A rapid review to inform the further development of mental health rehabilitation services in Northern Ireland

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Contents

'A good rehabilitation service should be timely and close to home, taking a whole-system and holistic approach to support the needs and aspirations of an individual to help them live as independently as possible.'

Professor Tim Briggs, National Director of Clinical Improvement for the NHS

Professor Tim Kendall, National Clinical Director for Mental Health for the NHS

(Kalidindi, 2022)

BACKGROUND

Northern Ireland's new Mental Health Strategy 2021-2031 (Department of Health, 2021) outlines the key priorities for transforming mental health services and highlights the role that rehabilitation services can offer to those with severe and complex mental health needs.

Rehabilitation has long been a key element of comprehensive mental health services. Currently, the National Institute for Health and Care Excellence (NICE, 2020) publish guidelines with the objective that mental health rehabilitation is provided for adults with complex mental health needs. It aims to ensure people can have rehabilitation when they need it and a positive approach to long-term recovery is promoted by services.

The purpose of specialist rehabilitation services is to deliver effective rehabilitation and recovery to people whose needs cannot be met by less intensive mainstream adult mental health services. The focus is on the treatment and care of people with severe and complex mental health problems who are or would otherwise be high users of in-patient and community services (Wolfson et al., 2009).

A number of individuals with severe and enduring mental illness that do not respond to conventional treatment will benefit from dedicated, intensive support. Many of these people will experience significant isolation, stigma and discrimination and constitute some of the most vulnerable in our communities. Whether this support is provided within inpatient or outpatient settings, it is unlikely to be provided within the current community mental health team structure and the conflicting demands of crisis care. Providing intensive support that can offer opportunities to develop life skills, engage in social contact and develop important relationships with family and others, help build independence, and participate in meaningful occupation is centred on a rights-based approach to care. Thinking beyond current structures and services could help develop innovative approaches to help build meaningful recovery-focused rehabilitation.

The review will seek to inform work relating to Action 25 of the Mental Health Strategy:

ACTION 25. Create a regional structure for a mental health rehabilitation service, including specialist community teams and appropriate facilities for long-term care.

An effective regional structure for a mental health rehabilitation service will also contribute to addressing a number of the other actions in the Mental Health Strategy including:

- **Action 16.** Create a recovery model, and further develop and embed the work of Recovery Colleges, to ensure that a recovery focus and approach is embedded across the entire mental health system.
- **Action 17.** Fully integrate community and voluntary sector in mental health service delivery with a lifespan approach including the development of a protocol to make maximum use of the sector's expertise.
- **Action 20.** Develop an agreed framework between mental health services and primary care services for the physical health monitoring of people with a severe and enduring mental illness, as well as other people with mental disorders.
- **Action 23.** Provide people with severe and enduring mental ill health the right care and treatment at the right time. They, together with their support networks, are to be included in the decision making around their care and in the development of services and new ways of working.
- **Action 31.** Develop a regional mental health service, operating across the five HSC Trusts, with regional professional leadership that is responsible for consistency in service delivery and development.

It should maybe also be noted that there is a separate action (26) to develop regional low secure inpatient care and it would also be important to consider the interaction and potential overlap with the mental health rehabilitation service.

This rapid review will explore the relevant international literature with a view of drawing conclusions and recommendations for services in Northern Ireland (both community and inpatient provision). It has several key objectives:

- discuss definitions, purpose and target populations of mental health rehabilitation services;
- review the evidence base underpinning such services and the key elements of services and;
- review the international literature to identify best practice examples of rehabilitation services

Within all of the objectives, consideration will be given for future developments in Northern Ireland.

METHODS

A rapid review of relevant international mental health systems and literature form the basis of this report. While this was not exhaustive, it helped to identify examples of good practice and builds on experience of other health and care settings that have developed effective approaches to establishing rehabilitation models. Grey literature sources were identified by consulting mental health professionals, and hand searching health/social services department websites in other jurisdictions.

In addition, five key databases (APA PsycInfo, Embase, MEDLINE, SCIE, Social Science Citation Index) were searched from inception to January Week 2 2023 using a combination of key terms (see Appendix 1 for the search strategy). An additional search of systematic reviews, meta-analyses and qualitative evidence syntheses of mental health or psychiatric rehabilitation was also undertaken.

FINDINGS

A total of 1,451 records were retrieved and 554 duplicates were removed. To reduce the results to a manageable number, papers published within the last 5 years were prioritised, although key texts published before this date were also included. The search identified key areas of rehabilitation support delivered across different settings:

Inpatient

Community rehabilitation

- Employment
- Housing
- Social contact
- Family interventions
- Peer support
- Lifestyle interventions
- Day hospital

Other service considerations were also discussed in the literature including: medication; assertive community treatment; psychosocial interventions; and co-ordinated speciality care.

BACKGROUND TO THE DEVELOPMENT OF REHABILITATION SERVICES

In the majority of European countries, including the UK, institutions built in the Victorian era were the dominant form of provision for people with severe and chronic mental health needs for many decades. Both the philosophy of rehabilitation and the services that stem from it have their origins in the deinstitutionalisation that occurred in the latter half of the last century.

Initially, the focus of such services was on the process of resettlement from the asylum to the community; subsequent focus shifted to facilitating recovery and maximising function within community settings. In the UK, this large-scale resettlement led to the development of inpatient and community rehabilitation teams. These were often not mirrored in other parts of the world. However, the philosophy of rehabilitation permeated many community services that provided housing, education, employment and social spaces.

Within the UK, Mountain et al. (2009) describe very diverse services that all fell under the umbrella of mental health rehabilitation. There was no nationally agreed structure until the publication of NICE Guideline for rehabilitation for adults with complex psychosis (2020). This provides the first UK guideline on best practice in rehabilitation services.

DEFINING REHABILITATION

Killaspy et al. (2005) define mental health rehabilitation as,

> *"a whole systems approach to recovery from mental illness that maximizes an individual's quality of life and social inclusion by encouraging their skill, promoting independence and autonomy in order to give them hope for the future and which leads to successful community living through appropriate support."* (Killaspy et al., 2005, p.163)

A key aspect of this definition is a 'whole system approach to recovery'. This will include inpatient and community-based services provided by statutory, non-statutory and independent organisations across health and social care. It stresses the importance of a host of providers of housing, education and employment services. The definition stresses the importance of improving and maintaining community functioning rather than focusing on symptoms and incorporates the vital role of the recovery ethos.

WHO ARE REHABILITATION SERVICES FOR?

The NICE guideline recommends that rehabilitation services be made available to individuals who meet criteria for 'complex psychosis':

A primary diagnosis of a psychotic illness (this includes schizophrenia, bipolar affective disorder, psychotic depression, delusional disorders and schizoaffective disorder) with severe and treatment-resistant symptoms of psychosis and functional impairment.

The guideline explains that:

People with complex psychosis usually also have one or more of the following:

- cognitive impairments associated with their psychosis
- coexisting mental health conditions (including substance misuse)
- pre-existing neurodevelopmental disorders, such as autism spectrum disorder or attention deficit hyperactivity disorder
- physical health problems, such as diabetes, cardiovascular disease or pulmonary conditions.

Together, these complex problems severely affect the person's relationships, and social and occupational functioning, and mean they need a period of rehabilitation to enable their recovery and ensure they achieve their optimum level of independence.

The literature on rehabilitation services seldom uses the term complex psychosis and more often employs the term serious mental illness (SMI) which is defined by the National Institute of Mental Health (NIMH) in the US as a sub-group of the umbrella term ‘any mental illness’.

Any mental illness (AMI) is defined as a mental, behavioural, or emotional disorder. AMI can vary in impact, ranging from no impairment to mild, moderate, and even severe impairment (e.g., individuals with serious mental illness as defined below).

Serious mental illness (SMI) is defined as a mental, behavioural, or emotional disorder resulting in serious functional impairment, which substantially interferes with or limits one or more major life activities. The burden of mental illnesses is particularly concentrated among those who experience disability due to SMI.

SMI is a broader concept than complex psychosis and in the USA context encompasses no less than 5.6% of all adults (2020 National Survey on Drug Use and Health (NSDUH)) by the Substance Abuse and Mental Health Services Administration (SAMHSA). The prevalence of

SMI was higher among females (7.0%) than males (4.2%) and is highest in the 18-25 years age group at 9.7%, compared to adults aged 26-49 years (6.9%) and aged 50 and older (3.4%).

SMI and complex psychosis differ primarily in two ways:

- complex psychosis is comprised of psychotic disorders only
- meeting criteria for complex psychosis pre-supposes treatment-resistance (variously defined by NICE for each condition)

Thus, a person with severe and persistent depression but without a lifetime history of psychotic symptoms will meet criteria for a SMI but not for a complex psychosis. And a person who meets criteria for schizophrenia and who has severe and persistent symptoms will not met criteria for complex psychosis until they have had an adequate trial of two antipsychotics and thus meet treatment resistance criteria.

Nevertheless, the terms are broadly similar, and accordingly the extant research literature is relevant to this review. The key conditions which sometimes result in the need for rehabilitation and which are addressed in this review are schizophrenia (and related psychotic illnesses such as schizoaffective disorder), bipolar disorder, and major depressive disorder. Obsessive-compulsive disorder is in many cases very disabling and is also considered as possible reason for referral to a rehabilitation service when treatment options are exhausted and onward progress is halted.

The importance of co-morbidity (especially substance misuse), and in particular of pre-existing and concurrent neurodevelopmental disorders such attention deficit disorder (ADHD) and autistic spectrum disorder (ASD) is underlined, but a full review of these factors lies outside the scope of this review.

