the architecture of **mental health:**

understanding approaches to mental health + care in the urban environment

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Cover image:
Helsingor Psychiatric Hospital, 2018

the architecture of mental health: understanding approaches to mental health + care in the urban environment

The goal of this research was to discover the role of architecture as both building and care system, providing leading models of therapeutic mental healthcare facilities in urban settings

1

Introduction

The impact of mental health

Mental illness can strip people of their independence, wellbeing and dignity. In any given year 1 in 5 Australians aged 16 - 85 experience some form of mental illness, and it is expected that almost half the population will experience mental illness at some point in their lifetime.[1] Mental illness affects a person's ability to live with comfort and purpose, being the leading cause of death for Australians aged 25-44 and second leading cause of death for young people aged 15-24. In 2017 over 3,000 Australians lost their lives to suicide,[2] and suicide rates for those affected by mental illness are seven times higher than the general population.[3] Furthermore, between 20-30% of suicides in the mental health population involve patients that were not admitted to care upon presentation or following a discharge from acute care.[4]

Mental illness is perceived as a chronic stress on society and is responsible for nearly a quarter of all disability. People with mental illness also have higher rates of co-morbidities, meaning higher rates of high blood pressure, cancers, diabetes, obesity, respiratory and musculoskeletal diseases.[5] The World Health Organisation identified that mental illnesses accounts for nearly 12% of the global burden for disease, and will account for nearly 15% of disability-adjusted life years (DALY's) lost to illness.

It is estimated that two thirds of people experiencing mental illness do not seek any treatment.[6] This is partly caused by the fear of discrimination (from workplaces, communities, families and friends), lack of sufficient awareness of mental health or the inability to navigate the current mental health system. In either scenario, these figures are alarming and lead to larger problems for the health system, the economy, communities and individuals if not addressed.

In 2018, mental illness accounted for 14% of the economic impact of all illness in New South Wales, however mental health expenditure accounted for only 8% of the New South Wales Health budget.[7] There has certainly been growing economic commitment from the government in recent years and Australia has taken the charge in leading mental healthcare, however New South Wales has the lowest rate of community care in Australia and has the highest expenditure on hospitals.[8]

As we look towards an urbanising 2050, Sydney is expected to face an unprecedented population growth of 70% - from 5 million to 8.5 million - due to childbirth and migration. The densification of people in cities has direct links to mental health concerns; doubling the risk of schizophrenia, and increasing the risk of anxiety and mood disorders by 21% and 39% respectively.[9] Crowding, violence, lack of infrastructure and lack of access to sufficient social support accounts for a proportion of this.

However, a shift away from acute institutionalisation and towards provision of decentralised mental healthcare services is the most supported approach towards looking after our people adequately. Leading healthcare systems across the world are attempting to prove that the shift away from acute hospitalisation and towards a network of community-based healthcare centres and initiatives can more efficiently assign resources and can promote one's own management of their mental wellness. The goal is to move away from 'treatment' at the end of a patient's healthcare journey and towards prevention and intervention – developing an individual's resilience, empowering them to be mindful of their mental health and willing to seek support within their urban communities. [10]

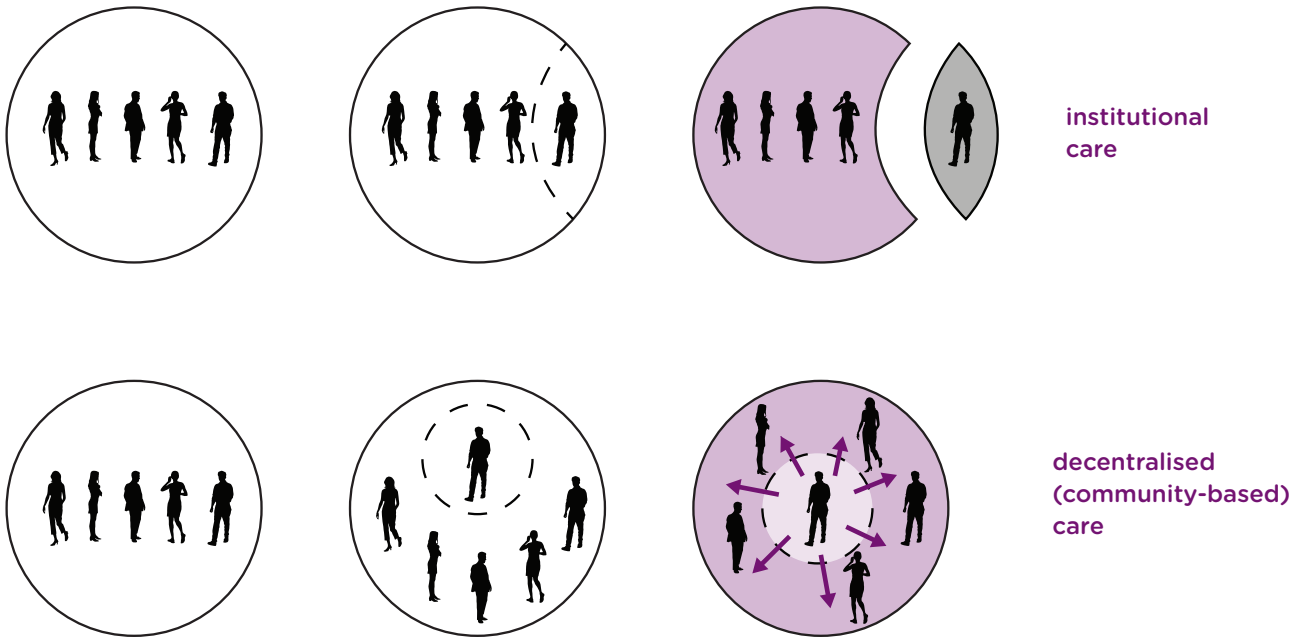


Figure 1. Institutional vs decentralised care

This research investigates new models of healthcare (and their architectural manifestations) that promote mental wellness through reconceptualising traditional systems and reorienting the community based services at the front line and encouraging a more cohesive network of diversified interventions that can empower an individual to dictate their own path of recovery and diminish stigma around mental health. These models each have unique approaches that have been derived from the individual character and impact of mental health in their communities and can provide insight into the process of place-based approach which is reflective of urban community based health care as opposed to a large formal institution such as a hospital that provides a 'one case fits all' approach.

New models of mental healthcare

Within the new models of mental health care, the intention is to replace long-stay psychiatric hospitals with a system of integrated community base networks, backed up by specialist hospital or other services as required.[11] This leads to a shift in funding focused on more opportunities for those living with mental illness with greater provision of stable housing with less barriers to access and greater community initiatives for employment and skills development.

The duration and severity of mental illness can vary significantly depending on the level of care and support. With the correct treatment, support and care, individuals are able to continue to engage with, and participate in the community. Increasingly, mental illness is becoming a chronic stress that effects the occupants of a city and has detrimental effects on their happiness and enjoyment which demands large resources from governments and organisations to address these issues.

Institutionalisation is still the core treatment of mental illness as a means of care, but community based implementations that approach the prevention and intervention of mental illness is now becoming a more prominently acknowledged approach and demands less resources and cost to do so. There is no doubt that institutionalised care is still an important component of the mental healthcare system to provide safety and care for those suffering from severe mental illness but it should be considered as the exception and not the rule.

Whereas the existing system places high importance on the value of formal institutions and acute mental healthcare facilities, the current and still developing system seeks to situate smaller interventions within the community and utilise existing services already established within the urban fabric.

Recovery-oriented system & "Getting in earlier"

Essentially, the new model of mental health places higher importance upon the value of community interaction in the holistic treatment of mental illness. It aims at decentralising the structure of the mental health system from the acute institutionalisation of patients that need psychological treatment by 'getting in earlier' – meaning rather than addressing an illness when it has come to a breaking point for the patient, the model seeks higher attention towards prevention and intervention. Community services become the buffer for people who experience psychological unrest and the intention is through a more open system that addresses all facets of

Mental health and well-being are fundamental to our collective and individual ability as humans to think, emote, interact with each other, earn a living and enjoy life. On this basis, the promotion, protection and restoration of mental health can be regarded as a vital concern of individuals, communities and societies throughout the world.

- World Health Organisation -

one's lifestyle, they are able to work through their issues while they are still incipient and are much more likely to dissolve them through soft interventions.

The new model of mental health understands that mental wellbeing (and illness) are influenced by greater factors than the traditional model recognised. In the past, the main treatment was through pharmacology and isolation with limited psychiatric assessments. The new model aims at empowering individuals to become responsible for their own path of recovery as they are most likely to know their comfort levels and their habits/behaviours. It places people at the centre of an interconnected network of services where institutional care is only one of the options.

This model aims at strengthening communities and more effectively leverage their assets to provide more systems for recovery. Greater importance is placed on family and friends, and those with lived experience of mental illness and are valuable resources to those that surround them. The recovery-oriented system of care can also reduce the stigma that surrounds mental illness, as more members of the community are involved in the process with help from psychiatrists, psychologists and other mental health professionals.

The concept of recovery in this system of care is not that recovery means a cure, but it means hope, healing, empowerment, and connection. New understandings dictate that mental health is a continuum rather than finite periods of time and as such attempt to establish a positive culture of self-determined healing. The Australian Government National Standards for Mental Health services 2010 outlines 6 principles of recovery-oriented mental health care;

- *Uniqueness of Individual*
- *Real choices*
- *Attitudes and rights*
- *Dignity and respect*
- *Partnership and communication*
- *Evaluating recovery*

Keeping the population healthy and proactive in their mental health is much more effective than allowing the same population to experience prolonged psychological distress which results in treating them within an institutional environment, expending more of the limited resources alloted to mental health systems. By paying for a recovery-oriented system, it becomes cheaper to intervene. The goal is to finance mechanisms that incentivise people to get better quicker and keeping people better, with less experience of stress and reducing stigma.

Through my research and ensuing visits to selected projects, a collection of contemporary attitudes became clear in the new approaches to mental healthcare. These projects were varied in terms of built response, type and level of care provided, but all presented an alternative to traditional institutionalised care. The topics throughout the report capture my overarching questions into the success and implementation of current evidence-based mental healthcare design. Where possible, supporting evidence was provided by internationally recognised projects which won various awards not only for their architectural qualities, but their ability to respond to the needs of their community and redefine the relationship patients have with their mental health and environment.

2

Complete system of care

• What does a complete system of care look like?
• What is the importance of decentralised care in urban settings?
• What role does research play in this system?

Population Health Approach

The Department of Behavioural Health and Intellectual Disability Services (DBHIDS) program overseen by Dr Arthur Evans in the City of Philadelphia presented a series of conferences in 2017 outlining the process and success of a decade in pioneering system transformation to a population health and mental health care approach.[12]

From Dr Evans' findings, 7 conceptual shifts in community health were highlighted as key areas needed to fully engage with a new model of mental healthcare.

1. Working Upstream (intervening earlier)
The earlier that mental health treatment can be implemented within a community means that there is less chance of short term psychological distress transforming into a chronic illness which demands considerably more time and resources in more acute, specialised services.

2. Broad set of strategies
Looking beyond the traditional treatments of psychotherapy and pharmacology in favour of an approach such as mental health first aid, which should be as common and accepted as traditional first aid.

3. Working with at risk and healthy populations
Addressing cultural groups beyond standard methods. Cultural groups tend to have their own social structures and values of healthcare and cross-cultural translation may be needed to provide parity and solve specific issues more effectively.

4. Deliver Health Promotion Interventions
Resources that can be accessed in non-formal settings, by anyone at any moment of the day promotes the idea of a continuous system of care. Resources such as websites and apps or community screening sessions brings the culture of increased self-awareness and potential for self-diagnosis to the everyday and mainstream.

