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The Integrated Mental Health Atlas of Western Sydney

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The Integrated Mental Health Atlas of Western Sydney

Abstract
Australians living with serious and continuing ill-health face bewilderingly complex health and social care systems. Even experienced health professionals have trouble navigating this health care maze. The mental health service system poses some of the greatest navigation challenges. The recovery of individuals living with mental health issues, requires a smooth link between acute and domiciliary health care, housing and other social care agencies. The need for simple rules of navigation is strong, but fragmentation and gaps in services remain great, confounding attempts to understand and organise appropriate care and support. The need for deeper knowledge about the mental health system in Western Sydney motivated Western Sydney Partners in Recovery to fund the development of the Integrated Mental Health Atlas of Western Sydney. The aim of this Atlas is twofold; 1) to help providers and consumers to navigate the system, by improving their knowledge about the services available in the area; and 2) as a tool for evidence-informed planning, as it presents a critical analysis of the pattern of mental health care provided within the boundaries of Western Sydney Local Health District.

Keywords
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The Integrated Mental Health Atlas of Western Sydney

Funded By: Western Sydney Partners In Recovery

THE UNIVERSITY OF SYDNEY

University of Western Sydney

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ABBREVIATIONS

BSIC Basic Stable Input of Care

DESDE- LTC Description and Evaluation of Services and Directories in Europe for long-term care

FaCS Family and Community Services

GIS Geographical Information System

HASI House and Accommodation Support Initiative

LHD Local Health District

MTC Main Type of Care

NGO Non-Governmental Organization

NDIS National Disability Insurance Scheme

NSW New South Wales

PIR Partners in Recovery

WHO World Health Organization

WS Western Sydney

A NOTE ON THE LANGUAGE

The language used in some of the service categories mapped in this report (e.g. outpatient-clinical, outpatient-social, day hospital) may seem to be very hospital-centric and even archaic for advanced community –based mental health services which are already recovery-oriented and highly devolved. However, these categories are employed for comparability with standardized categories which have been used for some years in European mental health service mapping studies and the resulting Atlas [this standard classification system is the "Description and Evaluation of Services and Directories in Europe for long-term care" model (DESDE-LTC)].

EXECUTIVE SUMMARY

"Without a map we will not know where we are coming from or where we are going. We can neither describe the journey to others nor interpret their directions"
(HealthKnowledge,2011)

Australians living with serious and continuing ill-health face bewilderingly complex health and social care systems. Even experienced health professionals have trouble navigating this health care maze. The mental health service system poses some of the greatest navigation challenges. The recovery of individuals living with mental health issues, requires a smooth link between acute and domiciliary health care, housing and other social care agencies. The need for simple rules of navigation is strong, but fragmentation and gaps in services remain great, confounding attempts to understand and organise appropriate care and support.

The need for deeper knowledge about the mental health system in Western Sydney motivated Western Sydney Partners in Recovery to fund the development of the Integrated Mental Health Atlas of Western Sydney. The aim of this Atlas is twofold; 1) to help providers and consumers to navigate the system, by improving their knowledge about the services available in the area; and 2) as a tool for evidence-informed planning, as it presents a critical analysis of the pattern of mental health care provided within the boundaries of Western Sydney Local Health District.

Our Atlas is framed by the 'integrated care model'. This model has challenged the way health-related care should be assessed and planned. Through focusing on possibilities for integration it enables us to identify new routes for linked-up, consumer-centred approaches to care. Greater integration relies on a global picture of all the services available, regardless of which sector is funding them (i.e. Health, Social Welfare and Family, Employment, Criminal Justice). Integrated Atlases allow policy planners and decision makers to understand the landscape in which they work (including areas of gap or over-supply), make bridges between the different sectors and to better allocate services. This is particularly important as mental health services become more 'person-centred' (placing the person and their needs at the centre of their care, with less involuntary care and more choice and control) and public investment focuses on person-centred care coordination programs such as Partners in Recovery (PIR) or the National Disability Insurance Scheme (NDIS).

This Atlas uses a standard classification system, the "*Description and Evaluation of Services and Directories in Europe for long-term care"* model (DESDE-LTC), to map the services. The use of a common language has allowed us to compare the pattern of mental health care provided in Western Sydney with regions in Europe. These comparisons are useful for learning lessons from service and policy approaches taken in other countries.

The Atlas reveals four major gaps in the provision of mental health care in Western Sydney. These are:

1) 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).
2) A lack of acute and sub-acute community residential care.
3) Low availability of specific employment services for people with a lived experience of mental ill-health.
4) A lack of comprehensive data related to availability of supported housing (housing linked to necessary, individualised supports) for people with mental health problems.

These gaps mirror the needs analysis of PIR clients in Western Sydney. An analysis of unmet needs amongst 241 PIR clients found the highest areas of need were: daytime activities 63% of clients; psychological distress 63%; company (social life) 58%; physical health 56%; accommodation 46% and employment and volunteering 41%.

The Atlas has also revealed some real strengths in the existing system. One of the most striking is the high availability of mobile services and service 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 mapping of the services shows that the public funded services are located in the most populous areas of the LHD jurisdiction, particularly around Parramatta and Blacktown. These are also the communities identified as being at a greater risk of psychological distress and socioeconomic disadvantage. Communities in the northern area of the LHD are shown to have poorer geographic access to mental health services, however levels of disadvantage and risk of psychological distress are also lower in this part of the LHD.

Taken together the information in this Atlas highlights key areas for system improvement in the provision of mental health services in Western Sydney. The critical areas of progress that we have identified are to:

a) Develop alternatives to hospitalisation, such as Day Hospitals; and residential facilities in the community, such as crisis housing.
b) Develop health-related day care centres staffed with highly skilled mental health professionals that can focus on recovery oriented rehabilitation. These day care centres promote social inclusion by providing the opportunity to socialise, while offering training in skills related to the development of strategies both to manage their condition (i.e. stress management) and day to day activities of living.
c) Develop specific services related to employment (‘social firms’ or ‘social enterprises’) for people with a lived experience of mental ill-health to promote their recovery.
d) Improve our knowledge of public and community housing to allow better planning.
e) Move from a *reactive* system to a *proactive* system, to increase the robustness of the system, particularly in the social sector. This implies the provision of long-term funding for the NGO sector, which stabilizes operations and allows for long-term planning.
f) Incorporate systems thinking into policy and planning. This will encourage the development of an integrated mental health model of care.

Our recommendations are in line with the recent report of the National Review of Mental Health Programmes and Services made by the National Mental Health Commission, which make the following recommendations, amongst others: 1) *to develop more community-based psychosocial, primary and community mental health services,* as alternatives to acute hospital care; and 2) *to boost the role and capacity of NGOs and other service providers to provide more comprehensive, integrated and higher-level mental health services.*

This is an unique moment for Western Sydney. We need to harness this local evidence to change the mental health system, for the benefit of all of our fellow community members experiencing mental ill-health.

1. FRAMEWORK

The philosophy of mental health care reform has been built on key principles of community psychiatry, with four linked areas of action[1]:

i) deinstitutionalisation and the end of the old model of incarceration in mental hospitals;
ii) development of alternative community services and programs;
iii) integration with other health services; and
iv) integration with social and community services.

More recently this has also included a focus on recovery orientation and person-centred care.

Australia started this journey of reform in 1983, with David Richmond's report on care for people experiencing mental ill-health and intellectual disabilities in NSW: *Inquiry into Health Services for the Psychiatrically Ill and Developmentally Disabled*. But it took 10 years to establish the first National Mental Health Strategy[2]. Since then, there have been considerable systemic changes made, including the closure or downsizing of many large psychiatric hospitals and the development of the community mental health movement[3].

However, this journey has not been completed and application of reform has been uneven and patchy[4, 5]. For example, the Australian mental health system still has high rates of readmission to acute care, with at least 46% of patients hospitalized being readmitted during the year following the admission [6]; we have high rates of compulsory community treatment orders, ranging from 30.2 per 100,000 population in Tasmania to 98.8 per 100,000 population in Victoria[7]; and high rates of seclusion with 10.6 seclusion events per 1,000 bed days in 2011-12[8]. These features are associated with a system characterised by fragmented, hospital-based, inefficient provision of care[2]. It has been argued that we lack a clear service model, that reform has not been informed by evidence, and that quality and access to care is a lottery dependent on postcode[2].

The situation in Western Sydney is no better than in the rest of Australia. There is no publicly available data on readmission rates, compulsory treatment orders, or rates of seclusion. Yet according to data from the 45 and Up Study[9], it is an area of New South Wales with high risk of psychological distress.

In this context it is crucial to provide policy and service decision makers with every tool and opportunity to make better, more intelligent choices about future investments in mental health care, including which services are needed and where and how they can be most effectively delivered. In other words, they need a map that will guide them through their reform journey.

This Atlas is an ideal tool to help them in this process.

1.1. What are Integrated Mental Health Atlases?

The WHO Mental Health Gap Action Program (mhGAP) [10] has highlighted the need for a comprehensive and systematic description of all the mental health resources available and the utilisation of these resources. It is not only important to know the **numbers** of services in each health area, but also to describe **what** they are doing and **where** they are located. This information also enables an understanding of the context of health-related interventions which are essential for the development of evidence-informed Health [11].

The 'integrated care model' [12] has challenged the way health-related care should be assessed and planned. It enables us to identify new routes for linked-up, consumer-centred approaches to care. Greater integration relies on a global picture of all the services available, regardless of which sector is funding them (i.e. Health, Social Welfare and Family, Employment, Criminal Justice). Such 'systems thinking' enables policy planners to capture the complexity of service provision holistically. It offers a comprehensive way of anticipating synergies and mitigating problems and barriers, with direct relevance for creating policies that integrate the different systems of care [13, 14]. This is particularly important in the mental healthcare sector, which is characterised by increasing personalisation of services and care coordination programs such as Partners in Recovery (PIR) or the National Disability Insurance Scheme (NDIS). Indeed, Western Sydney LHD is one of the three lead demonstrator sites across NSW to develop an innovative, system wide and sustainable service model for providing coordinated and integrated care services[15].

Within this context, Integrated Atlases of Mental Health are essential tools for decision making and quality assessment. 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. Integrated Atlases of Mental Health allow comparison between small health areas, highlighting variations of care, and detecting gaps in the system. The holistic service maps produced through an Integrated Atlas of Mental Health also allows policy planners and decision makers to build bridges between the different sectors and to better allocate services [16].

Integrated Atlases of Health include maps and graphics as a main form of presenting the data. As a visual form of communicating health information, they crucially bridge the gap between complex epidemiological presentations of statistics and the varied educational backgrounds represented by policymakers, other decision makers and consumers [17]. Policy makers and health planners may use the information presented in the Atlas as a visual reference point from which to quickly present and structure their ideas. In addition, the new knowledge presented in an Atlas will quickly increase a planner's self-efficacy and personal mastery of the field. Consequently, policy makers and health planners will be more willing to make informed decisions bolstered by solid evidence. In parallel, as Atlases are integrated (i.e. they include all funding providers) they may increase collaboration across services as they can act as a shared reference point from which to discuss the system. Consequently, it is expected that the Integrated Mental Health Atlas of Western Sydney will change the culture of planning

and, from this, care through facilitating the integration and coordination of services. This will be reflected in the quality of care provided and, in the longer term, better health outcomes for individuals experiencing mental ill-health[18].

The methodology followed to create an Atlas can be consulted in the Annex 1.

2. MAPPING WESTERN SYDNEY: SOCIO AND ECONOMIC INDICATORS

Western Sydney LHD is a large region, with a younger age structure than the Australian average. Its advanced infrastructure supports one of Australia's fastest growing urban populations. It has a major commercial centre in Parramatta. It is also one of the most multicultural Local Health Districts in Greater Sydney, with a dynamic and diverse ethnic mix ranging from long-established immigrant communities to recent arrivals and refugees. Some of the largest urban Aboriginal and Torres Strait Islander communities live around Mt Druitt and Blacktown. Unfortunately, it also has areas of extreme social and economic disadvantage, characterised by high intergenerational unemployment, low education attainment rates, poor physical health and low income[19].

Figure 10 shows the distribution of the risk of psychological distress in different LHDs, using Kessler scores and data from the 45 and Up study[9]. It can be observed that the higher risk of psychological distress is concentrated around the boundaries between Western Sydney and South Western Sydney, in areas also characterized by high deprivation. These areas around Blacktown and Parramatta can be considered "hot spots" for mental health care provision.

Figures 1-5 depicts the distribution of selected demand-related factors (including density maps, the rate of unemployment, low self-reported proficiency in the English language, Indigenous population density, the percentage self-identifying as requiring assistance in daily activities and the rate of people providing unpaid assistance) that may be taken into account in future mental health service planning

Figure 1. Risk of psychological distress

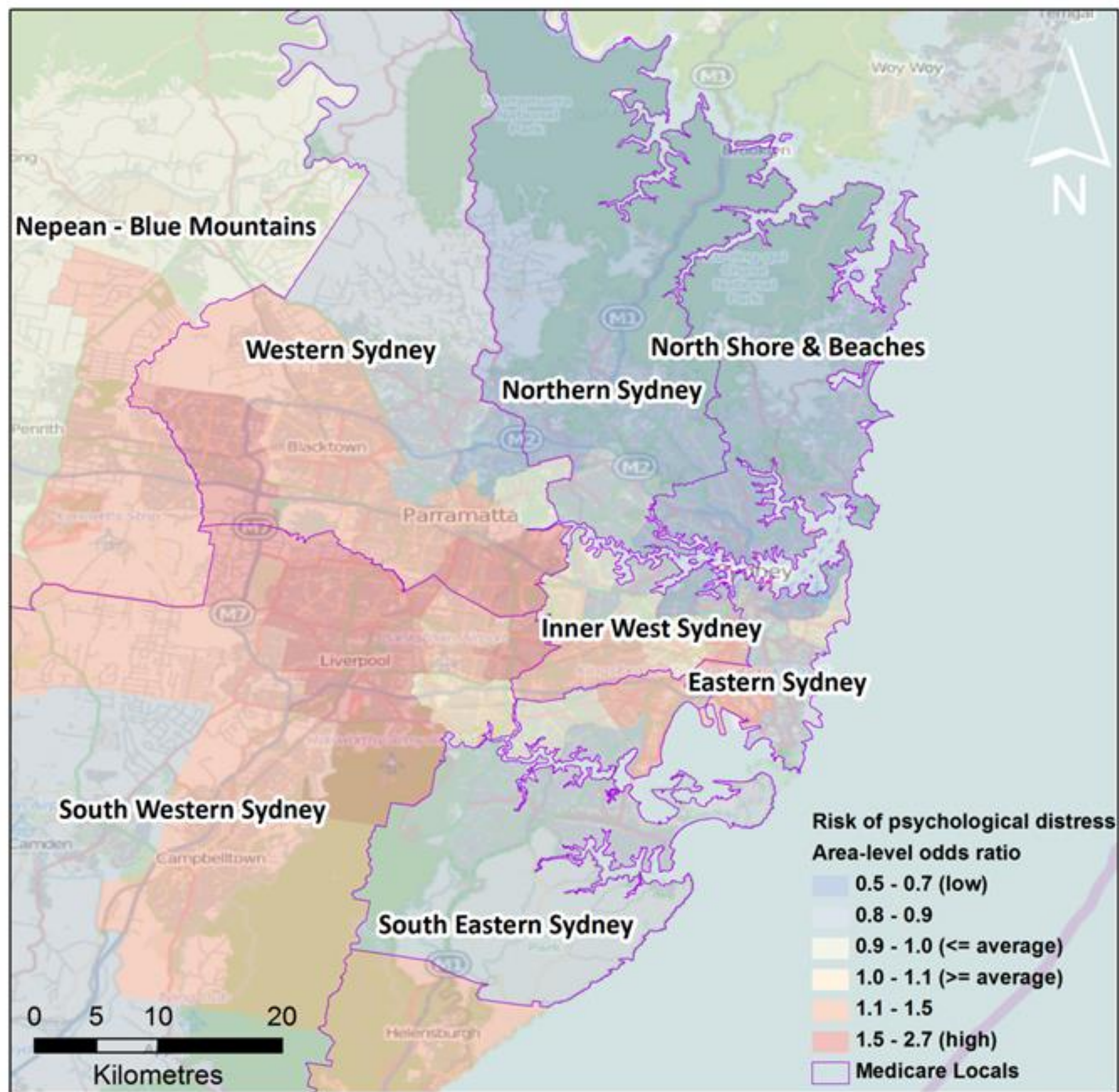


Figure 3. Percentage of unemployment in Western Sydney

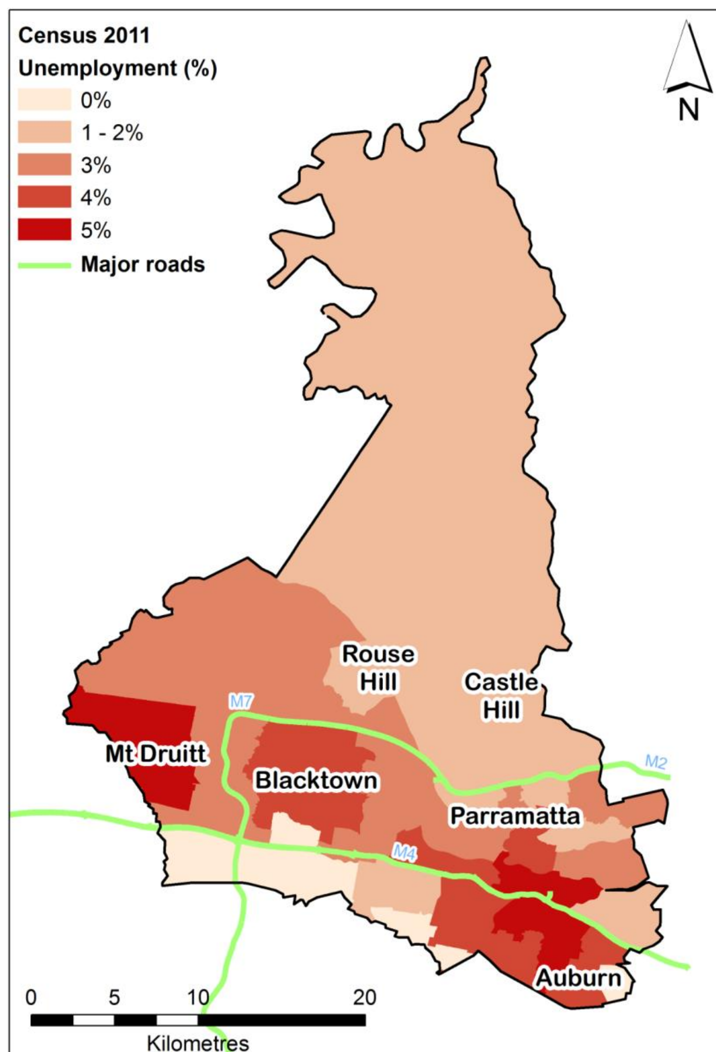


Figure 2. Percentage of people with Low English proficiency in Western Sydney

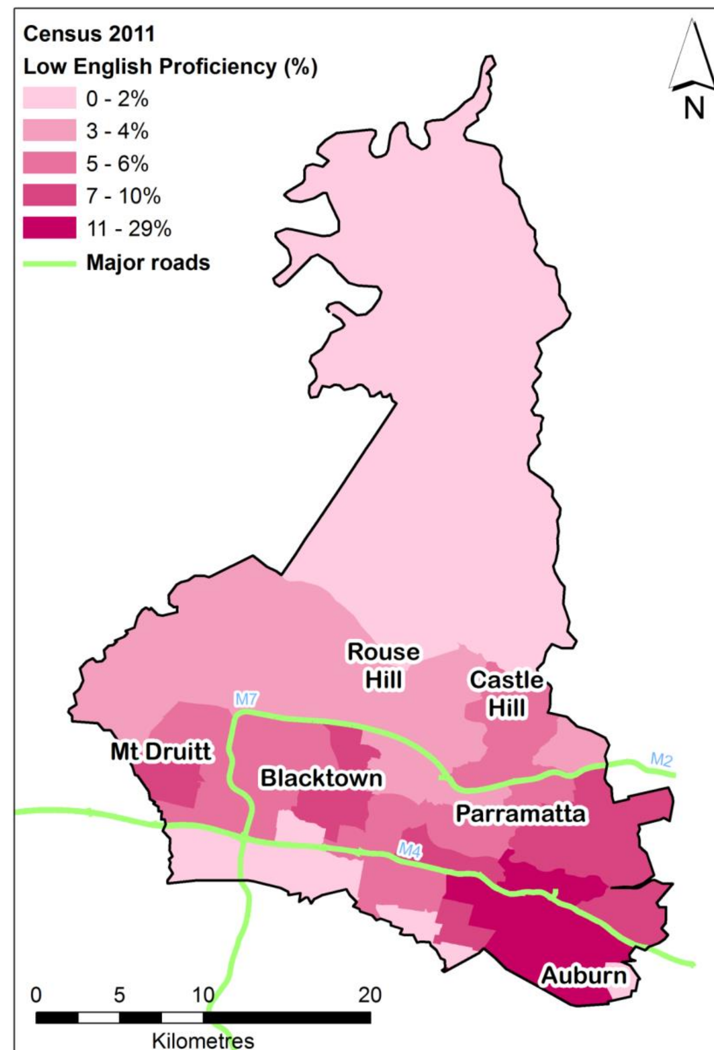


Figure 5. Percentage of people who need assistance in Western Sydney.

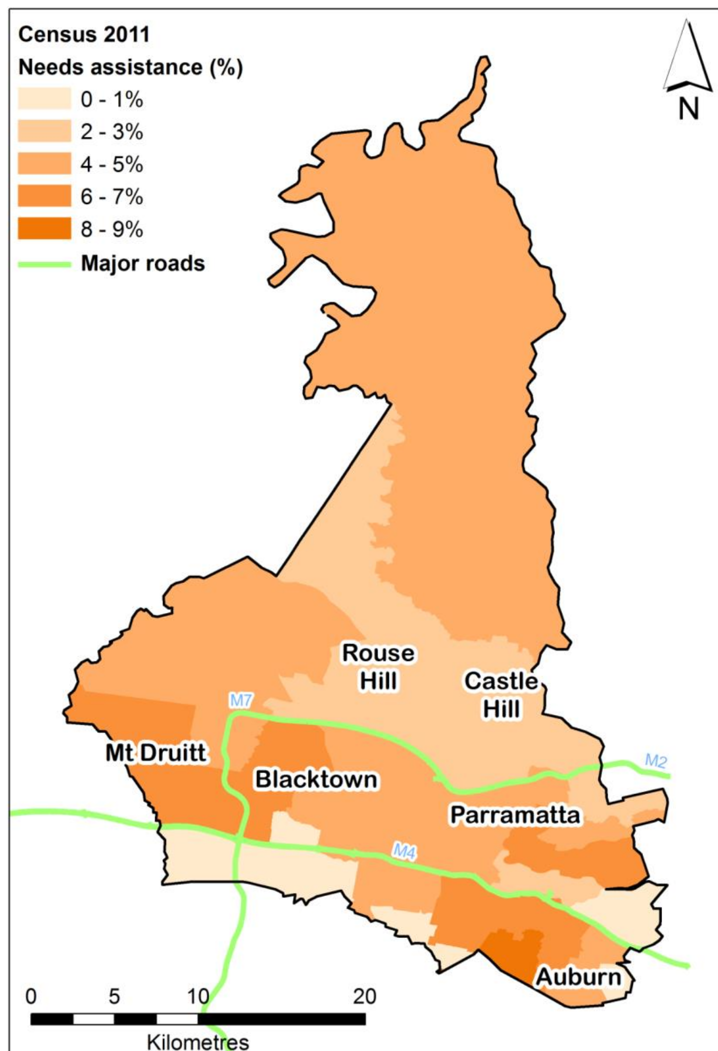


Figure 4. Percentage of people who provided unpaid assistance in Western Sydney (.i.e. caring responsibilities)