SCHIZOPHRENIA

Individuals who meet criteria for schizophrenia are likely to comprise the majority of those using any rehabilitation service. Typically, a person is referred when no longer acutely ill and is understood to be in the ‘chronic’ or ‘residual’ phase of schizophrenia. This longer-term state is often characterised by a lack of drive, underactivity and social withdrawal.

It is likely however that the person will still be experiencing some of the common symptoms of acute schizophrenia – otherwise known as ‘positive symptoms’. They may lack full insight, experience auditory hallucinations or delusions of persecution or suspiciousness, or hear their own thoughts spoken aloud. The person often appears to have adapted to these

symptoms, for example, whilst they might hold the idea that someone is unjustly trying to get at them, but this does not cause any emotional distress. This does mean that persons in this phase are free of mood disturbances: depressive symptoms, anxiety, irritability or euphoria often accompany the symptoms of acute schizophrenia and may persist into the longer-term state.

The 'negative' symptoms and cognitive deficits of schizophrenia are likely to be the main barriers to a return to full or close-to-full functioning. Negative symptoms include social withdrawal, underactivity and slowness, lack of conversation, loss of interest in the world, odd behaviour and neglect of appearance. Cognitive deficits are usually present at the first onset of psychosis (suggesting that for the most part they are not a side effect of antipsychotic medication) and will persist into the longer-term state. These symptoms often result in difficulties in daily life which require a rehabilitative approach.

For example, the rate at which a person receives, assesses, and responds to new information (processing speed) is often reduced. A person with slow processing speed may need extra time to respond to questions as they feel overwhelmed by too much information at once, and might need instructions or information repeated. Deficits in working memory (the information a person needs to retain in order to complete an immediate task) will impact on any task requiring multistep instructions, for example remembering a short shopping list. Other possible deficits include reduced attention and vigilance, verbal learning deficits, and impaired executive functioning (higher level cognitive abilities like reasoning and problem-solving necessary for complex skills with multiple steps). Social cognitive impairment may cause difficulties in regulating emotions and understanding the feelings of others.

Medication is effective but whilst a diminution in positive symptoms is to be expected in the majority of cases a decrease in negative and cognitive symptoms is less likely. Understanding the effectiveness of long-term antipsychotic treatment in the period since the second-generation or atypical antipsychotics became the treatment of choice is optimal given the improved side-effect profile of these medications. A systematic review of studies published between 2000 and 2015 (Karson et al., 2016) reported randomized and non-randomized prospective clinical trials on the long-term effects of oral or long-acting injectable antipsychotics and demonstrated that antipsychotic treatment produced high rates of remission in the year following treatment initiation and reduced the rate of relapse in patients with a longer illness history. Maintenance therapy was more effective than treatment discontinuation in preventing relapse. Antipsychotic treatment also produced sustained cognitive improvement for up to 2 years.

Whilst this is encouraging the fact remains that many persons with a diagnosis of schizophrenia do not do well (Jobe & Harrow, 2005; Volavka & Vevera, 2018). In the ten years after diagnosis, we should expect:

- 50% of people with schizophrenia to recover or improve to the point they can work and live on their own
- 25% to improve but to need assistance from a strong support network
- 15% not to improve significantly. This is the target group for rehabilitation services

CASE STUDY: HELEN'S STORY

"Helen is a woman in her mid-30s. When she was 16 she was diagnosed with schizophrenia and had her first admission to a psychiatric inpatient unit. Since then she has been admitted to hospital on average about four times a year, mostly as an involuntary patient, and when she is in hospital her mental health improves. However, when she returns to the community she places herself at great risk by injecting herself with substances such as household bleach. Her judgement and ability to make decisions is seriously impaired and she has a Guardian.

When Helen is in the community her behaviour is challenging and she begs, steals and threatens members of the public. She has been charged many times with minor offences. Her behaviour towards her family is often threatening and when she does return home to live she regularly damages the house and police are often called out.

Helen is itinerant and attempts to get her hostel accommodation have been refused because of her complex needs and her risky behaviour. Her community mental health team have made repeated requests for her to be admitted to the only mental health extended care inpatient unit in the State but this has been refused as she is considered unsuitable, mainly because of her substance abuse.

Her family have become increasingly concerned about how vulnerable she is to sexual exploitation and to physical harm when she is in the community. They are also worried about her very poor physical health as doesn't look after herself properly. Helen's family don't see any way out of the current situation and, with an increasing sense of desperation, have said that maybe prison is the only place where she can be safe and receive some rehabilitation treatment for her mental health and substance misuse."

(Chief Psychiatrist of Australia, 2020, p.11)

BIPOLAR DISORDER

The natural course of bipolar disorder (BD) is characterized by a constant risk of recurrences over a life span, even 30 to 40 years after onset, causing impairment of psychosocial functioning, despite advances in pharmacological and non-pharmacological treatments.

Thus, whilst lasting remission is possible, a chronic course or frequent recurrences requiring admissions, is not an infrequent pattern. It is unclear to what extent the clinical course of BD predicts long-term outcomes (Uher et al., 2019).

Observational long-term studies on patients with BD report persistent functional impairment with significant disability: 19% to 23% of months with moderate impairment and 7% to 9% of months with severe overall impairment are typical (Goldberg et al., 2005; Treuer & Tohen, 2010). Patients with BD I were unable to carry out work role functions during 30% of assessed months, which is significantly more in comparison to patients with unipolar major depression or BD II (21% and 20%, respectively). This degree of disability is similar to that seen in schizoaffective disorders.

Over time, bipolar disorder may affect memory, concentration, attention and executive functioning (impulse control, organization and planning). Neuropsychological impairment due to BD persists when the person is well (or in a euthymic state). Thus it is not uncommon to see a clinical presentation characterised by on-going low-level symptoms, which are punctuated by regular hypomanic/manic and depressive episodes, and which exist alongside persistent cognitive deficits. This constellation of symptoms, perhaps accentuated by substance misuse and lack of social support, sometimes requires a referral to a rehabilitation

FUNCTIONAL IMPAIRMENT

Whilst each of the illnesses discussed above has its own distinctive constellation of signs, symptoms and associated problems, the impact on function is often similar. A person who may benefit from a rehabilitation programme typically still experiences moderate-severe symptoms typical of the acute phase of illness (e.g., persistent, and severe low mood or anxiety, delusions or hallucinations which may be fixed, obsessional rituals, other symptoms of major psychiatric illness). They will have severe difficulty functioning in a number of social areas (e.g., they are socially isolated, seldom leave home, and have no social outlets). They are likely to have severe difficulty functioning in occupational environments and remunerative work is likely to be possible only in a supportive and supervised environment. The ability to perform self-care tasks is often moderately or severely impaired.

In more severe cases there may be frequent periods when a person experiences little or no enjoyment of life. Severe impairment of communication may be evident. Their behaviour may be considerably influenced by symptoms and affect their judgement and decision-making.

Some service users may display quite extreme impairments of social functioning (e.g., symptoms interfere with family life to the extent that it disintegrates, and relationships with all others effectively come to an end). They may experience little or no enjoyment of life, keep a distance from others or open display open hostility. Impairment of occupational functioning may be absolute (e.g., cannot keep a job and stay in bed all day). Their behaviour may be considerably influenced by symptoms, their decision making capacity may be ineffective and their ability to perform self-care tasks may be extremely impaired. These individuals are likely to prove most challenging to rehabilitation services, and to require the greatest proportion of available resources.

MARK'S STORY

"Mark is in his early twenties and is currently housed and supported in a shared-house provided by a mental health NGO. This is his third housing placement, having had to be relocated on two occasions; the first, resulting from delusional beliefs about his housemate and, the second, from escalating antisocial and abusive behaviour towards neighbours.

Despite intermittent relapses in his condition and his continued alcohol and drug misuse, the NGO and its support workers have managed to keep him engaged in their program. Mark's family gave a history of gradually increasing social withdrawal from early adolescence leading to him being diagnosed by private psychiatrist with social anxiety and depression at aged 17. The following year, he had his first admission to hospital with a mental illness characterised by delusional belief about his family and command hallucinations.

Mark's progress has subsequently been punctuated by four further admissions, two of which have been under the Mental Health Act, each precipitated by his dropping out of treatment and discontinuing his medication. He has also experienced intermittent periods of homelessness. He has not had consistent, ongoing, coordinated treatment and support having had admissions to 3 different inpatient units and attended four separate community mental health services. He has been diagnosed as having schizophrenia with comorbid drug and alcohol abuse. The onset of his illness in adolescent brought his education to a premature close. At one stage, he enrolled in a bridging course with a view to gaining entry to university, but ended up dropping out of the program. He has never had a job and is now in receipt of the sickness allowance.

Mark's family remain supportive and maintain regular contact with him. However, he has not been able to live with them because of threatening behaviour which led to them having to take out a Violence Restraining Order. He has faced court on two charges of threat to injure, endanger or harm a person and one of criminal damage, resulting in a spent conviction and a community service order.

Mark's future is very uncertain. His relationship with community mental health services remains tenuous. From early in the course of his illness, he has been reluctant to accept treatment and periodically drops out of treatment and stops his medication. This has led, on two occasions to him being discharged to his general practitioner; this being despite the fact that he does not have one.

He continues to abuse drugs and alcohol, and it has proved extremely challenging trying to get him to attend drug and alcohol services. Without the continuing support of his current accommodation provider, he is at significant risk of homelessness. This would, undoubtedly, heighten the ever-present risk of him ending up in the forensic system. Despite his young age Mark's life is in a holding pattern with the risk of going downhill. The main focus of his mental health treatment is to ensure he stays on medication. It isn't clear where his life is heading and despite his earlier hopes to go to university, there is little being done to actively engage with him and provide the evidence-based treatments which could support him re-gain his life and begin his recovery journey."