5. Working in non-treatment settings
Looking at the determinants of mental health and how they align with the demography of a community can bring light to trends that influence the impact of mental health. An example is the understanding that stable housing can promote mental wellness, which then prompts mechanisms for providing those that are socio-economically disadvantaged with financial support for housing. It is also a more efficient use of funds and promotes cross-industry collaboration for greater results and coverage whilst providing ongoing support rather than a temporary solution.

6. Health activation approaches and empowering others
Community gatherings and workshops held within formal and informal settings can raise awareness about mental wellness and can strengthen community links through a similar desire for health.

7. Working at the community level of analysis
Understanding that mental wellness is ingrained into the social interactions we have and the spaces we exist within can become the catalyst of powerful movements. Cultural events and activities that bring people together from all backgrounds become idea generators and invaluable indicators of how people feel about their community and the world around them.

A community mental health center is basically a program and may or may not reside within a particular structure. The building depends on the program, and the program responds to the needs of the community.

- Dr. Robijn Hornstra MD, Psychiatrist -

Expenditure on Mental Health Services (2014-2015)

In 2014-15, $8.5 billion was spent on mental health services in Australia[14]. This equates to $361 per person, which is an increase from $341 per person in 2010-2011[15]. There was more funding focused on public hospital services ($2.2 billion) for patients admitted for diagnosed with mental illness than community mental health services ($1.9 billion)[16]. This does not reflect the value placed on community based services and further funding should be allocated to the latter for more effective allocation of resources, as acute specialised mental health care services are more expensive than those for non-acute services.

The average national cost of a patient in acute care is $1,029 per patient day[17], however the average national cost of a patient in residential mental health care is only $400 per patient day[18]. Of the $304million spent on residential mental health services, 86.6% was spent on 24-hour staffed services[19].

There were 7,750 episodes of residential care recorded for approximately 5,800 residents in 2014-15[20]. This equates to an average of 1.3 episodes of care per person, and resulted in an average of 39 residential care days per episode. 60% of completed residential care stays were between 0-2 weeks[21].

The 5 most commonly reported principle diagnoses were of involuntary status; schizophrenia, personality disorders, depressive disorders, schizo-affective disorders and bipolar affective disorders[22].

Snapshot: Central Eastern Sydney Primary Health Network (CESPHN) Atlas

To understand the current allocation of mental healthcare resources and its efficacy in urban settings in Australia, the CESPHN Atlas provides figures and data on the programs assigned funding and the communities capacity to engage with these services. With these results, comparisons can be made to other health networks from different areas across Sydney. Three main gaps were identified in the provision of services within the Central Eastern Sydney Primary Health Network Integrated Mental Health Atlas.[23]

Non-hospital acute and sub-acute care
There is an absence of services with staffed mental health professionals who provide treatment and care for patients with lived experience of mental illness whom are in psychological distress. They provide the same type of care as the inpatient unit of a hospital but are embedded into the community. These are small units, with a strong focus on recovery such as crisis homes.

Lack of medium- or long-term accommodation for people with mental illness
The need for people living with mental illness to have access to support through various forms of accommodation is essential as they suffer many barriers to stable housing.

Acute and non-acute health care day-related
Acute day care relates to the services that provides an alternative to hospitalisation, through treatment in a community. They can stay in the facility during the day but will return home after hours and does not cater for sleeping arrangements. Non-acute day care facilities are usually staffed with more than 20% of highly skilled mental healthcare professionals. People experiencing psychological distress can spend the day socialising and participating in structured activities related to mental health such as cognitive training. There is also a lack of cultural and leisure activities within the day care environments which could be addressed.

Further understanding
Figure 2. bar graph identifies the focus of beds allocated per 100,000 residents in the CESPHN, the South Western Sydney (SWS) PHN and the Western Sydney (WS) PHN. Although CESPHN has a higher proportion of beds in acute care, they fall behind in other decentralised forms of short to medium term accommodation. This indicates that the services a) do not reflect the demand in shifting resources towards community mental healthcare services, and b) that those who do require these services must travel beyond the CESPHN to receive this type of care. This becomes an issue of inefficient resourcing and does not capitalise on the value of locality and community-based provision of service.

Figure 3. radial line chart identifies the patterns of mental health care. The CESPHN line identifies a spike in Residential Acute care, but no services that are embedded within the community. In comparison, overlaying the patterns of care of the WS and SWS PHN's, convey the redistribution of residential care away from the hospital sector and into more community-based environments. From this, it can be deduced that suburban regions in Sydney are more adequately able to provide for their community than urban settings. This could be because that suburban settings are able to adapt to changing approaches to healthcare quicker.

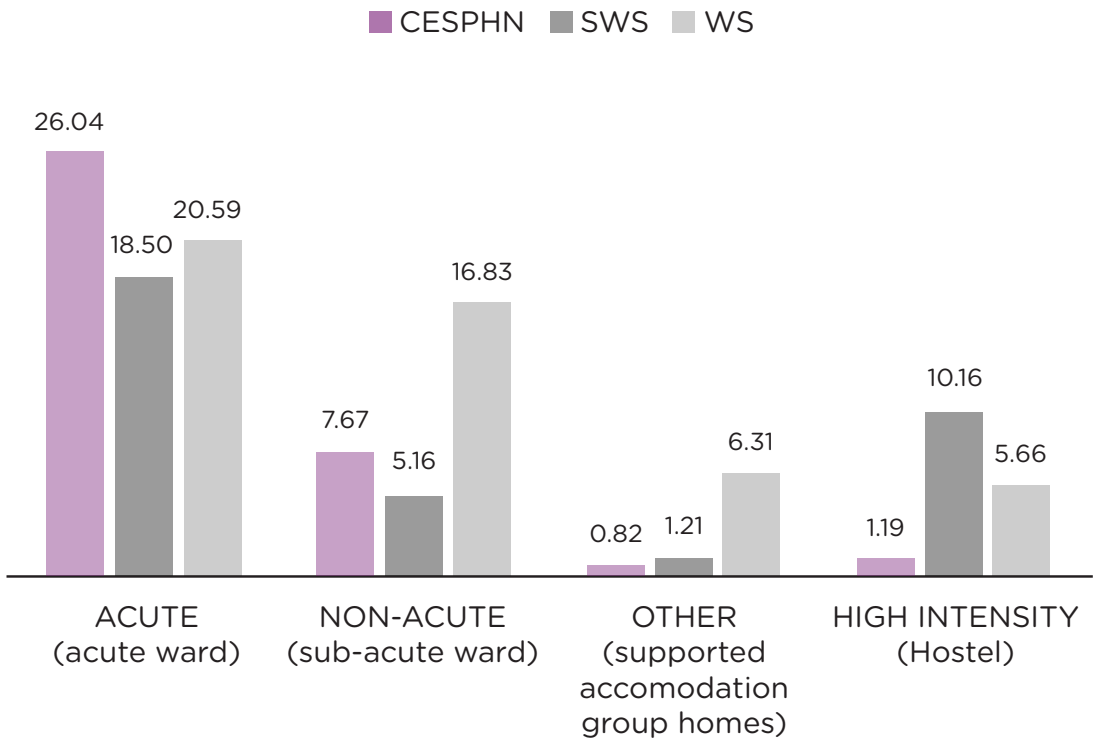


Figure 2. Number of beds per 100,000 residents

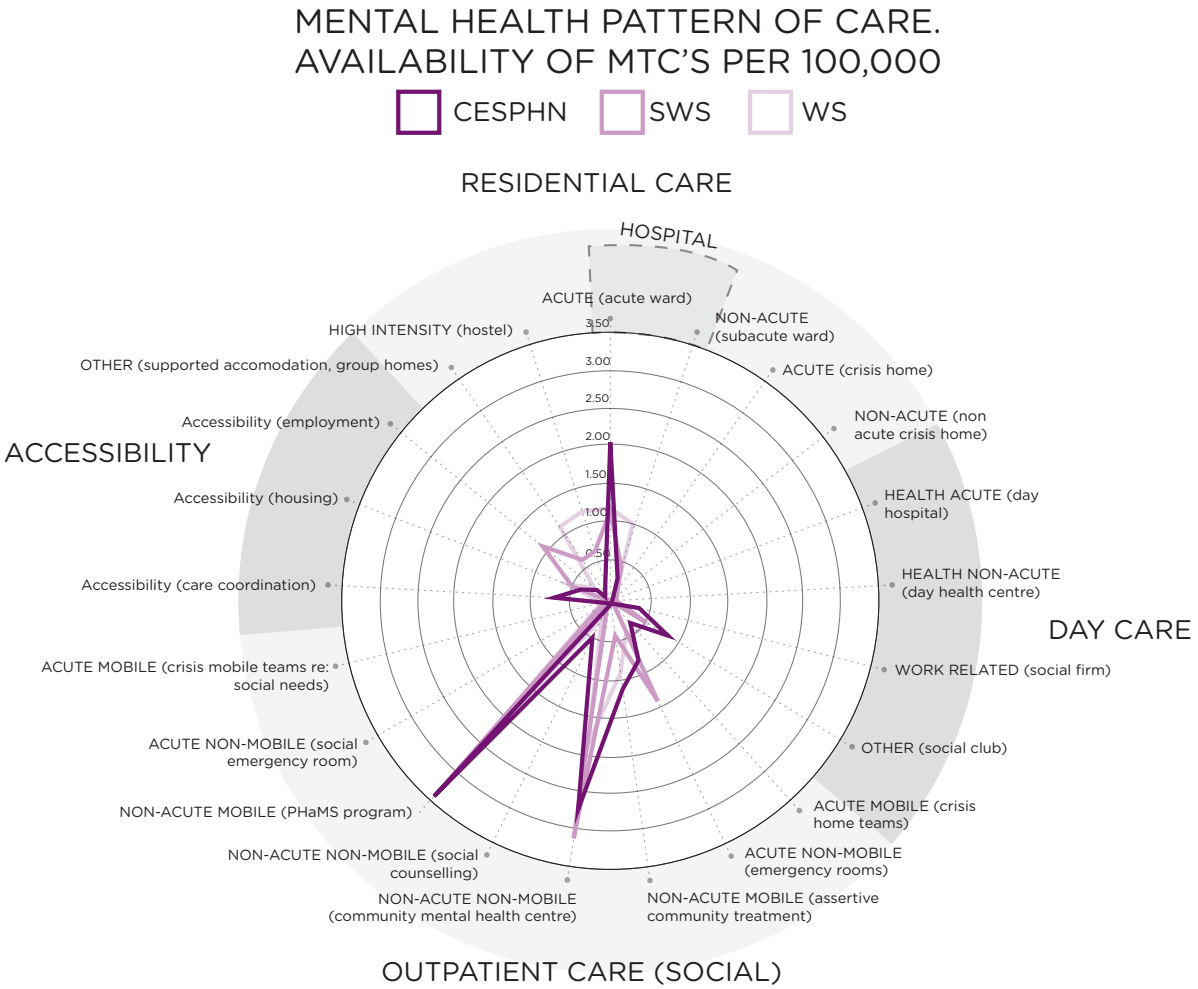


Figure 3. Mental Health Pattern of Care. Availability of Main Types of Care (MTC) per 1000,000 residents

Stable housing is the first step to health.

- Shane Phillips -

Decentralised Care

It is just as important to bring the community to the mental healthcare centre as it is to bring the mental healthcare centre to the community. Redistributing resources for mental healthcare across a range of community-scale initiatives improves the neighbourhoods ability to promote mental wellbeing and provide a range of services to address a variety of different mental health experiences.

