the system. This is similar to our findings in the NGO sector in the ACT in 2016. This situation is typical of a 'component view' rather than a 'system thinking perspective' of the whole pattern of care at the local level and how the different components are related (Thornicroft & Tansella, 2013). The problem with this approach is that it results in a highly inefficient use of scarce resources, as investment is made in new services, whilst the core services are absent, or not appropriately resourced. This leads to a "reactive", rather than a "proactive" system, based on long term planning informed by local evidence. From a provider point of view, this lack of organisational stability compromises their ability to plan ahead, develop innovative services and maintain an appropriately qualified workforce. Most fragile was the Daycare provision, with five of the six available services earning this code, followed by Accessibility services and then social mobile Outpatient care. Day services and Outpatient mobile care comprise an important part of services for the 'missing middle", or services for those people whose illness requires more than the low level care of the mildly unwell, but who are not acutely or severely unwell and requiring acute or emergency support. Services in the missing middle play an important role in preventing acute admissions through the provision of moderate to high level of continuing support.

(ii) Impact of the NDIS. Service providers who commented on their experience with the transition to the NDIS expressed that the ongoing change in the system was creating an environment of uncertainty and anxiety, or as one provider put it "the only thing that is consistent is inconsistency". Although we have identified a higher number of services than in the previous atlas, it is important to note that almost half of these have "v" codes, with some services imminently closing, and others without the certainty of ongoing funding beyond the next 12 months, this system fragility contributing to an overall perception of service scarcity. Previous findings (Smith-Merry et al., 2018) regarding the transition to the NDIS were largely echoed here. Concerns remain about the compatibility of the NDIS with the philosophy of recovery and with the issues affecting people with psychosocial illness, and the effect of this on service users in terms of eligibility, appropriateness of plans, and their relationship with frontline workers and with providers. For the service providers themselves concerns included continuing uncertainty around ongoing funding, and the effects of the change to a business model on workforce skills and retention and on the potential for collaboration.

Implications in relation to models of care

Recovery model: a report into the types of care best supporting the recovery model identified that this included consumer led or co-led services, community based recovery-oriented crisis support, services providing individualised and localised care, transition support programs, individualised vocational placement and support programs and social enterprises. PIR was also shown to promote recovery, with its ability to engage people even in the stages of early recovery (Hancock, Smith-Merry, Jessup, Wayland, & Kokany, 2018). For CALD communities, and in line with the research suggesting that higher own-group ethnic density neighbourhoods have a more positive effect on mental health (Das-Munshi et al., 2019), programs staffed with culturally specific staff and peer support workers were shown to be more successful at engaging with this population (Smith-Merry et al., 2016). We have found examples of most of these types of care in the WS region, including services providing peer led support (those coded as Self help/Volunteer), providing some structural support to a recovery orientated system. However, the stability of affordable support services was regarded as a basic need by people in the early stages of recovery (Hancock, Smith-Merry, et al., 2018) so the instability of the system is not conducive to consolidating this support.

Stepped care. The stepped care model is based on a person-centred approach, with the availability of services appropriate to individual level of need. However, a smooth transition between the levels of care assumes an underlying integrated system structure, foundational to which is a core provision of support bridging the gaps between the "steps". Multidisciplinary teams providing care which bridge this gap are fundamental to an integrated system as they provide the underlying structure and pathways for movement between the levels of care as needed. Without this, there is a risk of further fragmentation and siloing of care. We found that while there was increased availability of services providing care at the "mild to moderate" and "moderate to severe" level of illness, people using these services would need to transfer to other services as their condition improved or deteriorated. The concerns expressed by service providers around service continuity, workforce instability and an overall more competitive environment also have the potential to compromise system integration. In addition,

the system fragility resulting from the high number of services with a "v" code is not congruent with the stability inherent to an integrated system.