(Chief Psychiatrist of Australia, 2020, p.11)

PREVALENCE

Mental health prevalence rates are not available for the adult population in Northern Ireland, highlighting the need for a population-level survey of a similar scope and range to the Northern Ireland Youth Wellbeing Study (Bunting et al., 2022). Data from England's Adult Psychiatric Morbidity Survey 2014 (McManus et al., 2016) gives us the next best estimate of prevalence of SMI that could help indicate levels of need for rehabilitation services.

England's Adult Psychiatric Morbidity Survey (APMS) 2014 (McManus et al., 2016) estimated a past year prevalence of 0.7% for people aged 16 years and over. Predisposing factors increase the risk of experiencing a psychotic episode including family history of schizophrenia, adverse childhood experiences, and stressful life events; social and economic factors can also contribute to risk including early exposure to alcohol and substance abuse, neighbourhood factors, deprivation and social capital/fragmentation (Halvorsrud et al., 2019; Kirkbride et al., 2012). Higher prevalence rates of psychosis have been identified in ethnic minorities, people who are economically inactive and people living alone (Halvorsrud et al., 2019; Public Health England, 2016).

The APMS estimated rates of 2.0% for bipolar disorder.

Almost two-thirds of adult acute inpatient bed days will be taken by service users experiencing psychosis (NHS, 2015) and discharge delays for inpatients with psychosis are associated with rehabilitation and/or accommodation needs not being adequately met (Crossley & Sweeney, 2020). While prevention and early intervention strategies can be extremely effective, a substantial proportion of service users will not have received the right care at the right time. It is estimated that around 25% of people with schizophrenia and related disorders will develop complex, long-term problems that may include (The Chief Psychiatrist of Western Australia, 2020):

- Poor engagement with services
- Non-acceptance of treatment and/or treatment resistance
- Severe pervasive negative symptoms
- Cognitive impairment
- Co-morbidities (including poor physical health, alcohol and substance use, intellectual disability)
- Severe difficulties with social and everyday functioning
- Vulnerability to self-neglect and exploitation
- Repeated hospitalisations and/or long hospital stays

- Homelessness

A small number of people within this group may also have additional treatment and care needs associated with what is often termed as 'challenging behaviour'; this group experience high risk of homelessness, co-morbid substance use and frequent contact with the criminal justice system, typically presenting with:

- Significantly impaired executive function
- Severely disorganised behaviour
- Poor impulse control
- Serious risk of self-harm and/or harm to others

There is no doubt that mental health systems are under pressure globally; a leading carer advocate in Western Australia stated that,

> *"maybe the problem is not with the person with 'challenging behaviour' but in the lack of fit between the complex needs of people with severe, enduring mental illness and the way that services are currently organised and delivered; that is, it is the 'services that are challenged' rather than the people that are 'challenging'."*
>
> Carer Advocate (The Chief Psychiatrist of Western Australia, 2020, p. 22)

The NICE guideline (2020) stipulates (where complex psychosis is present) when they should be offered mental health rehabilitation:

- "As soon as it is identified that the symptoms are treatment-resistant and the impairment is affecting day-to-day functioning
- Regardless of where they are living
- Should include people who have experienced recurrent admissions or extended stays in acute inpatient or psychiatric units locally or out of area
- Include those who live in 24-hour staffed accommodation where the placement is breaking down" (p. 7)

The guideline recommends that all local mental health care systems should include a defined pathway as part of their comprehensive service.

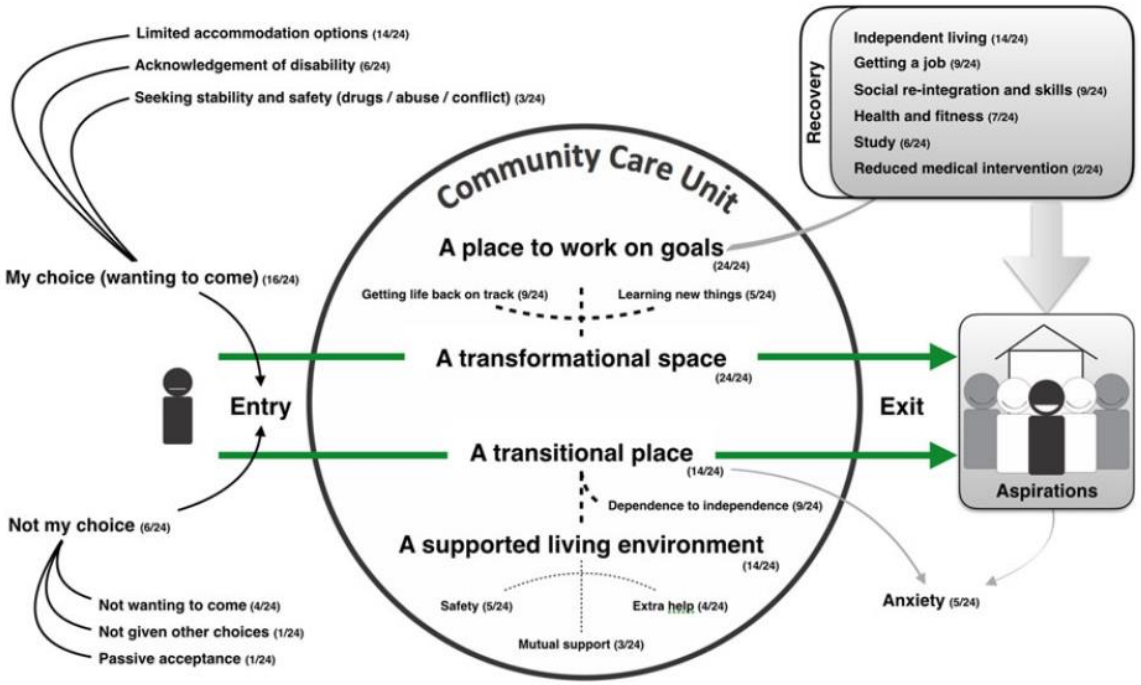
The ‘Getting it Right First Time’ (Kalidindi, 2022) review of mental health rehabilitation outlines that the ultimate aims of rehabilitation services should:

- Reduce acute admissions
- Reduce long stays on acute wards
- Provide a streamlined pathway to community support, including supported housing and care packages
- There is the right multidisciplinary skill set and appropriate staff levels in accommodation
- Reduce and cease the use of inappropriate out of provider placements (OPPs)
- Establish a census approach where everyone is known about and their needs are met
- Ensure patients and carers are included in the development of rehabilitation services
- Onward moves are planned with individuals and their families
- Work with system partners to develop a whole system rehabilitation pathway with sufficient operational support and proper funding of housing necessary for success

WHAT DO SERVICE USERS WANT?

To date, there has been little engagement with service users about their expectations and needs for rehabilitation. Parker et al. (2019) conducted interviews with consumers in three recovery-oriented community-based residential mental health rehabilitation units in Australia. Rehab was considered a ‘transformational’ space but was also understood as temporary and transitional. While some people were involved in the decision to move to the rehab unit, others had no part in the decision making process or felt pressure or threat from family members or clinicians to relocate. Experiencing housing insecurity was the most common motivator for entering rehab, seeking safety from family conflict or dysfunctional home environments was also a factor for some. In this study, the priority for participants entering rehab was to achieve housing security and not rehabilitation. Lack of goal alignment can be associated with service disengagement (Smith et al., 2013) and Parker et al. (2019) highlight the importance of co-creating models of service.

FIGURE 1. KEY CONCEPTS, THEMES AND THEIR INTER-RELATIONSHIPS IDENTIFIED IN EXPLORING CONSUMERS CONCEPTS OF A COMMUNITY-BASED RESIDENTIAL MENTAL HEALTH REHABILITATION UNIT.



(Parker et al., 2019, p. 413)

The 'Getting it Right First Time' (Kalidindi, 2022) report recommends that co-production should be at the heart of service development and monitoring.

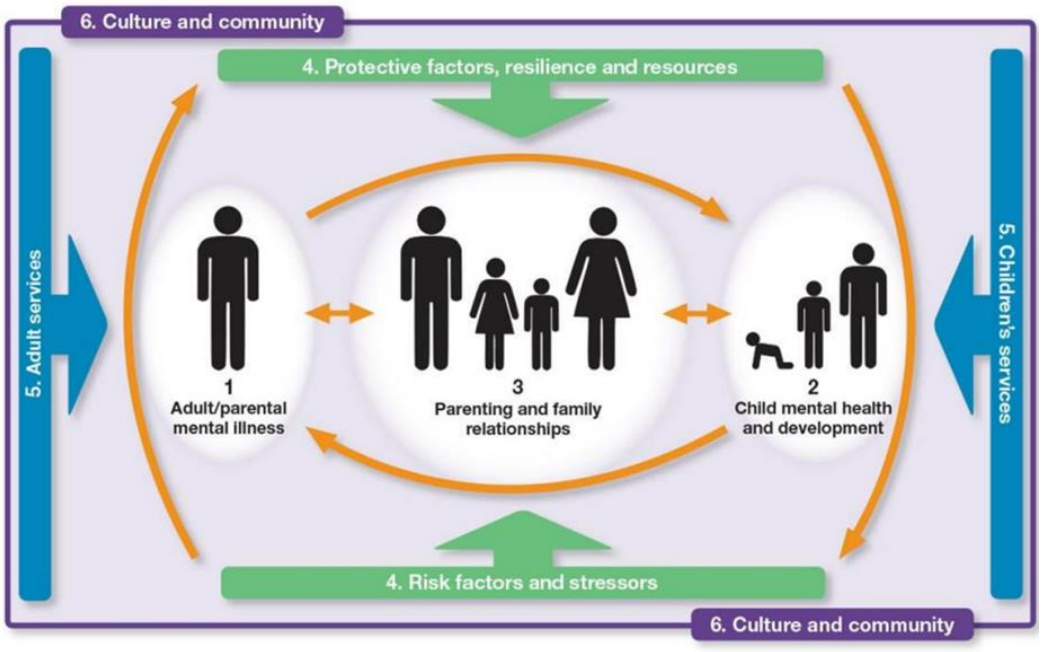
FAMILIES AND CARERS

Rebuilding bridges with family and carers is an important component of rehabilitation services (NICE, 2020). The NICE guidance recommends that conversations with service users should be encouraged about whether, and how, family members, carers and other services are involved in their care. Family members and carers also have rights and needs and the advice recommends that these are respected in conjunction with an individual's right to confidentiality. Consent to share information should be reviewed on a regular basis.