Decentralised care builds on the foundation of typical mental healthcare programs including non-hospital sub-acute care and non-acute healthcare, in other words, day clinics and inpatients units. Additional services are provided to address a range of severity and level of commitment that an individual in a community may prefer when taking initiative over their own mental health journey. Increased support through pharmacies and general medical clinics establishes an opportunity for people to address the wider determinants of health beyond just mental disorders, as there is an established link between physical and mental health. Mobile mental first aid units operate with the sole purpose of reaching those in the community unable to access these primary services or experience crises and unable to seek out the appropriate support networks, able to act immediately and intervene in some of the most critical moments.

Establishing an environment of positive mental health attitudes requires constant discussion of mental illness at both an institutional (primary, secondary & tertiary) level and a community level and can be represented in the form of recovery colleges and short courses that encourage the general public to become more involved in their own and others role of mental wellbeing.

A secure, stable and safe home is an essential component of mental wellness. Social housing is an important part of the housing spectrum and many suffering from illness or disability depend on it as they often also experience economic disadvantage; it can often be the determining factor whether a person is on a path to recovery or being unwell. However, of the 19% of people in NSW living in social housing with severe mental illness, many feel there are difficulties obtaining entry into social housing due to the lengthy waiting lists and burden to continually advocate for themselves by proving their conditions and justifying their needs. [24]

Social housing is sometimes a long-term need for those with mental disabilities or illnesses, however most low-income earners living with mental illnesses report living in unstable or marginalised housing such as boarding houses, crisis accommodation and other forms of temporary housing. The low incomes of people who experience mental illness can often be linked to the cyclical nature of illness, which impacts on the ability to access employment and education. [25]

Spectrum of Care

The purpose of this complete system of decentralised care means people are cared for, wherever on the spectrum of care they sit. Providing these services ensures a level of ‘round the clock’ mental healthcare that establishes a positive presence of support in the community.

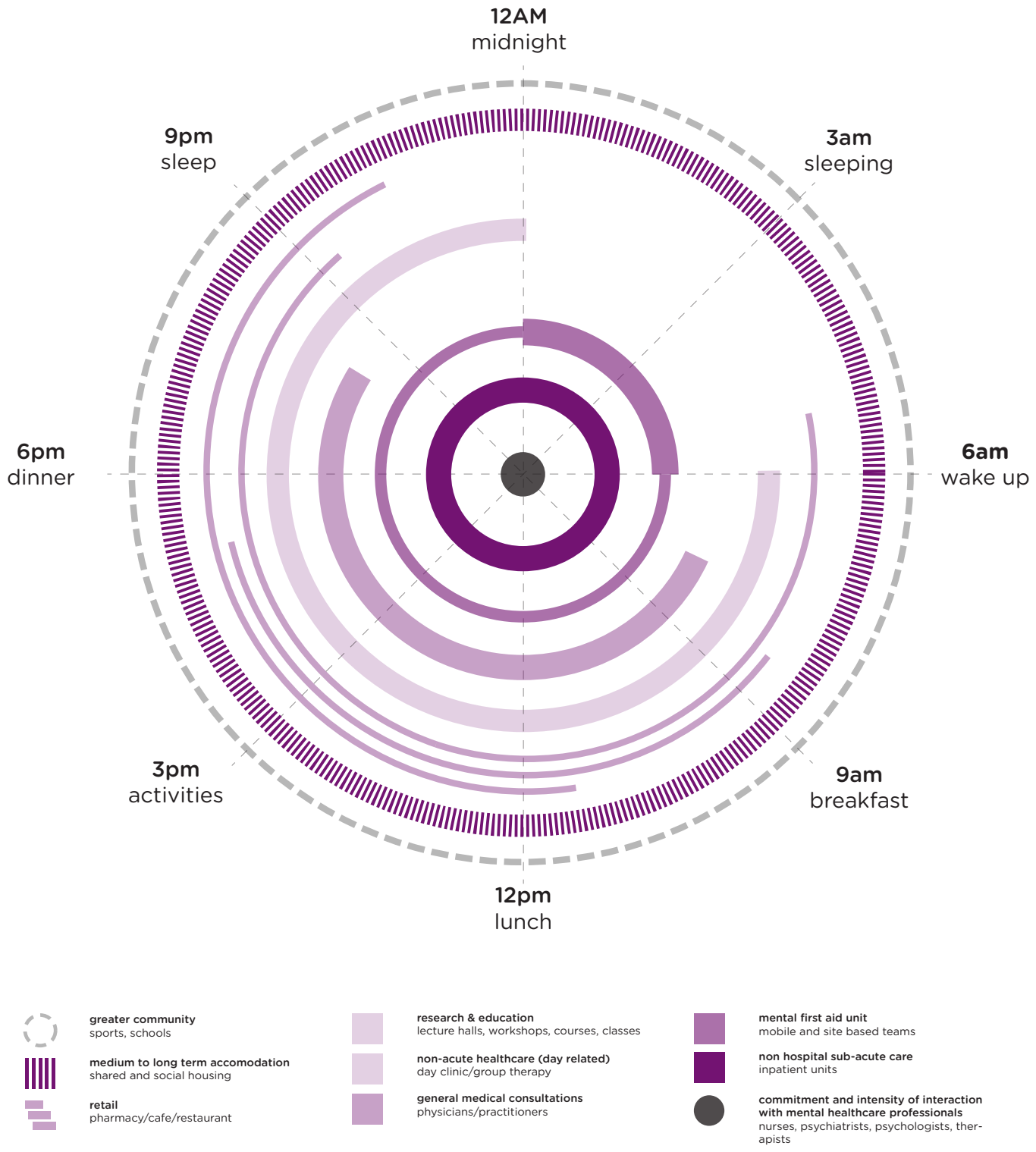


Figure 4: Diagrammatic example of a complete system of care in proximity, program and around the clock resources

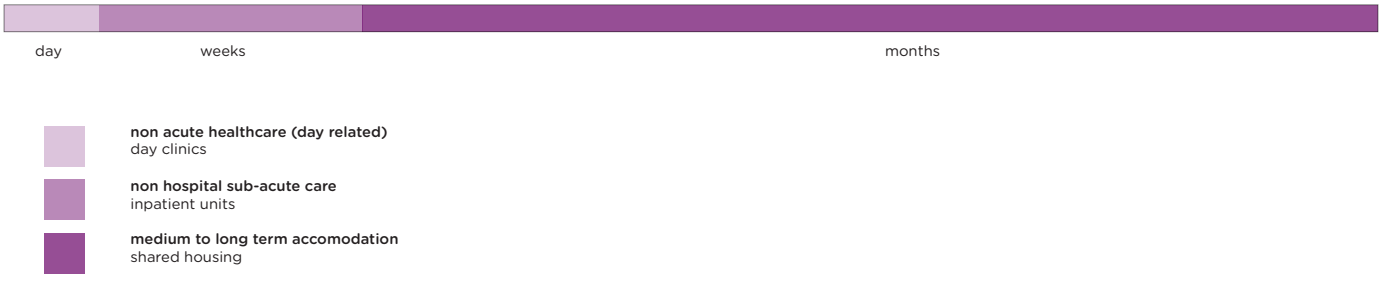


Figure 5: Diagrammatic example of a complete system of care in intensity and duration

2.1

Journal note: Kronstad District Psychiatric Center

Bergen, Norway
Origo Arkitektgruppe

The Kronstad DPS (districktpsyckiatrske senter or District Psychiatric Center) was the project I was most eager to visit during my travelling scholarship. The centre serves a population of approximately 95,000 residents within the Bergen 'Kommune', a term that is embedded within the Norwegian culture and instils the notion that everyone is responsible for the wellbeing and progress of their society. The approach towards the center aligned with the goals and aspirations of addressing complex therapeutic care for mental illness in an urban context whilst establishing a supportive and positive community presence for mental health. Spanning 6 floors above ground and an underground sports field, the facility treats 3,500 outpatients annually with a community of 255 staff and carers. Among the 700 rooms of the center, 32 inpatient wards with 60 inpatient beds are dispersed throughout the building (shaped like a figure 8 in plan) to create communal hubs providing a variety of environments for treatment and recovery.

A tour of Kronstad DPS was given by Stig-Arthur Didriksen, the Clinical Director and one of many project managers overseeing the construction of the centre completed in 2013. He explained the collective ambition and role of the project team (consisting of healthcare managers and architects), asking "what do people need to cope with themselves – what is our responsibility and what is the community's responsibility?" This ethos has trickled down all the way from the overarching strategy offering a complete system of care to the dialogue between immediate neighbours and wider community. The centre houses ambulant teams for remote care, a pharmacy, a variety of individual and group dayclinics, inpatient wards for longer term treatment up to 14 days for psychiatric disorders, as well as programs for those willing to receive therapy and return home each night. There is a strong focus on engaging those with lived experience throughout the various offerings, and there are programs for patients to maintain employability. A large hall with capacity for over 100 people sits at ground floor and hosts regular seminars and teaching events for staff, patients and the general community functions.

Stig-Arthur pointed to a nearby mountainside, noting that the predecessor of the Kronstad DPS was a greenfield asylum far-removed from the rest of the city; a common architectural typology for mental illness over the last two centuries and heavily burdened with negative connotations. There was initial debate in the community about having a psychiatric hospital in the centre of the city, but the project team argued that this is where the patients live – why not provide support nearby so rehabilitation doesn't disconnect them. Therefore therapy can occur as part of a daily routine where visits from family and friends are convenient.

The masterplan developed by Origo Arkitektgruppe was responsible for a new soccer field, a public forecourt to the centre (Stig-Arthur insists its more often called a house) and engaging with the surrounding infrastructure including the light rail, cycleway and roads– all with the intention of dissolving the boundary of the hospital and give visitors a more positive perception of the building and its functions. Car parking is concealed underground, with more emphasis placed on cycling, hybrid and electric cars and public transport in alignment with modern urban principles. Upon approaching the centre it's hard to miss the large football field filled with a squad of players engaged in a high-energy game of soccer. The Kronstad DPS considers sport a form of therapy and encourage their patients to partake, with its very own team, club house, changing rooms and physiotherapist nestled among the ground floor. The team manager comes from a nearby first grade club but is organised and


KRONSTAD
Danmarksplass
APOTEK

filled only with patients who regularly play other teams in the community. Other teams and schools share the field and facilities too, giving everyone a sense of ownership and granting the 'house' a public face, actively dissolving of stigma around mental health facilities. Importantly, the integration of physical activity as part of a holistic recovery plan addresses the link of mental illness and comorbidities which research suggests reduces life expectancy by around 20 years.

And Kronstad DPS truly is a complete system of care. The psychiatrists are focused on somatic (physical) rehabilitation as a link to mental recovery, and offer various alternative therapies such as gym, physiotherapy, art, and music. Stig-Arthur explained that although there isn't an abundance of evidence validating art therapy improving wellbeing, they acknowledge that it still works and are therefore kept and encouraged. This act of recognition beyond academic acclaim and government-mandated care reflects the support of therapeutic support given at Kronstad DPS – historically alternative therapies and anything outside the scope of pharmacological or psychological treatment are the first to be culled when tighter budgets are assigned throughout the healthcare sector. Furthermore, a certain percentage of the staff population is required to have lived experience, meaning those that have been through a journey of mental illness and recovered will be involved in a patients treatment plan and are often as essential as trained medical professionals.

Stig-Arthur noted that the spaces and care established in the inpatient wards were so supportive that early on they struggled to get patients to leave. This forced them to question what the role of therapeutic spaces and care was, eventually deciding to close a portion of inpatient beds and replacing them with acute and assistive ambulant teams to service the community, which is now renowned as a large success. This redistribution of resources encouraged more residents to receive at-home care rather than depend on being dislocated from their surroundings which is a key concern for the transition from rehabilitative facilities when re-entering their lives and re-igniting prior stressors. These mobile support units can be dispatched throughout the community, where typically a law enforcement unit would be called to address the crisis – sometimes ineffectively or with an inappropriate response altogether.