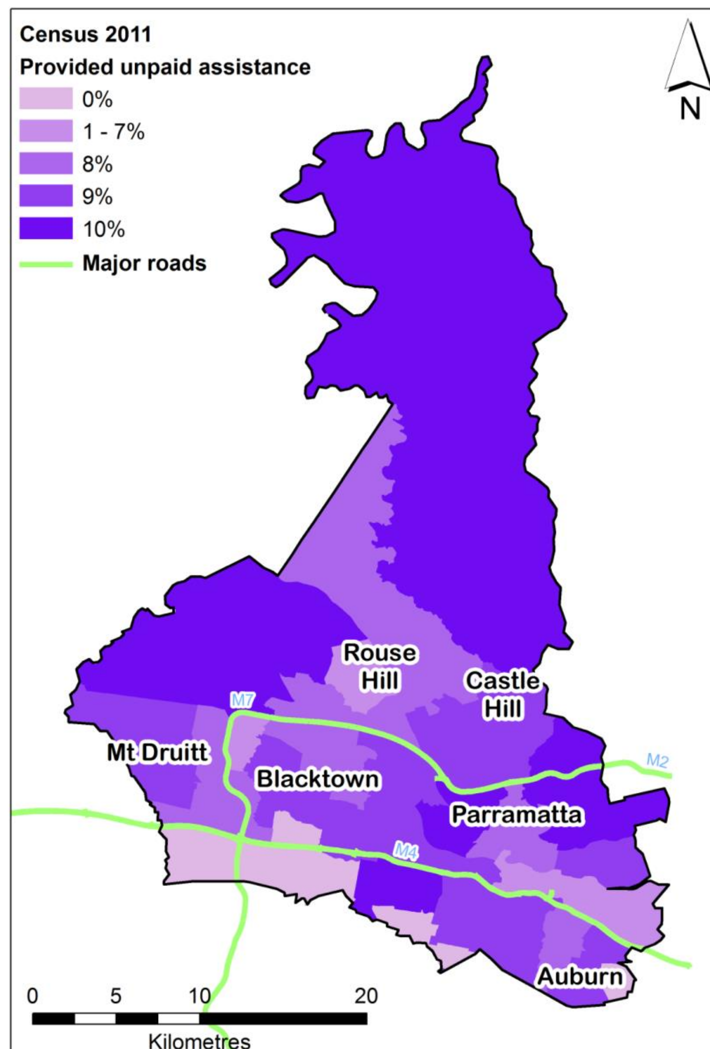
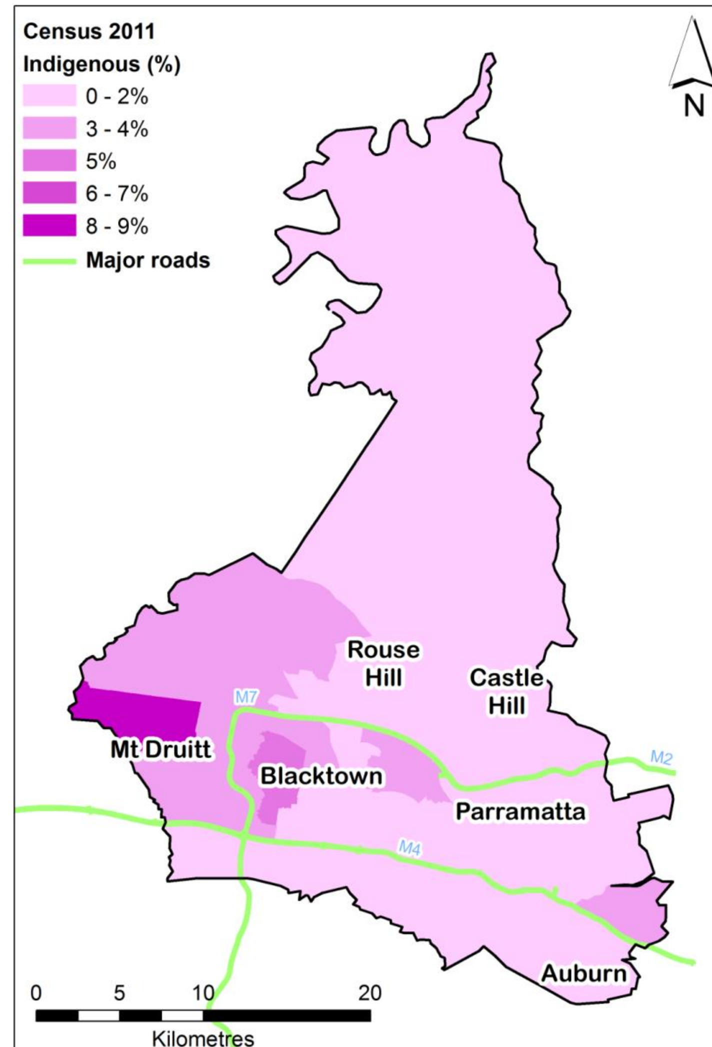


Figure 6. Percentage of Aboriginal and Torres Strait Islander peoples living in Western Sydney



3. DESCRIBING THE SERVICES PROVIDING CARE FOR PEOPLE WITH A LIVED EXPERIENCE OF MENTAL ILL-HEALTH IN WESTERN SYDNEY

3.1. GENERAL DESCRIPTION

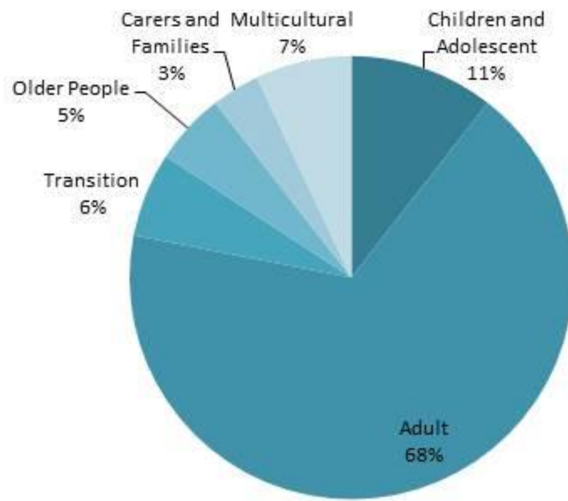
Data on services providing care for people with a lived experience of mental ill-health in Western Sydney was collected from 13th October 2014 to 28th February 2015. We received 70 on-line responses complemented with 12 face to face interviews with large mental health provider organizations. A preliminary version of the Atlas was presented to an audience of more than 200 people on the 5th and 6th of May 2015. After this presentation, the Atlas was opened for public comments for 3 months. A total of 10 new services were added-including 5 PIR programs run in the area, as the PIR program was extended- and 4 codes were reviewed and changed.

We found a total of 121 BSICs (or services) for people with a lived experience of mental health ill-health or psychosocial problems. About 93% of these BSICs (or services) received only one MTC code, suggesting a good organizational structure, as stable organizations are generally focused on only one type of care. Three of the 121 BSIC (or services) identified have been weighted as they were covering all of NSW and their services were not confined to Western Sydney . To have included a full weighting for their services would have distorted what was actually offered in Western Sydney. Weighting these services thus reduced the services available in Western Sydney to 117.8 and reduced the number of MTCs was to 127.4.

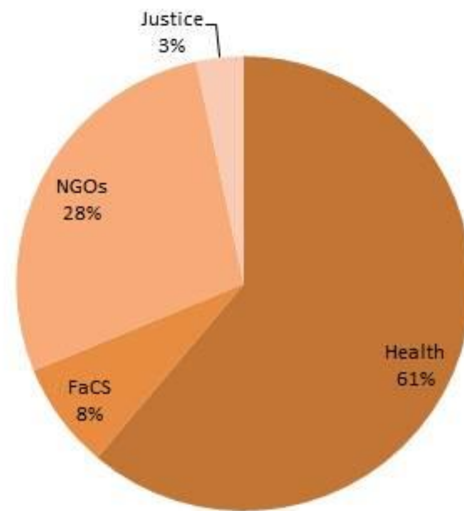
Table 1 depicts the distribution of the MTC by sector and population group.

Figure 7 briefly describes the BSICs (or services) identified. With regards to the age distribution of clients provided for, 68% of the care provided is for adults and 11% for Child and Adolescents.6% of the services were devoted to young people in transition from childhood to adulthood (i.e. 16 to 25 years old) Only 5% of the care was specific to older people with mental health problems. 7% of the BSICs (or services) identified were specific to people with from non-English speaking backgrounds. Lastly, 3% of the services were targeting families. More than 60% of the care for people with mental health problems is provided by the health sector. Within the health sector, more than 45% of the MTCs provide inpatient services in a hospital setting. The NGO sector contributes nearly 28% of the MTCs, while the remaining 10% is provided by FaCS and Police NSW. However, as will be explained below, services provided by FaCS and Police NSW are not specifically targeting people with experiencing mental ill-health. All this information will be described in detail in the sections below.

Figure 7. Description of the BSICS (or services)



Distribution of the MTCs according to the target population



Distribution of the MTCs according to the sector

Distribution of the MTCs by type of care, and sector

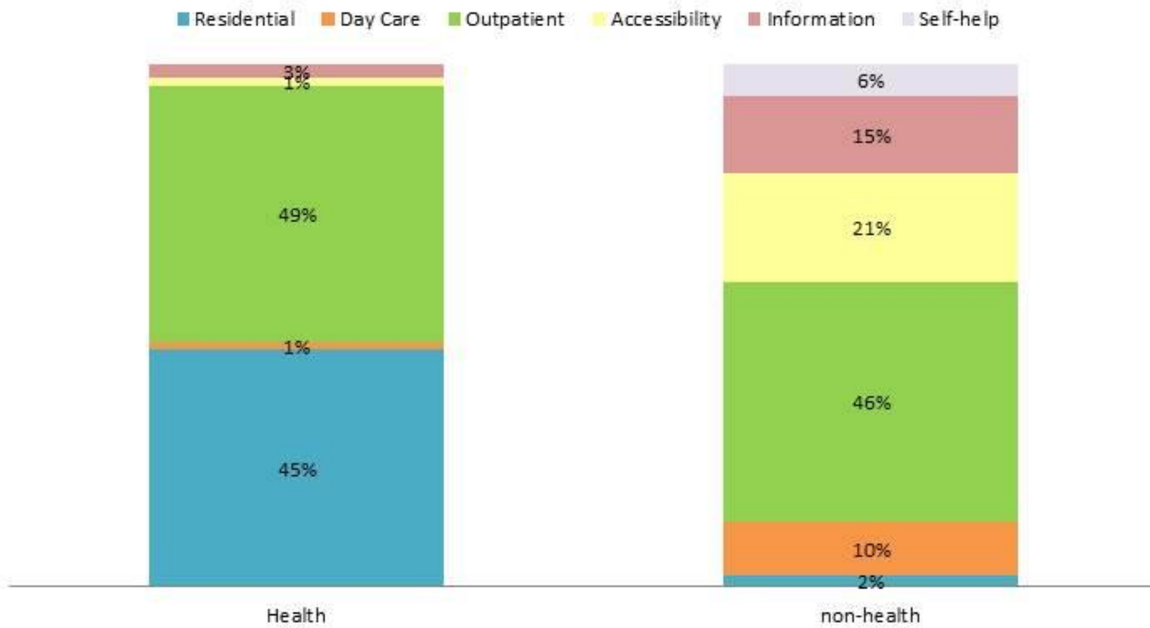


Table 1. Description of the MTCs per age group and sector

		ADULTS					Children and Adolescents*				Older Adults				Specific Populations				Total				
MTC	**Definition**	**H**	**FACs**	**NGO**	**J**	**Tot**	**H**	**FACs**	**NGO**	**Tot**	**H**	**FACs**	**NGO**	**Tot**	**H**	**FACs**	**NGO**	**Tot**	**H**	**FACs**	**NGO**	**J**	**Tot**
RESIDENTIAL: Facilities that provide beds overnight for purposes related to the clinical and social management of their long term care																							
R1	Acute, 24 hours physician cover, hospital, high intensity (WEIGHTED)	**2.6**				2.6				0				0				0	2.6	0	0	0	2.6
R2	Acute, 24 hours physician cover, hospital, medium intensity * (WEIGHTED)	**4.2**				4.2	3			3	1			1				0	8.2	0	0	0	8.2
R4	Non- Acute, 24 hours physician cover, hospital, time limited	**5**				5				0	1			1				0	6	0	0	0	6
R6	Non- Acute, 24 hours physician cover, hospital, indefinite stay	**1**				1				0	1			1				0	2	0	0	0	2
R8.2	Non-acute, non-24 physician cover, time limited, 24-hours support, over 4 weeks	**7**				7			1	1				0				0	7	0	1	0	8
R10.2	Non-Acute, non-24 physician cover, time limited, lower support, over 4 weeks (we have included 3 properties in Adults Health managed by others)	**7**				7				0				0				0	7	0	0	0	7
DAY CARE: Facilities that are normally available to several users at a time, provide some combination of treatment/support/care for problems related to long-term care needs; have regular opening hours, and expect service users to stay at the facility beyond periods druing which they have face-to-face contact with staff																							
D2.2.	non-acute, work, high intensity, other work			1		1				0				0				*0*	0	0	1	0	1
D4.2.	non-acute, non-work structured care, high intensity, educational related care					0	1			1				0				*0*	1	0	0	0	1
D5	non-acute, non-work other day care, high intensity. Open day care centres			2		2				0			1	1				*0*	0	0	3	0	3
D9	non-acute, non-work other day care, low intensity. Open day care centres			1		1				0				0				*0*	0	0	1	0	1

OUTPATIENT: Facilities that involve contact between staff and users for some purpose related to management of their condition and its associated clinical and social dificulties																							
O2.1	Acute, Home & Mobile, Limited Hours, Health related care	3				3	*1*			1				0				0	4	0	0	0	4
O3.1	Acute, non-mobile, 24-h, health related care*	2.6				2.6				0				0				0	2.6	0	0	0	2.6
O4.1.	Acute, non-mobile, time limited, health related care					0				0				0				0	0	0	0	0	0
O5.1	Non-Acute, Home & Mobile, High Intensity	5				5	2			2	2			2				0	9	0	0	0	9
O6.1	Non-Acute, Home & Mobile, Medium Intensity					0				0				0	1			1	1	0	0	0	1
O8.1	Non-Acute, non-mobile, High intensity, health related care	9				9	8	1	2	11				0	1		1	2	18	1	3	0	22
O9.1	Non-Acute, non-mobile, Medium intensity,, health related care			2		2				0				0				0	0	0	2	0	2
O10.1	Non-acute, non-mobile, low intensity, health related care					0				0				0	1			1	1	0	0	0	1
O5.2	Non-Acute, Home & Mobile, High Intensity, other care			10		10			1	1				0				0	0	0	6	0	11
o6.2	Non-Acute, Home & Mobile, Medium Intensity, other care					0			1	1				0				0	0	0	1	0	1
O7.2	Non-Acute, Home & Mobile, low Intensity, other care		5			5				0				0				0	0	5	0	0	5
O8.2	Non-Acute, non-mobile, High intensity, other care			1		1			2	2				0				0	0	0	3	0	3
O9.2	Non-Acute, non-mobile, Medium intensity other care			1		1				0				0				0	0	0	1	0	1

ACCESSIBILITY: Facilities which main iam is to provide accesibility aids for users wiwth long term care needs																							
A3	Personal Accompaniment by non-care professionals.			1		1													0	0	1	0	1
A4	Case Coordination						1			1							3	3	1	0	3	0	4
A5.3	Access to Social and Cultural services			1		1													0	0	1	0	1
A5.4	Acces to Employment			2		2													0	0	2	0	2
A5.5	Access to Housing		3			3													0	3	0	0	3
INFORMATION AND GUIDANCE: Facilities which main aim is to provide users with information and or assessm,ent of their needs. This service does not entail subsequent follow-up or direct care provision																							
I1.1	Professional assessment and guidance related to health care														1			1	1	0	0	0	1
I2.2.	Information provided through information technologies or telephone			3	6	9									1			1	1	0	3	6	10
SELF-HELP AND VOLUNTARY CARE: facilities which main aim is to rpovide users with support, self-help or contact, with un-pain staff that offers accessibility, information, day, outpatient and residentail care (as described above)																							
S1.2.	Volunteers providing access (personal accompaniment)			1		1													0	0	1	0	1
S1.3	Volunteers [providing outpatient care (slef-groups)			2		2																	2
TOTAL		46.4	8	23	6	81.4	16	1	7	24	5	0	1	6	5	0	4	9	72.4	9	33	4	127.4

3.2. Adults

In this section we describe the availability and placement capacity of the BSICs (or services) providing care for adults (> 18 years olds) experiencing mental ill-health by sector. Specific care related to the perinatal period, or to transition from adolescence to adulthood is included in the section on Child and Adolescent Care. Similarly, specific care for older people experiencing mental health problems is presented in an independent section.

3.2.1. Residential Care

3.2.1.1. Residential Care Provided by the Public Health Sector

Acute Inpatient Services

A total of 6 BSICs (or services) were identified which provide acute inpatient care in the Western Sydney LHD. However, the BSIC (or service) at Westmead Hospital covers the whole of NSW, so the number of places available have been reduced to take this into account. According to the information on the total number of separations from 1st July 2011 to 30th June 2012 (available on Flowinfo version 12.0), nearly 60% of the total number of separations in Westmead were from people living in the Western Sydney LHD. Consequently as a proxy of the real availability of acute inpatient services in Western Sydney LHD, we have weighted the number of beds and the services BSICs at Westmead Hospital by 0.6 instead of 1.

The number of acute beds per 100,000 inhabitants is 20.6. The number of BSICs providing acute care per 100,000 inhabitants is 0.97.

Table 2. Acute inpatient services: Availability and Capacity

Provider	Pop > 18 years old	Name	Desde1	Desde2	Beds	Town	Coverage Area
Cumberland Hospital		Yarala	A[F0-F99]-R1		12	Westmead	Western Sydney
		Hainsworth	A[F0-F99]-R2		33	Westmead	Western Sydney
		Paringa	A[F0-F99]-R2		33	Westmead	Western Sydney
Westmead Hospital		C4a	A[F0-F99]-R1	A[F0-F99]-R2s	12 *(7.2)*	Westmead	State Level
Westmead Hospital		C4b	O[F0-F99]-R2		10 *(6)*	Westmead	State Level
Blacktown Hospital		Bungarribee House	A[F0-F99]-R1	A[F0-F99]-R2	36	Blacktown	Western Sydney
Total	617,864[1]				127.2		

[1] Population estimated for the Western Sydney Local Health District by 2011 (MH-CCP 2010 calculator v2)

SUB-ACUTE INPATIENT SERVICES

A total of 5 BSICs were identified as providing sub-acute inpatient care in the area of the Western Sydney LHD. Four out of the five are located inside the Cumberland Hospital. The remaining one (Bunya) is a special forensic sub-acute unit.

The number of sub-acute beds per 100,000 inhabitants is 16.83. The number of services providing sub-acute care per 100,000 inhabitants is 0.81

Table 3. Sub-acute inpatient services: availability and capacity

Provider	Pop > 18 years olds	Name	Desde1	Beds	Town	Coverage Area
Cumberland Hospital		Boronia	A[F0-F99]-R4	20	Westmead	Western Sydney
		Bunya	A[F0-F99]-R4j	24	Westmead	Western Sydney
Cumberland Hospital-Cottages		Willow	A[F0-F99]-R4	20	Westmead	Western Sydney
		Waratah	A[F0-F99]-R4	20	Westmead	Western Sydney
Blacktown Hospital		Malaleuca	A[F0-F99]-R4	20	Blacktown	Western Sydney
TOTAL	617,864			104		

LONG TERM STAY INPATIENT SERVICES

We have identified only 1 BSIC providing long term stay inpatient care for people with mental health problems. It is also located on the Cumberland campus.

The number of long term stay inpatient beds per 100,000 inhabitants is 3.24. The numbers of services providing long term stay per 100,000 inhabitants is 0.16.

Table 4. Long Term Stay Residential services- availability and capacity

Provider	Pop > 18 years olds	Name	Desde1	Beds	Town	Coverage Area
Cumberland Hospital		Acacia	A[F0-F99]-R6	20	Westmead	Western Sydney
TOTAL	**617,864**			**20**		

OTHER RESIDENTIAL CARE

A total of 14 BSICs providing support accommodation and managed by the public health sector were found in the area of Western Sydney LHD. These BSICs provide non-acute residential care outside of the hospital. There are 7 residential houses in North Parramatta, which provide 24 hour nursing supervision (CHIP Hostel). One of them (Red Gum) is devoted to forensic patients who are referred from the sub-acute forensic unit at the Cumberland Hospital (Bunya). In addition, we have found 7 units that provide

lower support (non 24 hour supervision). Five of them are related to the CHIP Outreach program. It is worth noting that two out of five of these facilities are managed by the LHD, while the remaining three are owned by Social Housing (FaCS) and by Community Housing (St George).

The number of low support accommodation places per 100,000 inhabitants is around 2.27. The number of services providing long term stay per 100,000 inhabitants is 11.98

Table 5. High and Low Support Accommodation- availability and capacity

Provider	Name	Desde1	Beds	Town	Coverage Area
Community MH Services	Support Accommodation CHIP Hostel	A [F0-F99]-R8. 2	5	North Parramatta	Western Sydney
	Support Accommodation CHIP Hostel	A [F0-F99]-R8. 2	5	North Parramatta	Western Sydney
	Support Accommodation CHIP Hostel	A [F0-F99]-R8. 2	5	North Parramatta	Western Sydney
	Support Accommodation CHIP Hostel	A [F0-F99]-R8. 2	5	North Parramatta	Western Sydney
	Support Accommodation CHIP Hostel	A [F0-F99]-R8. 2	5	North Parramatta	Western Sydney
	Support Accommodation CHIP Hostel	A [F0-F99]-R8. 2	5	North Parramatta	Western Sydney
	Support Accommodation Red Gum	A [F0-F99]-R8. 2j	5	North Parramatta	Western Sydney
	Support Accommodation Chip Outreach	A [F0-F99]-R10.2	5	Westmead	Western Sydney
	Support Accommodation Chip Outreach	A [F0-F99]-R10.2	5	Wenthwothville	Western Sydney
	Support Accommodation Chip Outreach* (manage by Social Housing-FaCS)	A [F0-F99]-R10.2	5	North Parramatta	Western Sydney
	Support Accommodation Chip Outreach* (manage by Social Housing-FaCS)	A [F0-F99]-R10.2	5	North Parramatta	Western Sydney
	Support Accommodation Chip Outreach* (manage by Community Housing -St George)	A [F0-F99]-R10.2	5	North Parramatta	Western Sydney
	Support Accommodation	A [F0-F99]-R10.2	4	Granville	Western Sydney
	Residential Team	A [F0-F99]-R10.2	10	Mt Druitt	Western Sydney
TOTAL	617,864		74		

3.2.1.2. RESIDENTIAL CARE PROVIDED BY FAMILY AND COMMUNITY SERVICES (FACS)-SOCIAL HOUSING

Family and Community Services (FaCS) provides services related to:

- Aboriginal and Torres Strait Islander peoples.
- Children and young people.
- Families.
- People who are in need of housing.
- People with a disability, their families and carers.
- Women.
- Older People.

FaCS aims to improve the lives of vulnerable people and to support their participation in social and economic life. People with mental health problems use the services provided by FaCS, but FaCS does not provide specific care for people with mental health problems. **Concerns have been raised about the appropriateness of including FaCS in the Mental Health Atlas as it could bias the picture by implying that there are significantly more services targeting people with mental health problems than there are.** On the other hand, people with mental health problems are one of the main client groups in some of these areas, such as Public Housing. Excluding some of these services also distorts the picture.

The fact remains that there is no specific BSIC (service or team) in Family and Community services that specialises in care for people with mental health problems. This contrasts significantly to other counties, where equivalents to Family and Community services include a specific division related to Mental Health. In spite of this, we think that it is important to mention the services for the general population that relate to Public Housing and Child Protection.

We have excluded the services providing care for people with intellectual disabilities.

SOCIAL HOUSING

According to the last report published by FaCS NSW [20], as at 30 June 2013 there were a total of 110,059 households living in public housing; 25,973 living in community housing and 4469 living in Aboriginal Housing. FaCS manages 149,972 properties in all NSW, comprising 117,798 public housing dwellings, 27,450 properties in the community housing sector and 4724 Aboriginal Housing properties.

We have identified three main obstacles for evidence informed local planning related to mental health care in social housing: 1) it is not possible to know how many of the properties are specifically devoted to people with a lived experience of mental ill-health; 2) it is not possible to know how many people with a lived experience of mental ill-health were using the properties (data on mental health status is not collected); and 3) properties are not restricted to specified districts (i.e. a person living in Western Sydney may be relocated in Northern NSW if there is a property available there).

An additional problem is that public housing may or may not include direct support. People with a lived experience of mental ill-health who need support at home receive this type of care through the House and Accommodation Support Initiative (HASI). HASI is a partnership between NSW Health, Housing NSW and an array of non-government organizations (NGOs) that provides people with mental health problems access to stable housing linked to clinical and psychosocial rehabilitation services. HASI can be delivered at an individual’s privately owned or rented property or through social housing. Consequently, it could be argued that **the way housing for people with mental health problems is provided is more accurately conceptualised as a financing mechanism than a service providing care.**

In spite of the above limitations we codified the FaCS services. We found 8 BSIC/services delivered by FaCS providing direct care related to housing. Although this is not specifically for people with mental health problems, most of their clients experience mental health issues. However, if they are using the system it is because they are in a vulnerable situation.

Five out of the eight services are providing tenancy support, that is, non-acute, mobile, outpatient care of low intensity (contact with the client is lower than once a month). The other three BSICs are focused on helping the client to access social housing (through assessment and eligibility).

It is important to recognize that although these BSICs/services are mainly providing care for people within the boundaries of Western Sydney LHD, they also provide support to people from throughout the state if needed.

The total number of BSICs (or services) providing tenancy support (non-acute, mobile, outpatient care, low intensity) in Western Sydney is 0.81 per 100,000 inhabitants.

The number of BSICs (or services) providing assessment and eligibility care (accessibility to social housing) in Western Sydney is 0.49 per 100,000 inhabitants.

Table 6. BSICs related to social housing

Provider	Pop >18 years old	Name	Desde 1	Town	Coverage Area
Family & Community Services		Tenancy support	AX[Z55-Z65]-O7.2	Parramatta	Western Sydney
		Tenancy support	AX[Z55-Z65]-O7.2	Parramatta	Western Sydney
		Tenancy support	AX[Z55-Z65]-O7.2	Parramatta	Western Sydney
		Tenancy support	AX[Z55-Z65]-O7.2	Mt Druitt	Western Sydney
		Tenancy support	AX[Z55-Z65]-O7.2	Blacktown	Western Sydney
		Assessment and Eligibility	AX[Z55-Z65]-A5.5.	Parramatta	Western Sydney
		Assessment and Eligibility	AX[Z55-Z65]-A5.5.	Mt Druitt	Western Sydney
		Assessment and Eligibility	AX[Z55-Z65]-A5.5.	Blacktown	Western Sydney
TOTAL	**617,864**				

3.2.1.3. Residential Care provided by NGOs- Community Housing

We have not been able to identify residential services (including community housing) provided by NGOs within the boundaries of the Western Sydney LHD.

The same limitations that have been discussed in the FaCS section also apply to community housing: organizations such as Hume, Argyle, St George, among others, only provide the property, while the support is provided by other NGOs. So, this type of service is a “financial mechanism” (help to access housing) rather than a service providing direct support for people with mental health problems. As mentioned in the FaCS section, although the property is located in Western Sydney, it is utilized by the whole state. In addition, it is difficult to know how many of these properties are devoted to people with mental health problems, as they are accessible to all vulnerable groups in the general population. Despite this, it is possible to estimate how many residents in the properties are participating in HASI.

The table 7 summarises this information as a proxy of availability of housing for people with mental health problems, where this information was reported by the providers.

Table 7. Community Housing Providers in Western Sydney Region

	No Properties in the area (WS and SWS)	No of properties with a client under the HASI program
Evolve Housing	2234	*no response*
Argyle Community Housing	1994	*no response*
Community Housing Limited	1248	*no response*
Ecclesia Housing	302	*no response*
Hume Community Housing	1400	**No properties in WS.**
MA Housing	961	*no response*
St George	4069	**6**

3.2.2. Day Care

3.2.2.1. Day Care Provided by the Public Health Sector

We have not identified any service providing day care in the Public Health Sector.