Many service users will also be parents themselves and systemic family-focused practice such as the *Family Model* (Falkov, 2012) can have wider benefits for the whole family unit. In 2017, Reupert, Price-Robertson and Maybery published a systematic review of current practice in parenting as a focus of recovery. While only three interventions (and only one

RCT) were included, limited available data suggests that recovery-oriented parenting interventions may have positive effects on parent, child and family outcomes.

FIGURE 2. THE FAMILY MODEL



Consideration of the design of services should also represent the voice of family members and carers who often carry substantial responsibility for the provision of support and care. This process should also acknowledge practical issues around maintaining income and welfare security when periods of health may fluctuate.

CONCEPTS OF REHABILITATION AND RECOVERY

Internationally, the move away from institutionalised care in the mid-1950s refocused efforts to promote mental health rehabilitation. The seminal research on the harmful impact of institutionalisation (Wing & Brown, 1970) highlighted the importance of people, even when

Even when people are unwell, it is important that they:
** Retain a sense of control of their lives*
** Maintain important relationships with friends and family*
** Stay involved in meaningful activity*
(Wing & Brown, 2017)

unwell, retaining a sense of control of their lives, maintaining important relationships with friends and family, and staying involved in meaningful activity.

Underpinning this approach, lies the recovery concept where people are supported to live their lives well (Anthony, 1993). As part of rehabilitation and recovery, a person is gradually encouraged to increase their engagement in a balanced range of different activities with varying complexity that can improve health and social functioning. This can include daily living activities such as self-care, cooking, housework, shopping and budgeting (Gee et al., 2017). This biopsychosocial model of rehabilitation may include employment, social contact, skills training, appropriate housing, contact with mental health services in order to develop and nurture skill deficits and lead to independent living (Kopelowicz et al., 2003).

Farkas et al. (1988) set out to measure the rehabilitation model, identifying key components:

a) a rehabilitation programme mission;
b) rehabilitation diagnosis including skill assessments, environmental factors, and personal resources;
c) rehabilitation treatment planning, and;
d) a rehabilitation intervention e.g. addressing skills deficits and establishing a timeline to achieve these.

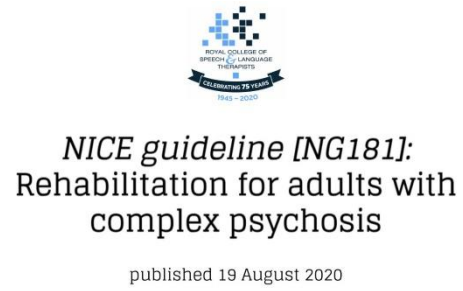
Coping with the stigma, discrimination and social exclusion can be challenging and alongside symptoms and/or medication that can impair intellectual and social skills can have a significant impact on wellbeing and living life well (Fischer, 2022). Rehabilitation programmes that focus on a strengths-based approach to build skills may be beneficial (Fischer, 2022) as they can in turn improve functional outcomes (Ventura et al., 2009). The importance of trauma-informed services is also an important consideration, and particularly for service users in Northern Ireland.

The *Clinical Framework for the Delivery of Rehabilitation Services* (Mental Health Adult Program, 2009) in Western Australia sets out the principles of rehabilitation and recovery.

TABLE 1. PRINCIPLES OF REHABILITATION AND RECOVERY

Optimism	That recovery is possible and always underpins individual care.
Empowerment	Working collaboratively with consumers to promote self-determination.
Strengths focus	Recognising people's capacity to change and focusing on their strengths.
Accessible	Rehabilitation services are provided in a timely manner, with "no wrong door" into the system.
Trauma informed	Recognising and responding to the impact of trauma and avoid re-traumatisation.
Collaborative partnerships	With consumers, their family/carers, staff and organisations providing services to help an individual to achieve their goals.
Person-centred	Fully involving each individual in their mental health care, recognising their unique needs, concerns and preferences.
Evidence-based	Interventions are provided to promote recovery and social inclusion.
Social Integration	Support full integration of people into their communities where they can realise their rights of citizenship.
Quality of life	Strive to help individuals improve the quality of all aspects of their lives, including social, occupational, educational, residential and financial.
Culturally & spiritually secure	Services encourage and support diversity.

THE NICE GUIDELINE



The National Institute for Health and Care Excellence (2020) has established a clear guideline for the *Rehabilitation for adults with complex psychosis* based on systematic reviews of the best available evidence and expert advice. It highlights the importance of referring people with complex psychosis for rehabilitation as early as possible if they are not responding to usual treatments and are struggling with their social and everyday functioning.

The guideline recommends that inpatient and community rehab services should be provided as close to home as possible within a recovery-oriented model to help people gain the confidence and skills for "successful community living". The physical health needs of this population are also highlighted recommending a comprehensive assessment on admission and on an annual basis thereafter.

Around 20% of people with schizophrenia and other psychoses have complex problems that impair functioning and are associated with repeated hospital admissions. Difficulties include

treatment resistant and severe symptoms and cognitive deficits that can affect motivation, organisational and social skills; many individuals will also experience related physical health, mental and neurodevelopmental problems. Longer-term specialist support will be required in order to deliver a tailored treatment programme, build skills and confidence with a view to supporting independent living where possible. Despite the guidance stipulating that services should be as close to home as possible, inadequate provision means that many people experience treatment delays, cannot access services in their community which contributes to prolonged inpatient stays that undermine the rehabilitation process (Killaspy et al., 2021).

The NICE (2020) guideline specifies overarching principles of rehabilitation. Rehab services should:

- "Be embedded in a local comprehensive mental healthcare service
- Provide a recovery-oriented approach that has a shared ethos and agreed goals, a sense of hope and optimism, and aims to reduce stigma
- Deliver individualised, person-centred care through collaboration and shared decision making with service users and their carers involved
- Be offered in the least restrictive environment and aim to help people progress from more intensive support to greater independence through the rehabilitation pathway
- Recognise that not everyone returns to the same level of independence they had before their illness and may require supported accommodation (such as residential care, supported housing, or floating outreach) in the long term." (pp. 7-8)

THE REHABILITATION PATHWAY

The guidelines state that a pathway should be offered on a continuum in a range of settings or service components that provide a programme of care dependent on a person's stage of recovery. This will involve a local needs assessment to ensure services are available as close to home as possible. This should include metrics on the number of people with complex psychosis who:

- Are currently placed out of area
- Have recurrent admissions or extended stays (e.g. longer than 60 days) in acute inpatient or psychiatric intensive care (close to home or out of area)
- Live in high support accommodation (24 hour support)

- Receiving forensic services care but need to continue their rehabilitation in a local setting when risks or behaviours have been sufficiently addressed (e.g. fire setting, physical or sexual aggression)
- Receiving care from early intervention psychosis services and developing problems anticipated to require rehab in the future
- Are physically frail and may need specialist support in their accommodation
- Are young adults moving from CAMHS to adult services

The guidance also recommends a range of support and interventions to offer, including social connections, employment, and life skills and the importance of considering families and carers and addressing physical health needs.

THE CHALLENGE FOR REHABILITATION SERVICES

Common challenges evident in mental health services are similar across different jurisdictions and pose difficulties and problems that rehabilitation services seek to support. These include:

- Growth in demand for community treatment services but funding and capacity has not increased to meet this increased demand;
- Around 10% of people use 90% of inpatient and 50% of emergency/community care;
- Those who require long-term, extended care are being treated in inpatient beds in the absence of alternative provision;
- Pressure on emergency departments as a gateway to mental health services means that hospital beds are more difficult to access;
- Step-up/step-down facilities are not accessible to those experiencing homelessness; and
- People are being cared for in the most intensive and expensive settings with poorer outcomes.

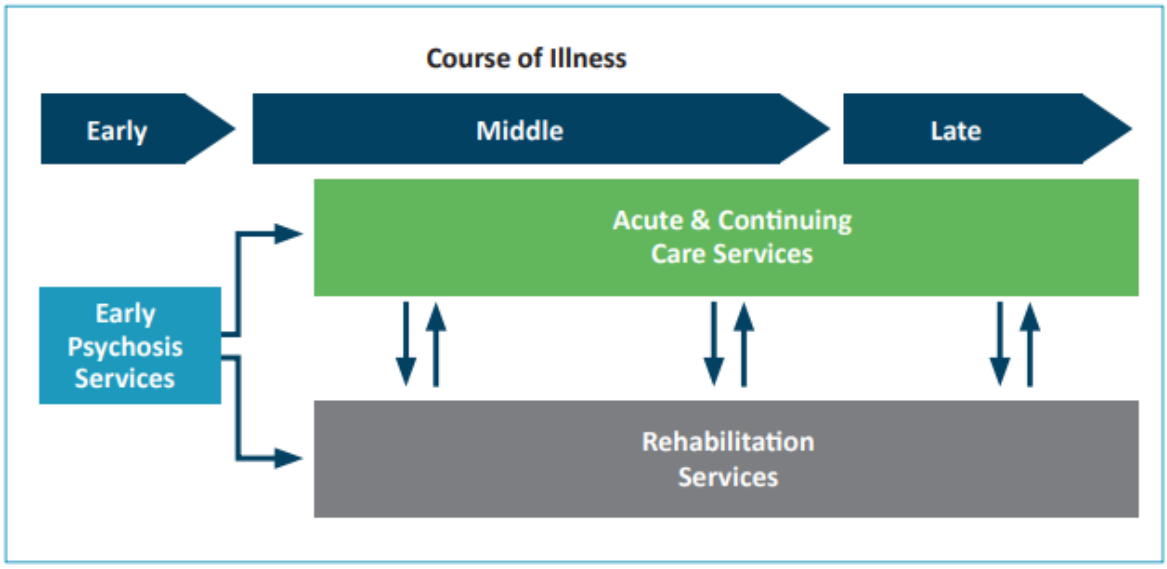
Systemic problems arising from an acute care model that responds to episodes of need has detracted from the provision of an integrated model of ongoing care for people with complex, long-term treatment and support needs (The Chief Psychiatrist of Western Australia, 2020). Those who do receive support from rehabilitation services are eight times more likely to

achieve and sustain community living compared to those receiving generic community mental health team services or inpatient rehab (Killaspy & Zis, 2013; Lavelle, 2011).