Integrated care: Regionally integrated care is widely viewed as a cornerstone of mental health care provision (Australian Government Department of Health, 2016; Commonwealth of Australia, 2017). It relies on the breaking down of silos between sectors and between levels of care, and is evidenced in the smooth transition of consumers through the system as required by their level of need. While the Atlas provides comprehensive information on service availability across all sectors, it is not intended as a measure of integration. Additional information such as finance flows and service utilisation is required. Some observations may be made however. Initiatives in the region such as the PCPLS bring together psychiatrists, GPs, nurses, and peer workers at the local level and help to build capacity at the GP level. Investigation into the role teams with satellites play in the system in terms of their links with services and populations in more than one geographical area could be useful. However, service provision in the region is highly complex, with a lack of team based services able to provide care for broad target populations to balance the number of services targeting specific populations, and counter potential siloing. The impending decrease in services providing people with support in coordinating their care in the context of this complexity also presents significant challenges to the provision of integrated care.

Limitations

- We have not included services provided by the public health sector, primary care services or services requiring a significant out of pocket cost. The inclusion of private providers in the mapping of universally accessible services could distort the results. These services could be included in a future analysis. We have also not included those whose primary target population was not mental health.
- Some services may be missing because we did not reach them. Additionally, a small number
 of services did not respond to our invitation to participate. However, we have sought feedback
 both from the PHN during the course of the project and from individual providers when
 interviewed, and we believe the majority of psychosocial services in the region have been
 included.
- The assessment of the services was made through interviews with the managers of the services. Some information may not be accurate and should be objectively confirmed (e.g. the percentage of activities made outside the office in order to be classified as a mobile service).
- We have only included services within the boundaries of the WSPHN region. We acknowledge that some services outside the area may also be used by people in the WSPHN region.

Conclusion

Mapping the service landscape is a vital prerequisite for understanding the components within it and for providing system co-ordination. Over time, service mapping can enable monitoring of the behaviour of the system and how its components interact with, and affect, each other and the system as a whole. We have mapped changes in the availability of psychosocial services in the WS region within a very dynamic socio-demographic, political and regional planning context. Service availability has increased overall and more particularly in certain populations, but the system is highly complex and lacks robustness in several areas. We did not find a decrease in service availability following the introduction of the NDIS, but we did find that the larger national organisations have established a bigger footprint in the sector, although smaller services appear to be surviving.

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Integrated Atlas of Psychosocial Care in the WSPHN region 2019 - Annexes	
The Integrated Atlas of Psychosocial Care in the Western Sydney Primary Health Network Region: Annexes	

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1. Annex 1 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:

- -the wide variability in the terminology of services and programs even in the same geographical area;
- -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,
- -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 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. 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 to 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, but comparisons should 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). They 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).

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 or care 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 1-1 Basic Stable Input of Care Criteria

Crit	Criterion		
Α	Has its own professional staff		
В	All activities are used by the same clients		
С	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	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	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.

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.

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.

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) is not provided as a part of delivery of Residential or Day service. These include outreach services. 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.

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.

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).