3.2.2.2. Day Care Provided by NGOs.

Social and Cultural Related

We have identified 3 BSICs (or services) providing social and cultural related day care for people with mental health problems. These are centres that enable social contacts in a structured way and that provide workshops that aim to train people in basic life skills. Two of the BSICs (or services) identified (RichmondPRA and Uniting Care) are high intensity, meaning that they can be used more than the equivalent of four half days per week. They provide structured activities but the users can drop in whenever they want, being an open program. On the other hand the BSIC (or service) provided by the Hills Community Care Mental Health Respite program provides the same type of care, but low intensity. However, in addition to the centre, this BSIC (or service) also provides mobile outpatient care, meaning that they can go to the home of the client and take care of the person, while their family/carers need a break. The Hills Community Care Mental Health respite Program has 35 places.

The total number of BSICs (or services) providing cultural and social related day care in Western Sydney is 0.49 per 100,000 inhabitants.

Table 8. Availability of Day Care

Provider	Name	Desde 1	Desde 2	Town	Coverage Area
Hills Community Care Mental Health Respite Program	Hills Community Care Mental Health Respite Program	GX[F0-F9]-D9	GX[F0-F9]O5.2.1	Baulkham Hills	Western Sydney
RichmondPRA	Embark Cottages	Ax[F0-F99]-D5		Blacktown	Western Sydney
Uniting Care	Day to Day centre	AX[F0-F99]-D5		Parramatta	Western Sydney

WORK RELATED

Only one BSIC (or service) providing work-related day care for people with experiencing mental ill-health was identified within the boundaries of Western Sydney LHD. This day-care facility provides clients with the opportunity to work for pay. In this case, employees are paid at least 50% of the minimum wage for this form of work.

The total number of BSICs (or services) providing work related day care in Western Sydney is 0.16 per 100,000 inhabitants, with a total of 3.43 places per 100,000 inhabitants.

Table 9. Availability of Day Care- Work Related

Provider	Name	Desde 1	Town	Coverage Area
RichmondPRA	Enterpraise	Ax[F0-F99]-D2.2	St Marys	Western Sydney

3.2.3. OUTPATIENT CARE

3.2.3.1. OUTPATIENT CARE PROVIDED BY THE PUBLIC MENTAL HEALTH SECTOR

ACUTE OUTPATIENT CARE (EMERGENCY CARE)

We identified a total of 4 BSICs (or services) providing emergency care for adults with mental health problems. These teams also liaise with other services at hospitals to provide psychiatric care. At Blacktown Hospital this team also provides non-acute services. It should be noted that the emergency care team at Westmead Hospital covers all of NSW. Similar to the acute wards, we have weighted this service by 0.6 to account for the availability of services for people living within the boundaries of Western Sydney LHD. Lastly, the Access and Assessment Mental health Team is a mobile team that provides acute care during limited hours in a range of settings including the client's home.

The numbers of services providing acute outpatient care per 100,000 inhabitants is 0.58.

Table 10. Availability of Acute Outpatient Care

Provider	Pop > 18 years old	Name	Desde1	Desde2	Town	Coverage Area
Cumberland Hospital		Assessment Centre	A[F0-F99]-O3.1		Westmead	Western Sydney
Westmead Hospital		Consultation/ Liaison/ Outpatient	A[F0-F99]-O3.1l		Westmead	State Level
Blacktown Hospital		Consultation/ Liaison/ Outpatient	A[F0-F99]-O3.1l	A[F0-F99]-O8.1	Blacktown	Western Sydney
Community Mental Health Services		Access and Assessment Mental health	A [F0-F99]-O2.1l		Blacktown	Western Sydney

	Team				
TOTAL	**617,864**				

Non-Acute Mobile Outpatient Care

A total of 5 BSICs (or services) providing non-acute, mobile, outpatient care were identified. Two of them (Auburn and Parramatta) are composed of one person (a nurse). In other two of them (Auburn, Parramatta) these teams also liaise with other services across the LHD. These BSICs (or services) have the capacity to attend to people according to their needs. The Greyvillea team provide non-acute, home and mobile care, with high intensity that is health related during 7 days per week. The clients in this team have more complex needs and may require a higher intensity.

The numbers of BSICs (or services) providing non-acute mobile outpatient care per 100,000 inhabitants is 0.81.

Table 11. Availability of non-acute mobile outpatient care

Provider	Pop >18 years old	Name	Desde1	Town	Coverage Area
Community MH Services		Community Nurse	A [F0-F99]-O5.1lu	Auburn	Western Sydney
		Community Nurse	A [F0-F99]-O5.1lu	Parramatta	Western Sydney
		Community Rehabilitation Services	A [F0-F99]-O5.1	Granville	Western Sydney
		Case Management Team	A [F0-F99]-O5.1.1	Blacktown	Western Sydney
		Greyvillea	A [F0-F99]-O5.1.2	Mt Druitt	Western Sydney
TOTAL	**617,864**				

Non-Acute Non-Mobile Outpatient Care

We identified 8 BSICs (or services) providing non-acute, non-mobile outpatient care. These teams provide face to face services to people with mental health problems living in the different areas of Western Sydney LHD. They have the capacity to see clients according to their needs (i.e. on a weekly basis if needed). Although these have been classified as non-mobile services, they have the capacity to see people in the community, and around 20% - 49% of their activity is mobile (but less than 50%). We have added the qualifier “d” to these codes to highlight this fact. The teams in Parramatta and Merrylands also provide mobile time-limited emergency care outside office hours. One of the teams in Castle Hill is managed by the Community Health Centre (instead of being managed by the Community

MH service), and provides counselling support. The Psychological Services at Cumberland Hospital specialise in psychological treatment for depression and anxiety disorders.

The numbers of BSICs (or services) providing non- acute outpatient care per 100,000 inhabitants is 1.29.

Table 12. Availability of non-acute non-mobile outpatient care

Provider	Pop >18 years old	Name	Desde1	Desde2	Town	Coverage area
Cumberland Hospital		Psychology Services	A[F0-F99]-O9.1		Westmead	Western Sydney
Community MH Services		The Hills MH Team	A [F0-F99]-O9.1d		Castle Hill	Western Sydney
		Dundas MH Team	A [F0-F99]-O9.1d		Telopea	Western Sydney
		Parramatta MH Team	A [F0-F99]-O9.1d	g[f0-f99]-o2.1	Parramatta	Western Sydney
		Merrylands MH Team	A [F0-F99]-O9.1d	g[f0-f99]-o2.1	Merrylands	Western Sydney
		Auburn MH Team	A [F0-F99]-O9.1d		Auburn	Western Sydney
		Therapies and Clinical Support Team (at Bungurribee House)	A [F0-F99]-O9.1d		Blacktown	Western Sydney
The Hills Community Health		Adult Counselling Services	A [F0-F99]-O9.1d		Castle Hill	Western Sydney
TOTAL	**617,864**					

3.2.3.2. Outpatient Care Provided by NGOs

Mobile Outpatient Care

We identified 5 BSICs (or services) providing non-acute mobile outpatient care for people with mental health problems. Three of them are related to the HASI program. Affordable housing is delivered by social housing providers, clinical care by the Mental Health Services, and accommodation support by the NGOs. In the area of Western Sydney LHD, accommodation support is provided by Richmond PRA and Uniting Care. Richmond PRA also provides a HASI service specific to Aboriginal and Torres Strait Islanders people.

Uniting Care is also providing a Mental Health Family and Carer Program that is mainly targeting the families of people with mental health problems and can be conceptualised as a respite program, as well as the Personal Helpers and Mentors Services (PHaMs). This service provides practical assistance to people with severe mental illness to help them to achieve their goals, develop better social relationships and manage their day-to-day activities.

The total number of BSICs (or services) from the NGO sector providing mobile outpatient care (non-acute) in Western Sydney is 0.81 per 100,000 inhabitants (0.49 account the HASI program alone).

Table 13. Availability of non-acute mobile outpatient care (NGOs)

Provider	Name	Desde1	Town	Area covered
Uniting Care	Housing and Accommodation Support Initiative	AX[F0-F99]-O5.2	Parramatta	Western Sydney
	Personal helpers and mentors (PHaMs)	AX[F0-F99]-O5.2	Parramatta	Western Sydney
	UnitingCare Mental Health Family and Carer Program	Gx[e310][F0-F99]-O5.2	Parramatta	Western Sydney
RichmondPRA	Housing and Accommodation Support Initiative	Ax[F0-F99]-O5.2	Seven Hills	Western Sydney
	Housing and Accommodation Support Initiative- ATSI	Ax[F0-F99][1102]-O5.2	Seven Hills	Western Sydney

Partners in Recovery

We have identified 5 organisations involved in the PIR program providing support facilitation. The program is lead by WentWest (Primary Heath Network) that contracts different organizations to provide the support. The main objective of the PIR program is to increase the accessibility to a different range of services of people with a lived experience of mental illness. Interestingly, though, these providers are not just focused on the accessibility, but take a more holistic approach, providing also some of counselling or coaching. Theoretically, the code of the PIR program should be an A4, but it seems that they are providing more intensive direct day care. They can meet accordingly to the needs of the patient, with the capacity of meeting them on a daily basis, if needed in the first stage of the program. The program started in 2012, and it has been recently extended for 3 additional years (until 2018). A more detailed analysis of Partners in Recovery will be needed.

Table 14. PIR in Recovery

Provider	Name	Desde1	Town	Coverage Area	FTE support facilitators
RichmondPRA	Partners in Recovery	A [F0-F99]-O5.2	Seven Hills	Council area/Western Sydney	3 support facilitators
AfterCare	Partners in Recovery	A [F0-F99]-O5.2	Castle Hill	Council area/Western Sydney	1 team leader +4 support facilitators
Uniting Care Mental Health	Partners in Recovery	A [F0-F99]-O5.2	Oatlands	Council area/Western Sydney	1 team leader + 3.8 support facilitators
Mission Australia	Partners in Recovery	A [F0-F99]-O5.2	Blacktown	Council area/Western Sydney	1 team leader + 3.8 support facilitators
Wise Employment	Partners in Recovery	A [F0-F99]-O5.2	Auburn	Council area/Western Sydney	1 team leader + 4.6 support facilitators

Non-Mobile Outpatient Care

We have found three BSICs (or services) providing non-mobile outpatient care. The Blackdog REACH program, delivered by Catholic Care Social Services, is a psycho-educational wellbeing group aiming to help participants with depression or bipolar disorder to manage their illness. It is based on the principles of Responsibility, Education, Acceptance, Connection and Hope. The Blacktown Women' and Girls'

Health Centre provides counselling services for women and girls who are experiencing psychosocial difficulties or who are survivors of violence. Similarly, Women's Activities and Self Help House (in Mt Druitt) provides outpatient care related to their social needs (i.e. counselling, education, early intervention for mothers with a mental illness) for women with psychosocial problems. Lastly, Uniting Care also manages a BSIC (or service) providing financial counselling for people with psychosocial problems and mental health problems.

Table 15. Availability of non-acute non-mobile outpatient care (NGOs)

Provider	Name	Desde1	Town	Area covered
CatholicCare Social Services	Blackdog REACH programs	Ax[F0-F99]-O9.1	Blacktown	Western Sydney
Blacktown Women' and Girls' Health Centre	Counselling	GX[Z55-Z65]O9.1s	Blacktown	Western Sydney
Women's Activities and Self Help House	Women's Activities and Self Help House	AX[F0-F99]-O9.2	Mt Druitt	Western Sydney
Uniting Care	Financial Counselling	Ax[Z55-Z65][D860-D879]-O8.2b	Parramatta	Western Sydney

3.2.4. Accessibility Services

3.2.4.1. Accessibility Services Provided by NGOs

Accessibility related services cover a wide range of domains. We have found 3 BSICs or services facilitating access to different types of care. RichmondPRA provides accessibility related to culture and education, while Uniting Care is focused on increasing accessibility to employment. Finally, Afford Employment has a service that aims to increase accessibility to employment for people with disabilities, including psychosocial ones.

Table 16. Availability of accessibility to care

Provider	Name	Desde1	Town	Area Covered
RichmondPRA	Recovery and Resources Service Program	Ax[F0-F99]-A5.3	Blacktown	Western Sydney
Uniting Care	PHaMs-Employment	AX[F0-F99]-A5.4	Blacktown	Western Sydney
Afford	Access to Employment	AX[F0-F99]-A5.4	Blacktown	Western Sydney

Ability Links

Ability Links is a program funded by FACs that aims to support people with disability, their families and carers. It supports people to access supports and services in their local communities. Although it is not a specific service for people with psychosocial disabilities, they deal with people with mental health issues. They have estimated that at least 70% of their clients will have mental health needs. Uniting Care in partnership with Settlement Services International are the providers of the Ability Links in Western Sydney. There are offices in Parramatta, Blacktown and Auburn. They provide care for people from 9 to 65 years old.

3.2.5. Information and Guidance

3.2.5.1. Information and Guidance Services provided by NGOs

We have identified 3BSICs (or services) providing information related to mental ill-health. The main characteristic of these services is that they do not entail subsequent follow up. Lifeline provides information via telephone and it is for all age groups.

Table 17. Availability of Information and Guidance services

Provider	Name	Desde1	Town	Area Covered
Granville Multicultural Community Centre	Granville Multicultural Community Centre	GX[Z55-Z65]-I2.1.1	Granville	Western Sydney
Salvation Army	Emergency Relief Providers	Ax[z55-z65]I2.1.1	Parramatta	Western Sydney
Uniting Care	Lifeline	Gx[F0-F99]-I2.1.2	Parramatta	Western Sydney (National, but focus on the council area)

3.2.5.2. Information and Guidance Services provided by the Police

We have found 6 BSICs (or services) delivered by the police providing information that may be related to mental health issues. They are working closely with PIR Western Sydney and we believe that it is therefore important to include them here. Although some of their clients may be experiencing mental health issues these are not specific services for people with mental health problems.

Table 18. Availability of information and guidance Services (Police)

Provider	Name	Desde1	Town	Area of Coverage
NSW Police	NSW Police Mount Druitt	Ax[Z55-Z65]- I2.12	Mount Druitt	Western Sydney
	NSW Police Quakers Hill	Ax[Z55-Z65]- I2.12	Quakers Hill	Council area
	The Hills Local Area Command- NSW Police Force	Ax[Z55-Z65]- I2.12	Castle Hill	Western Sydney
	NSW Police Parramatta	GX[Z55-Z65]I2.12	Parramatta	State
	NSW Police Blacktown	Ax[Z55-Z65]- I2.12	Blacktown	Council area
	NSW Police Auburn	Ax[Z55-Z65]- I2.12	Auburn	Council area

3.2.6. Self and Voluntary Support

3.2.6.1. Self and Voluntary Support provided by NGOs.

We have found one service based on volunteer staff providing care for people with mental health problems: the Compeer Friendship Program, is managed by the St Vincent de Paul Society, and located in North Parramatta. This service aims to improve the mental wellbeing and self-esteem of adults experiencing mental ill-health through one-to-one friendship with a caring volunteer. Friends meet for simple social activities, such as going for a walk or visiting a local attraction.

Hearing Voices Network NSW provides support groups on a monthly basis in different locations (e.g. Parramatta). The Mental Health Association provides Anxiety Support Groups on a monthly basis in different locations around Western Sydney (Blacktown and Parramatta);

Provider	Name	Desde1	Town	Area of Coverage
St Vincent the Paul Society	Compeer Friendship Program	Ax[Z55-Z65]- S-A3	North Parramatta	Western Sydney
Hearing Voices NSW	Support Groups	Ax[F0-F99]-S1.3	Different Locations	Western Sydney
Mental Health Association	Support Groups	Ax[F0-F99]-S1.3	Different Locations	Western Sydney

3.2.7. Other Specific Services for Adults (Parents)

3.2.7.1. Public Health Sector

We have identified three additional BSICs (or services) providing perinatal related care. One of them is located in Westmead. This service provides acute, home and mobile health-related care to new mothers with mental health issues. Although the service is located at the Westmead Hospital, it covers all the state. On the other hand, the Safe Start team is focused on care coordination of maternal and child health care, with a special focus on mental health issues. The third service is provided by St John of God, but it is publicly accessible, without a fee. It provides care for mothers with postnatal depression.

Lastly, there is one BSIC (or service) in North Parramatta that provides non-acute health care for parents with mental health problems and their children. It is a mobile service composed of just one professional. It covers the area of the Western Sydney LHD.

Table 19. BSICs (or services) providing care for families (Health Sector)

Provider	Name	Desde1	Town	Coverage Area
Westmead Hospital	Perinatal Team	Ax[F0-F99]-O2.1	Westmead	State Level
Community MH Services	Safe Start	Ax [F0-F99]-A4ls	Mt Druitt	Western Sydney
Saint John of God	Outpatient Services Puerperial MH problems	Ax[F53.0]-O8.1	Blacktown	Western Sydney
Community MH Services	COPMI- Children of Parents Mentally Ill	Gx [F0-F99]-O5.1lu	North Parramatta	Western Sydney

3.3. Children and Adolescents

In this section we describe the availability and placement capacity of the BSICs (or services) providing care for children and adolescents with mental health problems. Specific care related to transition from adolescence to adulthood is also included in this section.

3.3.1. Residential Care

3.3.1.1. Residential Care provided by the Public Health Sector

A total of three BSICs (or services) providing care for children and adolescents experiencing mental health problems were identified.

There is an acute mental health unit in Westmead providing care for children with behavioural problems. However, the number of beds provided by the service was not released. In addition, this service covers the whole state so needs to be weighted. Unfortunately, we do not have information on the flow of patients and therefore are unable to estimate a weight.

There is also a BSIC (or service) providing acute inpatient care for adolescents with mental health problems. This specialised service is known as RedBank House. A total of 24 beds are available. The level of coverage is also the whole state, so numbers should be weighted to account for this. However, we do not have information on the flow of patients and therefore are unable to estimate a weight. Lastly, there is a special acute inpatient unit at the Cumberland Hospital for young people with mental health problems (16-25 years old). This service covers the Western Sydney LHD.

Table 20. Availability of Acute residential care- children and adolescents

Provider	Name	Desde1	Beds	Town	Coverage Area
Westmead	Child Acute MH Unit	Cs [F0-F99]-R2		Westmead	State Level
RedBank House	Acute unit for Adolescents	Ca[F0-F99]-R2	24	Westmead	State Level
Cumberland Hospital	Riverview	TA[F0-F99]-R2	20	Westmead	Western Sydney

3.3.1.2. Residential Care provided by NGOs

We have found a residential service (Kurinda) provided by Aftercare to young people between the ages of 14 and 24 years who have a diagnosed mental illness. Kurinda is staffed 24 hours a day, seven days a week. This service covers the whole of NSW.

Table 21. Availability of high support residential care- children and adolescents

Provider	Name	Desde1	Beds	Town	Coverage Area
AfterCare	Kurinda Adolescent Service	TA[F0-F99]-R8.2	10	Seven Hills	State Level

3.3.2. Day Care

3.3.2.1. Day Care Provided by the Public Health Sector

We found only one service providing day care for children and adolescents with mental health problems. It was located at **Redbank House** (Westmead) and provides day care related to education (similar to a school) to children and adolescents who are hospitalized or experiencing mental health problems and

are not able to follow a regular school-based course of study. It has a total of 16 places and covers the whole state.

Provider	Name	Desde1	Town	Coverage Area
RedBank House	Day Care related to education	Cx[F0-F99]-D4.2	Westmead	State Level

3.3.3. Outpatient Care

3.3.3.1. Outpatient Care provided by the Public Health Sector

A total of 8 BSICs (or services) providing outpatient care for children and adolescents were found. Four of them are services for children (Redbank House at Westmead, and the community MH services in Auburn, Blacktown and Mt Druitt), one is a service for children and adolescents (counselling services at Castle Hill) while the other three (PEIRS and BEAT) are services targeting young people (16-25 years).

The outpatient services at the Redbank House and the Got it! are providing outpatient care for the whole state.

All the BSICs (or services) identified are non-mobile, with the exception of Got it!, which is a mobile service.

Table 22. Availability of non-mobile non-acute care- child and adolescents

Provider	Name	Desde1	Town	Coverage Area
RedBank House	Outpatient service for children	Cc[F0-F99]-O8.1	Westmead	State Level
Community MH Services	Therapy for kids (T4K)	Cc [F0-F99]-O8.1	Auburn	Western Sydney
	PMHT (Paediatric Mental health)	Cc [F0-F99]-O8.1	Blacktown	Western Sydney
	Got it!	Cc [F0-F99]-O5.1l	Mt Druitt	State Level
The Hills Community health Centre	Children Counselling Services	Cx [F0-F99]-O8.1	Castle Hill	Western Sydney
Community MH Services	PEIRS @ Signature Tower	TA[F0-F99]-O8.1m	North Parramatta	Western Sydney
Community MH Services	PEIRS Recovery	TA[F0-F99]-O8.1	Parramatta	Western Sydney
Community MH Services	BEAT (Blacktown Early Access Team)	TA [F0-F99]-O8.1l	Mt Druitt	Western Sydney

3.3.3.2. Outpatient Care provided by FaCS

We identified one service that provides care for children and their families in a vulnerable situation, with a special focus on the mental health needs of both children and their parents. It is a non-mobile, non-acute, high intensity, outpatient service. This BSIC or service is composed by a team of psychologists and social workers who, in addition to the face-to-face contact with the families, also provide clinical advice to other community services and training for case workers. The direct care they provide consists of behavioural assessment and parenting education aimed at providing them with skills to address their

children's behavioural problems. Although the client is the child, they always have direct contact with the parents and/or carers. It is characterised as a preventive and early intervention service, rather than a service focused on treatment.

Table 23. Availability of non-acute non-mobile outpatient care- child and adolescents (FaCS)

Provider	Name	Desde 1	Town	Coverage Area
Family & Community Services-	Child protection	Cx[e310][Z55-Z65]-O8.1	Parramatta	Western Sydney

3.3.3.3. Outpatient Care provided by NGOs

Mobile Outpatient Services

Two services providing mobile outpatient care for children and adolescents with psychosocial needs were identified. Both of them are targeting the social needs of this population. 2Realise aims to develop mental, social and emotional resilience of young people, while Junay is more focused on working with families with psychosocial problems.

Table 24. Availability of non-acute mobile outpatient care- child and adolescents (NGOS)

Provider	Name	Desde1	Town	Area of coverage
2REALISE	2realise	Cx[Z55-Z65]-O5.2	Baulkham Hills	Western Sydney
Junay	Junay Family Development Services	Cx[e310][Z55-Z65]-O6.2	Blacktown	Western Sydney

Non-Mobile Outpatient Services

There are three services providing non-mobile outpatient support for young people with mental health problems. Two of them are focused on the heath related needs (Headspace managed by Uniting Care in Mt Druitt and Parramatta). The other one has two main objectives, the social needs of the young person and those of his/her family.

Table 25. Availability of non-acute non-mobile outpatient care- child and adolescents (NGOs)

Provider	Name	Desde1	Desde2	Town	Area of coverage
Uniting Care	Headspace	TA[F0-F99]-O8.1b		Mtt Druitt	Western Sydney
	Headspace	TA[F0-F99]-O8.1b		Parramatta	Western Sydney
Mission Australia	Family MH Support services	Cx[F0-F99]-O8.2	ax[e310][f0-f99]-o8.2	Mt Druitt	Western Sydney

3.4. Older People

In this section we describe the availability and placement capacity of the BSICs (or services) providing care for older people with mental health problems.

3.4.1. Residential Care

3.4.1.1. Residential Care provided by the Public Health Sector

We have identified a total of 3 BSICs providing residential care for older people with mental health problems.

The BSIC in the Westmead Hospital provides **acute care.** Again, the level of coverage is all the state, so this facility needs to be weighted.

The number of acute inpatient BSICs (or services) for older people living in Western Sydney per 100,000 inhabitants is 0.7, with 6.95 beds per 100,000 older people with mental health problems.

On the other hand, the BSIC (or service) in Mt Druitt Hospital provides **sub-acute care** for people with mental health problems.

The number of sub-acute inpatient BSICs (or services) for older people living in Western Sydney per 100,000 inhabitants is 1.15, with 18.54 beds per 100,000 older people with mental health problems.

Lastly, there is one BSIC (or service) providing **long term inpatient care** in Cumberland Hospital.

This means that the number of long term inpatient care for older people with mental health problems per 100,000 inhabitants is 1.15, with 23.18 beds per 100,000 inhabitants.

Overall, there are 48.66 beds per 100,000 inhabitants provided by the public health sector for older people with mental health problems. The total number of BSIC/services providing residential care for older people with mental health problems is 3.01 per 100,000 inhabitants.

Table 26. Residential Care for Older People

Provider	Pop > 64 years old	Name	Desde1	Beds	Town	Coverage Area
Westmead Hospital		C4b	O[F0-F99]-R2	10 (6)	Westmead	State Level
MT Druitt Hospital		T-Basis	O[F0-F99]-R4	16	Mt Druitt	Western Sydney
Cumberland Hospital-Cottages		Banskia	O[F0-F99]-R6	20	Westmead	Western Sydney
TOTAL	86,296			42		

3.4.2. DAY CARE

3.4.2.1. Day Care provided by NGOs

We have not found any specific day care service for older people with mental health problems. In spite of this, it is worth mentioning the Men's Shed service, supported by Granville Multicultural Centre. It is a service where men can meet to socialise and do various "hands on" projects. It is only for men, and especially for men in the period near their retirement age (pre or post). Although it is not for men with mental health problems, it has a special focus on the prevention of mental illness.

Table 27. Day Care for Older People (NGOs)

Provider	Name	Desde1	Town	Coverage Area
Granville Multicultural Community Centre	Men's Shed	TO[Z55-Z65]D4.3	South Granville	Local Level

3.4.3. Outpatient Care

3.4.3.1. Outpatient Care provided by the Public Health Sector

We have identified 2 BSICs (or services) providing care for older people with mental health problems. They provided mobile health care, non-acute and high intensity care. This means that the professionals can visit the client in their home, according to his/her needs (for example they have the capacity of see them on a weekly basis).

The number of outpatient services, providing care for older people with mental health problems per 100,000 inhabitants is 2.32.