> Those who receive rehabilitation support are 8 times more likely to achieve and sustain community living compared to those in generic community mental health services.

Most people who develop psychosis will experience their first episode at an early age but too often referral to rehabilitation services is initiated after all other options have been exhausted (Power et al., 2006). Instead, there should be a close collaboration between rehab, early intervention/prevention and acute care services that identify clear pathways to avoid unhelpful delays to treatment. Services in Western Australia have incorporated the importance of rehab at early intervention in their care model (Figure 3).

FIGURE 3. EARLY AND CONTINUOUS ACCESS TO REHABILITATION AND RECOVERY SERVICES



(The Chief Psychiatrist of Western Australia, 2020, p. 32)

"Staff in rehabilitation services should aim to foster people's autonomy, help them take an active part in treatment decisions and support self-management"

NICE Guideline, 2020 (p. 20)

The Mental Capacity Act (Northern Ireland) 2016 has introduced a statutory duty, when there may be concerns about a person's ability to make a specific decision, to provide all practicable help and support to enable the person to make the decision. This new legal framework also enables greater flexibility when a person, even with support, lacks the capacity to make the relevant decision. Under traditional mental health law, the focus of compulsory intervention was in hospital settings but the new Act, which, when fully implemented, will replace the Mental Health (Northern Ireland) Order 1986 for everyone aged 16 and over, applies across all settings.

Rehabilitation services also need to be considered within the social and economic context of people's lives; experiencing homelessness, moving between inpatient and outpatient care and fluctuating levels of family and carer support may have an impact on social security benefits for service users and their wider family. This is particularly relevant when people are ready to live and/or work independently but may need ongoing support and help. A disability assessment process can be punitive and evidence has demonstrated its negative mental health impact using longitudinal data from England (Barr et al., 2016). With the introduction of the Work Capability Assessment, a significant increase in the number of self-reported mental health problems and suicides were observed. Using national administrative data, Barr et al. (2016) found that for every 10,000 reassessments, there were 2,700 cases of self-reported mental health problems ($p < 0.05$) and 6 additional suicides ($p < 0.01$). Rates were disproportionately higher in more deprived areas, further increasing mental health inequalities. The introduction of Universal Credit has also significantly increased psychological distress in the unemployed (Wickham et al., 2020).

Rehabilitation ultimately aims to support living independently as possible and ensuring access to income forms a fundamental part of this identity.

THE ORGANISATIONAL STRUCTURE OF REHABILITATION PROGRAMMES

While the components of rehabilitation programmes have been evaluated individually, no one specific intervention will suit every individual with SMI (Fischer, 2022) and it will be necessary to tailor programmes to meet individual needs. Implementation will also be affected by barriers and opportunities such as the support available within organisations, policy, relationships, culture and values, and knowledge of evidence-based practice (Aarons et al., 2009; Lau et al., 2015; Powell et al., 2017; Williams, 2015).

Integrated team-based treatment often serve people best (Fischer 2021). Staff profiles will vary across services but multidisciplinary teams with different and complementary skills that recognise the complexity of SMI will often be best placed to deliver shared treatment goals,

> *"…the client is a part of the treatment team, attends team meetings, and has an equal voice in the decision making by consensus approach."*
>
> Fischer 2021 (p.19)

Spaulding et al., (2003), identified eight rehabilitation decisions that treatment teams must regularly review in the rehabilitation process:

1. Decide whether rehabilitation is an appropriate approach for enhancing recovery.
2. Decide which domains of personal and social functioning need to be addressed, and which resources the team will need to address them.
3. Decide which assets and liabilities will be pertinent to rehabilitation and recovery.
4. Decide which problems should be identified and described as the foci of rehabilitation activities.
5. Decide which long- and short-term goals represent rehabilitation progress.
6. Decide which measures will provide reliable, objective, and quantitative indicators of progress toward goals.
7. Decide which interventions will best facilitate attainment of the goals.
8. Decide whether the outcomes of all the preceding decisions are producing progress, as expected, toward recovery.

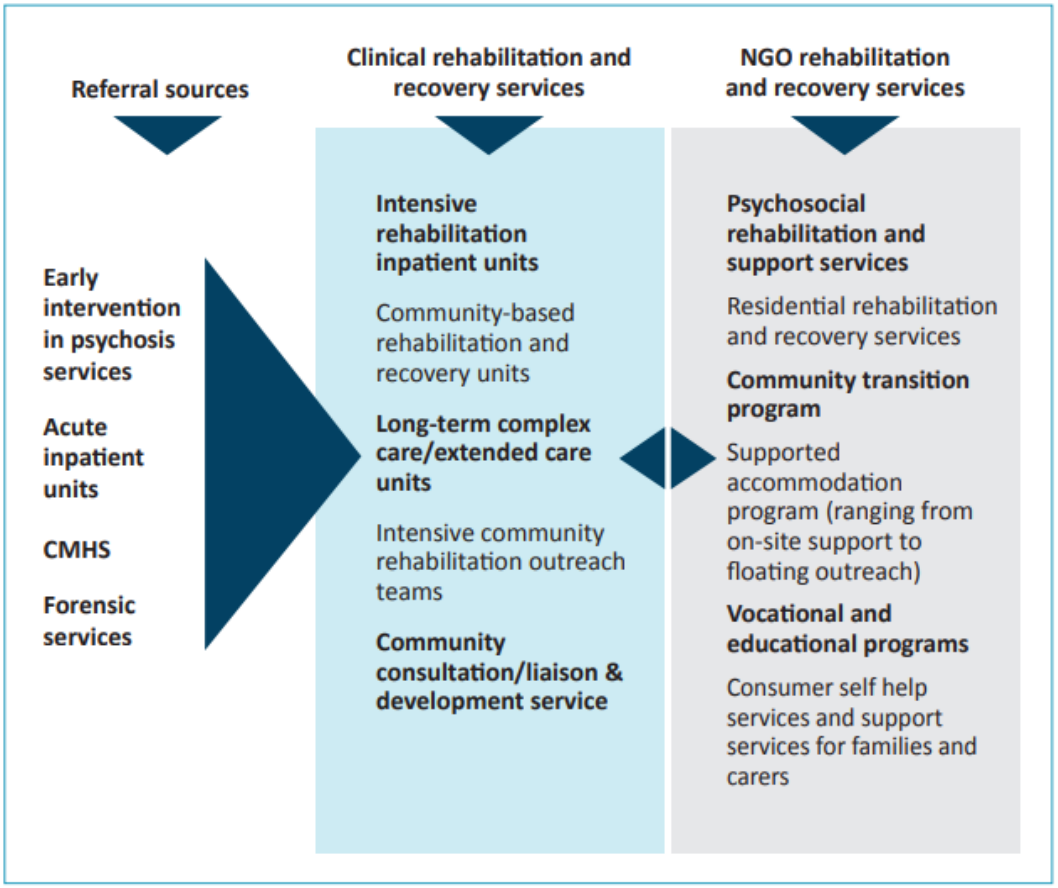
The Western Australia guidance suggests that there needs to be "a managed functional network of services across a wide spectrum of care" comprised of statutory and community/voluntary sector organisations offering:

- Inpatient and community rehabilitation units;

- Community rehabilitation teams;
- Psychosocial support and recovery services;
- Supported accommodation services;
- Supported occupation/work services;
- Peer support services;
- Advocacy services; and
- Liaison and consultation services working with primary and secondary care services.

The statutory services taking responsibility for the clinical rehabilitation component, with psychosocial support facilitated by the community/voluntary sector but pathways should be as 'seamless' as possible.

FIGURE 3. COMPONENTS OF AN INTEGRATED REHABILITATION AND RECOVERY SYSTEM NETWORK



(The Chief Psychiatrist of Western Australia, 2020, p. 36)

The NICE guideline offers detailed advice on what a rehabilitation programme should offer in order to "develop a culture that promotes activities to improve daily living skills" which is given equality priority to other interventions such as medication. These should include:

- Activities to develop and maintain daily living skills such as self-care, laundry, shopping, budgeting, using public transport, cooking and communicating (including digital technology)
- Support to engage in activities to develop or improve daily living skills:
    - Making an individual plan with each person that focuses on their needs and regularly reviews their goals
    - Provide enjoyable and motivational activities
    - Enable them to practise skills in risk-managed real life settings e.g. kitchens, laundry rooms, etc.
- Structured group activities (social, leisure, occupational) aimed at improved interpersonal skills – these can be peer-led or peer-supported and should be available daily in inpatient rehab services and at least weekly in community settings
- Offer the opportunity for people to be involved in a range of activities they enjoy, tailored to their ability and need
- And a range of educational and skill development opportunities e.g. through the Recovery College and mainstream adult education settings to help build confidence and qualifications if desired
- For those working towards mainstream employment, referral to support such as Individual Placement and Support should be considered and take into account/advise on impact of employment on benefits
- Some people won't be ready for employment – alternatives such as transitional employment schemes or volunteering may be appropriate
- Cognitive remediation programmes alongside vocational programmes may be appropriate
- Developing partnerships with other voluntary organisations/employment providers may help increase opportunities for people

Maintaining social and family networks are also considered important whilst acknowledging that relationships may have been difficult or become estranged over the period of ill health.