Whilst the Konstad DPS building is remarkable and is able to effortlessly facilitate the considerably programmatic demands of the centre, Stig-Arthur made it abundantly clear that the architecture is not the star of the Kronstad DPS's success – it is the systems, networks and providers of care which have been the conduits for the innovative delivery of world class mental healthcare. In saying that, the centre is littered with architectural generosity at every turn – hallways are shortened and terminate not at dead ends or closed doors but rather kitchenettes, smaller inpatient beds afford larger communal spaces, stairways are made more enticing and prominent than lift cores to encourage walking, and there are discrete passageways between various wards and ambulance entrance so if urgent care is needed, patients are granted anonymity whilst also not creating undue stress for other users. A variety of smaller private courtyards and communal gardens are centrally located throughout the floors, maximising the connection to nature for patients and staff.

It was evident that the inbuilt flexibility of the building had allowed it to weather some largescale changes since its opening – Stig-Arthur noted that flexibility is important because the way we address social issues changes

physically over time as our perceptions change. The building was not merely addressing physical flexibility – that is the reconfiguration of spaces over time, but rather social and cultural flexibility – developing a platform that adapts to the future attitudes of therapeutic care.

A small cluster of consultation spaces is dedicated to bringing in an amalgam of world-leading researchers and psychiatrists with the intention of promoting collaboration and sharing knowledge with the in-house staff. Many of these fields would never have crossed paths, however more complex issues require innovative and multidisciplinary approaches and have seen Bipolar research alongside substance abuse, OCD and specialists working across 3 different anxiety disorders. Kronstads attitude towards empowering one's own journey to recovery is so advanced that they are able to offer treatment options to severe patients not requiring the use of medication if preferred, a previously inconceivable approach heavily supplemented with a program of other therapies. Employment support is available to patients who have been unemployed throughout their treatment and reinforces social skills vital to ensuring a smooth transition back to their lives.

As the centre hosts almost every type of psychiatric care possible, the managers decided to centralise the receptionists to one hub rather than dispersed among multiple community clinics across the region. All of the phone calls that are received within the Kommune regarding mental health services comes through one of 6 receptionists whom sit next to each other – this improved the lines of communication drastically and enabled a much more consistent and efficient patient experience whilst being able to ask for advice directly from their colleagues rather than potentially sending themselves, patients and staff on a correspondence loop.

2.2

Journal note: House of Psychiatry

Uppsala, Sweden
Tengbom Architects

The House of Psychiatry in Uppsala resides within an 'Akademiska sjukhuset' – academic hospital – with a reputation for providing world class psychiatric and somatic care for patients suffering from mild to severe and chronic mental illness. Like some of the other examples visited and researched as part of the trip, the House offers a proportionate balance of inpatient and outpatient clinics whilst aiding the coexistence of academia, medical research, and care.

The hospital is located within Uppsala, the oldest university town in Sweden founded in the late 14th century. Uppsala University Hospital opened its first department and 1708 and has been at the forefront of advancing and refining the feedback loop of medical research and implementation, improving the treatment of patients and the pedagogical approach to health.

The tour of the House was a frank and earnest experience, as most spaces appeared and were described like typical hospital spaces. This was not architecture with a capital 'A', but architecture that knew its purpose. Most distinctly, the House was designed as two halves of a larger ecosystem – nestled on one side of the 6-storey light-filled atrium were various wards, clinics and consultation rooms. Bridges on all levels stretch to the other side housing the psychological care units as well as academic and medical staff, with the variety of spaces that teams of this nature require. Clusters of semi-open plan desks called 'office landscapes' are assigned as clinicians' offices, nursing units, academic study nooks and carers quarters. Conference and managerial offices flank these spaces and create a generous variety of privacy, connection, and collaborative opportunities. The hospital

Comprehensive mental health programming must include service, training and research. Research evaluation is essential to reshape the program to meet the changing needs. The emphasis must be on program, not centre.

- A.R. Foley, Psychiatrist -

even stipulates that the university periodically 'secures' a certain proportion of spaces for academic researchers and students to establish a culture of learning. This also ensures diversity and an organic allocation of parties involved in the care of their patients, whilst allowing for changes to reflect the most current and prevailing attitudes towards care.

Supporting the workplace diversity is a gym, library, auditorium, and raft of lecture halls at ground level with glazing to both atrium and outside. These teaching spaces are available for all staff meetings, psychiatric care discussions, nurse briefings, university seminars and pharmaceutical conferences. Establishing a highly visible culture of learning and transparency to the public, patients, and their visitors, is an indication of faith in approach. At the House of Psychiatry, a pedagogical framework is the foundation of the building and community's success and the commitment to the process is by no means instant.

There was much debate within the House (mainly from staff) of how visible they should be from across the atrium to the patients; some discussed keeping the glazing completely clear as the process of treatment is transparent and those caring for patients should be completely in sight and accountable; others supported the merit of a slightly more obscured glazing to ensure privacy as the patients need to maintain respect for their carers which could otherwise diminish (reducing receptiveness during therapy) if and when behaviours occasionally falter. A few months passed and the arguments subsided, with the winning outcome remaining transparent. However, the decision has again come to the fore. Importantly, underneath these seemingly trivial disputes is the means of putting the patient's best interest at the centre of the debate. In the House, decisions like these are often revisited - not taken as absolute truth but acknowledged as a decision regularly evaluated amongst a whole range of carers to ensure the best service possible.

The architects made sure to prioritise the longer-term inpatient units towards the more therapeutic and private views towards the fields at the rear of the site, whilst staff and academic teams enjoyed connection to the more active street and campus promenade. Given the availability of the site and the programmatic density required in the House, and the climate (it snows in Winter) there was no opportunity to propose internal gardens within the primary envelope. The rooftop gardens however are available to both staff and patients and enjoy spectacular views across Uppsala.

In the House there is a unique emphasis placed on art, with a healthy budget and trained team who specifically curate the art for therapeutic effect in the hospital. Throughout the visit, attention was drawn to the hundreds of paintings, sculptures and artworks carefully laid within to give patients a moment to reflect. An artwork of particular importance was the enormous lithium stone placed at the main entry foyer. Whilst historically lithium served as the primary pharmacological treatment for major depressive disorder when antidepressants have been ineffective, the sculpture can serve as a reminder to patients that in the hospital there are now far more advanced and preventative treatments available and that they need not feel weighed down or be burdened by their internal struggles.

3

Urban permeation

- *How can mental healthcare infiltrate the urban fabric?*
- *Do urban constraints necessitate innovative design solutions and potentially more beneficial mental healthcare?*

We spend 90% of our life indoors or near buildings but have a better understanding of the relationship between natural environmental conditions and health than we do about the built environment and health.[26] It is generally accepted that there is a strong link between the quality of the built environment that surrounds us and our levels of psychological wellbeing.

A giant leap in modern mental healthcare has come from decentralising highly institutionalised consultation and psychiatric wards into urban community-scale interventions as the needs of the population changed, and asylums along with their thinking became outdated. Urban qualities have served as a valuable foundation to disperse smaller mental healthcare services throughout mixed-use retail, commercial and residential areas of a neighbourhood, aiming to be both inconspicuous yet visible enough to establish a positive presence to those that may find themselves looking.

Urbanisation and Mental health

As the world approaches 9 billion people by 2050, the structure of population demographics is expected to shift rapidly to accommodate this unprecedented growth. Increasingly, there is a migration towards large urban centres to reap the benefits of larger infrastructural systems, access to resources and better employment opportunities. Cities generate 85% of global GDP, and cities around the world are growing by 1.5 million people every week through childbirth and migration.[27]

Urbanisation is not only a demographic movement but also includes social, economic and psychological changes that constitute the demographic movement and is identified as one of the most important global health issues of the 21st century.[28] It brings with it a unique set of advantages and disadvantages and is accompanied by economic growth, industrialisation and the profound changes in social organisation and in the pattern of family life. Urbanisation has definite links with increased mental health concerns as it introduces an increase in stressors and factors such as overcrowding, violence, reduced social support and undersupply of infrastructure.

The primary purpose for this migration is greater access to facilities and infrastructure but rarely in alignment with the population. There is a constant need for the infrastructure to catch up to the population. This results in poverty and exposure to environmental adversity such as congestion, overcrowding, lack of adequate access through the city and lack of services to provide for the people, resulting in greater risk of mental health issues.

Moreover, the cultural transformation that takes place in moving from a rural to an urban area can cause high levels of stress, with new environments, social structures, higher levels of stimulation and loss of identity.

Research evidence finds that living in a city roughly doubles the risk of schizophrenia, whilst raising the risk of anxiety and mood disorders by 21% and 39% respectively.[29] A theory for this is the paradoxical nature of loneliness in dense, crowded urban areas. If social density and social isolation came at the same time and hit high risk individuals, then city stress related mental illness can be the consequence.

Architecture should shape environment to create behaviour.

- David McKinley Jr., Architect -

Unlike organic disease, mental illness never completely resides within the individual.

- Alfred Paul Bay, Psychiatrist -

Changing urban fabric and heritage

Mental health extends far beyond the walls of a health care centre. It is important that the densifying, rapidly developing and constantly iterating urban environment does not cause undue stress on its occupants, which can cause disorientation and increasing levels of anxiety or lack of ownership over their surrounding environment. As designers of the urban landscape, increased responsibility is placed on the role of the architecture deiscipline to re-implement human scale, improve wayfinding and improve public amenity for those that traverse the urban fabric daily.

The challenge of heritage conservation and retaining existing built fabric presents an opportunity for leverage in urban design. Residents may find reverie in the buildings that hold so much historical significance, and as suburbs become densified and new cultures propagate, it is imperative that landmarks provide wayfinding dialogue for occupants that use the area.

The very permanence of buildings makes them predestined for use as bearers and points of orientation in individual and collective memory, and importance of architectural continuity and the orientation it provides becomes particularly apparent where urban structures undergo rapid transformations.[30]

Increasingly we are seeing urban architectural responses which take the challenge of heritage conservation in their stride to generate a more locally responsive program which retains its familiarity to its neighbours. This should be no different for urban healthcare services wishing to become as ubiquitous and indistinguishable as a café or bar and to relate to the cultural and historical significance of its urban setting.

Privacy vs. Access

As with most types of architectural programs in urban settings, healthcare programs face complex challenges where the proximity to adjacent buildings or public infrastructure offer no spatial relief or transitional zones to establish privacy. On the other hand, being located within an urban setting provides access to established and far-reaching public transport networks, therefore making exposure and accessibility to these facilities much more abundant. It is this management of density and separation that should be closely explored in the improvement of mental health of our cities and occupants.

Mechanisms of privacy often prescribe an assortment of spatial configurations, generating unique responses to the constraints of complex urban settings and can have great influence over the relationship between staff and patients. Facilities that embed privacy, seclusion, passive surveillance, and ownership over space allow staff and doctors to have supportive, equitable interactions with patients as they are not required to act as security or maintain a dominant presence. There are two main aspects of privacy that are important to consider in healthcare.

Privacy as controlled visual and aural connections

Studies indicate that people in care environments prefer to have a degree of control of eye contact with other occupants in a space and feel more comfortable when they can know who has direct lines of sight with them. Smaller communal spaces spread incrementally

"Most healthcare facilities are freestanding, and therefore autonomous. Too often they are isolated, and, at worst, cut off from their surroundings. The outer walls of a hospital slam to the street like a guillotine. This unfortunate guillotine syndrome can occur either by design or by default. It is, by any measure, an unfortunate condition that precludes any genuine connection with the exterior world, and vice versa. The term theraserialisation is a hybrid assemblage of the words 'therapeutic' and 'serialise'. It is a very promising alternative to the status quo.