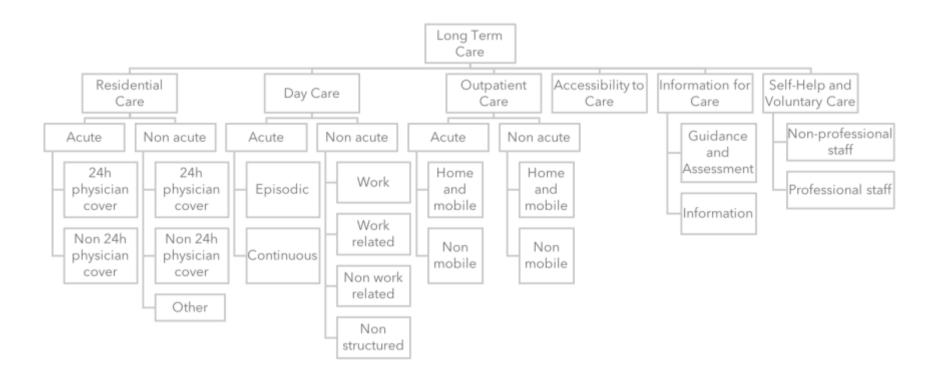


Figure 1-1 Long Term Care Main Branches of Care

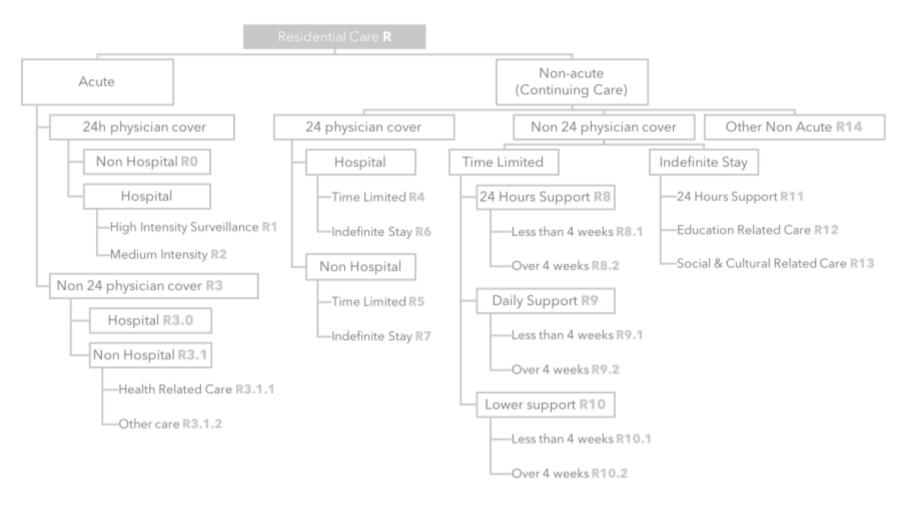


Figure 1-2 Residential Main Branch of Care

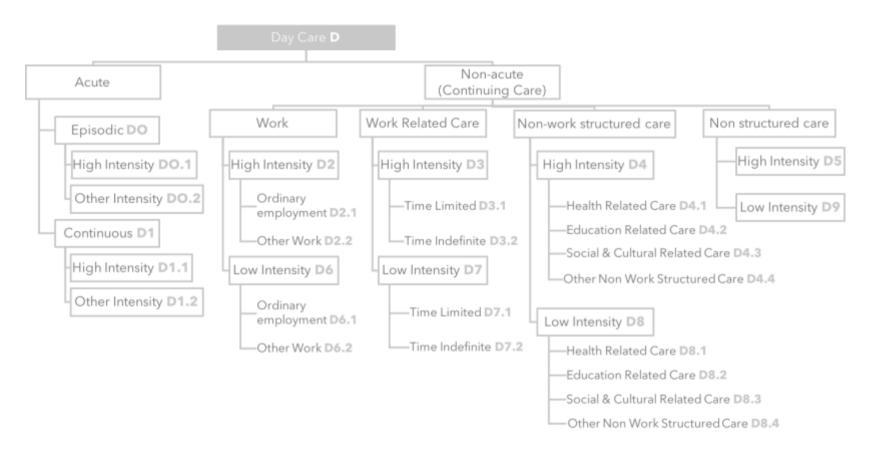


Figure 1-3 Day Care Main Branch of Care

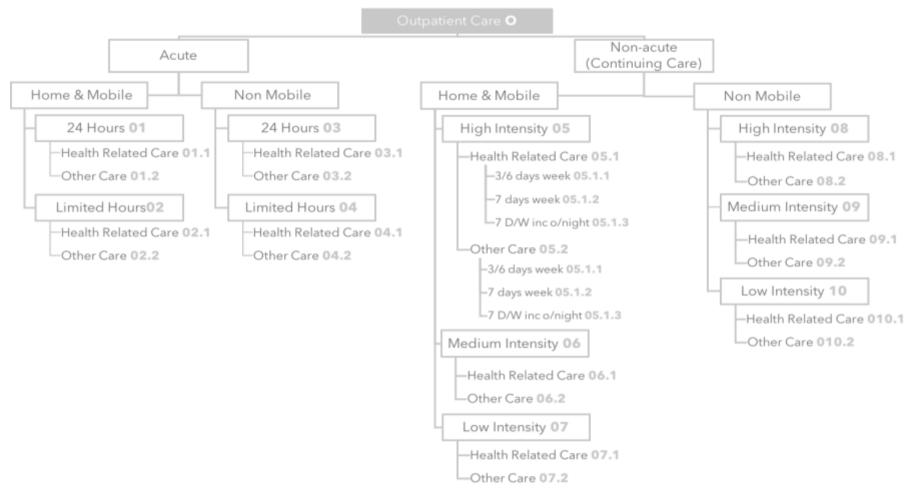


Figure 1-4 Outpatient Main Branch of Care

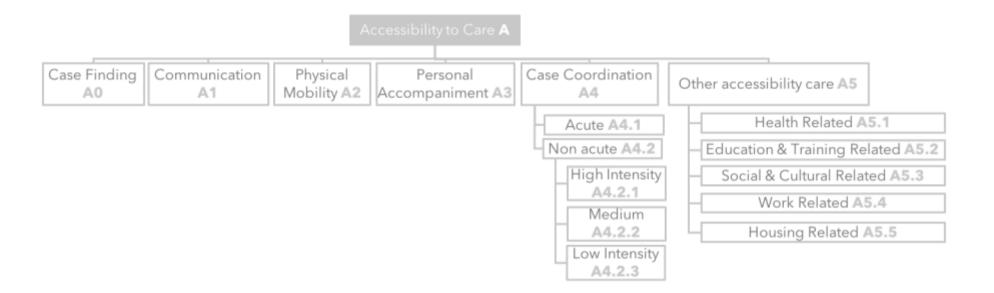


Figure 1-5 Accessibility Main Branch of Care

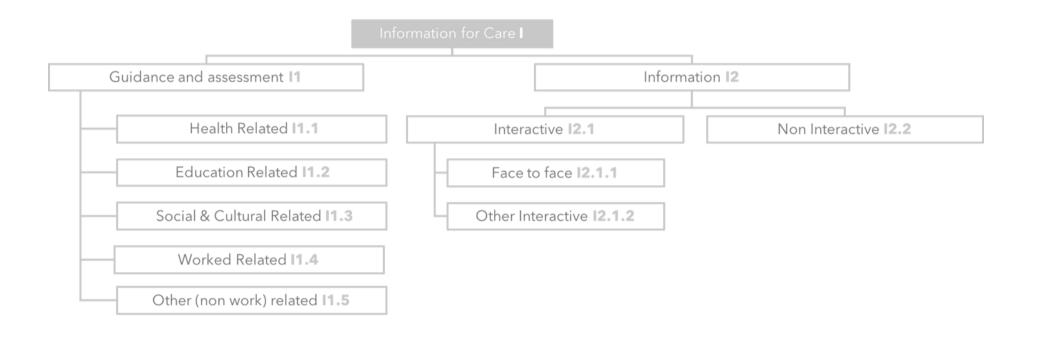


Figure 1-6 Information for Care Main Branch of Care

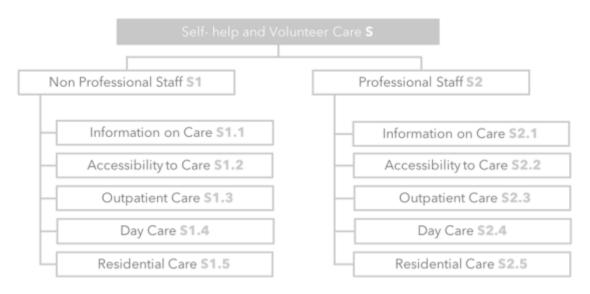


Figure 1-7 Self-help and Volunteer Main Branch of Care

Other Care Teams (OCT)

These are a minimal set of inputs organised for delivering health-related care characterised by time continuity which does not fulfil the organisational stability criteria or attributes described for a BSIC. An example are stable clinical units financed with earmarked funding under a policy provision programme separated from the general financing system of the micro-organisation (e.g. early psychosis intervention in Catalonia) and using a separate documentation due to specific monitoring by the local health agency).

A typical case of OCT are 'clinical units' within 'care teams' of general hospitals or other health-related meso-organisations (e.g. an eating disorder clinical unit within a psychiatric inpatient care team in a general hospital, or the acute emergency care function provided by the staff of the psychiatric care team at the emergency room). These are coded with lower case mtc (d1.1 etc.) to differentiate them from MTCs of BSICs.

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. That is, the primary reason for using the service is for treatment of mental ill-health. This excludes generalist services that may lack staff with specialised mental health 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.

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. Thus, an additional qualifier "v" has been added to the classification to identify services that do not have this stability of funding but whose exclusion would skew the information provided.