INPATIENT SETTINGS

Inevitably care, some of the time, may need to be provided in inpatient settings to protect individuals from harm but ideally this should be for as short as time as possible. Alternative approaches to providing intense support (which arguably can be more resource intensive than an acute hospital admission) have been trialled in community settings in Australia.

CASE STUDY: PREVENTION AND RECOVERY CARE (PARC)

The PARC model has been implemented in Australia as a community-based residential alternative to hospitalisation, offering short-term subacute treatment and care (usually 7-28 days) in a step-care model (Harvey et al., 2019). PARC services involve a partnership between community-managed mental health support services and clinical mental health service providers and focus on integrating clinical mental health care with intensive recovery-focused psychosocial input (Heyeres et al., 2018). Strengths of the service include their recovery-focused practice that identifies and addresses the basic needs of service users (Heyeres et al., 2018). Each resident collaborates on a formal Individual Recovery Plan (see Table 2).

TABLE 2. CHARACTERISTICS OF AN INDIVIDUAL RECOVERY PLAN

Gender, M/F	Length of stay (days)	Individual recovery goals	Strategies to achieve the goals	Person who filled IRP
F	14	Obtain optimal health	Eating well, preparation of meals, look for recipes	Self/staff
		Get back to work	Manage stress and anxiety; less stress management techniques; see a psychologist	Self/staff
Not reported	14	Social interaction	Join groups; socialize with co-residents and staff	Self/staff
M	11	Find accommodation	Visit housing hub; apply for accommodation	Self
		Medications	Medication review	Staff
F	15	Cooking	Go to the kitchen and assist	Self/staff
		Physical health	Set plan for the day; go for a walk around lunchtime	Self/staff
		Learn about nutrition	Google things; worker to download sheets	Self/staff
F	14	Find suitable accommodation	Approach real estate agents	Self/staff
		Sort out belongings, personal comforts, etc.	Shopping	Self/staff
		Counseling	Get domestic violence counseling	Self/staff
		Contact with children	Receive phone calls; send mail	Staff
M	28	Obtain ID and access money	Ring bank; Medicare; health care	Self/staff
		Obtain accommodation	Real estate, shared accommodation	Self/staff
		Dentist	Ring to make appointment	Self/staff
M	14	Social interaction	Participate in some of the group	Self/staff
		Visits from family, wife, grandson	Ask to use office phone; arrange visits	Self/staff
F	13	Social interaction and establish meaningful relationships	Join hobby groups and Prevention And Recovery Care (PARC) outings	Self/family
		Medication stability	Make use of support systems and people	Self/staff
F	14	Find suitable accommodation	Fill out rental application; search real estate.com	Self
		Get furniture or furnished unit	Contact Salvo and Lifeline	Self/staff
		Seek regular access to children	Set regular times and maintain phone calls.	Self
M	21	Get teeth fixed	Make dentist appointment	Staff
		Finances	Get on disability pension	Self/staff
		Exit into accommodation	Contact homeless hub; register with housing; moving in with brother	Self/staff
M	22	Give up all bad things	Be rehabilitated; cut off all negative people; getting involved in …?	Self/staff/family
		Get a job	Got to NEATO (employment agency) and speak to neighbors	Self
		Get life organized—study	Study next year a certificate in mental health work and support work	Self/staff
M	32	Improve mental health	Getting sorted out with Clozaril; interact with PARC staff	Self/staff/medica

(Heyeres et al., 2018, p. 7)

Managing risk can be a concern for service users, family members and staff. Although serving a different population, Springbank Ward is a specialist inpatient unit for women with Emotionally Unstable Personality Disorder in Cambridge, and manages many similar risks to patients with psychosis (Yue et al., 2023). The scheme ethos supports individuals to live as autonomously as possible, with minimal restrictions and allows for patients to leave the ward temporarily (e.g. to go to the supermarket, social contact). The unit has replaced a compulsory formal risk assessment for individuals leaving the ward with an optional 1:1 conversation with a staff member before they leave the premises and evaluated the impact this has had incident in frequency and degree of harm pre- and post-introduction of the new protocol. Patient and staff took part in qualitative interviews. The new approach was generally perceived to increase patient ownership of their recovery while allowing staff to

holistically assess and manage risk. Patient satisfaction has improved with evidence too that patient safety has not been compromised.

Treatment in therapeutic communities historically used to support people with a personality disorder diagnosis has also demonstrated effectiveness for other long-term mental health problems including psychosis (Bruschetta & Barone, 2016; Gale et al., 2013). In Northern Ireland, Threshold offer 40 places in two residential therapeutic communities.

PSYCHOLOGICAL INTERVENTIONS

Of the psychological therapies available, there appears to be good evidence for the provision of Cognitive Behaviour for Psychosis (CBTp). CBTp is included in the NICE guideline (2020) and appears to be effective in improving symptoms such as delusions, hallucinations as well as comorbidities such as anxiety and depression and relapse. There is one review and meta-analysis of studies (Burns et al., 2014) that focus on CBTp delivered to those who had poor response to medication (mostly likely to be those in a rehabilitation setting). The review concluded that this is a treatment that should be offered to those who continue to exhibit symptoms of psychosis despite adequate trials of medication.

NICE (2020) also acknowledge the importance of training all rehabilitation staff in psychological approaches such as motivational interviewing, positive behaviour support, behavioural activation and trauma-informed care.

MEDICATION

There is good evidence for the effectiveness of anti-psychotic medication at all stages of psychotic disorders. Zhu et al. (2017) report a systematic review of 3,156 participants and reported that on the average, 81.3%/51.9% of the first-episode patients reached an at least 20%/50% symptom reduction from baseline, respectively.

This contrasts with a meta-analysis of 29,087 patients mainly for acute relapses in people with enduring problems where only 53%/23% of participants reached a 20%/50% symptom reduction from baseline respectively (Leucht et al., 2017). In addition, maintenance drug treatment reduces relapse risk from approximately 64% to 27% (Leucht et al., 2012).

Anti-psychotics are effective against positive symptoms in ~70% of patients (non-treatment resistant; for review, see Nucifora Jr et al., 2019) and the remaining treatment resistant 30% will experience no therapeutic benefits from first-line antipsychotics, creating a reliance on clozapine which can have significant side effects and lifelong monitoring (Spark et al., 2022). Antipsychotics also do not significantly improve negative or cognitive symptoms associated with poor functional outcomes (Girgis et al., 2019; Milev et al., 2005; Reichenberg et al., 2014) and their long-term use has been questioned (Harrow et al., 2022). New and emerging treatments are under development (Lobo et al., 2022).

CASE STUDY: MEDICATION-FREE TREATMENT IN NORWAY

In 2011, service user organisations in Norway successfully lobbied the Government for medication-free services within the mental health care system. Partly as a response to the debate about the effectiveness and adverse effects of antipsychotics, and a rights-based approach to care, the Norwegian government adopted measures to allocate additional funding and a legal framework to reduce coercive treatment and introduce choice for medication-free treatment within a safe setting. Alternatives to medication-free treatment is provided in psychiatric clinics with a range of different health professional backgrounds and offers a larger range of psychosocial recovery-oriented treatment options including peer support supported employment and illness self-management.

Oedegaard and colleagues (2022) conducted qualitative research with health professionals in Bergen and identified challenges implementing this new policy. Participants described service users with psychosis as resource intensive, and those who were medication-free often required more attention than those on medication. Staff were concerned about relapses, as well as the time required when this happened, social and family networks were small or non-existent which in turn demanded more time from staff to provide support. Shared decision-making and spending time considering patient preferences was perceived to be important in the treatment process however the patient/clinician alliance was sometimes fragile. Being able to offer medication-free treatment has increased the available treatment options but in practice has resulted in conflicting goals.

ASSERTIVE COMMUNITY TREATMENT

Assertive community treatment (ACT) offers specialist assertive outreach to people with severe mental health problems. It was developed in the USA to help individuals struggling to stay out of hospital to live more successfully in the community by providing more intensive support by placing a greater emphasis on social functioning and quality of life rather than focusing on symptoms. The multidisciplinary teams provide intensive support in obtaining material essentials such as food and shelter. Teams require a broad skills mix, and require competence across a wide range of areas. Teams should include a psychiatrist or have regular access to one. Ideal individual case-loads are 10–12 patients.

Research evidence from Northern Ireland on the effectiveness of ACT showed statistically significant reductions in inpatient use compared to Community Mental Health Team (CMHT) support (Davidson & Campbell, 2007; Davidson et al., 2009). Other important positive outcomes were observed, however these were not statistically significant due to the small sample size.

Flexible Assertive Community Treatment (FACT) is a Dutch community-based multidisciplinary treatment model for individuals with SMI. It offers more intensive support when needed using the principles of ACT. Once a patient has stabilised, the level of care is reduced back to standard individual case management and has been widely implemented despite the lack of evidence for its effectiveness. Recent research suggests that it appears to offer a safe and more intensive service compared to ACT or CMHT but may not reduce inpatient days (Nielsen et al., 2021). The evidence indicates that it may be a better model than standard CMHT care for people with a history of psychosis (Sood et al., 2017) and offers greater insight and understanding of individuals by providing help and support on different aspects of people's lives which in turn helps to promote a recovery approach by creating "opportunities for enjoyable and everyday experiences" (Brekke et al., 2021, p. 4) .