It is defined as a continuum of indoor to outdoor space consciously designed in support of biophilic environmental design principles. It entails the interpretation of space as being serialised, as layered, collaged, superimposed, transparent and fluid. It is about the creation of serialised space from the public, to semi-public, to semi-private, to private. It is about the spaces in-between and about illusion. Theraserialisation is applicable to a single continuum or multiple continua on the same site. It is horizontal and it is vertical, it can reach upward from subterranean spaces to the ground plane, ascending to the sky."[31]

- Stephen Verderber -

throughout a project means less people will be gathering in each space and allows everyone a sense of perceived 'ownership' of spaces, an important consideration for patients. Constantly feeling unsettled by unfamiliar presences is counteractive to successful therapeutic environments. Patients desire privacy when talking to family and friend on the phone and appreciate acoustic isolation when discussing distressing circumstances to a consulting professional.

Privacy as security and access
Staff and patients require controlled access for a variety of tasks within healthcare facilities; from requiring emergency attention in times of crises to simple tasks such as walk to and from the bathroom and communal spaces. Privacy in this instance is the perceived choice and control over whether they wish to interact or not depending on their wellbeing at the time.

Biophilia and Theraserialisation
The research on of biophilia revolves around the theory that people possess an inherent inclination to affiliate with natural processes and natural diversity, and this affinity continues to be instrumental in humans' physical and mental development especially in urban conditions.[32] The confirmed benefits on mental health due to positive and prolonged interactions with nature are;

- Relaxation, Restoration and Stress Reduction
- The decrease in depression, anxiety, aggression, anger
- Encouragement of physical activity
- Increased social connectedness and interactions
- Encouragement of sustainable behaviours and conservation of the natural environment.

Theraserialisation builds on the fundamental strategy of biophilia to provide a progression of spaces that are all linked through their connection to nature.

Increasingly, successful examples of urban mental healthcare facilities are including an intermingled progression of green, open spaces within their programs for patients, staff, and visitors. As everyone has their own preference of interaction with the outdoors and other people – especially whilst vulnerable - providing an arrangement of configurations grants users opportunities for refuge and reflection whilst maintaining a relationship with nature in an environment that can often feel barren or have an overwhelming built presence.

Where space is at a premium and urban programs are required to be densely packed and efficient, healthcare facilities would benefit from borrowing the restorative attributes from neighbouring parks, reserves, greenways and canopies that are strewn throughout communities, offering improvised pedestrian links for residents and the greater public to pass through or pass by mental healthcare facilities and share common space with those that utilise their services.

The role of the greater extents of urban fabric are critical and are to be considered as part of the design response of healthcare programs. With increased outpatient programs and day-therapy programs being offered and encouraged within the new model of decentralised care, it is expected that users enlisting in these services share the same public goods and infrastructure throughout their day, and therefore should expect the same affinity with their surrounding environment as their counterparts.

3.1

Journal note: 42nd Street Youth Mental Health Centre

Manchester, United Kingdom
Maurice Shapiro Architects

The centre was designed for 42nd Street, a charity that operates out of Manchester in England. Named 'The Space', the building provides support and sanctuary from the disorienting cityscape and stressful domestic life for the community's youth between the ages of 16 to 26 that have experienced traumatic events.

The Space acts as a metaphor to address those it was designed for – a small intervention from the main road, an abnormal entrance incongruent to the rapidly urbanising streets of Manchester, with towering residential and commercial buildings surrounding the site. When The Space is closed, four pivoting wall panels named 'Sentinels' offer protection to those within and present a blank white façade to passersby. When activated and in use, the 4 manually operable panels pivot to provide a clear sightline to the entrance foyer, connecting the front courtyard to the greater streetscape.

Long hallways are often seen as something to avoid as they are considered dissociating and disorienting. However, as architect Maurice Shapiro explains, the long hallway upon entry in The Space was designed to provide an intermediary place for those in distress to pause, gather frayed thoughts - and even consider turning back if it all feels too much - before being addressed by a reception further down the hall where confronting discussions take place.

The Space offers a series of consultation rooms as well as traditional office spaces for 42nd Streets operations. Maurice worked with various stakeholders to generate an architectural solution which had an identity troubled youth could resonate with whilst providing all the necessities of a growing charitable organisation. The floors of the offices were designed with flexibility in mind, allowing the office to change layouts with the changing needs of the organisation.

Maurice describes his responsibility as an architect to listen to the end-users of the space and interrogate their input for their own benefit. It seems engagement is a crucial yet deeply challenging concept with regard to mental health design; balancing the demands of a charity's operational requirements and appropriate design for mental health care whilst interpreting the voices of young adults constantly evolving attitudes of what a comfortable space for them might be or feel like.

Intending to create a supportive and responsive physical environment, Maurice noted his desire for the occupants to own the space rather than the space owning them. The main wall along the entry (~10m long by 2.5m tall) was dedicated as a whiteboard and became a common noticeboard, helping a lot of the occupants to express themselves. He explains that touches like this make people feel like they have some agency within the space, and it's not just seen as a sterile space where they sit. For some, that's all they want, part of the experience of growing up is to push boundaries and express themselves - if they can't do it somewhere else, they can do it safely here.

Central to the concept of the building was understanding and representing the balance of chaos and structure that is often experienced by youths in distress. Both chaos and structure are important in part but if there is a heavy imbalance, one can feel overwhelmed or anxious.

Sadly, the proposal of a youth mental health clinic stirred concern with the neighbouring residential flats opposing the "mental asylum" by their front door. Fortunately, the council planners didn't see it that way and the development was approved albeit with a reduction in


ORSFALL
BoConcept
DESIGN
SALE
the SPACE


42nd Street is the best! It's a lovely place and it's like a family!
MORR RIGHTS
CHALLENGING INJUSTICE CREATING CHANGE
WOOP!
Homosexual
Stay HAPPY!

building height in one of the wings to suit the built form of the adjacent apartment block. Maurice explained that the presence of The Space eventually lifted the spirit and atmosphere of the area, activating an otherwise sterile streetscape now enriched by a youthful café, art workshop and trendy barbershop nearby.

Consultation rooms for the young adults are accessible through recycled unassuming wardrobe cabinetry - secure environment and whatever is shared within the room is private, confidential and can be kept away from the world.

I was fortunate to be able to speak with Christine Jacobs the Operations Manager of 42nd Street charity whilst Maurice was around. They hadn't been in touch in over a year and Chris was able to provide a different perspective and great deal of insight into how the staff, consultants and carers functionally use the spaces. Initially designed for 25 full-time staff, The Space saw a 30-40% increase over the last few years and there are now 60-something staff that operate within the building in some capacity. There is obvious strain on the physical resources accessible to the staff, as some consultants are dealing with distressing phone calls with at-risk youth threatening self-harm and have no other space to privately talk than in a stairwell or quiet hallway. Furthermore, Chris explained that the building is becoming unable to accommodate certain group sizes and sessions, and there are limited 1 on 1 therapeutic spaces for more intimate consultations vitally important in talking through and resolving issues. Arrangements for part-time and casual staff to hotdesk and work remotely are being implemented to ensure these resources are assigned effectively but it seems that there will be a time soon that the operations will approach a critical mass and either additional space will be needed, or an assessment into the systems that run and provide support for the youth will be required.

3.2

Journal note: De Hogeweyk Dementia Village

Weesp, the Netherlands
Vivium Care Group

Along the walk from the train station at De Weesp, two-storey klinker (Dutch brick) flats and terraces flank the main promenade. De Hogeweyk appeared to mimic the scale, built fabric and demeanour of any of its neighbours. Passing by a primary school and mosque there was no indication that a world-leading dementia village was just across the road – the building almost looked as if it was inspired by the schools welcoming front entry.

The world-leading De Hogeweyk care concept developed by Vivium Healthcare over the last 20 years pioneered an architectural and therapeutic framework for contemporary residential care for elderly residents who suffer from more severe levels of dementia. The model encourages the 170 residents to feel like they were continuing with everyday life and removing cause for concern or becoming overwhelmed by unfamiliar surroundings which could aggravate their condition or cause other harm.

From an urban and community sense, the arrangement of amenities and utilisation of spaces emulate the everyday life that the residents grew accustomed to – architectural cues of the streetscapes are taken directly from neighbourhood shops only a few streets away to remain authentic and associated to life residents have been accustomed to living, encouraging a seamless transition to an otherwise unfamiliar environment. Spaces specially curated for subtle reinforcement of skills and cognitive therapy such as shops, cafes, a restaurant, a small theatre, a physiotherapist and various clubs (such as reading, writing and music) flank the main walkways which are completely operational and run by people that are trained to interact with residents living with dementia and can address any concerns that inevitably arise from time to time.

The village encourages visitors and welcome family and friends, to preserve the dignity and respect of the resident's existence rather than segregate those living through a chronic illness widely becoming more recognised and prevalent. The village often open their doors to the nearby school, community and other healthcare and design agencies wishing to adopt these principles valuable in dementia care. The village is bound by its own built form along all street frontages, meaning that residents can meander within the spaces freely without becoming lost in the wider neighbourhood. A single entrance to the village is through the double-doored foyer monitored closely by a nurse. From inside the village, the entrance appears as unassuming as a convenience shop with a 'closed' sign permanently affixed. Visitors come and go through this closed shop, and residents, if ever having a fleeting sense of curiosity, are promptly dissuaded by the mirrored glass before turning their attentions towards the nearby fountain where their friends are gathering.

A unique trait of the De Hogeweyk concept is the variety of 'household units' catering for lifestyle and budgetary preferences reflecting the diverse culture of Dutch people[21];

- Traditional: for residents, whose pride and identity came from carrying out a traditional profession or managing a small business
- City: for urbanised residents whose life had been spent in the centre of the city


zorggroep

• Het Gooi: for residents who attach importance to correct manners, etiquette, and proper external appearance (named after an area close to Weesp).
• Cultural: for residents who appreciate art and fine culture
• Christian: for residents whom practicing their Christian religion is an important part of daily life
• Indonesian: a lifestyle catering for Indonesian culture and heritage (a former colony of the Dutch)
• Homey: for residents who believe that caring for the family and household is important, and for whom the domestic rhythms are as important as for those who have a traditional lifestyle.

These residential units celebrate occupants shared interests and allow personality differences to fade by prioritising living expectations. A consultancy called Motivaction provides a questionnaire framework to help assess which lifestyle would suit each resident (with the assistance of their family) to ensure they are comfortable. This approach results in a format easily translated to different cultures across the world and can tailor the experience of the residents respectfully. Each lifestyle unit has a combination of bedrooms for individuals and couples, and after much consideration it was agreed that each bedroom didn't need a bathroom but rather shared between 2 or 3 bedrooms to prioritise more generous public goods, such as the shared common spaces where residents are provided the opportunity to engage in the making of their own meals if they have the volition. The staff noted the value of residents cooking familiar meals to reinforce motor skills, cognitive resilience and social behaviours and share in deciding what to cook and eat together every day.

There was a delightful balance between clear wayfinding through few wider, central promenades countered with a respectful disorientation and dispersion of smaller pathways to courtyards behind the main walkways – an experience I began calling immersion by dispersion. This gives the residents an immense sense of journey and placemaking in such a limited site area, providing familiarity with just the right amount of opportunities for unique interpretation of their surroundings to stimulate a mind with deteriorating cognitive function threatening their livelihood. Pathways, courtyards, and plazas all have distinguishable wild grasses and native vegetation unique to each area and change with the seasons, a subtle reminder to the residents that change is a natural part of life and nothing is permanent. These become wayfinding mechanisms to their home quarters through enjoying the benefits of nature and wildlife.