Table 28. Outpatient Care for Older People

Provider	Pop > 64 years old	Name	Desde1	Town	Coverage Area
Community MH Services		SMHSOP Community Aged Care psychiatry (Cumberland)	O [F0-F99]-O5.1	Merrylands	Western Sydney
		SMHSOP Community Aged Care psychiatry (Blacktown)	O [F0-F99]-O5.1	Blacktown	Western Sydney
TOTAL	86,296				

3.5. Other Specific Populations

3.5.1. Multicultural Services provided by the public Health Sector

The Transcultural MH Service is located at Westmead, inside Cumberland Hospital. This service can be divided into 3 BSICs. The first one is focused on prevention and early intervention. It provides monthly outpatient care for migrants and their families. It provides outpatient non-mobile, high intensity, non-acute care for people with mental health problems from different cultural backgrounds. This BSIC also incorporates a team that translates and elaborates mental health information for individuals from different cultural and linguistic backgrounds. They are also responsible for translating clinical instruments (such as questionnaires) and for guaranteeing respectful cultural practices. The second BSIC targets people with gambling problems who come from different cultural and linguistic backgrounds. They provide high intensity, non-mobile, non-acute care. The third BSIC mainly provides information related to mental health to people with mental health issues coming from different cultures. This BSIC is not involved in follow-ups with the client. It has to be kept in mind that this service provides support to the entire state.

In addition to the services provided by the Transcultural MH team, we have identified another BSIC (or service) providing care for refugees. It is part of Blacktown Community Health Centre and they provide mobile outpatient care (at least on a fortnightly basis) for refugees with psychosocial problems, mostly related to trauma. Although the office of this service is located in Liverpool, it covers the area of Blacktown.

Table 29. Multicultural Services (Health)

Provider	Name	Desde 1	Desde 2	Town	Coverage Area
Transcultural MH Services	Prevention and Early Intervention- Carers Programs	Gx[F0-F99][Z59.0][e310] -O10.1s	gx[f0-f99][z59.0]-I2.2s	Westmead	State Level
	Multicultural Gambling	Ax[F63.0][Z59.0]-O8.1s		Westmead	State Level
	Clinical Services	Gx [F0-F99][Z59.0]-I1.1s		Westmead	State Level
Blacktown Community Health Centre	NSW Refugee Health Service	GX[Z55-Z65]-O6.1		Liverpool* *(but covers Blacktown area)*	Western Sydney

3.5.2. Multicultural Services provided by NGOs

We have identified 4 additional BSICs (or services) providing care for people with psychosocial problems from diverse cultural and linguistic backgrounds.

One of them is STARTTS, the NSW Service for the Treatment and Rehabilitation of Torture and Trauma Survivors. This BSIC (or service) provides non-mobile, outpatient, high intensity care for people from

refugee and refugee-like backgrounds who have experienced torture or other traumatic events before arriving in Australia. It is located in Blacktown.

The other services are provided by SydWest Multicultural Services and are also located in Blacktown. The main aim of these services is to facilitate the care coordination and the related accessibility to different types of services for people who have newly arrived in Australia from overseas. They have three different target populations covered by three different teams: (i) early intervention - providing care coordination for individuals and their families; (ii) settlement and youth services, and (iii) people with disabilities from culturally and linguistically diverse backgrounds. Although these are not specific services for people with mental health problems, more than 20% of their clients have mental health issues and may be using the service as a result of this.

Table 30. Multicultural Services (NGOs)

Provider	Name	Desde 1	Town	Coverage Area
STARTTS	STARTTS- Refugee Counselling Service	GX[Z55-Z65]-O8.1	Blacktown	Western Sydney
SydWest Multicultural Services Inc	Early intervention (families with children 0-8)	Gx[e310][Z55-Z65]-A4s	Blacktown	Western Sydney
	Settlement and Youth Service	Ax[Z55-Z65]-A4s	Blacktown	Western Sydney
	Disability services	Gx[Z55-Z65]-A4s	Blacktown	Western Sydney

4. MAPPING OF THE MENTAL HEALTH 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. Separate maps are shown for the overall provision of mental health services as well as by the type of MTC provided: (i) Adult Residential; (ii) Adult Day Care; (iii) Adult Outpatient Care; and (iv) mental health services tailored for children and adolescents.

Figure 8 shows 2 maps comparing the population density with the geolocation of the mental health services provided by the LHD and the levels of psychological distress. Figure 9 depicts 2 maps showing the distance to the mental health services provided by the LHD, as well as the distribution of socioeconomic disadvantage in the area

Figures 10 and 11 show the geolocation of adult residential services related to risk of psychological distress, distance to services, socioeconomic advantage and percentage of people living alone.

Figures 12 and 13 map the adult day care services in relation to the same indicators commented above.

Similarly, figures 14 and 15 depict the adult outpatient services in relation to these indicators, with the exception of the percentage of people living alone.

Finally, figure 16 shows 2 maps with the distribution of services for child and adolescent in relation with distance and socioeconomic advantage.

Overall, the maps show that the public funded services are located in the most populous areas of the LHD jurisdiction, particularly around Parramatta and Blacktown. These are also the communities identified as being at a greater risk of psychological distress and socioeconomic disadvantage. Communities in the northern area of the LHD are shown to have poorer geographic access to mental health services, however levels of disadvantage and risk of psychological distress are also lower in this part of the LHD.

Figure 8. Mapping of WSLHD Mental Health Services, in relation to population density (left) and risk of psychological distress (right)

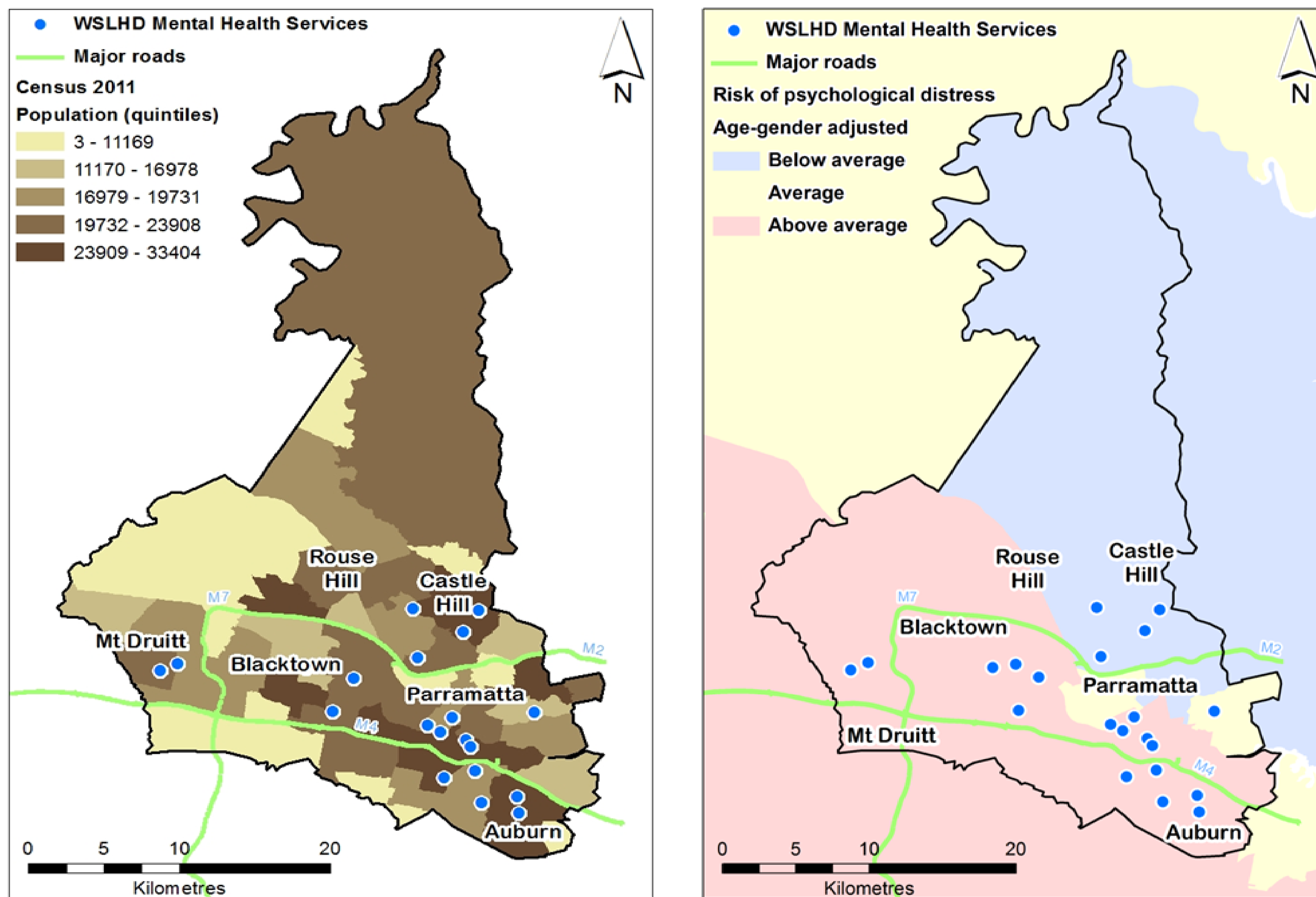


Figure 9. Mapping of WSLHD Mental Health Services, in relation to distance (left) and socioeconomic advantage (right)

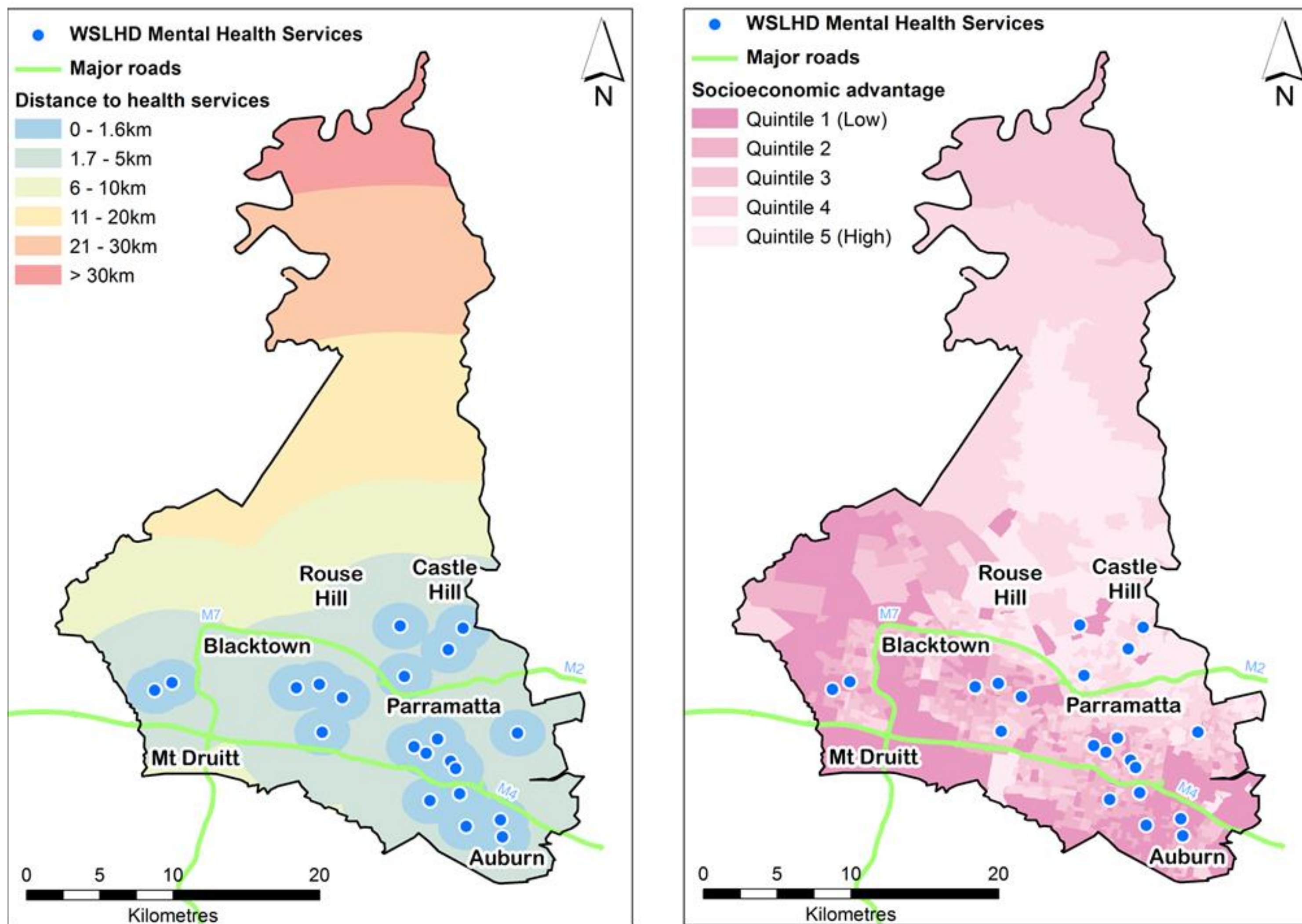


Figure 10. Mapping the services providing adult residential care, related to risk of psychological distress (left) and distance (right)

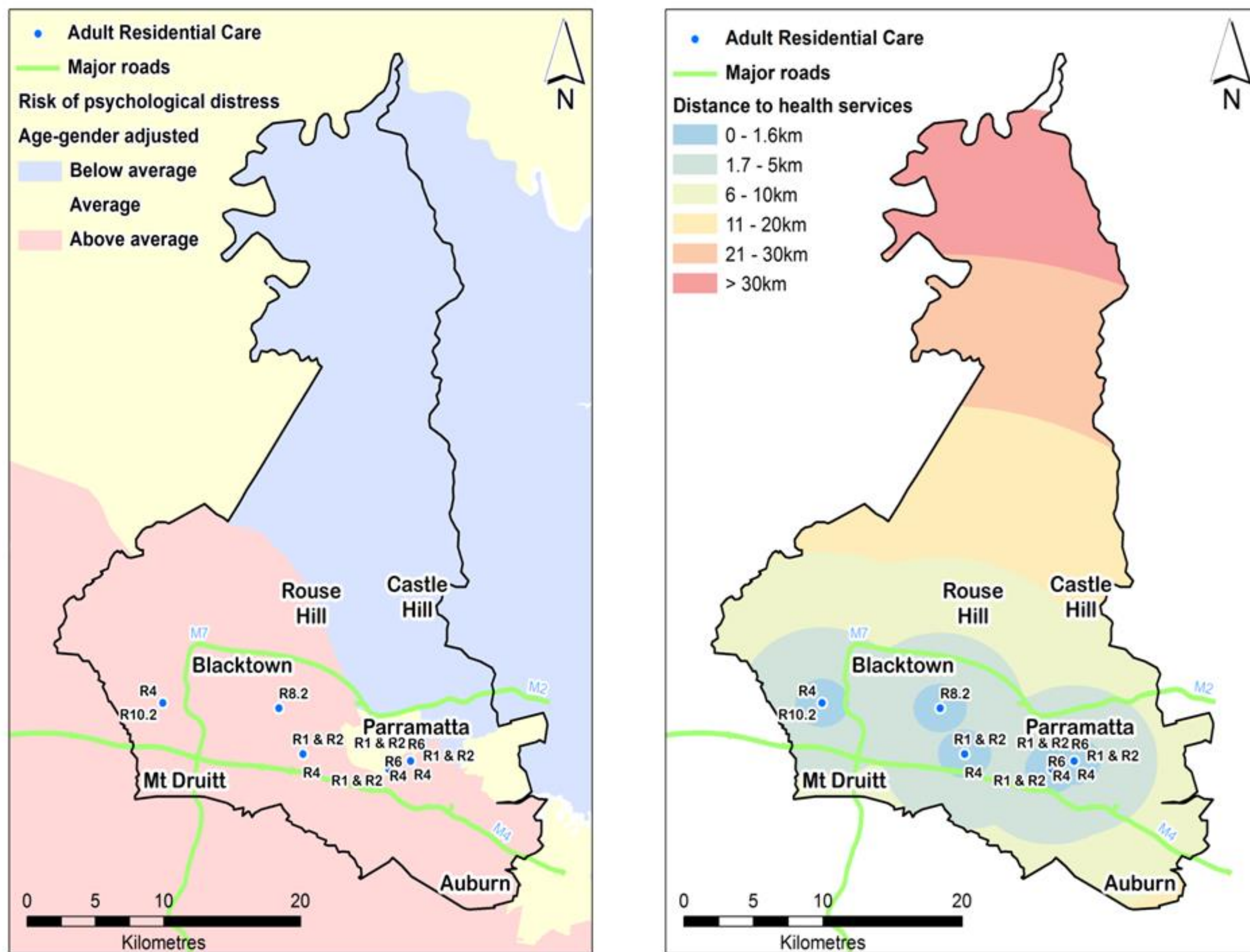


Figure 11. Mapping the services providing adult residential care, related to socioeconomic advantage (left) and percentage of people living alone (right)

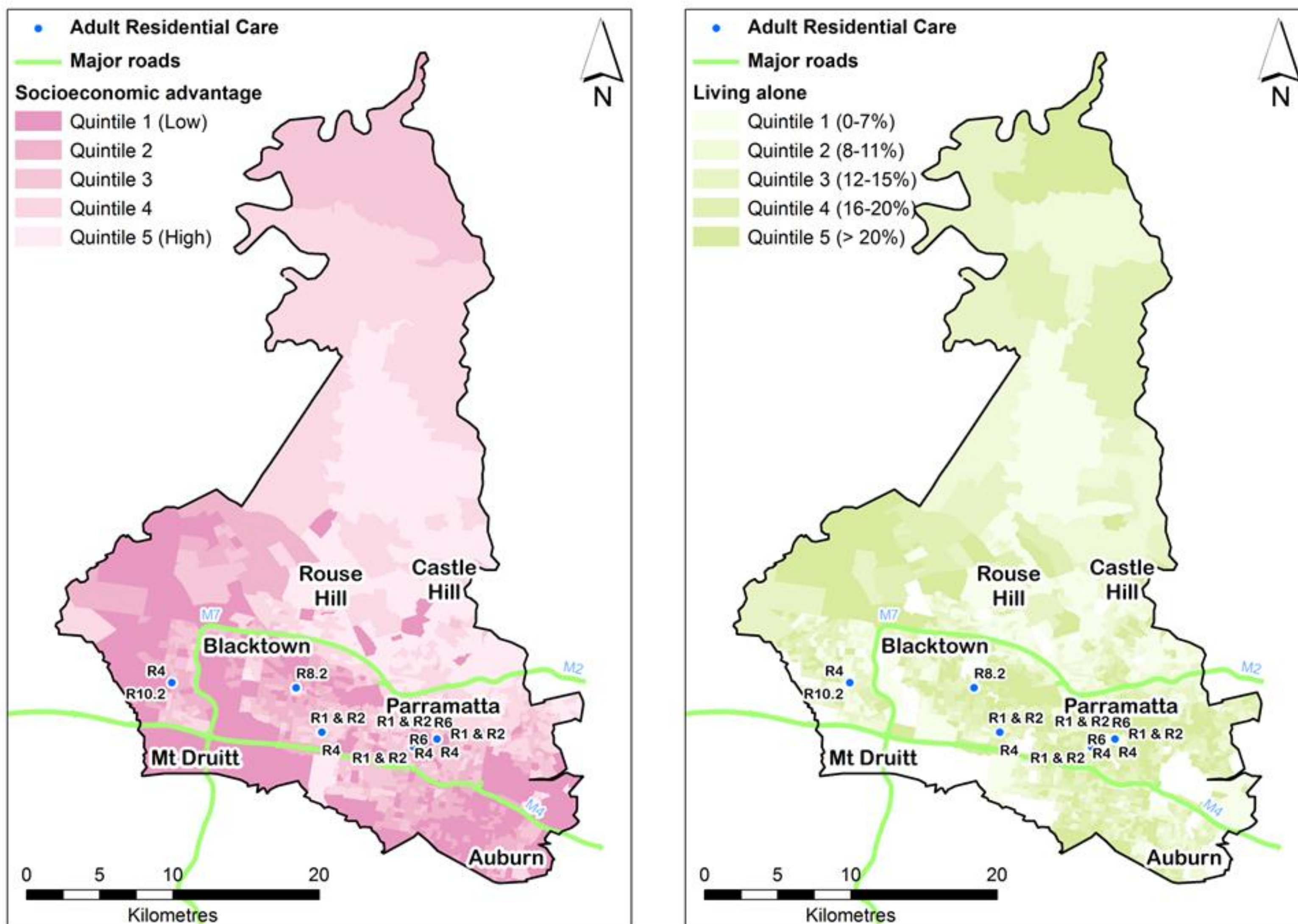


Figure 12. Mapping the services providing adult day care, related to risk of psychological distress (left) and distance (right)

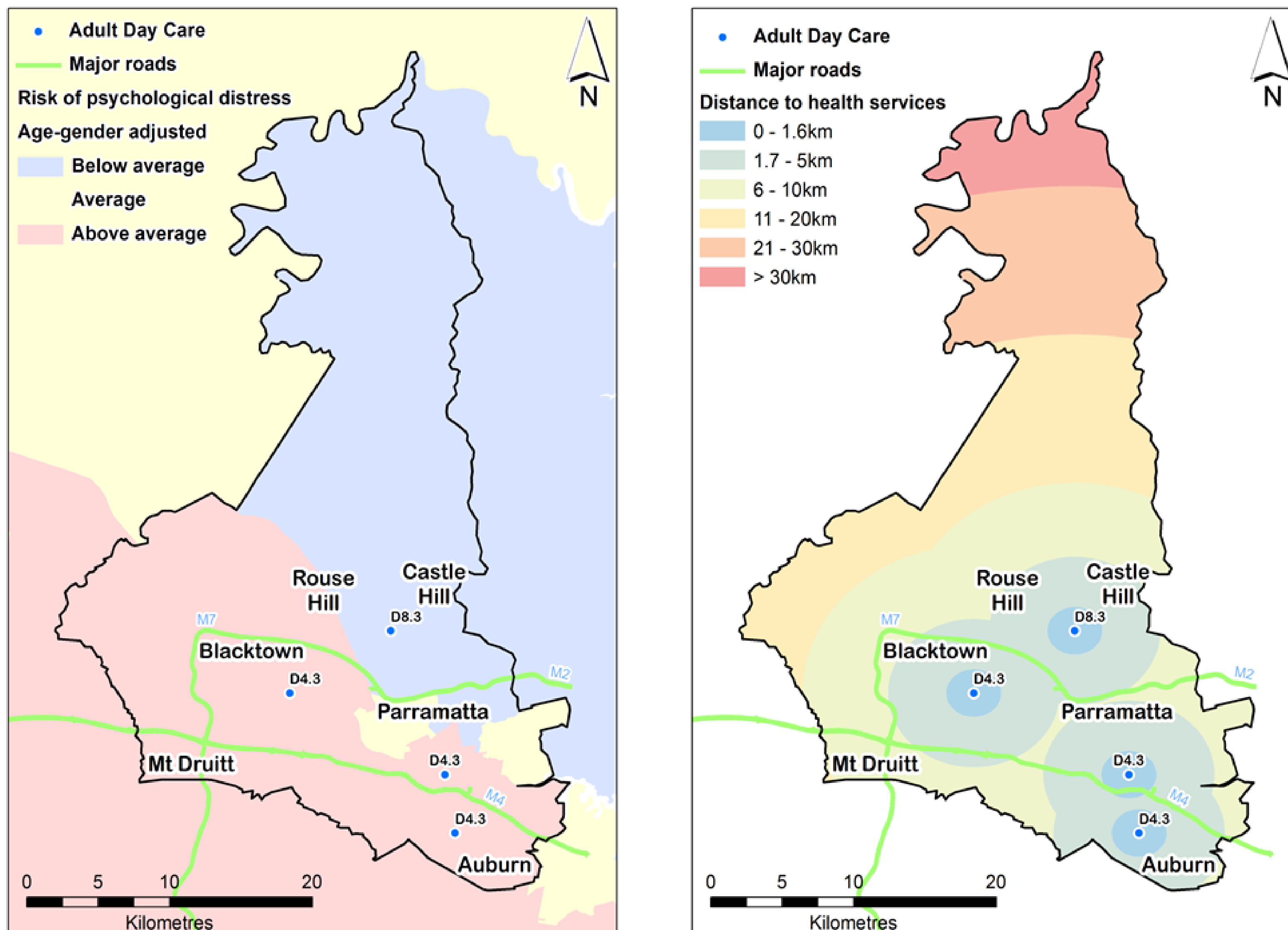


Figure 13. Mapping the services providing adult day care, related to socioeconomic advantage (left) and percentage of people living alone in the area (right)

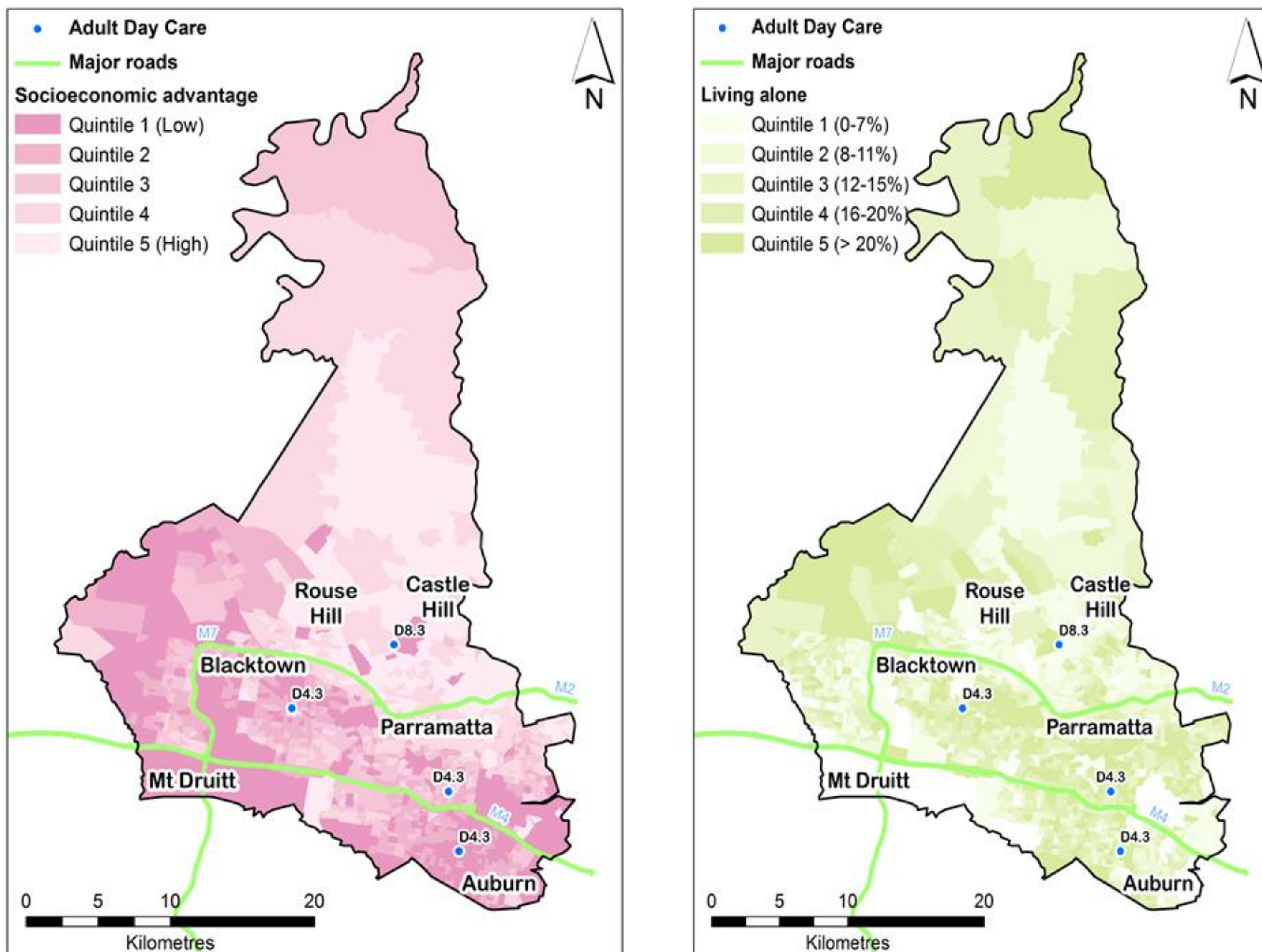


Figure 14 Mapping the services providing adult outpatient care, related to risk of psychological distress (left) and distance (right).