The service is within the boundaries of WSPHN-the inclusion of services that are within the boundaries of WSPHN 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 co- ordination of other services or system improvement, without any type of direct contact with people with a lived experience of mental ill- health, were excluded

Atlas Development Process

Phase 1: There were five key steps involved in the creation of the Integrated Atlas of Mental Health

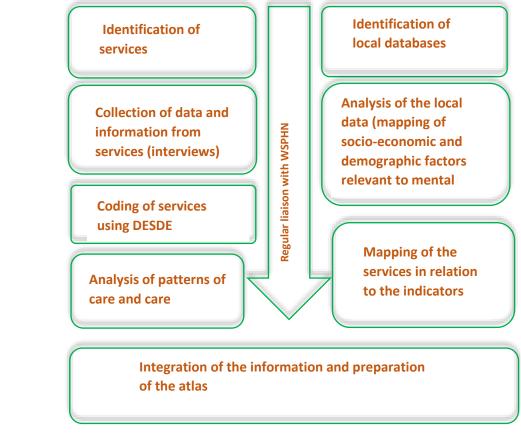


Figure 1-8 Atlas Development Process

Step 1 – Ethics and Governance Approval

The project obtained ethical approval from the HREC at Australian National University (ethics protocol 2018/536).

Step 2 - Data Collection

The first step in the development of the Atlas was to meet with the WSPHN. A preliminary list of organisations was drawn up 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 face to face and telephone interviews. Following the initial interview, additional information was on occasion sought 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.

(i) 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

CX Child & Adolescents (e.g. 0-17)

CC Only children (e.g. 0-11)

CA Only adolescent (e.g. 12 – 17)