The De Hogeweyk care concept has been so widely successful that the model has been implemented across the globe, with villages adopting their approach to aged care and dementia in Tasmania (Korongee Dementia Village) and Queensland (Microtown at NewDirection Care Bellemere) recently completed.

4

The role of architecture

• Can architecture elevate the status and awareness of mental health to contribute to lessening the impacts of stigma?

• How can the design process strengthen the involvement of mental health professionals, clients, users and the community?

Stigma and attribution theory

The effect of stigma in mental illness can be as influential as mental illness itself in determining the success of therapy and pathways to recovery. Stigma exacerbates the feelings of isolation and seclusion that one might already experience due to their psychological distress, as well as deterring potential workforce participation from mental health professionals, peer support workers or those with lived experience wishing to put their recovery behind them.

It can leave people lacking opportunities that define a quality life such as secure jobs, safe housing, satisfactory health care and an affiliation with a diverse range of people.[33] Understanding the impact of stigma on people suffering from mental illness can be hard to evaluate but has become more widely recognised as a major determinant on feelings of inclusion in a community. Stigma surrounding mental illness can be divided into two components; public stigma, which is the negative beliefs of the community towards people living with mental illness, and self-stigma, which is the negative beliefs that a person living with mental illness places upon themselves. Both are important to address in decreasing the impact of mental health and increasing the resilience of a society.

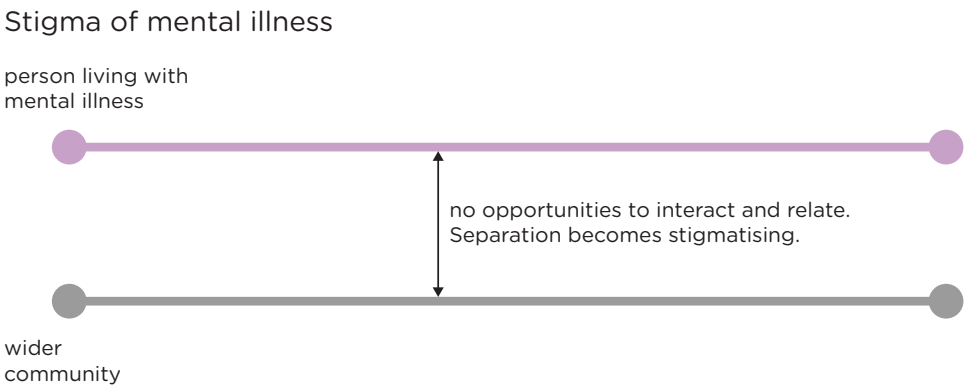
The following examples are generally accepted methods[34] of reducing stigma towards persons living with mental illness;

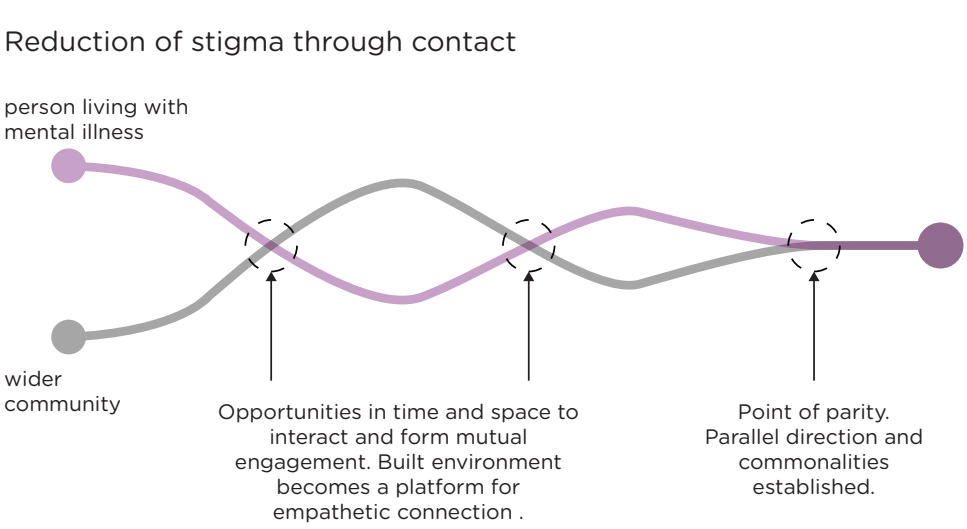
• Education; there is evidence to support that individuals who possess more information about mental illness empathised more and stigmatised less than individuals misinformed about mental illness.

• Contact; there is convincing evidence that increased contact with persons living with severe mental illness is associated with lower stigma. This is due to the disintegration of labels that segregate e.g. from 'them' to 'us' - a more collective responsibility and empathetic understanding of community.

• Attributions; attributions are explanations that an individual makes about another individual's behaviour. Mental illnesses are perceived as more controllable than medical disorders and hence, more stigmatising.[35] This results in assumptions that the person living with mental illness is responsible for their condition, which may create separation between the wider community. Regular contact with a person living with mental illness can shift the attribution from something they can control to something beyond their control, which leads to a shift in empathy, improved perceptions and greater relationships of people experiencing mental health issues.

Innovative models of mental healthcare have understood that dispersing mental healthcare services within an urban community encourages passive contact between patients and the greater community, becoming an opportunity to dissolve the stigma associated with people suffering from mental illness. To take this approach even further, facilities which encourage active interaction with the community through local events, sports teams and other social activities have had a remarkable impact on how the public view mental healthcare and those experiencing mental disorders. This has the added benefit of educating and changing personal views of mental health and can create a more positive mindset that encourages people to pursue support.





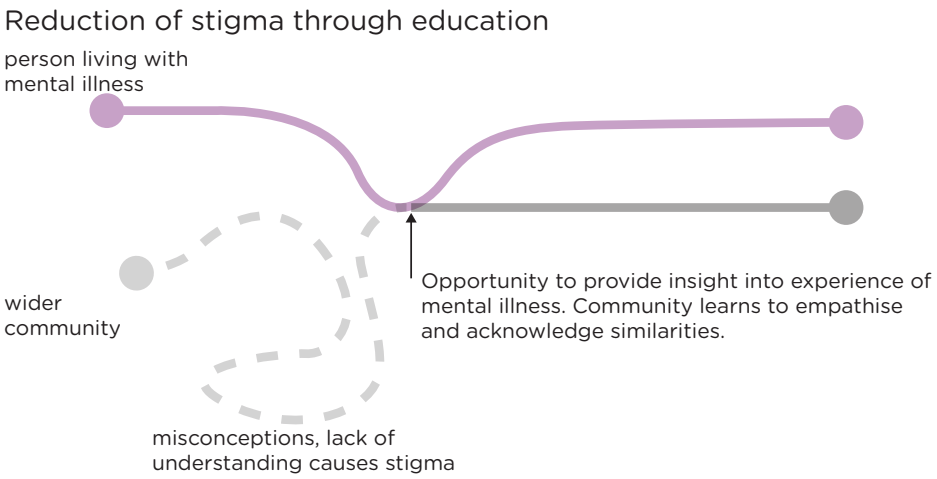


Figure 6: Types of stigma

A new building designed for the wellbeing of the mentally ill in which great attention is paid to their needs is a better form of public education than any amount of propaganda. A mentally ill person requires an environment which both prevents dehumanisation and encourages social interaction to the limits of, but not beyond, their tolerance.

- Humphrey Osmond -

Figure 7: Findings from a mental healthcare unit

Concerns	Consumers	Staff
Space	*... feel caged in.* *... feel their unit is too small.* *... don't value artificial courtyards.* *... don't like locked doors.*	*... feel caged in at nurse stations which is where they spend most of the time doing work.*
Control	*... feel controlled and coerced.*	*... feel they need control.*
Time	*... feel bored.* *... don't appreciate they can't smoke.* *... feel they have too much time.*	*... feel too busy.* *... feel there is not enough time.*
Feeling of presence	*... feel observed.*	*... feel monitored.*
Staff contact	*... feel there is not enough time with staff.*	*... feel they don't have enough time with patients as they are doing too much paperwork.*
More Space	*... want more space.*	*... don't want to have to manage and monitor a larger area.*
Object	*... feel like objects, being counted and tallied.*	*... must keep count.*
Meetings	*... hate meetings and want to be left alone.*	*... hate staff meetings and want more tome to provide clinical care.*
Interaction	*... interact only with other consumers.*	*... interact only with other staff.*
Perception	*... feel bullied.*	*... feel they are taken advantage of.*
Freedom	*... don't know when they will get out.*	*... can't wait to leave.*
Rules	*... feel confined and restricted by rules.*	*... feel the rules are there for a reason, otherwise becomes tough to manage so many people.*
Trust	*... want more trust.*	*... can't trust patients.* *... taught not to trust patients.*

Considering design for mental health patients
Experiences of patients and staff were recorded in a research paper titled "So, You Want To Design An Acute Mental Health Inpatient Unit: Physical Issues For Consideration" by Dinesh Arya.[36]

Although framed by experiences in more acute mental health care settings, the table **Figure 7** is a collection of observations made from both the patient (or "consumer) and staff perspective and its lessons on relationships can be interpreted and translated for use in similar settings. It is interesting that most observations between the two parties are conflicting which can create separation, exclusion, a lack of respect or dehumanisation.

Among the findings was a suggestion for a well-designed area for community health services staff to acclimatise consumers and their families to the inpatient unit upon their arrival.

This process mapping helps understand the needs of consumers requests of minimising non-value activities, prompting important questions such as; what would these patients be doing in their normal lives and how can the carers facilitate or simulate these daily functions for their eventual return to their lives? These spaces and facilities should serve more than just a place to consult, grieve and work through truly uncomfortable memories, providing a familiar environment which does not contribute to heightened feelings of discomfort or worthlessness.

Access to facilities for self-management are usually lacking and could serve as important keys to a self-oriented system of recovery. Giving people ownership over spaces for individual therapy and reflection grants them control of their own journey for mental wellbeing and reduces the dependencies of typical institutional programs.

How can design improve therapeutic environments
Design must begin to complement clinical practice change. We are beginning to acknowledge the importance of designing physical spaces however there are a few longer term considerations that facilities must account for;

• A decrease in length of stay - how can a facility cater to the varying needs of people and adapt to people with different recovery plans?[37] Does the requirements of an inpatient room decrease as a patients expectation to stay for longer periods of time decreases? Are we missing something or not responding adequately to the needs of the individual if we give a person suffering from a mild case of depression and a severe schizoaffective episode the same residential unit? How can the design of these units accomodate the spectrum of experiences in mental illness and encourage mental wellbeing?[38]

• A changing model of care - how are facilities designing spaces with the positive intention of treatment changing in the near future? Are consultation rooms offering only a certain amount of configurations and types of interaction between patients and staff?

• The management of co-morbidities - are there facilities, programs and spaces to encourage and mandate personal or group physical activity, being aware that there is a close link between physical and mental health? Is it the responsibility of the mental healthcare facility to provide these physical spaces within their walls or is it more appropriate to connect and engage with peripheral clubs/services nearby to establish a relationship within the community?

4.1

Journal note: Humanitas Intergenerational Housing

Deventer, the Netherlands
Humanitas healthcare

The Humanitas model in Deventer has received global recognition for its innovative approach to aged care, dementia care and student housing. Crossing the road from the bus stop to Humanitas Deventer, it certainly didn't seem like a facility for aged care and dementia patients. There were no signs it was any different to any other medium rise apartment block on the short bus route from Deventer train station.