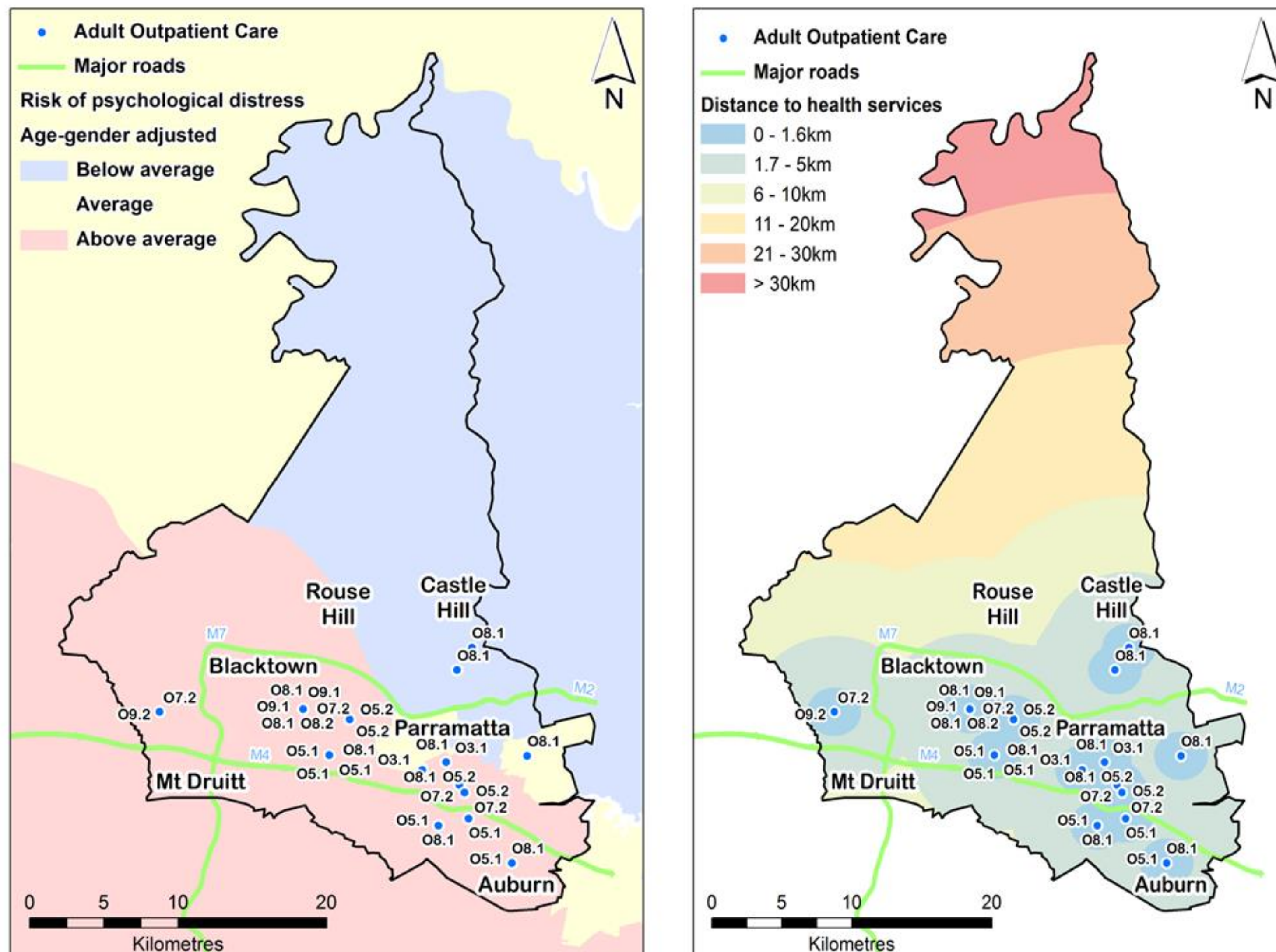


Figure 15.Mapping the Services providing adult day care, related to socioeconomic advantage

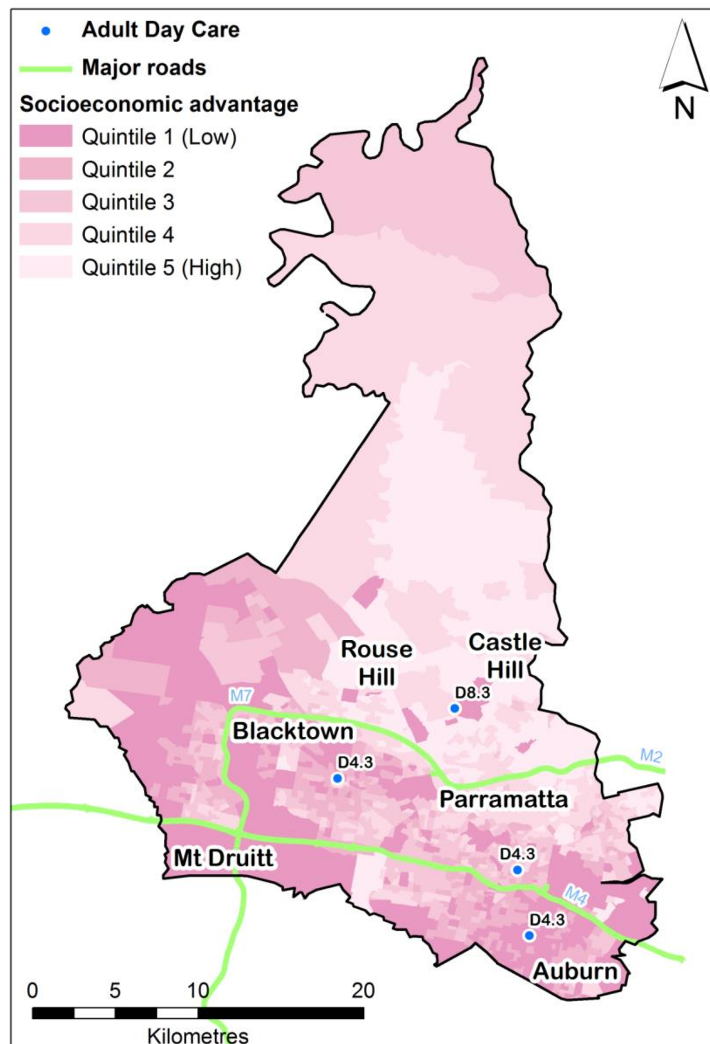
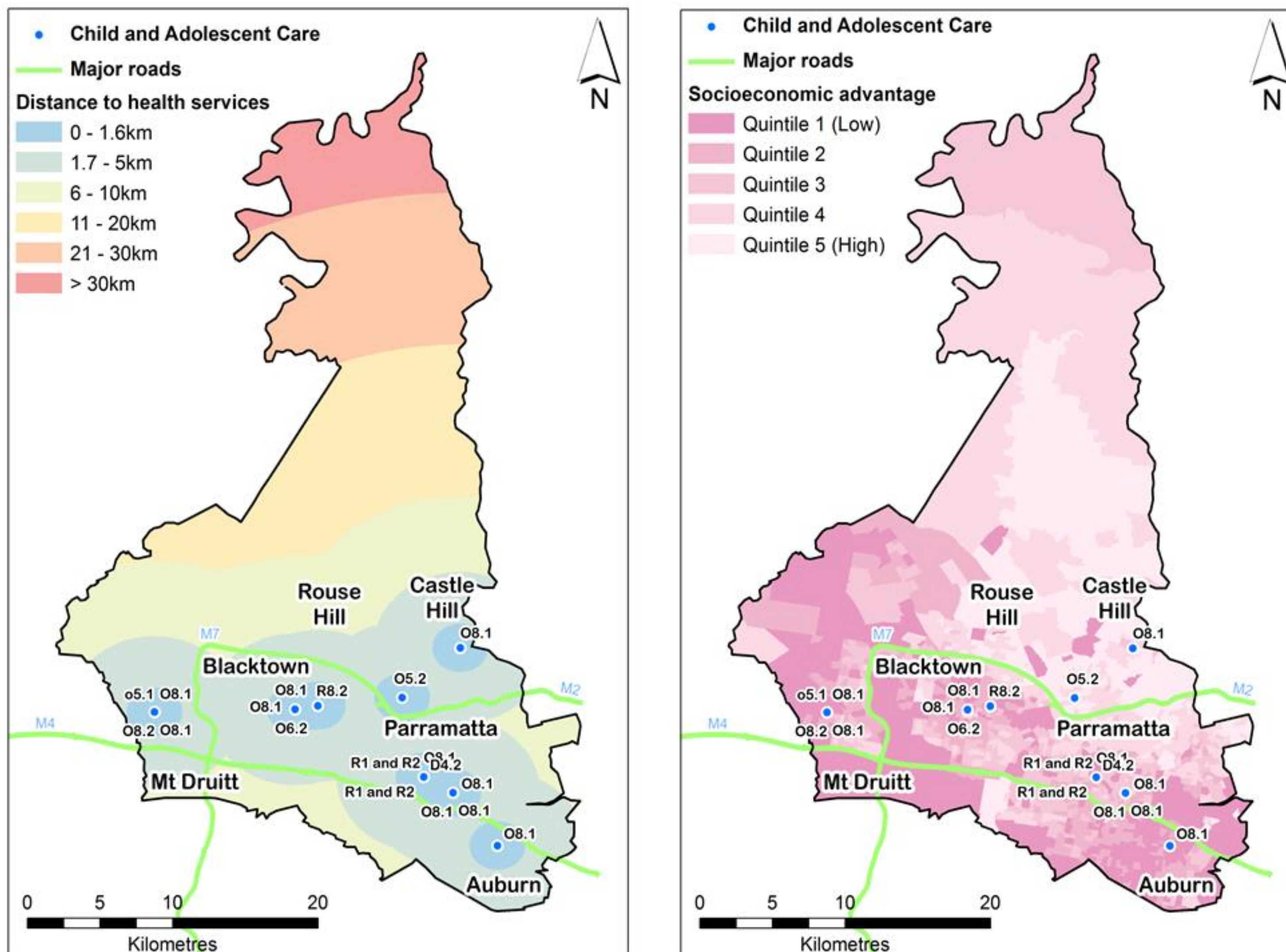


Figure 16. Mapping child and adolescent care, related to distance (left) and socioeconomic advantage (right).



5. DESCRIPTION OF THE PATTERN OF CARE IN WESTERN SYDNEY

Figure 17 depicts the pattern of mental health care in Western Sydney LHD. The blue area refers to residential care, the red area to day care, the green one to outpatient care and the yellow one to accessibility.

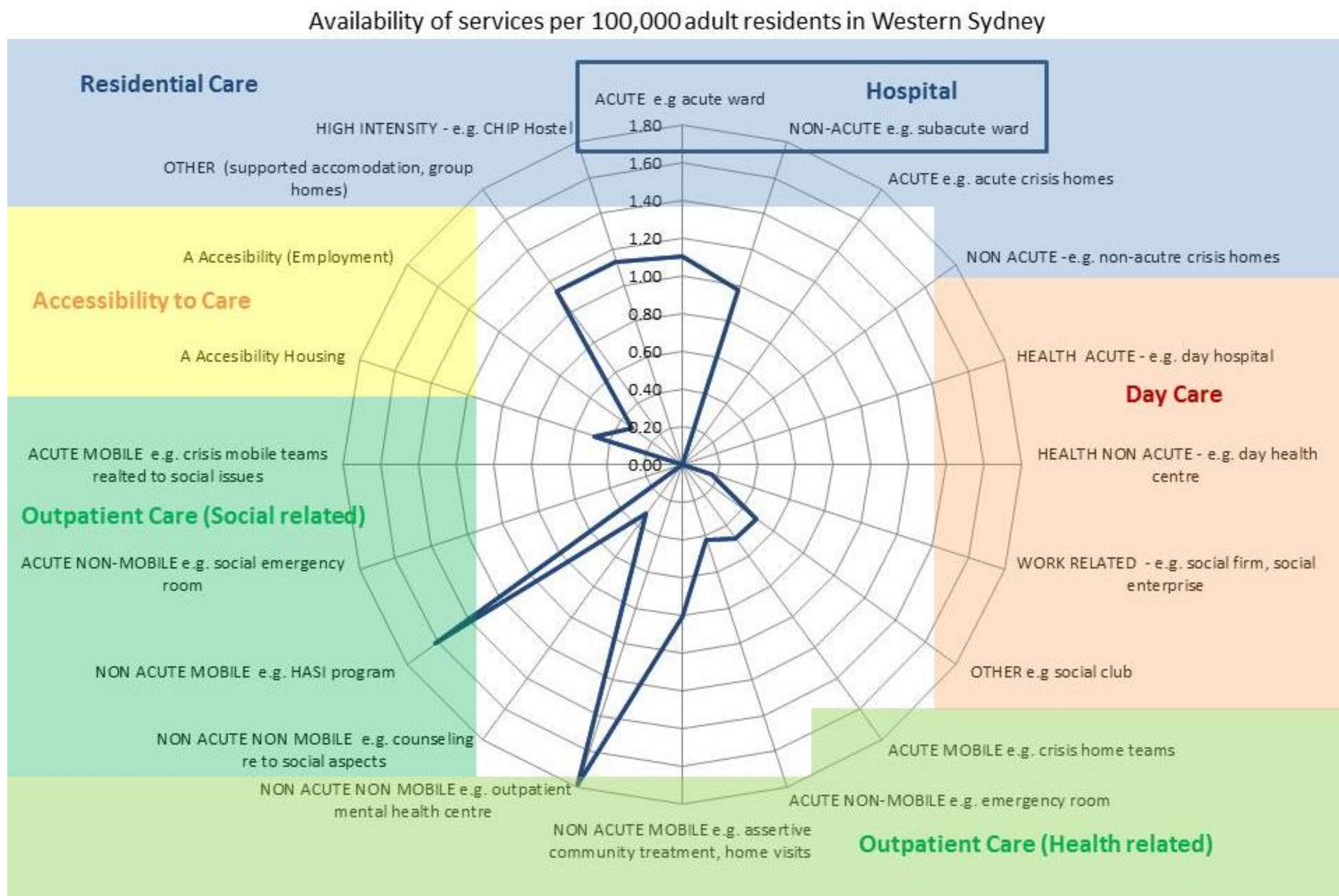
We have found 3 major gaps in the provision of services:

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

The first gap is related to an absence of services staffed with psychiatrists, psychologists, and nurses, who provide care for people with lived experience of mental illness who are experiencing a crisis. They provide the same type of care as the hospital (in an inpatient unit) but are embedded into the community. There are small units, with a strong focus on recovery (e.g. home crisis). The second gap is related to a lack of day care related to health. Acute day care related to health includes day hospital, which provide an alternative to hospitalisation. People living a mental health crisis are not admitted in a hospital, but treated in the community. They spend all the day at the facility, but they sleep at home. On the other hand, non-acute day care includes day care centres staffed with at least 20% of mental health high skill professionals. In these types of centres people with lived experience of mental illness can spend the day, socialising and participating in structured activities related to health, such as cognitive training. Lastly, we have found a low availability of day care centres providing care related to work (e.g. social firms where people with lived experience of mental illness work and are paid)

Social Housing and community housing would be mapped under the “R Other” code. However, due to the lack of data, they are not included. Nonetheless, the HASI program is coded under the “non-acute mobile non-health” code.

Figure 17. Pattern of Mental Health Care in Western Sydney



6. INTERNATIONAL COMPARISONS

International comparisons are useful for: 1) learning about national systems and policies; 2) learning why those systems take the forms they do; and 3) learning lessons from other countries for application elsewhere[21].

However, in order to conduct meaningful comparisons, it is important to use a standardised tool that goes beyond terminological variability. We have mapped the pattern of Mental Health in different European areas using the DESDE-LTC. The use of a common language allows us to compare Western Sydney with different community care models in Europe. The information on the European Countries has been presented as part of the The Refinement Research Project [22] funded by the European Commission. Table 30 describes the areas selected.

Table 31. Description of the areas

	Sør-Trøndelag (NORWAY)	Helsinki and Uusimaa Hospital District (FINLAND)	ULSS20 - Verona (ITALY)	Girona (SPAIN)	Hampshire (including Portsmouth and Southampton Unitary Authorities) (ENGLAND)
Population (>18 years old)	225,081 (2010)	1,206,446 (2010)	393,402 (2010)	599,473 (2010)	1,364,799 (2010)
Land Area (km²)	18,856	8,751	1,061	5,585	3,769
Population density (inhb./ km²)	15.60 (2011)	176.56 (2011-12)	416.85 (2001)	132.61 (2010)	459.45 (2010)
Ageing Index (>65/<15x100)	81.42 (2012)	82.17 (2010)	144.10 (2010)	98.29 (2010)	100.66 (2011)
Dependency ratio (<15 & >65/15-4x100)	49.55 (2012)	44.82 (2010)	53.51 (2010)	46.20 (2010)	52.43 (2011)
People living alone (%)	40.78 (2011)	41.37 (2011)	29.16 (2001)	17.94 (2007)	27.73 (2001)
Average of people per household	2.21 (2011)	2.07 (2011)	2.44 (2001)	2.62 (2007)	2.37 (2011)
Immigrants (%)	6.64 (2012)	6.14 (2011)	12.24 (2010)	21.60 (2010)	-
Unemployment rate (%)	2.79 (2010)	7.35 (2010)	4.21 (2001)	18.28 (2010)	5.8 (2011)
Total health care expenditure per capite Purchasing Power Parity (in Euros) (2010)	€4156	€ 2504	€ 2282	€ 2345	€2626
Total health care expenditure as a share of GDP	9.4%	8.9%	9.3%	9.6%	9.6%

6.1. NORTHERN EUROPE COMMUNITY MENTAL CARE MODEL

Figure 18 compares Western Sydney with an area in Norway (Sør-Trøndelag) while Figure 19 compares Western Sydney with an area in Finland (Helsinki and Uusimaa).

The main characteristic of the Northern Europe Community Mental Care Model is the high availability of different types of services. Indeed, Norway has one of the highest per capita health care expenditures per capita. Both Finland and Norway raise funds for mental health mainly from general taxes.

The provision of mental health services in Norway is organized within Health Authorities (HF), each one including several institutions/hospitals. The area in Norway (Sør-Trøndelag) covers 25 municipalities and it is the catchment area of the St Olavs Hospital HF. The municipalities are obliged to offer primary health care and long term care to all people in need of municipal services regardless of diagnosis. The GP is responsible for planning and coordinating preventive work, evaluation, and treatment and provides an important link between primary health care and the specialized health services,

With regard to socio and economic characteristics, Sør-Trøndelag las a low population density (15.60 inh/km^2). It also has a very low unemployment index.

The main difference with Western Sydney is related to the high availability of mobile services and day care related to employment.

The Finnish area (Helsinki and Uusimaa Hospital District) is owned and governed by 26 municipalities. Each municipality is free to provide the public services as a municipal activity, or to purchase the services from an external provider. Primary care is organized by the municipalities, and represents the main access point for people with mental health problems while specialized care is organized by the hospital districts.

More than 40% of the households of the area of Helsinki and Uusimaa are occupied by just one person.

When comparing Western Sydney and the Finnish area the main contrast is the high number of residential and day care in Finland.

Figure 18. Pattern of Mental Health Care in Western Sydney (blue line) and Sør-Trøndelag –Norway (red line).

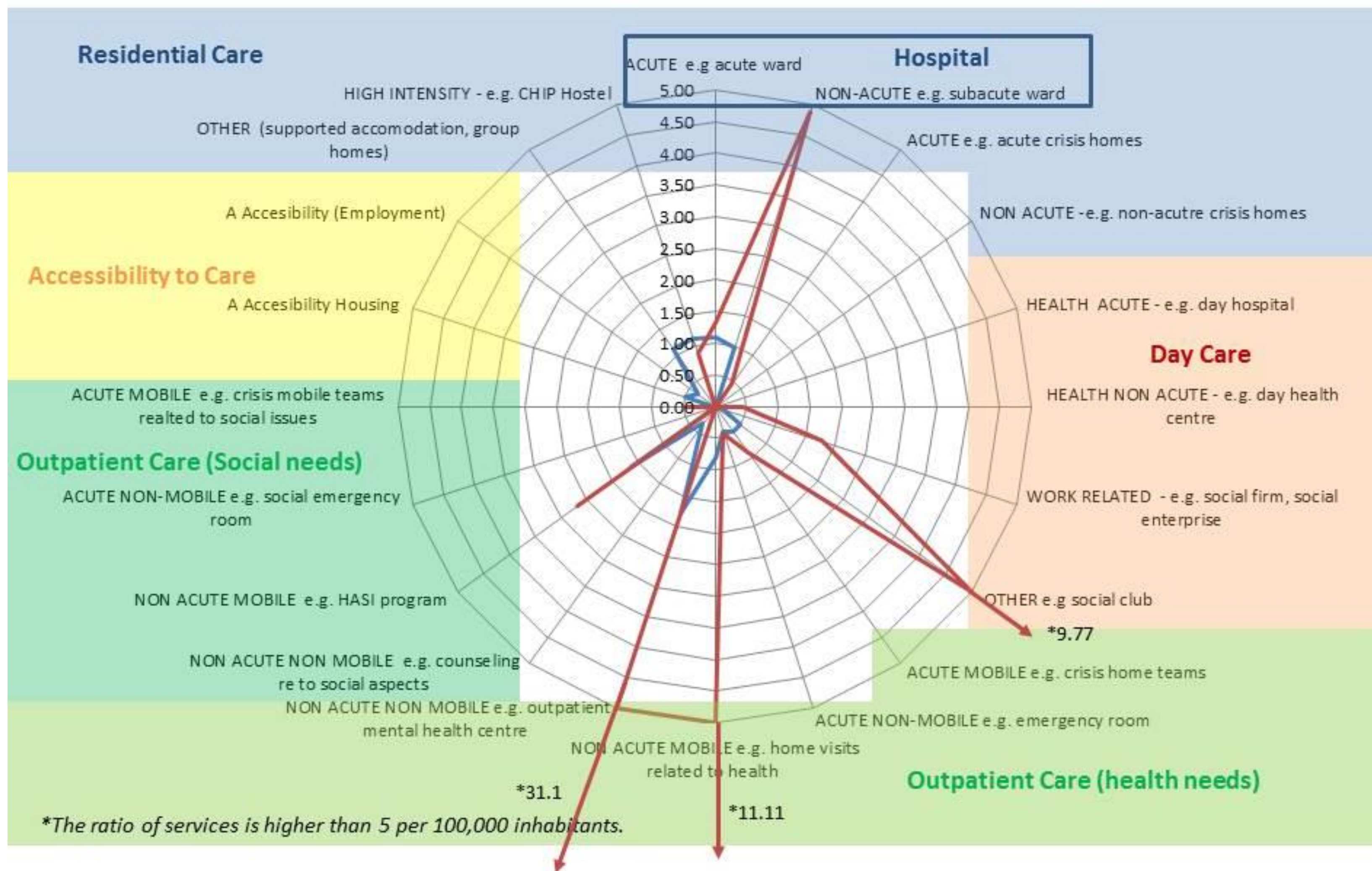
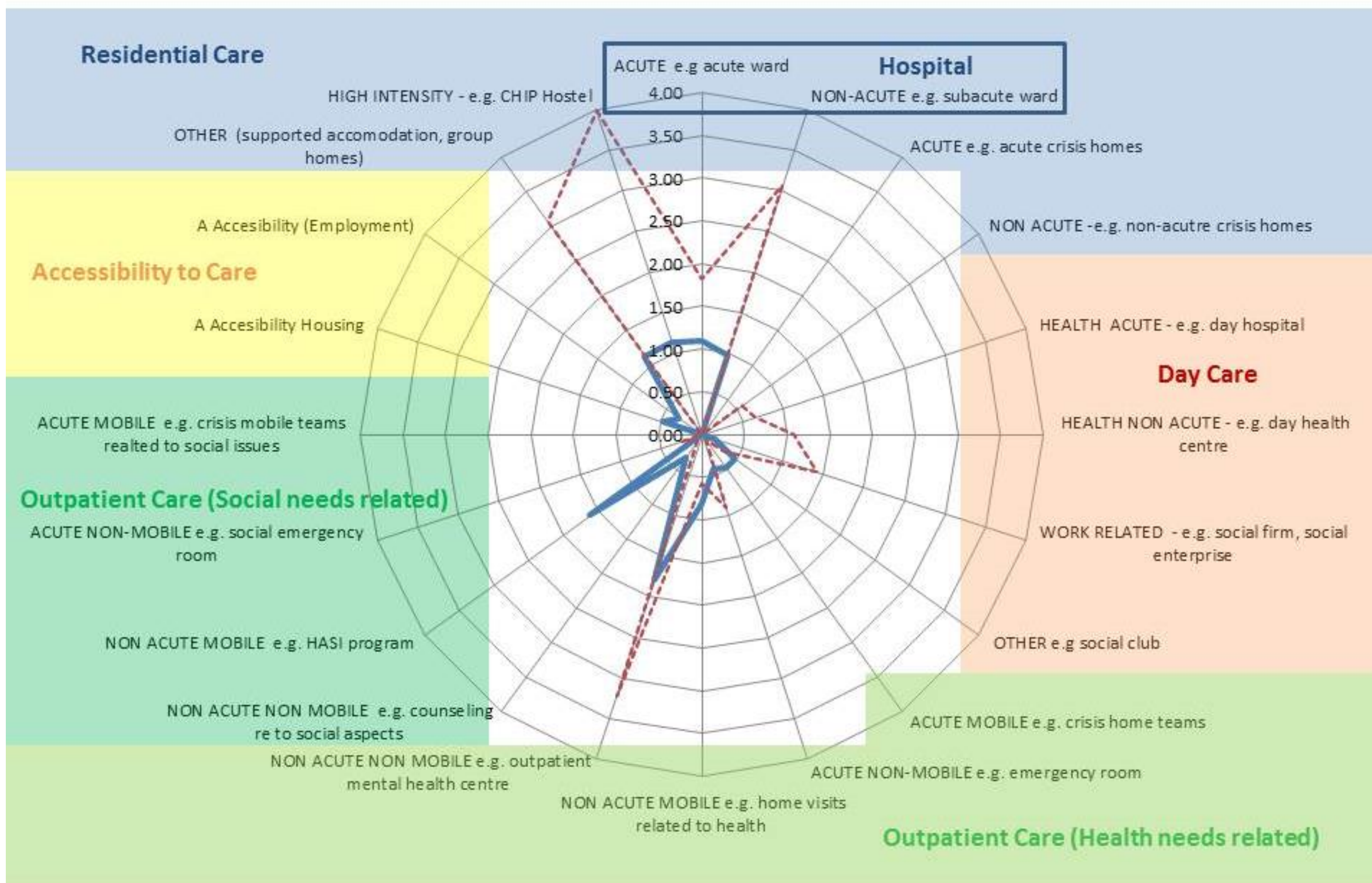


Figure 19. Pattern of Mental Health Care in Western Sydney (blue line) and Helsinki and Usaima – Finland (red line)



6.2. SOUTHERN EUROPE MODEL OF MENTAL HEALTH CARE

Figure 20 compares Western Sydney with Italy (Veneto Region) and figure 21 compares Western Sydney with Spain (Girona). Mental Health in Southern Europe is characterized by a strong emphasis on community care, and low availability of psychiatric hospitals. As in the case of Northern Europe, the public health sector is funded from general taxes.