CY Adolescents and young adults (e.g. 12-25)
```

AX Adult (e.g. 18-65)

TA Transition from adolescent to adult (e.g. 16-25)

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
- Transition to Adulthood-CY and TA
- Adults (Including services with no age specification) AX and GX

(ii) 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 [F0-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) codes between Z56-Z65 are 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, or if the service is for carers, or 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 are:

Table 1-2 ICD codes used in Integrated Atlas of Psychosocial Care of WSPHN Region

ICD			
Code	Diagnosis		
F0-F99	All types of mental disorders		
F29	Unspecified psychosis not due to a substance or known physiological condition. Includes early psychosis		
F43	Post Traumatic Stress Disorder		
F53	Puerperal psychosis; also used as proxy for peri- natal mental health disorders		
F60-69	Disorders of Adult personality and behaviour		
e310	Services for immediate family or carers		
Z55-	Persons with potential health hazards related to socioeconomic		
Z65	circumstances		
Z59	Problems related to housing and economic circumstances		

ICD – T Used where there is not a specific diagnostic group for this service or where there is a liaison service

(ii) DESDE-LTC code: The third component of the code is the core DESDE-LTC code which is the MTC. As explained above (p.5), the services were classified according to their main type of care. This care can be related to: a) Residential care (codes starting with R); b) Day care (codes starting with D); c) Outpatient care (codes starting with O); d) Accessibility to care (codes starting with A); e) Information for care (codes starting with I); and f) Self-help and voluntary care (codes starting with S).

(iv) Qualifiers: In some cases, a fourth component may be incorporated to facilitate a quick appraisal of those characteristics of the services which may be relevant to local policy. Not all available qualifiers have been relevant for use in this Atlas. The qualifiers used in this Atlas are:

Table 1-3 Qualifiers used in Integrated Atlas of Psychosocial Care in WSPHN Region

Qualifier	Description
b	This qualifier describes episode-related care provision, usually provided for non-acute patients within a time limited plan (e.g. three months of brief psychotherapy). The 'b' qualifier is only assigned when at least 80% of the care provided in the facility is short- time limited and episode-related.
е	Technology based services; eg phone or online
g	This qualifier is applied to Outpatient services that provide predominantly group activities and do not meet the criteria for a Day Care service (Typically 80% of their activity is through the provision of groups);
1	Liaison – use for liaison psychiatric services such as to oncology patients
m	Used where counselling is provided with management such as planning and care coordination
q	This qualifier indicates that the main attribute of the MTC (e.g., mobility, intensity) is significantly higher/greater than for other care teams coded in the same MTC. For example, a "q" qualifier in a "closed " MTC indicates that the security provided by the closed status of the care team is of a higher level than that which may be provided by other teams within the "closed"" group
S	Specialised – for specific sub-group of population
t	Tributary-refers to a satellite team: may be a second permanent location for the team or a team that travels to more than one location
V	This qualifier is used when the code applied at the moment of the interview could vary significantly in the near future (from example from acute outpatient care to non- acute). This depends on the capacity of the service to provide the type of care described by the code due to fluctuations in the demand or the supply capacity. For example a crisis accommodation team for homeless or a crisis domestic violence refuge may fluctuate in its capacity of providing acute care within 24 hours depending on the demand and the availability of places. This code can be also applied to services under transition due to a health reform, a change in the whole

financing system of health or social care, or the development of a new disability scheme. This variability in the pattern of service provision is independent of the time continuity of the service. For example, a continuous service can have a 'v' code due to a health reform while a care program limited to two years may show organisational stability during the period when it is funded.

Example:

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

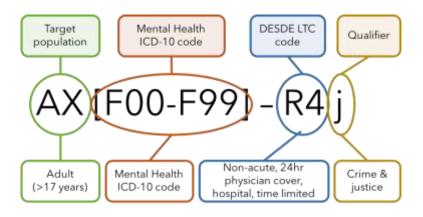


Figure 1-9 Code Components

Step 4 - Mapping the BSIC

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

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

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

Availability - defined as the presence, location and readiness for use of service delivery teams in a catchment area at a given time. A service is available when it is operable or useable 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 catchment area at a given time. Rates are also calculated per 100,000 of the target population (2016 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 (2016 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.