Past a teeming rack of bicycles and entering through the foyer, the warmth of a library and lively student hub came to mind. I was greeted by Peter Daniels, the happiness officer (care worker) responsible for overseeing the daily operations. A great man with a sharp sense of humour, Peter pointed to the air conditioning ducting in the ceiling and grinned. "The first tip to making sure it doesn't feel like an old person's home – make sure it doesn't smell like an old persons home." He explained that providing fresh fragrant air has notably improved visitors first impressions. There have been several design decisions just like this throughout Humanitas Deventer to improve the atmosphere and sense of comfort, distancing the home from any preconceived ideas of aged care facilities. Alongside this, he mentioned the importance of being a 'good neighbour' by serving the community and make the facilities desirable and an attractive asset to the community.

Approximately 160 residents aged above 80 call Humanitas Deventer home in various living arrangements, from independent living to supported residential care. The population is comprised of a 10% dilution of residents who live with a mild psychiatric disorder requiring low-level treatment, and uniquely, 6 students who live and work at the house for largely subsidised rent alongside permanent staff. The reciprocal support and interaction between the students and residents have been extremely rewarding and set precedent for intergenerational housing models over the last decade. Older residents feel embraced and comforted by the presence of young adults reminiscent of their grandchildren, not cast aside by the fast-paced world around them. The students cook, clean and care for the residents, and learn much from their wisdom in all facets of life, including life choices, career pathways and relationships.

As Peter walked us through the spaces, he made a point to talk to everyone that passed with genuine intent. Some responded to Peter and engaged in a giggly or sassy chat as if neighbours meeting in an aisle at the shops. Others grumbled and proceeded to walk by without much notice. Peter explained an understanding that everyone is different, and some people prefer to keep to themselves – all part of human nature.

Leifde, Samen, Positief. Love, Together, Positive. The principles of the Humanitas model.

The way Peter explained the function of the communal spaces was akin to describing how various species of animals coexist around a watering hole in a plain or jungle – for example, the group of ladies which regularly sit in the cafeteria on a daily basis, except on Tuesdays when the men come to play cards and become too disruptive, so the women temporarily uproot and gossip somewhere else until the cardgame has ended. The Humanitas model and the architectural consideration is a responsive space, accommodating the occasional disruptions that

are expected of any human being rather than provide a series of curated, sterile spaces and interactions often experienced in a hospital or facility. As Peter explained, "a degree of daily friction is welcome" – small barriers to overcome which stimulate the residents' cognition and remind them of the rhythms of life.

The facility also hosts shopping village spaces including a laundry, physiotherapy, and a small grocer to retain and empower agency. Those that are independent can choose to have breakfast at the main dining hall with friends and swing by the shops afterwards to pick up ingredients for an afternoon snack. Other patients suffering from advanced forms of dementia are grouped in self-contained units with two or three other residents and looked after by a carer.

Underpinning the Humanitas model was the Waldorf educational philosophy by Rudolf Steiner which acknowledges the three tenets of one's existence and the roles they play in holistic cognitive development: thinking, feeling, and willing. As the onset of dementia worsens, the thinking element is peeled away and only feeling and willing remains. At Humanitas, a special experience is offered called 'dementia whispering', where this absence of active thinking provides an opportunity to reconnect through an abundance of interactions relying on the wanting and feeling – that is, drawing on lived experiences between those living with dementia and loved ones. Peter described a mother who suffered from dementia, and how her daughter had felt sadly distant from her mother for some time. Through a personal experience of sharing a strawberry by mouth as they once did many decades ago, the maternal bond

was retied, and both the mother and daughter felt an overwhelming sense of reconciliation. Soon after, the mother passed away, but dementia whispering provided profound sense of closure to the daughter through the wanting and feeling.

Humanitas Deventer housing occupies a recent re-adaptation of a 1960's block of pokey flats. Visiting one of the resident's units (a cheeky Belgian man), our first impressions were exclaiming how cosy, generous and comforting the one bedroom suite with kitchenette felt. Peter pointed to the threshold where two separate units had been joined by the removal of an adjoining wall, explaining that regulations for such residential aged care units changes quickly and the adapted unit technically wouldn't have complied due to minimum dimensions. He continued "sometimes it's not enough to just follow the rules – sometimes you have to be in the discussions to help change the rules", referring to the vigour and uncompromising attitude that Humanitas has undertaken to champion for real quality of life beyond charts, schedules and codes that stipulate the most effective way to live. Humanitas works both at an intimately personal level with residents and equally working with regulatory bodies to ensure that the architecture is there to serve the occupants, fully embracing the concept of diversity and proving the value of its architecture lies in its care.

4.2

Journal note: Helsingor Psychiatric Hospital

Helsingor, Denmark
Frederiksborg County & Helsingor
PLOT (B.I.G + J.D.S)

Initially what was conducted as a design competition in the early 2000's for a new psychiatric ward to accompany the existing Hillerod Hospital which was also a pioneer for its healthcare design in 1976, Bjarke Ingels (partnering with JDS in a collaboration named PLOT) was awarded the design of the Helsingor Psychiatric Hospital for his trademark rationalisation and simplification of programmatic and spatial requirements. When a young Bjarke Ingels asked Eric (now the Director of Psychiatry) what his dream environment for severe psychiatric care would look like, he was surprised that Bjarke encouraged him to let his fantasy run wild. According to Eric, of all the entrants, none of the architects but Bjarke approached the users (staff, carers and patients) and asked them such questions of ambition: what the users really wanted and what was the dream environment for psychiatric therapeutic care if budget wasn't a concern.

The humble two storey hospital is nestled in hills and covered in snow for half of the year. The asterisk shaped plan was the key to its success; a central nexus holds communal spaces and facilities including a sports hall for constant activation and promotion of physical activity. From here, a series of smaller corridors shoot off in a frenzy of directions each with strong connections and framed views to the Danish countryside. Taking inspiration from the neighbouring hospital, Bjarke observed the value that patients saw in nature and open atriums, anchoring each end of corridor with a small outdoor courtyard; some with sculptures, some with trees, others with large rocks. Eric recalls that Bjarke was so determined to have an existing rock craned in at the end of a wing despite the cost because he felt it would be an important totem for the patients and staff – an immutable presence that might quell a restless soul, if even for a moment.

At various points throughout the tour, Eric would pause, turn to me and point out a choice that Bjarke had made which has been either directly or indirectly appreciated by the staff and patients. He likened the architectural approach of the hospital to BIG's recently completed Courtscraper in Manhattan (now coined VIA 57 West). Bjarke decided to reduce the overall footprint of the building to maximise the quality of the spaces, with much more glass to take in the surrounding natural landscape consisting of forests and lake he knew was crucial in a therapeutic environment. He was immovable in his decisions for a strict 3 colour palette throughout the hospital: a bright sunshine yellow, orange, and green. These colours, along with a splash of blue on a few walls, were a deliberate act to stimulate patients minds and transport them to somewhere with vibrance and liveliness, especially in the colder periods of the year where unrelenting snow and a dull, fleeting sunlight can have serious effect on ones mood (now observed as Seasonal Affective Disorder, compounding any existing mental disorder).

Other moments along the walk reinforced the level of consideration that you would expect from a highly intuitive architect. I was taught that patients suffering from psychosis may experience limited spatial awareness and finding it difficult to determine boundaries, so what was conceptually frameless glass from ceiling to floor in the residential units became a subtly lifted window sill to establish a frame, an unnoticeable cradle for a boundless mind.

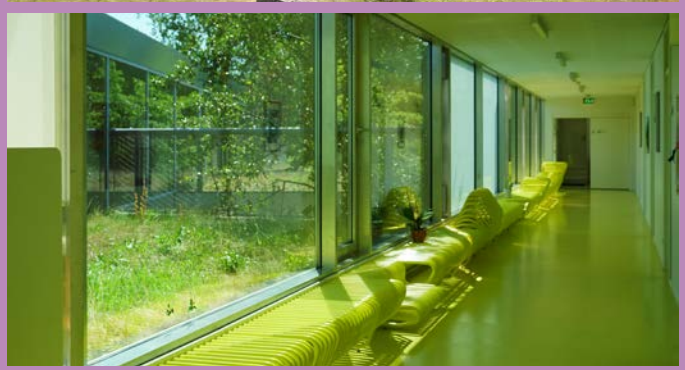
As is the case with many architectural journeys from conception to completion, the Helsingor Pscychiatric Hospital also suffered from 'value engineering' at the ultimate cost of the patient's experience despite falling reasonably close to the original budget. The carefully planned angles arraying the corridors were rationalised


Degnefsnit
Psykiatrisk ambulatorium
Afdelingsledelse
Konferencerum 1, 2, 3

by a few degrees during construction detailing which resulted in much more acute spatial enclosures. This in turn tightened up a lot of the corridor junctions and made some of the atriums unsettling to be in or less desirable to occupy for longer periods. Staff and patients at one time or another noted the sharp slants and felt disoriented or uneasy. Furthermore, common hallway benches outside consultation rooms were downgraded from a soft flat birch to rounded steel pipe sections, a cost-cutting decision that Eric felt was so poor that he laughed as he suggested I try sitting on one.

It is though, remarkable to hear such admiration for a then young architect - keeping in mind Bjarke was only 32 at the hospital's completion in 2006. As someone who was closely involved during the entire process, Eric's few criticisms of the hospital and aspects of its shortcomings do not seem to be aimed at Bjarke but rather the construction firm or those involved in the project management. It appears that these decisions were not made in collaboration with Bjarke or the design team, but rather independently and without questioning the design intention of certain design elements - which is often the case in the translation of design to construction however carries more critical consequences in a program of this nature.

Although Bjarke is considered in the realm of starchitects and often criticised for designs that are empty and detached from the public realm, this hospital needed to provide serious therapeutic care for patients that were seriously ill. For Eric to look back on this project and feel that Bjarke successfully developed an innovative responsible architectural approach to psychiatric care and aiding in the treatment of tens thousands of patients since its opening, it certainly reinstates the role of the architect - if only they ask the right questions.



5

What lessons are there?

Researching and reflecting on the encounters at the international case studies highlighted some key considerations that have proven to be significant to the success of the healthcare at both a program and community level. For each of these examples I have outlined key lessons that will be important in the future of mental healthcare design and pivotal to improve people-oriented recovery environments.

<u>Kronstad District Psychiatric Centre</u>

Cater for future attitudes.

There are several strategies embedded in the organisation of treatment and consultation in the centre, with an aim of fostering environments for collaboration of different disciplines with deliberately unknown outcomes. Just because evidence doesn't yet exist on the efficacy of an approach doesn't necessarily indicate that it isn't worth pursuing - respectful exploration into the relationship between different actors responsible for a person's care can sometimes yield incredibly valuable insights.

Community engagement and dissolved stigma through shared amenity.

The project offers sports facilities for the neighbourhood to use, creating a public good whilst encouraging its patients to participate in physical activity. This improves the patient's rehabilitation through somatic therapy and serves as an opportunity for the community to spend time, play and share experiences with those who have lived with mental illness to educate and unpack misconceptions that one may have about mental health.

Recovery isn't bound to a place.

Although programs for more severe mental illnesses can be suitable with prolonged stays in residential units, recovery is more often becoming a plan that can be tailored to suit each individual's lifestyle. Allowing patients to continue their day to day life and manage their mental health as seamlessly as any other common task creates a positive engagement with treatment and enables a sense of ownership and control over their healthcare. Distributing decentralised, local mental healthcare centres improves awareness and accessibility whilst normalising the presence of proactive approaches to mental health.