"They don't mind doing many hours of hard work as long as I'm OK. They work for the person sitting in front of them, no matter how hard it is or how many hours it takes. And they choose what they believe is best for me, even if it means more work for them."

"I tend to isolate myself…So it feels really good to go for a walk, talk to someone. That combination really gives me a lot. (…) I can get really afraid of going to the grocery store, but after going for a walk and talking, I go to the shop without any problem."

FACT service users in Brekke et al. (2021)

INTENSIVE CASE MANAGEMENT

Intensive Case Management (ICM) has a lot in common with community rehabilitation teams – it consists of the provision of rehabilitation and social support needs of the service user, over an indefinite period of time, by a team of people who have a fairly small group of patient (fewer than 20). Dieterich (2017) published a review of ICM. The authors conclude that in trials in Australia, Canada, China, Europe, and the USA, when ICM was compared to standard care, those in the ICM group were more likely to stay with the service, have improved general functioning, get a job, have a home, and have shorter stays in hospital (especially when they had had very long stays in hospital previously). They do note however the quality of many studies is low but conclude ICM is important to people with severe mental illnesses particularly in the subgroup of those with a high level of hospitalisation (about four days per month in past two years).

HOUSING

Providing a safe and stable home environment is an important element of both recovery and rehabilitation and there have been a variety of approaches that recognise the central importance of providing high quality supported accommodation for individuals with SMI who are often at an increased risk of experiencing homelessness. Housing problems often contribute to relapse and admission to hospital and the lack of suitable accommodation frequently factors in delayed discharges (The Chief Psychiatrist of Western Australia, 2020).

HOUSING FIRST

The Housing First model was originally developed in North America (Chez-Soi in Canada) to address the high rate of homelessness among people with SMI, many of whom have co-occurring substance use problems (Killapsy, 2022). It operates via rent supplements and the provision of clinical support to help people find, move into, and sustain tenancies while helping them to address their mental health needs using a recovery-based approach. Robust research evidence has demonstrated its effectiveness including qualitative evaluations that report outcomes that reach beyond achieving housing stability including the role that housing security offers in building adequate resources, routines and establishing or re-establishing identity. The research evidence also highlights how complex and difficult these negative cycles can be to break and may "only be able to 'cushion' downward trajectories." (Killaspy et al., 2022, p. 103).

(https://www.calgaryhomeless.com/discover-learn/our-approach/housing-first-people-first/)

At Home/Chez Soi (Mental Health Commission of Canada, 2014) provides immediate access to permanent housing with community-based supports. Two thousand participants were provided with an apartment, a rent supplement and one of two types of supportive services (Assertive Community Treatment) and those with moderate needs received Intensive Case Management (ICM). Across the 5 Canadian cities where the scheme was piloted, Housing First lowered rates of homelessness compared to treatment as usual. Over the two-year period following study entry, every $10 invested in HF services resulted in average savings of $21.72. Most participants were actively engaged in support and treatment services and there was a general move away from crisis/institutional services to community-based. People with previously unmet needs were able to access appropriate support.

CASE STUDY: 50 LIVES 50 HOMES

50 Lives 50 Homes is a Housing First scheme based in Perth, Australia. In a 6-year evaluation, 427 individuals have been supported by the programme (Vallesi et al., 2020). Eligibility for support is based on the Vulnerability Index-Service Prioritisation Decision Assistance Tool (VI-SPDAT) score which assesses current vulnerability of people sleeping rough, their future housing instability and risk of premature mortality. The Housing First ethos is to find accommodation and provide wrap-around support at the same time to achieve not only secure and stable housing but to engage people in meaningful activities and improve quality of life. Of those in the scheme, 83% had a serious health issue, mental health issue and problematic substance use, 26% had schizophrenia. Before joining the programme, estimated hospital use costs in the three years before starting was AUS$19.9k per person per year. Matched data for 97 people saw emergency department presentations and inpatient admission costs reduced by $10.1k per person per year. Significant reductions in criminal justice and risk of victimisation were also observed. 81% of all housed individuals retained their tenancy one year after being housed.

FIGURE 4. KEY ELEMENTS OF THE 50 LIVES HOUSING FIRST APPROACH

(Vallesi et al., 2020)

HOME AGAIN

Based on individual choice, the Home Again model provides housing and community-based rehab services within a continuum of care model using a single-stage transitional housing to independent housing model (Padmakar et al., 2020). Each house, with 3-5 occupants who are clinically stable and require community care, is managed by a trained onsite personal assistant (social worker) who lives or visits them to assist with tailored individual needs. Supervision is provided by a multidisciplinary team comprised of a programme manager, case manager and a nurse. Residents can meet self-care needs such as cooking, housekeeping and shopping and will be engaged in flexible employment depending on their abilities. Should independence increase and supervision is no longer required, individuals will move to 'Independent Living' while still receiving outpatient clinical and social care from the same multidisciplinary team. This 'Banyan' home model was developed by a mental health service provider in Tamil Nadu in India.

CLUSTERED GROUP HOMES

Clustered group homes offer psychiatric care in a quasi-institutional setting for those with moderate-severe mental health problems requiring inpatient care. Typically, eight cottages, housing 6-8 residents each allow around 50 individuals to live in a community setting. Multidisciplinary teams provide support and those who gain independent living skills will transfer to Housing First or Home Again settings (Gowda & Isaac, 2022).

Employment may offer the fastest and most effective route to rehabilitation and for those who are able to sustain employment, it will likely be in low paid and low status jobs. The provision of good employment (including supported employment) could make a significant difference to people's lives. Richard Warner, an anthropologist and psychiatrist, has argued for 30 years that the key to improving recovery rates for treatment resistant disorders is the provision of employment opportunities (Warner, 2009, 2013). He argues that recovery rates have been better in more traditional non-westernised societies where there is less stigma around mental health problems and where everyone has a socially useful role, no matter their mental health state. Maslow also recognises the value of work in creating a sense of safety and building self-esteem.

https://www.makingbusinessmatter.co.uk/self-esteem/

Work plays a significant role in most people's lives and choosing, getting and keeping a job can present additional challenges for people with severe and enduring mental health problems (Massel et al., 1990). Mental health problems are associated with high unemployment, limited job opportunities and experiences of work-related discrimination, stigma and prejudice (Axiotidou & Papakonstantinou, 2021). The onset of most disorders will occur by age 25 often significantly disrupting normal vocational pathways (Caruana et al., 2019). Employment rates continue to be low with significant costs associated with lost productivity (Aguey-Zinsou et al., 2022); RCT data confirms the cost-utility and cost-effectiveness of employment on mental health rehabilitation based on both quality-adjusted life years and hours in employment (Christensen et al., 2020) and other economic data has demonstrated reductions in inpatient service use (Evensen et al., 2019). Many people experiencing severe and enduring mental health problems express a desire to work, stakeholders have highlighted both the benefits and barriers to work expressing the need for employment support services to be expanded (Dalto, 2021).

Importantly, work and employment can offer better outcomes and can independently predict recovery for severe mental illness (Abidin et al., 2021). Meaningful employment can improve self-esteem, increase personal empowerment and social contact, social identity and status (Marwaha 2014). It can also help reduce clinical symptoms, increase wellbeing and contribute to higher levels of functioning (Dunn 2008; Siu 2010). Bladzinski et al.'s (2019) recent study of insight and treatment adherence in participants with chronic schizophrenia compared those in employment with a control group who were unemployed. The employed group had significantly higher levels of insight, lower symptom severity and better general and social functioning compared to the unemployed group.

There is a range of supported employment and vocational options to help people back into rewarding employment that in turn can contribute to recovery, many of which provide support for cognitive and communication skills which can commonly present in the psychopathology of long-term mental health problems.

While meaningful employment may contribute to and promote mental, financial, and social wellbeing, different mental health problems may impact individuals in different ways and intervention approaches can be tailored to help address specific symptoms that may affect one's ability to undertake tasks.

Psychosis can lead to disruption to education, employment and career development (Waghorn & Lloyd, 2005; Waghorn et al., 2018) and for young people experiencing mental health problems, psychosis can delay the journey into adulthood and financial

independence, workforce preparation and entry and career development (Arnett et al., 2014). Being employed is rated highly as a self-reported life goal for emerging adults experiencing first episode psychosis (Ramsay et al., 2011) and contributes to the recovery process (Drake & Whitley, 2014) via opportunities to establish social connections, feeling important and establishing financial independence (Torres Stone et al., 2018) and feeling optimistic about the future, developing a sense of meaning, purpose and contributing to society (Liljeholm & Bejerholm, 2020).

Individuals with schizophrenia face the greatest challenges in, "finding, keeping and maintaining a job due to various barriers such as stigma, low self-esteem, social and cognitive incompetence and poor social support" (Abidin et al., 2021, p. 605) with only 10-39% obtain and sustain employment (Jonnsdottir & Waghorn, 2015). Frequent cognitive impairments present as a major obstacle for seeking and securing employment (Cervello et al., 2021). Employment rates in schizophrenia are extremely low (Bechi et al., 2019). Carmona and colleagues (2019) scoped the literature on employment support needs of people with schizophrenia, thematic analysis identified four support needs: developing skills; vocational intervention; support and encouragement; and a supportive work environment.