In Italy, the Local Health Authorities, which are the local branches of the Regional National Health System, are the purchasers of health care services. They also finance social care services together with the municipalities. There are 21 Local Health Authorities in the Veneto Region. Each Local Health Authorities has assigned a Mental Health Department, which is is in charge of the planning and management of all medical and social resources related to prevention, treatment, and rehabilitation in mental health within the area.

Socio and economic indicators from the area are derived from data from 2001, which would have changed. However, this area registers high ageing index and population density.

In Spain, most of the Mental Health Services are funded by the Regional Health Authorities. Social services are paid for by the social and employment authority. In the area of Girona the mental health system is organized according to two different levels, Hospitalization and Community Care. Hospitalization is located in the "Marti i Julia Hospital Park" in Salt that belongs to Institut d'Assistència Sanitària (IAS). The Community Mental Health care is organized in seven areas that include an Adult Mental Health Centre and other specific services. Mental health patients enter the system through primary care (PC) that fulfills a gatekeeping function.

The area depicts high levels of unemployment, as well as high immigration rates.

Both in Italy and Spain, the availability of acute and non-acute hospital care is lower than in Western Sydney, while day care, specifically health related day care, is higher.

Figure 20. Pattern of Mental Health Care in Western Sydney (blue line) and Veneto- Italy (brown line).

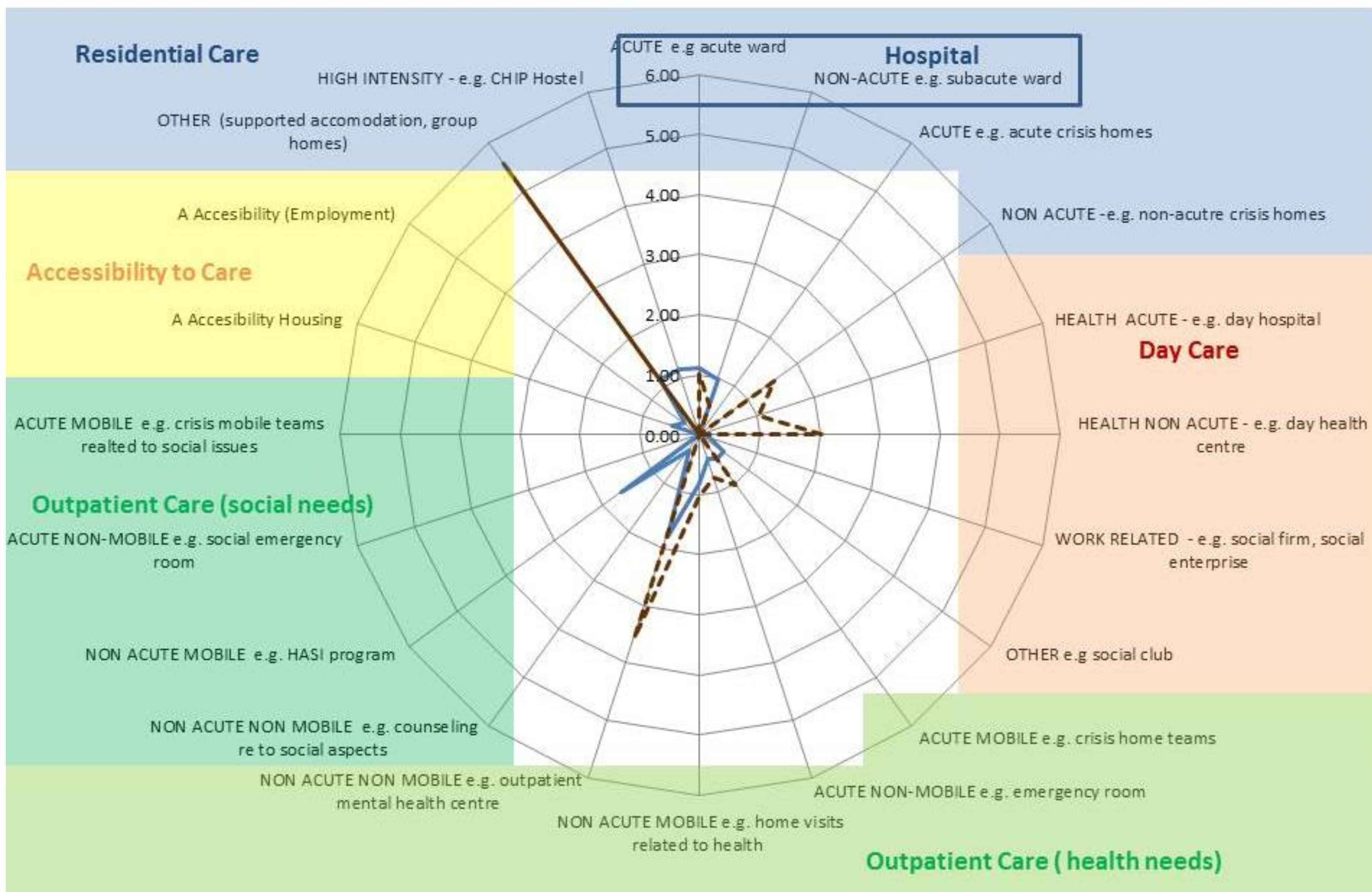
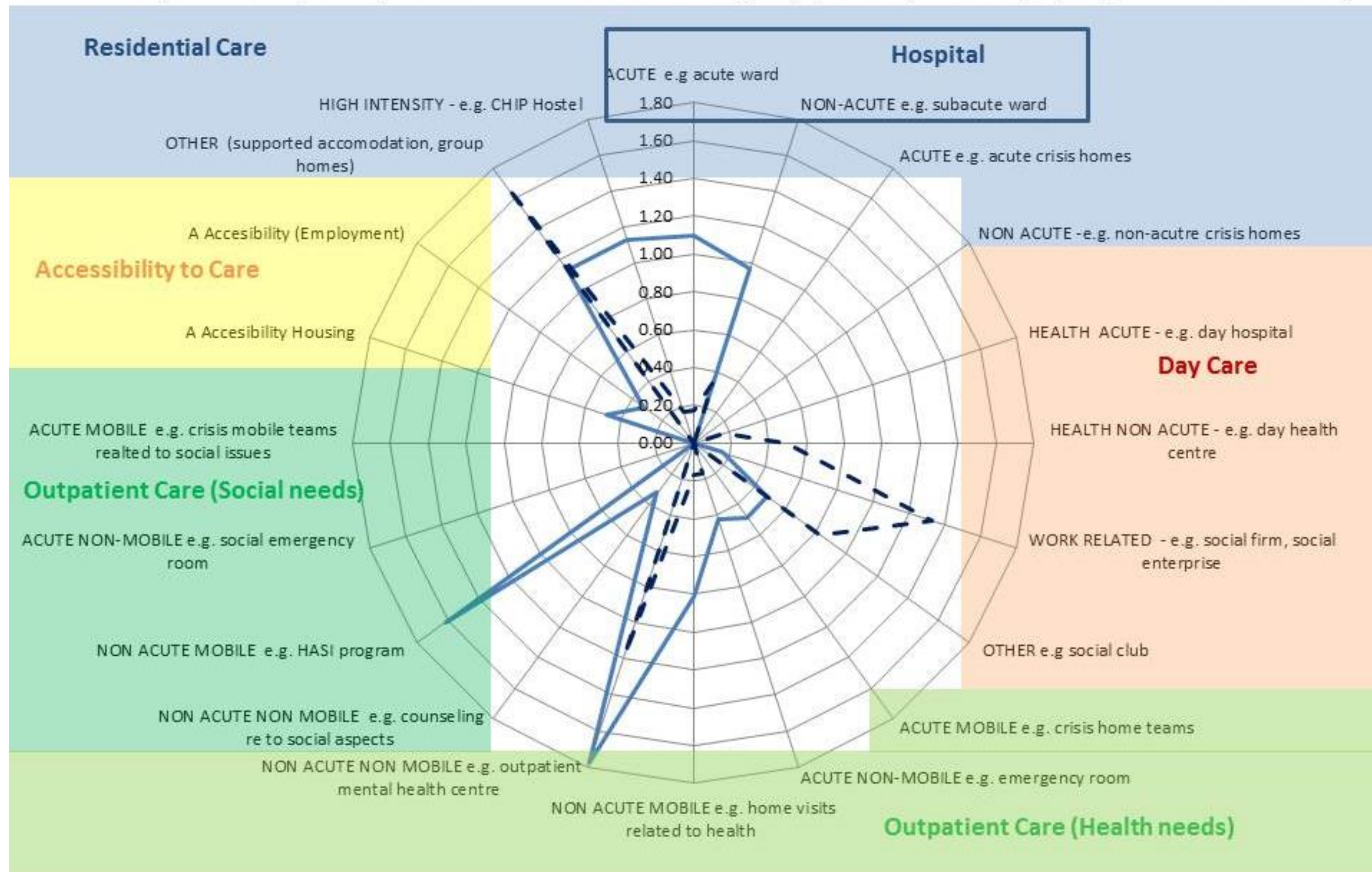


Figure 21. Pattern of Mental Health Care in Western Sydney (blue line) and Girona –Spain (dark blue dotted line).



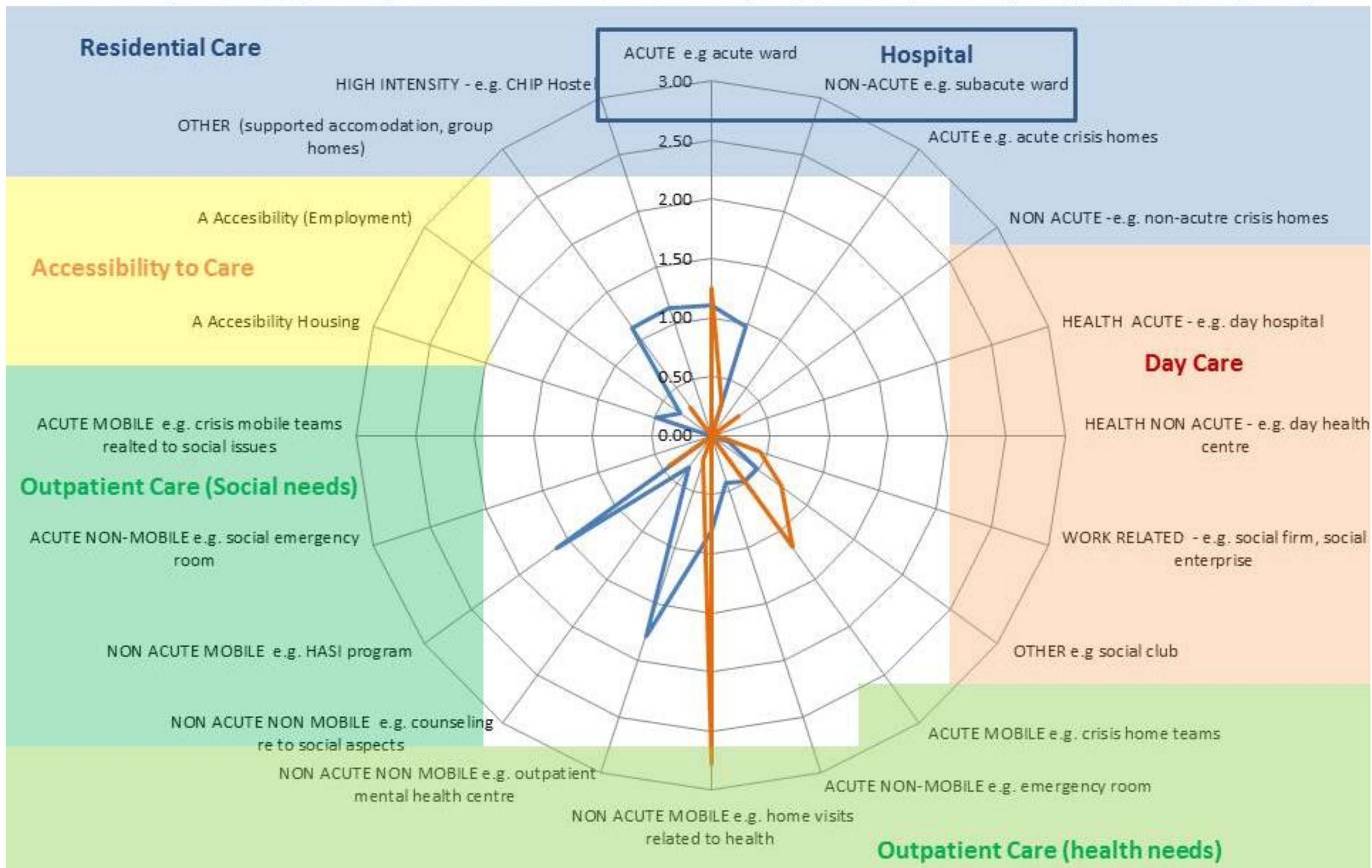
6.3 ENGLISH SYSTEM

Figure 22 compares Western Sydney with an area in England (Hampshire). England raises funds mainly form general taxes. There is one purchaser organization for most health care services. Since 2013 this function is held by the Clinical Commission Groups (CCGs). Local Health authorities are involved in funding social care services, in addition to local authorities and the state. CCGs tend to contract one local Mental Health Trust, an organization that will be responsible for providing most mental health services for a locality. These Trusts may also subcontract to others.

With regard to the socioeconomic characteristics, Hampshire shows a high population density; with relatively low unemployment figures. It is also an aged population

One of the main characteristics of the English model is the high availability of mobile care related to health, and the lack of day care related to health, similarly to Western Sydney.

Figure 22. Pattern of Mental Health Care in Western Sydney (blue line) and Hampshire- England (orange line).



6.4. Placement Capacity- Cross-national comparisons

6.4.1. Residential Care

There are large differences across countries related to the availability of beds per 100,000 inhabitants. These rates mirror the different models of mental health care.

Table 32. Cross-national comparisons- Placement capacity- beds per 100,000 inhabitants according to type of residential care

GROUPS	Western Sydney (Australia)	Sør-Trøndelag (Norway)	Helsinki and Uusimaa (Finland)	Verona (Italy)	Girona (Spain)	Hampshire (England)
R ACUTE HOSPITAL CARE: R1 - R2 - R3.0	**20.59**	28.43	26.86	13.98	7.01	26.38
R NON_ACUTE HOSPITAL: R4 – R6	**16.83**	75.08	52.22	11.95	15.35	4.84
R ACUTE NON-HOSPITAL: R0 R3.1.1	**0**	64.42	0	0	0	0
R NON ACUTE NON-HOSPITAL: R5 - R7	**0**	0	12.27	16.52	0	2.49
R OTHER R9,R10,R12,R13,R14	**6.31**	0	58.6	35.84	12.01	7.47
R NON-HOSPITAL HIGH INTENSITY R8 R11	**5.66**	8.89	113.64	0	9.68	0

6.4.2. Day Care

Some of the most advanced models, such as the Finnish one, are characterized by a good balance between beds at the hospital, and places at day health acute and day health non acute centres. It is also important to develop work related centres, where people with a lived experience of mental ill-health can develop work related skills and be paid for their work.

Table 33. Cross-national comparisons- Placement capacity- beds per 100,000 inhabitants according to type of day care

GROUPS	Western Sydney (Australia)	Sør-Trøndelag (Norway)	Helsinki and Uusimaa (Finland)	Verona (Italy)	Girona (Spain)	Hampshire (England)
D HEALTH ACUTE	**0**	0	9.62	3.05	4.17	0
D HEALTH NON ACUTE	**0**	0	17.99	40.67	12.51	0
D WORK RELATED	**5.34**	8	18.15	0	32.53	0
D OTHER	**5.66**	0	12.35	0	27.52	0

7. DISCUSSION

This study has revealed some important systemic gaps that can be used to focus discussion on the planning of an equitable, sustainable and effective mental health system in Western Sydney LHD. These gaps are mainly related to a lack of alternative to hospitalizations and an absence of services providing day care. We will discuss this further over the following pages.

To the best of our knowledge, this is the first Integrated Mental Health Atlas produced in Australia. We have described the care delivery system targeting people with a lived experience of mental ill-health within the boundaries of the Western Sydney Local Health District using an international classification system of services. This approach allows comparisons across jurisdictions at multiple levels: local, state, national and international. Social, demographic and mental health indicators and their relationship to the availability of services have been analysed using Geographical Information Systems (GIS).

This mapping aligns with some key recommendations made by the *National Review of Mental Health Programmes and Services* by the National Mental Health Commission[3] The report draws attention to the local level of MH planning in Australia and the relevance of a bottom-up approach to understanding "services available locally [in] the development of national policy". It also calls for responsiveness to the diverse local needs of different communities across Australia: "Mental Health Networks, in partnership with Local Health Networks, should conduct comprehensive mapping of mental health services, programmes and supports available in regional, rural and remote areas through Commonwealth, state and territory and local governments, private and not-for-profit sectors".

This mapping analysis provides an accurate representation of the main components of the mental health system at the local level: service availability, capacity and geographical accessibility. The international comparison with local care systems in other countries shows dissimilarities in some key components of the community mental health model. This comparison indicates relevant system gaps that should be considered for future MH planning strategies and local system reform in Western Sydney. At the same time, and as more local areas are mapped, State and national comparisons will be available in Australia, allowing a better understanding of the MH system and its relation to international models of community care.

There is a consensus on the need to base the mental health care of high income countries on a strong primary mental health sub-system together with a core tertiary care for severe acute cases. However there are some relevant information gaps concerning the constitution of secondary care in community-oriented specialised mental health services. According to a number international models[23], including that most recently promoted by Thornicroft and Tansella (2014)[24, 25], specialised mental health services should include the following:

- (i) Specialised outpatient/ambulatory clinics;
- (ii) Assertive community treatment teams;
- (iii) Early intervention teams;

(iv) Alternatives to acute in-patient care, such as high intensity day care, crisis homes; and other alternatives to acute hospitalisation
(v) Alternative types of long-stay community residential care; and
(vi) Specialised forms of work and occupation.

While point i in the Thornicroft and Tansella model[24] is well covered in Western Sydney, points (ii, iii and vi) are only partially developed. In addition, some types of health-related services have not been identified in the WS local mental health system at all. These include day care related to health (acute and non-acute) by high skilled professionals, as an alternative to acute in-patient care (iv); and acute and sub-acute community residential care as an alternative to hospital long-stay care (v).

In addition there is a lack of comprehensive data related to accommodation support for people with mental health problems.

The need for community alternatives to hospitalisation has been pointed out by the NSW Commission Plan *Living Well: a strategic Plan for Mental Health in NSW 2014-2024"* NSW [26] and the *National Review of Mental Health Programmes and Services* by the National Mental Health Commission[3]

The NSW Commission plan[26] indicates that the current mental health system is highly fragmented, difficult to navigate and characterised by disjointed policy, financing and service delivery systems at national and state levels. Furthermore, there is a mismatch between top-down policies developed centrally at national and state levels and the local need for efficient resource allocation. The lack of a comprehensive mapping of the available services constitutes an additional barrier to the accessibility of mental health services in this disjointed system.

Misalignments in investment and financing have also been pointed out by the *National Mental Health Review* [3] which indicates that NSW has the lowest residential community care in Australia and the highest expenditure on hospitals (NMHC, 2014, Paper 3).

Absence of services providing day care (acute and non-acute) by high skilled professionals

Day care for people with a lived experience of mental ill-health has been considered a key component of psychiatric reform since the early 60s[1, 27]. "Day care" (or partial hospitalisation) refers to all services where the consumer stays for part of the day but not overnight or just for a single face-to-face contact. There is a whole array of different types of day services according to the phase and the severity of the mental illness: from acute care (i.e. day hospitals/partial hospitalisation), to non-acute care (i.e. day centres) and recovery oriented programs (i.e. peer support, respite, social clubs, or work-related approaches), just to mention a few. These services should be integrated in a local acute care subsystem that also incorporates mobile care alternatives for crisis intervention at home (crisis resolution teams, medical homes), together with non-mobile emergency services and high-intensity coordination/case-management as in Assertive Community Treatment[1]

In Western Sydney we identified some public services which provide recovery oriented social day care, but none related to acute or non-acute health-related care which are usually staffed with highly skilled mental health clinicians, such as psychiatrists, clinical psychologists or mental health nurses.

Acute Day Care:

Acute day care (ADC) is a less restrictive alternative to inpatient admission for people who are acutely and severely mentally ill. Its objective is to deliver personalised, intensive and structured health care interventions in non-residential service locations[1] (Day hospitals or partial hospitalisation services combine the close supervision of a standard inpatient unit, with the maintenance of patients in the community. They also follow a multidisciplinary and multimodal approach.

Recent systematic reviews on the efficiency of acute day care alternatives to hospitalisation include the reviews made by the Cochrane Library[28] and by the US Agency for Healthcare Research and Quality (AHRQ)[29]. The Cochrane review concluded that ADC is at least as effective as traditional methods, and they are suitable options in situations where demand for inpatient care is high and facilities exist that can be converted to these uses. However, they are a less attractive option in situations where the demand for inpatient care is low and can be covered by other options [28]. The two major advantages of day hospitals are that they: 1) strengthen the patient's autonomy and links with the community; and 2) reduce the risk of institutionalization and the stigma associated with it. In addition, it is estimated that day hospitals can save around 5% of the cost of acute psychiatric inpatient care. However, these systematic reviews also indicate that studies on ADC do not follow a systematic approach and are limited to only two components of the local system (i.e. acute hospital vs day hospital) without taking into account their overall impact on the system.

The US AHRQ[29] draft acknowledges that a decrease in number of psychiatric admissions is a key priority for providers and insurers, and provides an analysis of alternatives to psychiatric hospitalization (e.g., day hospital, short-term crisis unit, various forms of supported housing, assertive community treatment services). This review calls for more research into ADC.

Another relevant source of information is the European Day Hospital Evaluation Study in Europe (EDEN)[30]. This is a multicentre randomized controlled trial comparing acute treatment in day hospitals and conventional wards in five European cities with different models of community care: Prague (Czech Republic); Dresden (Germany); Wroclaw (Poland); Michalovce (Slovakia); and London (UK). The study indicated that day hospitals are an extended care type in Europe which is more useful for female, educated patients with moderate to severe symptoms rather than those with highest levels of severity which may benefit from acute hospital care.

Despite the results of these studies, the overall number of studies on ADC is surprisingly low and we lack comparisons of the relative efficiency of local systems with and without day hospitals.

Due to the high demand for beds in Western Sydney LHD, the relative lack of alternatives for moderate-severe patients under crisis as well as the fact that there are facilities that can be reconverted, Acute Day Care (i.e. day hospitals) could be a beneficial addition to Western Sydney services.