Architecture is only part of the solution and is complementary to evidence-based approaches to care.

With all due merit to designing beautiful and effective spaces, successful and effective care environments tend to be associated with, and complemented by highly functioning staff and carer infrastructures capable of managing patients in a variety of conditions. Architecture should be as much about the incorporation of care systems and social interaction as it is about spatial consideration.

<u>House of Psychiatry</u>

Call it a house, or a home, or anything – just not a hospital or a facility.

Admittedly, this is an attitude that takes some time to adopt as buildings that serve functions for healthcare often imbue formal qualities. Once users make the conscious shift to talking about their shared space in a more personal and domestic manner, the interactions between the various parties transform and contribute towards reducing stigma. Therapeutic environments should be seen and felt as an extension of a patient's home to reassure stability and worth, considering that some may be feeling disoriented and distraught before even entering these spaces

Bad architecture is in the end as much a failure of psychology as of design.

- Alain de Botton -

Education and research should be integrated within care environments to promote a constructive feedback loop.
Having research facilities in close quarters with those that work directly in care environments encourages the sharing of evidence and experience. Not all information shared is considered of worth or quantifiable data, however something as minor as anecdotal evidence produced during a casual conversation on the treatment of patients suffering from certain illnesses could serve as a catalyst for future research or therapeutic consideration. Chartering a proportion of in-house research and educational staff as part of the organisational structure embeds a culture of discussion, exploration and adaptation of existing attitudes.

Humanitas Intergenerational Housing

Healthcare doesn't always have to look (and smell) like healthcare.
Granted, there are certainly places, spaces and programs which require a more formal atmosphere and structure to deliver their care effectively. However, for less severe instances where greater freedom is allowed it can be beneficial to look at treating spaces with domestic and humanistic qualities. Recovery, care, and rehabilitation can still occur organically and there is evidence to suggest that care environments are more successful when patients are less aware of the context of their admission and residence.

Environment yields response and everyone has the potential to support.
The unique housing model proved to be a success by looking at challenges beyond its site and addressing the need for a proportion of student housing for the nearby college. Both the students and elderly residents acknowledge the reciprocal benefits that arise from intergenerational relationships and sharing their time.

Help redefine the rules. With constant shift in regulations, silent approaches are often marginalised and become defunct.
If successful attitudes towards care are established, they should be fought for and used to set an example and benchmark.

It can be difficult to reconcile that the quality of care is not defined by assigned quantities of space, time and resource but through dignity and acknowledgement.
Consultation, patience, and empathy is the most valuable mechanism in translating needs of those in care and should be learned as part of a toolkit of essential skills when working in mental healthcare.

De Hogeweyk

Design for difference.
Experiencing mental illness doesn't preclude people from their own lifestyle preferences. When considering medium to long term residential care, catering for a range of living configurations plays a pivotal role in user satisfaction and delivering programs that embed dignity in their spaces.

Inclusion, not seclusion - share spaces.
Those suffering from dementia or other chronic illnesses still have the same desires for interaction as other members of the public, and programs should encourage visitors where possible to manage resident's morale. If it's unfeasible to allow excursions or external activities, consider bringing the community in to share the spaces, allowing the building to become an extension of the neighbourhood.

42nd Street

Buildings have the ability to speak to, and speak for, its users.

People from marginalised or disadvantaged backgrounds can feel less entitled to explore, use or enjoy space. When designing for these people or program, the responsibility is on the architect and the architecture to encourage sanctuary and ownership over these spaces. Allow the built (and unbuilt) environment to have a quality to influence the individual, and let a person's presence indirectly impact the architecture through their actions to establish engagement and healthy relationships with themselves, others and their cities.

Acknowledge and plan for the inevitability that the utilisation of spaces will exceed initial purpose.

Projects on small budgets dictate the delivery of smaller spaces or stretching resources thinner than ideal circumstances would allow. Workplaces and their cultures have changed over the last few years (and especially over the last few months). Invest time into developing a robust technological infrastructure for staff, not just space optimisation to ensure that the operation of the organisation is able to adapt and take advantage of these shifts.

Helsingor Psychiatric Centre

Assess the real cost of value engineering.

Architecture for mental health is designing for an unknown user, marginalised and often unable to adequately communicate their needs or evaluate self-worth. The most crucial role for architects is representing these people as you would any client – just because they use this building as a service at their most vulnerable does not mean they are less deserving of quality treatment in therapeutic environments. Value in healthcare buildings is defined by the financial cost vs. effect of physical and social infrastructure, indicated by metrics both within the facility and extending into the function and progress of a community. Small details in healthcare architecture can have a great impact to the way patients evaluate their worth and the perceived quality of the care they receive. It is important that both staff and patients are invested in the process of recovery, and it is the fundamental role of the architect to ensure that these spaces are delivered with recovery in mind. Details as minor as bench design and material can have lasting impact on those that occupy the space, whether it be a day, week or month. As with most projects with public or investor funding, healthcare projects are on a strict and inflexible budget. Therefore, these details should be factored in from the beginning, and not diminished over the course of documentation and value engineering and needs to be considered as important as a front door or running water to the successful delivery of the project and subsequent value to its clients.

Architects need to ask the right questions.

The story of Bjarke Ingels during the initial discussions of Helsingor reminded me of the theory of the Three Whys allowing the real root of the problem to surface. Bjarke didn't simply ask, "what rooms do you need and how big do these rooms need to be?" but asked an open-ended, participatory and imaginative question to engage the different actors of care in the process of design. By asking "what would your dream environment for care be", the forum was opened to beyond simple discussions on the arrangement of spaces; it encouraged the evaluation and quality of light, colour, space, function and most importantly nature, which became the core tenet of the design. This also allowed people to voice their opinions and speculate on how care environments could be operated if circumstances were different, helping establish ambitious goals and innovative approaches to health care design that may otherwise never reach the light of day.

6

Acknowledgements

I would like to first start by thanking the NSW Architects Registration Board and the Byera Hadley Trust for giving me the opportunity to visit these inspiring precedents on the other side of the world investigating the responses to mental health so important on a societal and personal level.

Specifically, I would like to thank Prof. David Sanderson, Mark Szczerbicki and Sue Wittenoom for their support and constant encouragement during my graduation project to engage in people-centred design.

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7

About the author Hayden Co'burn

I completed both my Bachelors and Masters of Architecture at the University of New South Wales, graduating in 2018 with a specialisation in Social Agency, reflecting a devotion to investigating the complex challenges facing marginalised or disadvantaged populations in an urbanising world. For my final year project I had embarked on a journey of discovering innovative approaches to urban mental healthcare for which I was awarded the Graduate of the Year in the Masters Program by the Australian Institute of Architects.

My involvement in the faculty of Built Environment at UNSW grew as I became a part time Associate Lecturer whilst undertaking full-time work at CplusC Architectural Workshop, committed to learning the act of translating architecture to construction and the business management of small architectural practice under the guidance of director, architect and builder Clinton Cole.

Mental Healthcare

I am heavily engaged in this topic for two main reasons. The first reason is that I have been surrounded by family and friends that have suffered from mental illness my whole life. My mother was diagnosed with severe paranoid schizophrenia before I was born and I have grown up with the truths that become apparent living through this experience. I have seen my mother pass through various forms of mental health care (both formal and informal), and have almost faced losing her many times through some of her more severe episodes. I have seen the harrowing impact of mental illness on her and my family.

In 2010, I transitioned into a role as her primary carer for her. Although in better periods of her life she can maintain a level of independence, when she suffers from psychotic episodes, she has historically been admitted into a mental health clinic. I am very fortunate that she has the appropriate medical insurance that can cover her stays in this place, and I have been there many times to understand the structure of the facilities and the positive effects it has on its patients. I hold its value in high regard; the clinic allows people to stay for weeks and is situated in an urban centre near public transport nodes that allows its patients to maintain a level of independence upon the discretion of the psychiatrists and case workers. Its organisation gifted my mum a much more informal and relaxed relationship with her psychiatrists and my involvement in her recovery was highly encouraged - before and after class I was able to visit and stay for meals, keep her company in the lounges and provided support in therapeutic consultation rooms. I know this was not the case for her and for many others in the past as the traditional model of mental healthcare was and still is heavily institutional, and my mum has been a constant reminder and valuable source, sharing her insights of her challenging journey over the years.

The second reason is, as I pursue architecture, I wonder what is it that I can do for the field of mental health. On the surface, mental health and architecture can seem at opposite ends of the spectrum. Architecture is the ultimate realisation of the physical form and a very precise science, while psychology/ psychiatry is possibly the least understood and most intangible element of human existence and heavily immeasurable. My graduation studio research has stirred a determination within me to explore the relationship between the built environment and mental health, reduce the stigma of mental illness and to improve access to mental healthcare. With the unprecedented global population growth and stresses of urbanisation, I feel that the existing systems need to be contemporised to serve the world more effectively as it evolves or many will suffer. I fear that mental health is not discussed nearly enough and as an ambassador of the built environment I know that architecture has a role to play in promoting mental wellness and social change.

8

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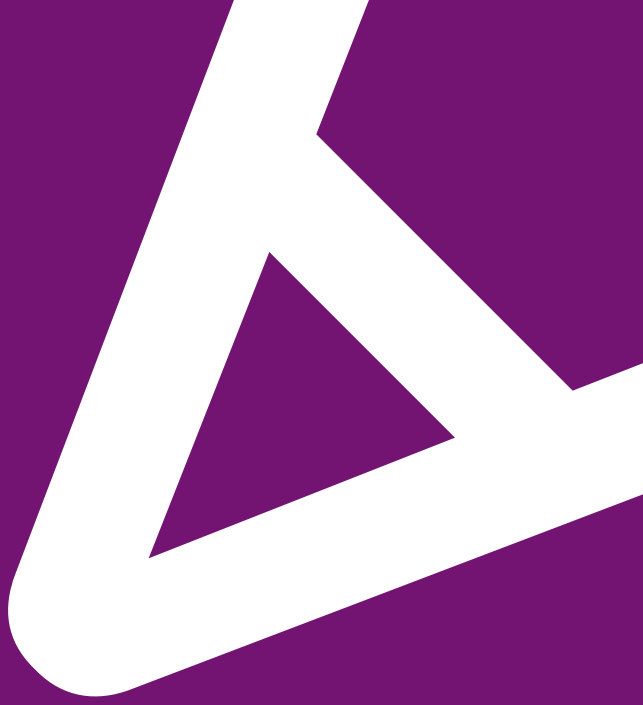
Illustration and Figure References

All photos included in the report were taken by myself or Farisa Adi and are included in the report with full permission. Due to the nature of the visits and in respecting the wishes of the staff and patients, opportunities to capture my experiences were quite limited and often were given a moments notice when it was appropriate to capture a scene. As a result, some of the photos are not well shot or don't effectively express the architecture and occupation of spaces however these images were used to provide some reference where possible.

Figure 1. redrawn from Verderber, Stephen. Innovations In Hospital Architecture: Routledge, 2014.
Figure 2. redrawn from Central and Eastern Sydney PHN. Mental Health And Suicide Prevention Needs Assessment. Ashfield, NSW: Central and Eastern Sydney PHN, 2016.
Figure 3. redrawn from Central and Eastern Sydney PHN. Mental Health And Suicide Prevention Needs Assessment. Ashfield, NSW: Central and Eastern Sydney PHN, 2016.
Figure 4. created by Hayden Co'burn.
Figure 5. created by Hayden Co'burn.
Figure 6. created by Hayden Co'burn
Figure 7. redrawn from Arya, "So, You Want To Design An Acute Mental Health Inpatient Unit: Physical Issues For Consideration".



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