Following the coding of the services and development of a draft Atlas (Phase 1, or Alpha version), the Atlas is presented to planners in order for them to review and adjust the data and codes presented where necessary (Phase 2, or Beta Version). A Version For Comments is then prepared by the research team for release to stakeholders. Time is allowed for stakeholders to review the service data and coding, and provide any further comment. After further revision based on the received feedback, a Final Version is released to the planners.

In the case of Western Sydney, this Atlas represents the results of Phase 2 of the process (Beta Version): that is, the revision of the Alpha version by the planners, and subsequent adjustment to data and codes carried out by the team from Australian National University (ANU) (Figure 1-10, below).

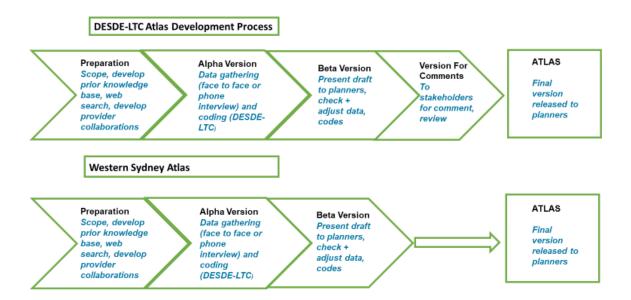


Figure 1-10 Development of the Integrated Atlas of Psychosocial Care in WSPHN Region

2. Annex 2: Equivalence of DESDE terminology and terms used in the Australian system

DESDE Code and Australian Mental Health Care Descriptors

The following table lists the DESDE Main Types of Care shown in the radar or spider diagrams. The variations in terminology for similar types of care in different Australian jurisdictions is a feature of the Australian mental health care structures. Further complicating the analysis of Australian services, is that within the same state-wide program there may be a great deal of variation in the intensity of care provided. For example, the HASI and HASP programs in NSW and Qld, both have high and low care support packages — this means that some HASI services may be coded as 'High Intensity non-Hospital Residential' and 'Other Non-Hospital'. DESDE allows consistent comparisons based on the level of input of care and setting, not localised descriptors.

Table 2-1 Service group for pattern of care analysis

DESDE main Types of Care by Group and sub-type	Examples of Australian Mental Health Care Descriptions
RESIDENTIAL	Accommodation, Hospital, Residential
R: ACUTE HOSPITAL	High Dependency Inpatient; Acute Care Unit; Intensive Care Unit; Psychiatric Assessment and Planning Unit
R: NON ACUTE HOSPITAL	Sub-acute; Community Care Units; Extended Care Mental Health Rehabilitation Unit; Extended Treatment
R: ACUTE NON HOSPITAL	Hospital in the Home; Crisis homes (almost complete absent in Australia)
R: NON ACUTE NON HOSPITAL	Step up-Step Down (SUSD); Prevention and Recovery Care (PARC)
R: OTHER NON HOSPITAL	Psychiatric Hostel; Group Houses; Supported Accommodation; Crisis accommodation (e.g. Common Ground)
R: HIGH INTENSITY NON HOSPITAL	PARC/SUSD; Housing Supported Care (e.g. HASI, HASP)
DAY CARE	Rehabilitation or Recovery
D: ACUTE HEALTH	Day Hospital services (non-existent in Australia)

Some limited, specialist services such as Psychological Trauma Recovery Service or Neuropsychiatric Rehabilitation Services, both at Austin Hospital Vic. D: WORK RELATED Disability Enterprises; Social firms; Workers Coop D: OTHER Social Clubs; Club Houses OUTPATIENT Community or ambulatory care O: ACUTE MOBILE HEALTH Police & Acute Care Response; Crisis and Treatment Team; Assertive Community Treatment O: ACUTE NON MOBILE HEALTH Emergency Depts, Psychiatric Emergency; Psychiatric Liaison O: NON ACUTE MOBILE HEALTH Outpatients; Clinic services, Dual Diagnosis; Community Care/Continuing Care O: NON ACUTE NON MOBILE HEALTH Daily Living O: NON ACUTE NON MOBILE NON HEALTH Personal Helpers and Mentors; Psychosocial support O: ACUTE NON MOBILE NON HEALTH Personal Helpers and Mentors; Psychosocial support Family and sexual violence crisis services (e.g. Yarrow Place, Adelaide) O: ACUTE MOBILE NON HEALTH No services identified in Australia ACCESSIBILITY A: OTHER Advocacy services A: CARE COORDINATION Partners in Recovery; Care Navigator; Access and Support A: EMPLOYMENT Disability Employment Service or DES (Psychiatric); some Partners in Recovery; Care Navigator; Access and Support A: HOUSING No services identified in Australia INFORMATION I: GUIDANCE & ASSESSMENT Telephone triage; Intake & Assessment I: INFORMATION Information services		
D: OTHER OUTPATIENT Community or ambulatory care O: ACUTE MOBILE HEALTH D: ACUTE NON MOBILE HEALTH O: NON ACUTE NON MOBILE NON HEALTH O: NON ACUTE MOBILE NON HEALTH O: NON ACUTE MOBILE NON HEALTH O: ACUTE MOBILE NON HEALTH Daily Living O: ACUTE MOBILE NON HEALTH No services identified in Australia ACCESSIBILITY A: OTHER Advocacy services A: CARE COORDINATION Partners in Recovery; Care Navigator; Access and Support Disability Employment Service or DES (Psychiatric); some Partners in Recovery A: HOUSING No services identified in Australia INFORMATION I: GUIDANCE & ASSESSMENT Telephone triage; Intake & Assessment	D: NON ACUTE HEALTH	Trauma Recovery Service or Neuropsychiatric
OUTPATIENT Community or ambulatory care O: ACUTE MOBILE HEALTH Police & Acute Care Response; Crisis and Treatment Team; Assertive Community Treatment O: ACUTE NON MOBILE HEALTH Emergency Depts, Psychiatric Emergency; Psychiatric Liaison O: NON ACUTE MOBILE HEALTH O: NON ACUTE MOBILE HEALTH O: NON ACUTE NON MOBILE HEALTH O: NON ACUTE NON MOBILE HEALTH O: NON ACUTE NON MOBILE NON HEALTH Daily Living O: NON ACUTE MOBILE NON HEALTH O: ACUTE NON MOBILE NON HEALTH Family and sexual violence crisis services (e.g. Yarrow Place, Adelaide) O: ACUTE MOBILE NON HEALTH No services identified in Australia ACCESSIBILITY A: OTHER Advocacy services A: CARE COORDINATION Partners in Recovery; Care Navigator; Access and Support Disability Employment Service or DES (Psychiatric); some Partners in Recovery A: HOUSING No services identified in Australia INFORMATION I: GUIDANCE & ASSESSMENT Telephone triage; Intake & Assessment	D: WORK RELATED	Disability Enterprises; Social firms; Workers Coop
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