Non-acute day care related to health or “day centres”:

Non-acute high-intensity day care (“day centres”) is another key component of a community mental health system that is missing in Western Sydney. Day centres staffed with at least 20% highly skilled mental health professionals, such as psychologists, neuropsychologists or mental health nurses, can provide a more intensive treatment than day centres staffed with non-health professionals and therefore provide a better focus on tertiary prevention and clinical improvement (e.g. by better training in daily living, problem solving, stress management, social skills or cognitive rehabilitation). This type of centre can improve socialisation and assist individuals to learn new skills according to their needs. They also include occupational therapy tailored to the patient’s needs. They should be provided in a recovery oriented format that promotes peer-support.

A lack of these services is particularly relevant in the context of Partners in Recovery in Western Sydney. An analysis of the needs carried out in 241 of their clients, showed that 63% of clients identify *psychological distress* as an unmet need. This needs analysis also identifies *daytime activities* and *company* (social life) as significant unmet needs, reported by 63% and 58% of the PIR clients in Western Sydney, respectively. Even though some of these activities, especially daytime activities and social life, are provided by the social day care sub-system, they can also be targeted in health-related day care services, together with the management of psychological distress. While these services may have been missed from analyses conducted at a service and policy level (see below) their lack is being strongly felt amongst consumers.

It is important to note that day hospitals and day care centres were available in Western Sydney LHD some years ago. The reasons for their disappearance are complex and an analysis of these factors goes beyond the objective of this report. However, policy remedies must be built of an understanding of how this occurred. It could be the case that the absence of high-intensity day care in Western Sydney is partly a by-product of a shift in the service model from acute to community care and from a provision-guided system to a more choice-oriented system which focuses on personalisation.

Public funding mental health services have moved from services provided in the public sector - including the more institutional modes provided by the LHD - to community-based services provided by the NGO sector. This shift has been a significant aspect of deinstitutionalization, emerging hand in hand with the closure of psychiatric hospitals across the system. Day Hospitals and day centres have been unintended victims of this necessary shift in the model of care. NGO-run services have been focused on the less clinical (and expensive) end of day care, focusing on cultural or respite services. Reduced budgets mean the staff that can be contracted are lower skilled or lack the specific skills needed for more intensive services. Although these types of services are absolutely necessary, we must not neglect more intensive health related day services. Indeed, day hospitals and day centres for mental health can be found in the private health sector, suggesting that there may be equity problems in the access to this type of care, adding to findings on outpatient care with respect to the operation of the *Better Access Program* in Australia[31]:

> "*people living in more disadvantaged and rural areas receive a service model in response to mental health needs that is characterised by lower volumes of services, provided possibly by less highly trained providers*"

The disappearance of day hospitals and day centres in the public sector could also be attributed to the shift to personalisation of care. Individual care based on individual preferences and choices, tends to prioritise individual face-to-face programs and home-based treatments rather than group interventions. Crisis resolution or home treatment teams are an effective community intervention to manage psychiatric crises, but they should not be seen as the only alternative to acute inpatient care. A recent systematic review [32]did not find a significant effect in hospitalisation rates for the implementation of crisis resolution services; and observational studies have shown disparate effects in Norway[33] and in England[34]. It has been suggested that a strategy that combines "crisis resolution/ home treatment treatment" and "day hospitals" is a good option to treat patients in the community [1].

We may also keep in mind that models that prioritize individual care may have unintended adverse effects if critical services in a community care model are missing from the local system. Likewise and although this requires further evaluation, the value of choice in recovery oriented systems may be limited by the availability of core services in the system. In order to take useful choices to meet an individual's needs, a whole array of service alternatives should be available at the local care system. Strikingly, the lack of high-intensity Day care (eg Day Hospitals and Day Centres related to health) has not been mentioned as a critical system gap in previous policy documents. Other authors have documented the dismantling of the Australian community mental health system in recent years, but without specific mention of the disappearance of day care [35, 36].

A central lesson of this mapping model is that mental health care needs to be treated as a system. Services providing intensive day care-such as day hospitals or day centres - as well as other components of the system should be included in a system when they are necessary. We need to create a system which fits with community needs, not policy trends or institutional imperatives.

The reduction or disappearance of health staffed day care has also been observed in other health systems that are shifting to a competitive market based on personalisation, such as England. Although this shift has been described in the disability sector[37-39] , an understanding the impact of this reform in the overall efficiency of the care system is still missing. Therefore it is an urgent need to assess the effects of this silent reform on key performance indicators of the system and on the outcomes. This need is made particularly urgent in the context of National Disability Insurance Scheme (NDIS), which has a strong emphasis on individualisation.

Lack of acute and sub-acute community residential care

Even though the National Mental Health Commission Review has recommended the reallocation of a minimum of $1 billion in Commonwealth acute hospital funding into more community-based psychosocial, primary and community mental health services, there is still a debate in the Australian literature on the need to invest in community beds at the expense of hospital beds[40] .

Although acute beds within hospitals are a key component of an integrated care system, it is also important to implement residential alternatives in the community. More studies are needed on the efficiency of these type of services. Some authors suggest that acute residential care in the community may be more cost-effective than hospital admission [24]. A recent quasi-experimental study carried out in Brisbane evaluating "crisis houses" showed that this community alternative provides a cost-saving for mental health services [41]. These services can also function as a 'step-down' from a period of acute psychiatric hospitalization, to facilitate transition from hospital. The key characteristic of these services if that they are staffed with highly-skilled mental health professionals. The development of these types of services in Western Sydney LHD will fill a gap in the provision of mental health care services.

Lack of comprehensive information about long term accommodation

Supported housing is another key component of a community mental health system. However it has not been possible to obtain comprehensive information on the Public and Community Housing properties assigned to people with a lived experience of mental ill-health. It seems that there is no *a priori* planning based on an analysis of needs (e.g. 20% of the properties are dedicated for people experiencing mental health issues). The lack of information on supportive accommodation jeopardises evidence-informed policy and planning. A long waiting list for housing and an increase in the number of people with a lived experience of mental ill-health who become homeless points to a major gap in this type of care provision in NSW.

A previous evaluation of the Housing and Accommodation Support Initiative (HASI)[42] also pointed out these problems. HASI consumers who require social housing apply through Housing Pathways for public or community housing. They are prioritised according to need. They are housed in existing social housing stock, when a property becomes available, and this varies depending on the location and needs, ranging up to many months. Although the evaluation report implicitly acknowledges geographical variability in the implementation and outcomes of the program, it does not present any data by LHD. This is crucial in order to develop a plan to promote stable housing tailored to the area with specific guidance on the number of places needed.

The research with PIR clients in Western Sydney independently identified a gap in appropriate accommodation in Western Sydney. 46 % of consumers identified *accommodation* as a core unmet need. Housing was also identified by PIR support facilitators and team leaders as a particular area which they had difficulty making contact with and referring their clients to[43]

As in so many areas of mental health, poor reporting of basic statistics makes it difficult to take this question much further. As a proxy of availability, one option might be to count the number of people with mental health problems using properties provided through social housing programs. Unfortunately, this information is not recorded. The only alternative is to know how many clients of social and community housing are also under the HASI program or another program targeting mental ill-health. This information is not readily available and it has not been possible to collect it within the timeframe of this project. Consequently, the availability of long term residential services presented in this Atlas should

be interpreted with caution and is likely to be underrepresented. In addition, the way this type of care is arranged (i.e. a partnership between the public health sector, which provides the clinical care; the NGOs, which provide the support at home and Housing providers, that own the facilities), complicates the codification of these services, as housing providers are not delivering direct care. Housing providers are better conceptualised as financing mechanisms. This can also create confusion and tension within the partners, and between providers and clients if the aims of the program and the roles of the providers are not clearly specified[42]

Employment-related services

It is also worthwhile highlighting the low diversity of services providing employment which plays a critical role in promoting recovery [44]. Employment is also a core unmet need identified by 41% of PIR clients. We identified some organizations (such as WISE employment) which aim to support people with a lived experience of mental ill-health to work in jobs that pay competitive wages in integrated settings in the community. Unfortunately, these are short-term programs that lack stability and have therefore not been included in our Atlas. “Disability Employment” also provides this type of intervention. However this is a generic service for people with all types of disabilities. There is a need to fund more long-term specific services supporting employment for people with lived experience of mental illness.

As with other areas of day care, it is important to have a broad availability of different employment alternatives for people with a lived experience of mental ill-health in addition to supported employment. The number of people with a lived experience of mental ill-health in ordinary employment is very low and it may be the case that ordinary employment cannot be provided to all persons with a mental problem. The opportunity costs of promoting ordinary employment for all the population with a severe mental problem may not be a feasible and it could be the case that not all of the people would be able to work in the ordinary employment, but they have still the right to work. Therefore it is important to guarantee that there are other options available for people that may have other abilities and may require more support. Some of these alternative services may be classified as ‘social firms’ which are market-oriented businesses that employ people with disabilities; or ‘social enterprises’ which are primarily focused on training and rehabilitation[45]. The availability of these other options may also allow a smoother transition to ordinary employment.

Further findings

An additional issue that emerged in this study was related to the lack of robustness or the fragility of the system brought by short term programs lacking recurrent funding bases. We had to exclude 10 BSIC/services because their funding was only for three years (no stable care programsThese time-limited, non-stable services are usually highly specialised, targeting specific populations or disorders, or pilot programs. The common three year time frame is an insufficient period to test their benefits. This type of problem is typical of high income countries where decision makers/policy planners (the advocates for a new service) take a ‘component view’ rather than a public health orientation, which takes a ‘system view’ of the whole pattern of care at the local level and how the different components

are related [24]. The problem of the component 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" system, rather than a "proactive" system based on long term planning informed by local evidence. In addition, most of these programs are community based, which means that the community mental health system in Western Sydney is very "fragile".

All of the problems described in this discussion are related to the concept of the "missing middle" of care, that has been also highlighted in the review made by the National Mental Health Commission[3]. When analysing the information, the type of services provided in Western Sydney may cover the needs of the two extremes of the lived experience of mental illness: on the one hand, those people with mental health problems who are relatively well, have good support, and only need low-level support, and on the other hand, those who are in a severe crisis situation that require acute care in a hospital setting. In the middle we have a significant proportion of people with a lived experience of chronic and moderate to severe mental illness who need more community-based options. In this sense, a balanced care system requires the active implication of the health sector in the provision of community care, together with the social sector[24].

It is important to note that gaps in the care provision for moderate disorders have been identified as a major problem in other countries with highly advanced community care systems such as Norway[46]. However the gap in other OECD countries is mainly related to the mild-moderate target group treated in primary care and by community nurses and not to clients experiencing moderate-severe mental ill-health treated in specialised care as identified in this analysis. The care pattern for mild-moderate mental ill-health in primary care in Western Sydney is an area that requires further investigation.

The gap in high intensity day care may hinder tertiary prevention or rehabilitation. As the National Mental Health Commission has also pointed out in its report, it is a system that responds too late[3].

In spite of this, the main strength of the Mental Health System of Western Sydney is the high availability of mobile outpatient services and the geolocation of the services. Services are in the areas with higher needs and the overall geographical accessibility is good. Another strength is the availability of specific services for people with a different cultural background. This is crucial due to the socio-demographic profile of the area.

The availability and placement capacity of the care subsystem for specific target population groups deserves further analysis. Unfortunately we cannot provide extensive comparison with other local districts in other OECD countries as the Refinement Study in Europe was limited to mental health services for adult populations. Specific services for child and adolescent populations show an unbalance towards transition services. Although a number of transition services are required at any local level to ensure the transition of clients with complex needs, it seems that many resources are devoted to transition services in Western Sydney in comparison to the overall availability of services for children and adolescents. This may indicate a problem in the continuity of care in the core outpatient services for adolescent and for adults. It is also worthwhile to highlight the presence of specific services for older

people with lived experience of mental illness. Due to the ageing pattern of the population, it may be crucial to develop these services, not only at the residential level but at the community level [47].

Study Limitations

The results presented here should be seen in the light of several limitations. The first one is related to the voluntary participation of the providers in this research. Although improbable, some core services may be missing because we did not reach them. Services which declined to participate in this study may have cause an under-representation in some care types. In order to address this limitation we presented and discussed services included and coded in the study to the Steering Committee of Partners in Recovery Western Sydney and, after different iterative reviews, it was agreed that the majority of the services providing care for people with a lived experience of mental ill-health have been included and coded. Nonetheless, some services that are not specific to mental health, but that are used by people with mental health problems, may be absent. Some services providing care for people with disabilities expressed their interest in the Atlas, but they did not want to be included as their target was not mental health. It should be highlighted that the response rate from the community housing providers was particularly low with only two providers, St George and Hume, participating.

A further issue is the role in the local system of private providers involved in the “Better Access” Program. As mentioned above, the inclusion of private providers in the mapping of publicly available services may increase noise, hamper the interpretation of the results and misrepresents the universality of access to services. In fact, a recent paper focused on the evaluation of the “Better Access” Initiative conclude that it *is not providing universality or consistent equity of delivery in mental health care* as the access is conditioned by economic barriers [31]. Private services should be included as an additional map in future analysis.

We have only mapped services that do not have time-limited funding (funded and available for more than three years). The primary aim of an Atlas is to map the robustness of the system, and therefore we have excluded services that are time-limited. The inclusion of care programs that are time-limited (i.e. less than three years of funding) would also have distorted the analysis, and would have decreased the utility of the Atlas for evidence-informed planning. To get a comprehensive picture of service availability and capacity it is important to develop a separate map of the time-limited services operating in the local system.

Finally, we have only included services within the boundaries of Western Sydney LHD. We acknowledge that some of the inhabitants in this area may use services from other LHD, such a Nepean/Blue Mountains (especially services in Penrith or Emu Plains that we have excluded) and South Western Sydney. A complete Atlas of NSW would eventually solve this problem.

Future Steps

Integrated Atlases of Mental Health are considered key tools for evidence informed policy and planning. In this Atlas we have mapped in a comprehensive way the stable services providing care for people with lived experience of mental illness. However, to have a complete picture of the situation, the results of this Atlas should be completed by mapping the:

(i) **Needs of the primary care physicians related to the provision of mental health:** General practitioners or family physicians are usually the first contact with the health system and they can play a key role in the prevention of mental illness and the treatment of common mental health problems. It is therefore crucial to understand and meet the needs of these professionals.

(ii) **Workforce capacity of the system:** this step will allow us to analyse if the teams are sufficiently resourced to provide required support.

(iii) **Rates of utilisation of the services**, by MTC, using the information provided in the administrative databases: the analysis of service utilisation will detect hot and cold spots and areas of improvement.

(iv) **Pathways to care:** understanding how people with a lived experience of mental ill-health navigate the system is a key area of knowledge needed for creating systems which increase accessibility and efficiency.

(v) **Temporary care programs available in 2015 for people with lived experience of mental illness**: this will allow us to better understand the overall availability of care in a given year, as well as describe the robustness of the system and the identification of the most fragile areas (i.e. for instance, among the care related to employment for people with mental health problems, what is the % of short-term programs?

(vi) **Financing mechanisms and financing flows**: This will allow us to delve into important areas such as the *Better Access Program* and housing.

(vii) **Level of integration of the services providing mental health care and the philosophy of care of the services:** a collateral finding that emerges, but that should be included, related to integration is the different philosophy of care of the services. It is important to know what is the view of the different providers on the public mental health system and their role in it.

Recent analysis of interviews with PIR support facilitators and team leaders has identified that the main component of these roles is to identify and make contact with services in order to meet their clients' needs [43]. One of the challenges to their work was the time taken in interpreting and sharing of knowledge about the system in which they work – a system whose boundaries, relationships and key features are difficult to interpret as an outsider.

The information provided in this Atlas is particularly useful for the following areas of navigation, management and planning:

Staff of PIR: The data in this Atlas could facilitate a better understanding of the landscape in which they work and the services that are available to their clients.

Managers and Planners: The information gathered in this Atlas is useful for the development of bottom up system indicators that can be used to monitor the evolution of the system. The production of different Atlases based on the DESDE system every 4 or 5 years can assist in the monitoring of the changes and the evaluation of policies [18]. This can be easily done by introducing the classification system (DESDE) into an on-line program that automatizes the codification of the services. The Department of Social Welfare of Andalusia, in the South of Spain, has incorporated the DESDE into their web page, so services receive the code after answering some questions. It will be also important to evaluate the impact of this Atlas, as a visual tool to increase the capacity and efficacy of managers and planners in evidence-informed decision making and in system thinking.

Consumers: A user-friendly version of the Atlas may facilitate to consumers system navigation, location of services and increase their local knowledge on service availability and capacity

8. Conclusions and Recommendations

In conclusion, the information presented in this Atlas highlights key areas for system improvement in the provision of mental health services in the Western Sydney LHD.

Critical areas of progress are to:

A. Develop alternatives to hospitalisation, such as day hospitals, and residential facilities in the community, such as crisis houses.
B. Develop day care centres related to health staffed with high skilled mental health clinicians and other professionals that can focus on rehabilitation.
C. Develop day care centres related to employment (‘social firms’ or ‘social enterprises’) for people with a lived experience of mental ill-health to promote their recovery.
D. Improve the information related to public and community housing to allow better planning,
E. Change from a reactive system to a proactive system, to increase the robustness of the system, particularly in the social sector. This implies the provision of long-term funding for the NGO sector, which stabilizes operations and allows for long-term planning.
F. Incorporate system thinking into policy and planning. This will ease the development of an integrated mental health model of care.

Our recommendations are in line with the recent report of the National Mental Health Commission’s *National Review of Mental Health Programmes and Services* , which recommended, amongst others: 1) the development of *more community-based psychosocial, primary and community mental health services,* as alternatives to acute hospital care; and 2) boosting of *the role and capacity of NGOs and other services providers to provide more comprehensive, integrated and higher-level mental health services.*

This is an unique moment for Western Sydney. We need to harness this local evidence to change the mental health system, for the benefit of all of our fellow community members experiencing mental ill-health.

ANNEX I – METHOD

HOW WAS THE INTEGRATED ATLAS OF MENTAL HEALTH ASSEMBLED?

Typically, general Atlases of health are formed through lists or directories of services and inclusion of services is based on their official or everyday titles. This is particularly problematic for several reasons [48]:

1) The wide variability in the terminology of services and programs even in the same geographical area and the lack of relationship between the names of services and their actual functions (e.g. day hospitals, day centres, social clubs, etc.), as the service name may not reflect the actual activity performed in the setting; and,

2) The lack of a common understanding of what a service is. The word 'service' is an umbrella term that is used to describe very different components of the organization of care. It merges permanent, highly structured services, with clinical units, or even short-term programs and interventions.

In order to overcome these limitations, we have used the "*Description and Evaluation of Services and Directories in Europe for long-term care*" (DESDE-LTC)[49] . This is an open-access, validated, international instrument for the standardised description and classification of services for Long Term Care (LTC). It includes a taxonomy tree and coding system that allows the classification of services in a defined catchment area according to the main care structure/activity offered, as well as the level of availability and utilisation. It is based on the activities, not the name of the service provider. This classification of services based on the actual activity of the service therefore reflects the real provision of care in the territory.

It is important to note that in research on health and social services there are different units of analysis and that comparisons must be made across a single and common 'unit of analysis' group. Different units of analysis include: Macro-organizations (e.g. a Local Health District), Meso-organizations (e.g. a hospital), and Micro-organizations (e.g. a service). It could also include smaller units within a service: Main Types of Care, Care Modalities, Care Units, Care Intervention Programs, Care Packages, Interventions, Activities, Micro Activities or Philosophy of Care. Our analysis, based on DESDE-LTC, is focused on the evaluation of the minimal service organization units or Basic Stable Inputs of Care (BSICs).

WHAT ARE BASIC STABLE INPUTS OF CARE (BSIC)?

A Basic Stable Input of Care (BSIC) can be defined as a team of professionals working together to provide care for a group of people. They have time stability (that is, they have been funded for more than 3 years) and structural stability. Structural stability means that they have administrative support, their own space, their own finances (for instance a specific cost centre) and their own forms of documentation (i.e. they produced their own report by the end of the year) (See Box 1, below).

Box 1. Basic Stable Input of Care: criteria

Criterion A: Has its own professional staff.
Criterion B: All activities are used by the same clients.
Criterion C: Time continuity (more than 3 years)
Criterion D: Organizational stability
Criterion D.1: The service is registered as an independent legal organization (with its own company tax code or an official register). This register is separate and the organization does not exist as part of a meso-organization (for example a service of rehabilitation within a general hospital) → **IF NOT:**
Criterion D.2.: The service has its own administrative unit and/or secretary's office and fulfils two additional descriptors (see below) → **IF NOT:**
Criterion D.3.: The service fulfils **3** additional descriptors:
D3.1. To have its own premises and not as part of other facility (e.g. a hospital)
D3.2. Separate financing and specific accountability (e.g. the unit has its own cost centre)
G3.3. Separated documentation when in a meso-organization (e.g. specific end of the year reports).

We identified the BSICs using these criteria and then labelled them. The typology of care provided by the BSIC (or service) is broken down into a smaller unit of analysis that identifies the "Main Type(s) of Care" (MTC) offered by the BSIC. Each service is described using one or more MTC codes based on the main care structure and activity offered by the service. For instance, the same service might include a principal structure or activity (for example a 'residential' code) and an additional one (for example, a 'day care' code). Figure 1 depicts the different types of care used in our system.

There are 6 main types of care[49]:

Residential care: The codes related to residential care are used to classify facilities which provide beds overnight for clients for a purpose related to the clinical and social management of their health condition. It is important to note that clients do not make use of such services simply because they are homeless or unable to reach home. Residential care can be divided in Acute and Non-Acute branches, and each one of this in subsequent branches. Figure 2 depicts the Residential Care branch.

Day Care: The day care branch is 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 combinations 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. Figure 3, below, depicts the day care coding branch.

Outpatient Care: The outpatient care branch is used to code facilities which (i) involve contact between staff and clients for some purpose related to the management of their condition and associated clinical and social needs and (ii) are not provided as a part of delivery of residential or day services, as defined above. Figure 4 depicts the outpatient care branch.

Accessibility to Care: The accessibility branch classifies facilities whose main aim is to facilitate accessibility to care for clients with long term care needs. These services, however, do not provide any therapeutic care. Figure 5 depicts the specific codes under this branch.

Information for Care: These codes are used for facilities that 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. Figure 6 depicts the information care branch.

Self-help and Voluntary Care: These codes are used for facilities which aim to provide clients with support, self-help or contact, with un-paid staff that offer any type of care as described above (i.e. residential, day, outpatient, accessibility or information). Figure 7 depicts the self-help and volunteer care branch.

A detailed description of each one of the branches is available here:
http://www.edesdeproject.eu/images/documents/eDESDE-LTC_Book.pdf

Figure 23. Main Type of Care: core codes

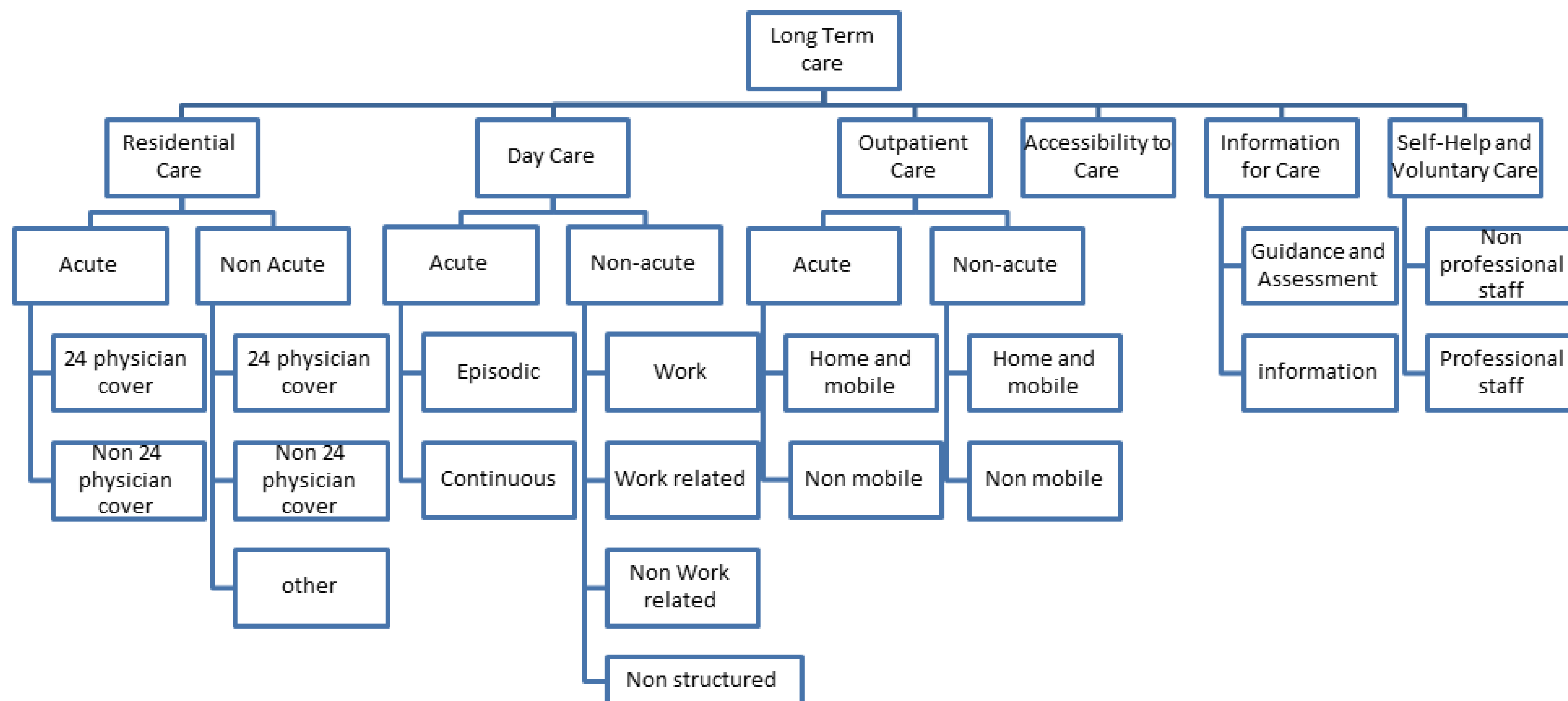


Figure 24. Residential care coding branch

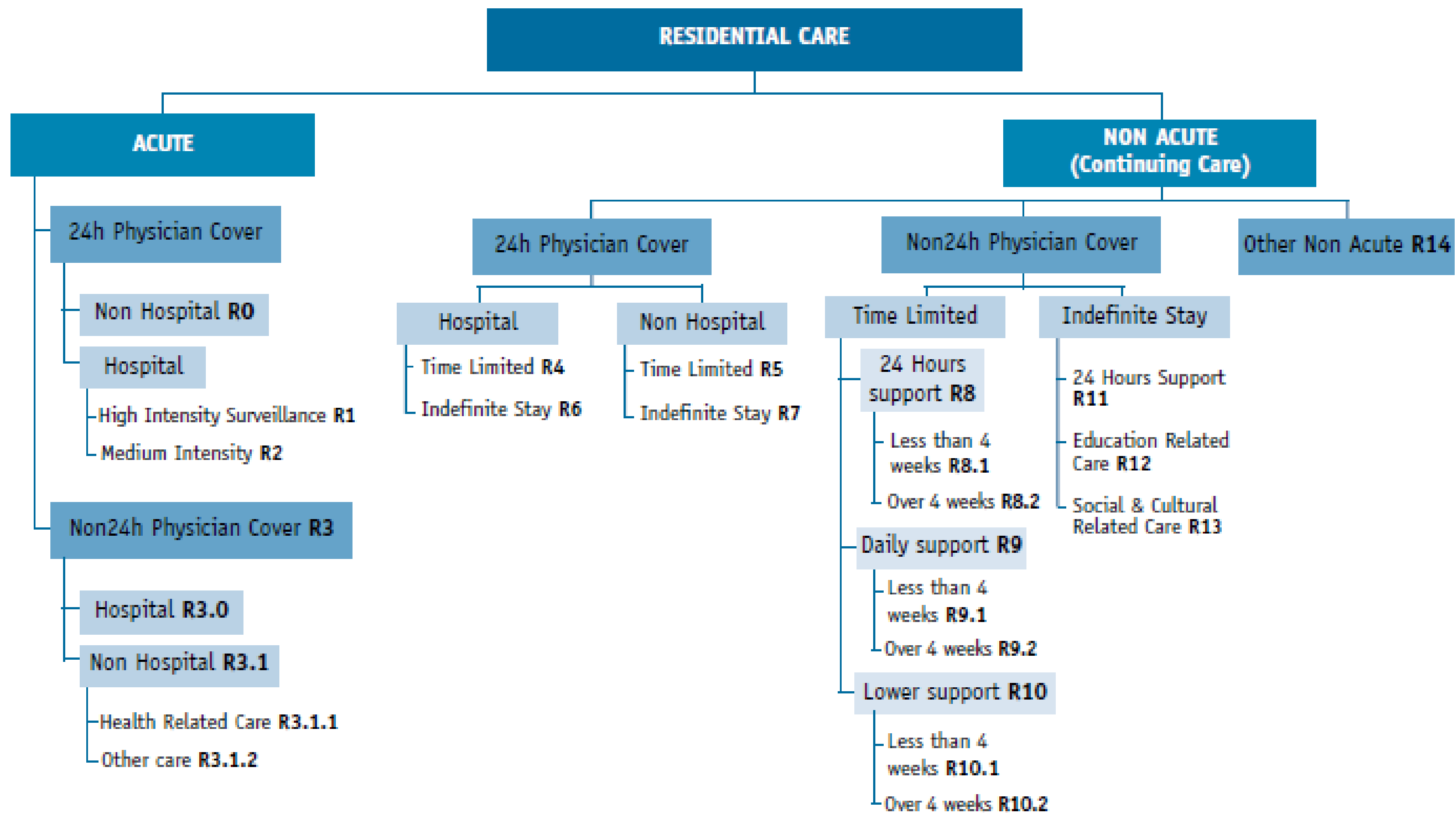


Figure 25. Day care coding branch

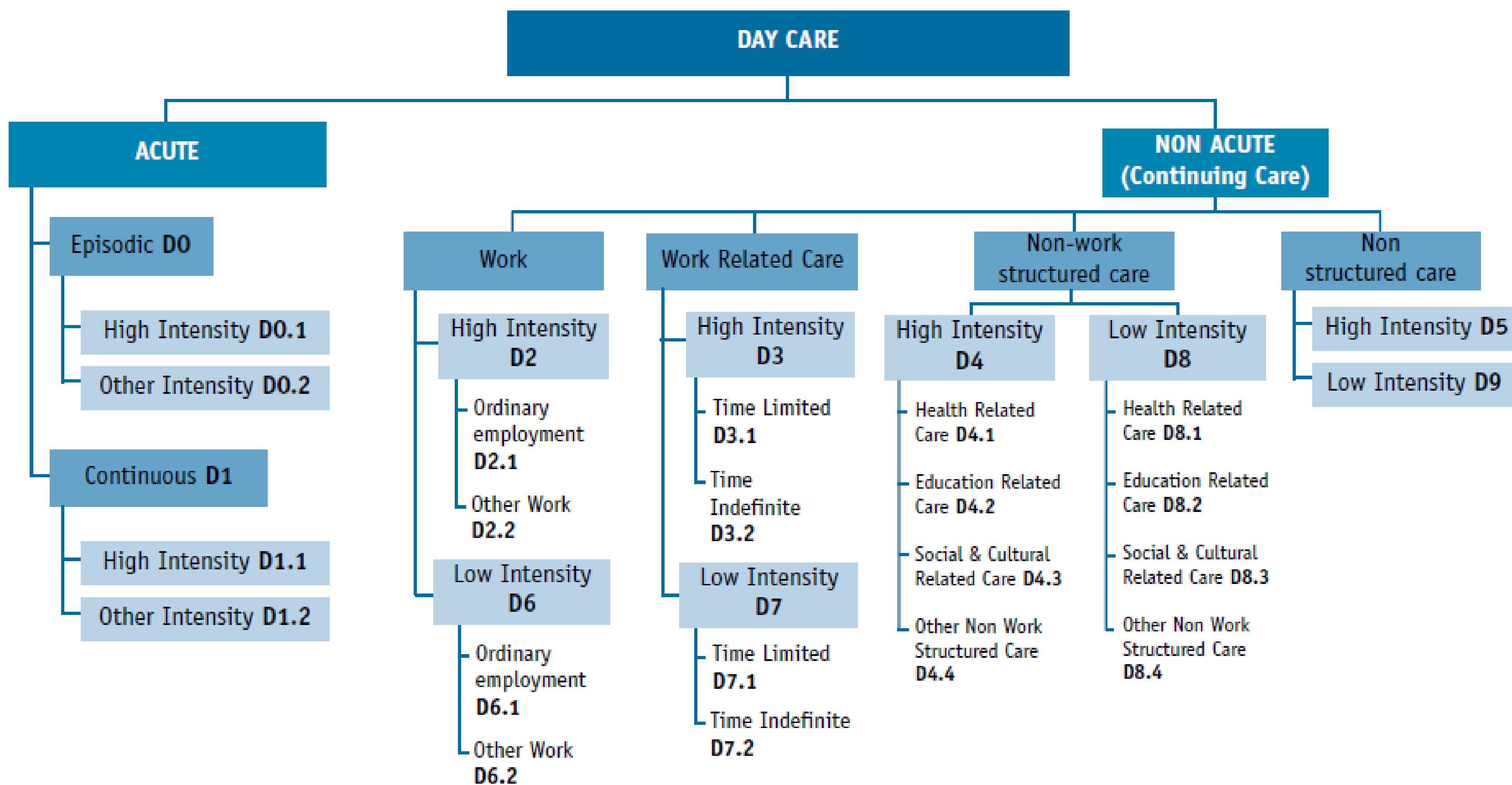


Figure 26. Outpatient care coding branch

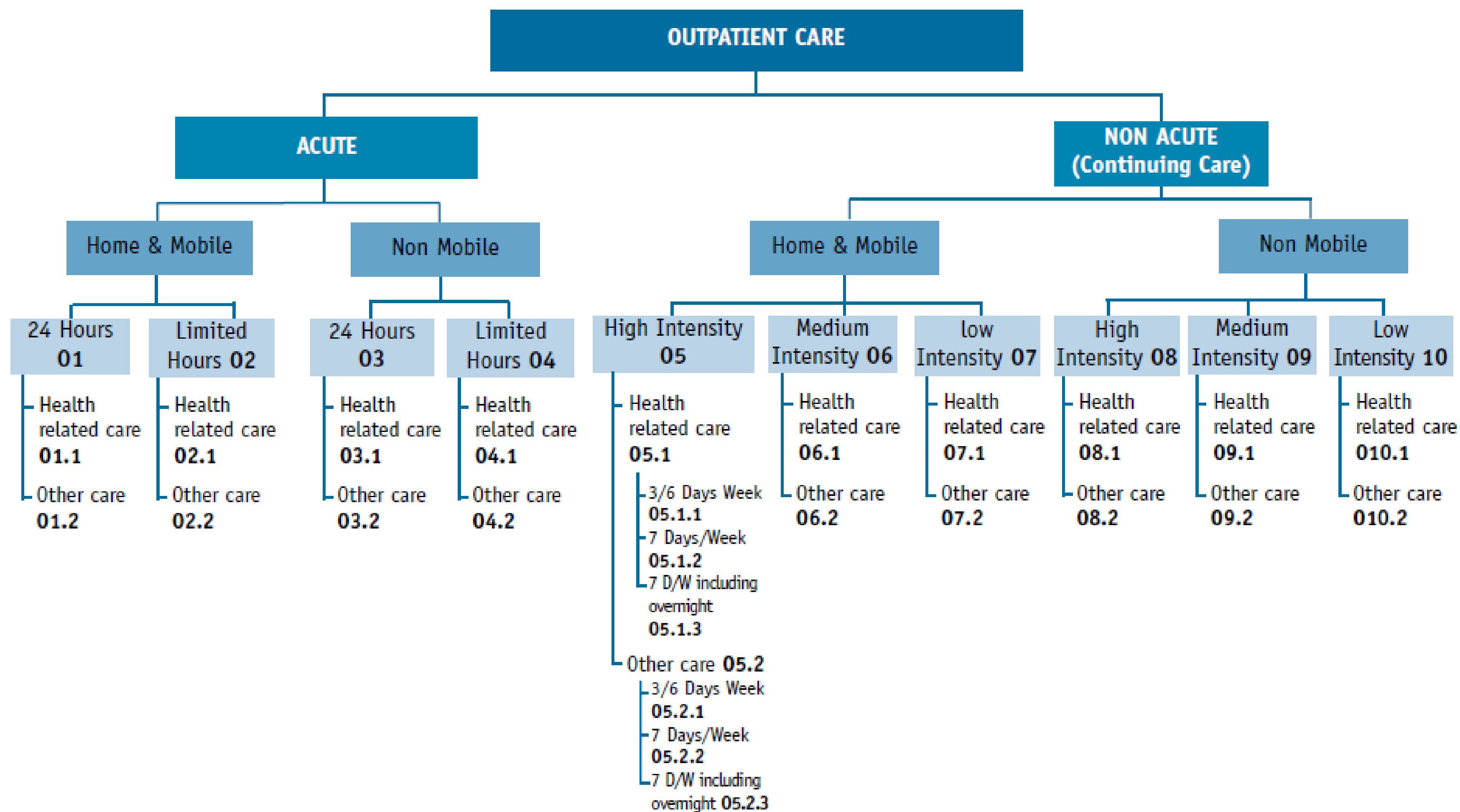


Figure 27. Accessibility to care coding branch

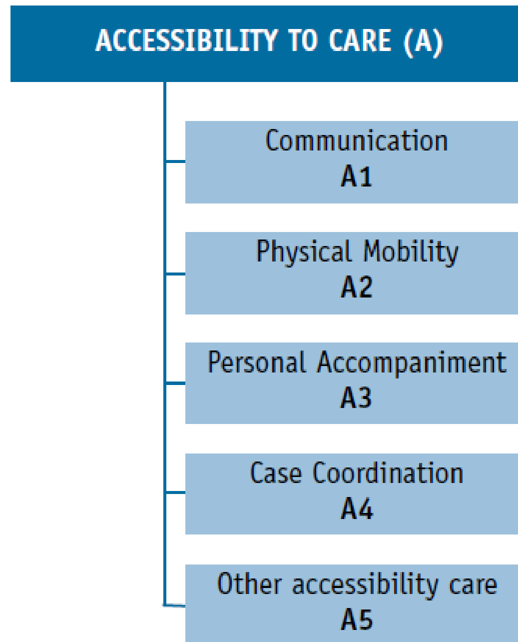


Figure 28. Information for care coding branch

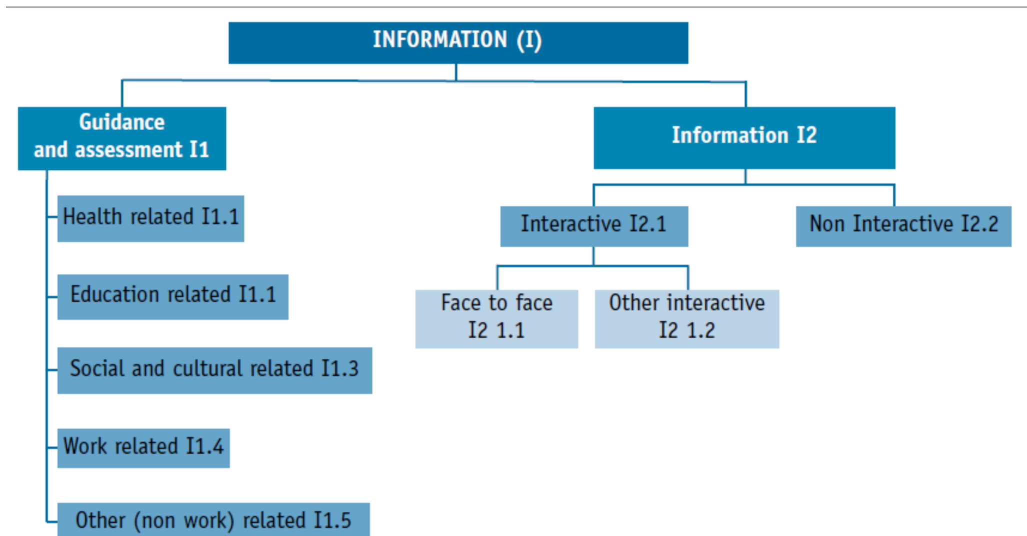
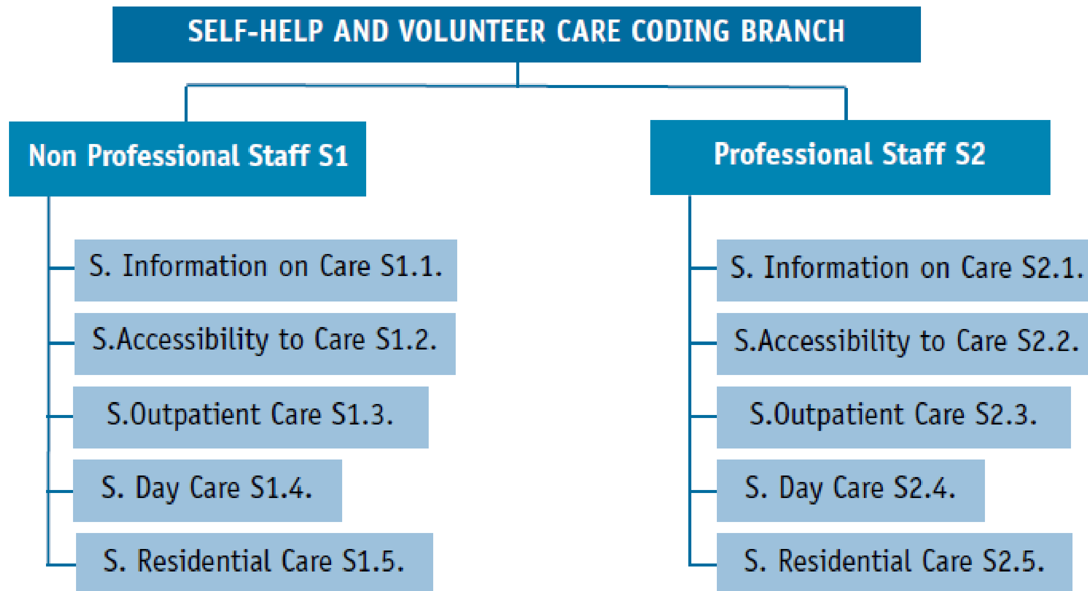


Figure 29. Self-help and volunteer care coding branch



Inclusion Criteria

In order to be included in the Atlas a service had to meet certain inclusion criteria:

1) **The service targets people with a lived experience of mental ill-health**: This means that at least 20% of its clients have experienced or are experiencing mental ill-health or psychosocial problems. The inclusion of services that are generic, and lack staff with the specialised training and experience to treat people with a lived experience of mental ill-health, may lead to bias which obscures the availability of services providing the specialised focus and expertise needed in mental health.

2) **The service is publicly funded**: The study focuses on services that are universally accessible. Access to most private mental health services in Australia requires an individual to have private health insurance coverage, high income or savings. Inclusion of private providers would give a misleading picture of the resources available to most people living with mental ill-health and obscures the data for evidence informed planning of the public health system. Most private services have some level of public funding, for example Medicare subsidies of private hospitals or community-based psychiatric specialist services. It would be useful in future mapping exercises to include an additional layer of private service mapping to inform those who can afford private health care and for planning in the private sector. However as a baseline the

importance of establishing the nature of universal and equitably accessible health care necessitates that these maps remain distinct.

3) **The service has received funding for more than 3 years:** The inclusion of stable services (rather than those provided through short term grants) guarantees that we are mapping the robustness of the system. If we include services with less than three years of funding it will jeopardize the use of the Atlas for evidence informed planning.

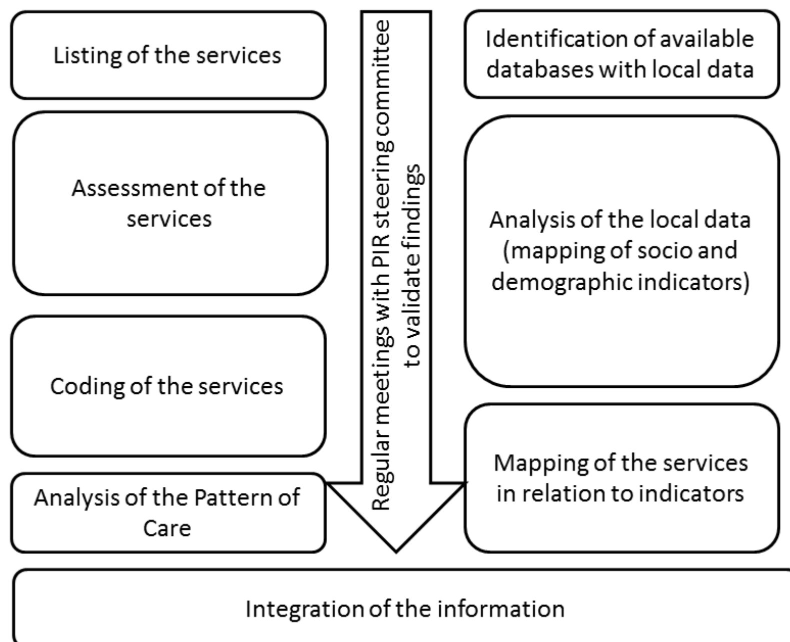
4) **The service is within the boundaries of Western Sydney LHD:** The inclusion of services that are within the boundaries of Western Sydney LHD is essential to have a clear picture of the local availability of resources.

5) **The service provides direct care or support to clients:** We excluded services that were only concerned with the coordination of other services or system improvement, without any type of contact with people with a lived experience of mental ill-health

WHAT PROCESS WAS FOLLOWED IN WESTERN SYDNEY?

There were four distinct steps in the creation of the Integrated Mental Health Atlas of Western Sydney. Figure 8 summarises the process followed in the development of the Atlas. These steps are explained below.

Figure 30. Steps followed in the development of the Integrated Mental Health Atlas of Western Sydney



Step 1 - Data collection: First we developed a list of all health related services providing care for persons experiencing mental ill-health (provided by Partners in Recovery Western Sydney). Then we contacted the services by phone to gather the following information: a) basic service information (e.g. name, type of service, description of governance); b) location and geographical information about the service (e.g., service of reference, service area); c) 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); d) additional information (name of coder, date, number of observations and problems with data collection). We then contacted the providers via email and asked them to fill in an online survey. Alternatively, they could ask for a face-to-face on-site interview with one of the researchers.

Step 2 - Codification of the services followed criteria defined in DESDE-LTC, according to their MTC (not the official name).

The codes can be split into four different components:

a) **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
- **NX** None/undetermined
- **CX** Child & Adolescents (0-17 years old)
- **AX** Adult (>17 years old)
- **OX** Old > 64
- **Cc** Only children (0-12 years old)
- **Ca** Only adolescent (12-17 years old)
- **TC** Period from child to adolescent (8-12 years old)
- **TA** Period from adolescent to adult (16-25 years old)
- **TO** Period from Adult to old (60- 70 years old)

b) Diagnostic group: ICD-10 codes in brackets after the age group code but before DESDE-LTC code were used to describe the main diagnostic group covered by the service. In the majority of the services we have used the code [F0-F99], which means that the service includes all types of mental disorders or does not specify any. If the service is not targeting mental ill-health, but psychosocial problems (for instance with some child and adolescent services) we have used the code [Z56-Z65]. If the client of the service is a child, but the professional is working with the family, we have included the code [e310] (immediate family), from the International Classification of Functioning (ICF).

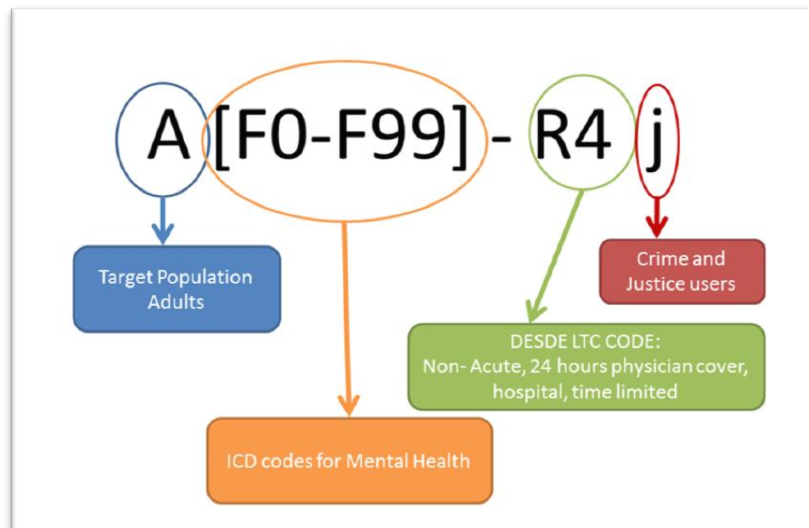
c) DESDE-LTC code: The third component of the code is the core DESDE-LTC code which is the MTC. As we have explained before (pages 13-21) the services are classified according to their main type of care. This care can be related to: a) residential care (codes starting with R); b) day care (codes starting 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).

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

- **"b" based-care:** This additional code typifies outpatient/ambulatory services that do not provide any care outside their own premises
- **"d" mobile-care:** This additional code is used in those non-mobile services, which have between 20% and 49% mobile contacts.
- **"j" Justice care:** This additional code describes BSICs whose main aim is to provide care to individuals in contact with crime and justice services.
- **"l" Liaison care:** This additional code describes liaison BSICs where specific consultation for a subgroup of clients is provided to other area (e.g. outpatient consultation on intellectual disabilities to a general medical service, or consultation on mental ill-health for the general medical services of a hospital).
- **"s" Specialised care:** This additional code describes BSICs for a specific subgroup within the target population of the catchment area (e.g. services for Elderly people with Alzheimer's disease within the "E" group, or services for Eating Disorders within the "MD" group).
- **"u" Unique:** This additional code describes single-handed BSICs where care is delivered by a health care professional (psychiatrist, psychologist, nurse).

Example: A sub-acute forensic unit in a hospital for adults with lived experience of mental illness will receive the following code presented in Figure 9:

Figure 31. Components of the code- an example of a sub-acute forensic unit based in a hospital.



Step 3 Mapping the BSICs:

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 Western Sydney LHD. To achieve this step, the classification of mental health services into BSICs was exported into a Geographic Information System (GIS)[50]. This data was augmented through the addition of selected indicators from the 2011 census, sourced from the Australian Bureau of Statistics (ABS), and an area-based indicator of psychological distress[9]. A series of chloropleth maps were visualised in the GIS to illustrate the distributions and small-area variations in each of the demand-related variables, including the rate of unemployment, low self-reported proficiency in the English language, Indigenous population density, the percentage self-identifying as requiring assistance in daily activities (e.g. bathing) and the rate of unpaid assistance (i.e. caring responsibilities). A second set of maps was then constructed to visualise the locations of all mental health services, and selected BSICs, within Western Sydney LHD and in relation to some of these demand-related indicators. The sophistication of these maps was then enhanced with the derivation of a spatial accessibility metric, classifying all areas within the LHD jurisdiction by their distance to the mental health services being presented.

Step 4 Description of the pattern of care: service availability and capacity

We have analysed the availability of services, by MTC as well as the capacity.

- **Availability:** Defined as the presence, location and readiness for use of services or other organizational units in a care organization or a catchment area at a given time. A service is available when it is operable or usable upon demand to perform its designated or required function. The calculated availability rates of an MTC is calculated by 100,000 inhabitants.

- **Placement Capacity**: Maximum number of beds in residential care and of places in day care in a care delivery organization or a catchment area at a given time. Rates have been calculated by 100,000 inhabitants.

This analysis allows us to compare the availability and capacity rates with other areas and to estimate if the provision is adequate with regard to the populations needs. We have compared the area of Western Sydney with other local areas from England, Finland, France, Italy, Norway and Spain. The information on the European Countries has been developed as part of the Refinement Project[22], funded by the European Commission.

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