SUPPORTED EMPLOYMENT, INDIVIDUAL PLACEMENT AND SUPPORT (IPS) OR THE 'PLACE-TRAIN' APPROACH

IPS was developed to support people with serious mental illness (SMI) to achieve competitive employment to aid recovery and is based on eight based principles (Becker & Drake, 2003):

TABLE 3. THE EIGHT BASIC PRINCIPLES OF IPS (Becker & Drake, 2003)

Principle		Explanation
1.	Goal of competitive employment	• Obtaining and sustaining competitive employment • In jobs that anyone can apply for • That pays at least minimum wage/equal pay to co-workers with similar duties • And have no artificial time limits imposed by the social service agency
2.	Zero exclusion & eligibility based on client choice	People aren't excluded on basis of: • Readiness • Diagnoses • Symptoms • Substance use history • Psychiatric hospitalisations • Homelessness • Level of disability or • Legal system involvement
3.	Attention to client preferences	Programme services are based on each job seeker's preferences and choices rather than the employment specialist's and supervisor's judgements
4.	Rapid job search	• A rapid job search approach to help job seeker's to obtain jobs rather than assessments, training and counselling • The first face-to-face contact with employers occurs within 30 days
5.	Integration with mental health treatment	• Programmes are integrated with mental health treatment teams • Employment specialists are attached to 1 or 2 mental health treatment teams to discuss caseloads
6.	Personalised benefits counselling	Employment specialists help obtain personalised, understandable, and accurate information about their social security and other entitlements.
7.	Targeted job development	Employment specialists systematically visit employers who are selected on job seeker's preferences to learn about their business needs and hiring preferences.
8.	Individualised, long-term support	• Job supports are individualised and continue for as long as each worker wants and needs support. • Employment specialists have face-to-face contact at least monthly.

IPS may help person-centred and recovery-oriented care approaches (Dawson et al., 2021).

A recent meta-analysis of randomised controlled trials for IPS for any mental health diagnosis concluded that it was effective in improving employment outcomes but was relatively more effective for service users with SMIs, schizophrenia spectrum disorders and low symptom severity (de Winter et al., 2022). Quality of life may also significantly improve (Areberg & Bejerholm, 2013).

Dawson et al. (2021) conducted interviews with service users, health professionals and employment specialists about their perceptions and experiences of an IPS programme and much like the evidence from the Occupational Therapy Workshops, the opportunity that a supportive environment created and the opportunities to build relationships was considered extremely positive.

IPS will not be suitable for everyone, and augmented versions of IPS have been designed to offer additional supports beyond standard IPS and offering cognitive and psychosocial skills training in addition to standard IPS may be more effective (Dewa et al., 2018).

INTEGRATED SUPPORTED EMPLOYMENT (ISE)

ISE is another vocational rehabilitation intervention which includes work-related social skills training is integrated with Individual Placement and Support (IPS) and has demonstrated greater long-term effectiveness including higher employment rates, longer job tenures and improved non-vocational outcomes such as psychiatric symptoms, social functioning (Au et al., 2015; Torrey et al., 2000; Tsang & Pearson, 2001; Tsang et al., 2009; Tsang et al., 2010; Zhang et al., 2017) and wellbeing however the majority of these studies have been conducted in China.

ENHANCED EMPLOYMENT SUPPORT SERVICES

Cognitive impairment may hamper employment opportunities and the support of employment services. Burns and Erickson (2022) report on a recent randomised controlled trial of adding cognitive remediation to employment support services across 14 mental health centres in Canada. Recruitment was targeted at clients that had not found work after 3 months of IPS and individuals were randomly assigned to a 12-week programme of *Thinking Skills for Work* which includes computerised cognitive exercises and coping strategies for managing cognitive challenges or IPS as usual. The addition of Cognitive Remediation Training (CRT) significantly increased employment at 3-month and 9-month follow up. Similar results were achieved in eight centres in a French trial (Cervello et al., 2021), participants were recruited into 'sheltered employment' and received either cognitive remediation for schizophrenia (CRS) or TAU, the individualised CRS programme led to a better rate of work attendance compared to TAU. In a Danish RCT, follow-up extended to 18 months post intervention with the primary outcome of hours in competitive employment or education. Secondary outcomes

included time to employment/education, cognitive and social functioning, self-esteem and self-efficacy. Most participants were diagnosed with schizophrenia spectrum disorder. Statistically significant differences were observed, with the IPSE group working/studying a mean of 488.1 hours compared with 340.8 hours in the TAU control group. Trials of supported employment have also shown promising outcomes within primary care settings (Davis et al., 2022).

VOCATIONAL REHABILITATION

Vocational rehabilitation uses a more conventional approach of vocational assessment and pre-vocational training within a supported environment in a variety of different work settings and groups; also referred to as the 'train-and-place approach' (Falkum et al., 2017; Kopelowicz et al., 2006). The Vocational Development Centre model – people employed in the VDC (Cichocki et al., 2019) achieved better outcomes in important areas including quality of life such as family relationships, overall health and self-esteem. Non-vocational outcomes also improved in other studies (Falkum et al., 2017; Kopelowicz et al., 2006).

OCCUPATIONAL THERAPY WORKSHOPS

The use of Occupational Therapy Workshops (OTWs) in Poland has been evaluated. Typically operating 7 hours per day, an interdisciplinary staff team support individuals with a range of activities in groups of around 30 people. Workshops, while similar to community-based support centres, concentrate on providing career advocacy and general help to return to employment. Bronowski et al. (2017) found that the social environment in OTWs was 'considerably richer and varied' (p. 150) compared to community-based settings and stronger feelings of "unconditional support" helped build social networks and tackle stigma and shame associated with mental illness. Interpersonal relationships were considerably stronger in the OTWs that reached beyond-family social support, were significantly more numerous compared to the main source of support in community settings which was the therapeutic relationship. Clearly, employment and vocational training create other valuable opportunities beyond work skills.

VIRTUAL REALITY-BASED VOCATIONAL TRAINING

The growing use of virtual reality in pre-vocational skills training is evident across many settings including support for mental health service users. Improvements in non-vocational outcomes have been observed in cognitive functioning (Tsang & Man, 2013) and job interview skills (Smith et al., 2015).

VOCATIONAL PEER SUPPORT

Having the right kind of social support may promote better employment experiences and peer support programmes have demonstrated some success in co-delivering vocational rehabilitation where resources have been limited. Cheng and Yen (2021) positively evaluated a programme in Taiwan; six peers were trained and co-led and assisted with workplace problem-solving groups and care skills training, objective and subjective social support.

Qualitative evidence also emphasises the importance of social support to facilitate re-entry into the workforce; Choi et al. (2020) synthesised evidence from eight qualitative studies of job experiences of people with schizophrenia. The authors recommend targeted nursing interventions to provide appropriate social support and foster job adaptations.

PSYCHOSOCIAL INTERVENTIONS

Severe mental health problems and the stigma associated with them have the potential to create severe disruption to the people's daily lives and functioning. Unemployment rates are extremely high ranging from 65% to 93% (Marwaha et al., 2007). Difficulties can be common with other activities such as education, unpaid employment (volunteering) and socialising (Eklund et al., 2009). Loneliness is common (McCormick et al., 2022). Therefore, interventions aimed at increasing social and community participation and reintegration are an essential component of a rehabilitation and recovery process.

Effective ways to promote positive and healthy behaviours may involve behaviour modification interventions to help increase prosocial behaviour, build new skills and promote appropriate behaviours and habits. For many years, token economies using positive non-monetary reinforcement were used to encourage individual behaviour change but proved more difficult to implement on an organisation-wide level (Fischer, 2022). An alternative approach has been to offer an adaptable social milieu programme that creates opportunities to address challenges faced by service users and one that is co-produced with both staff and consumers to help guarantee buy in (Spaulding et al., 2003). Programmes should also address stigma, self-concept and self-esteem, which can all present barriers to social integration. Psychoeducation to improve understanding of serious mental illness, recovery and a strengths-based approach can improve outcomes (Corrigan et al., 2014).

Providing services within institutionalised environments can bring its own risks to developing independent skills given some of the restrictions in treatment settings, but ensuring consumer feedback is welcomed may help build service user autonomy (Fischer, 2022).

THE CLUBHOUSE MODEL

One notable model in the literature is the clubhouse model and several effectiveness reviews have now been published (Battin et al., 2016; McKay et al., 2018; Yan et al., 2021).

Clubhouse International
Creating Community: Changing the World of Mental Health

Originating in Fountain House in New York City in 1948, Clubhouse International now has 326 Clubhouses in 33 countries affiliated with it (McKay et al., 2018). There is an accreditation process for organisations to become an affiliate. Affiliated Clubhouse operate on several characteristics:

- They are co-managed by members and staff. Each member participates in the running of the clubhouse in a system of consensus-based decision making and forums are organised in which member and staff discuss issues related to management of the Clubhouse (e.g. governance) and organisation of activities.
- They style themselves as a community and peer helping (structured support of members by members);
- They are non-medicalised organisations (no mental health professionals are on the staff and no interventions (medical or psychological) are carried out on site.

Clubhouses aim to provide members with severe mental health problems four key elements of community participation:

- A place to go
- Meaningful work
- Meaning relationships
- A place to meet

Clubhouse program activities can vary between clubhouses and are member driven. However, typically they include a range of activities and support including social events (e.g. meals, day trips etc.), and help with accessing education, employment and housing. Of course, rather than just receive these services members come together into work units (that include members and staff working side by side) to achieve common goals (e.g. provision of a meal to other members or organisation of a recreational activity). The Clubhouse operates

what it terms a 'work ordered day'. This day parallels the usual business hours of the community (e.g. 9.00am – 5.00pm).

https://www.mosaic-clubhouse.org/News_from_the_clubhouse

Vocational rehabilitation is a core part of the Clubhouse model. Employment services provided include transitional, supported and/or independent employment. Often, the Clubhouse nurtures a relationship with a particular employer and have a transitional position with that employer that 'belongs' to the Clubhouse and various members fill this position during the course of any year. This obviously has benefits to the employer and to the member placed within the role. The member learns work skills and employer is assured the job is filled by a member of the Clubhouse at all times. Also common are supported employment schemes. This refers to schemes in which the Clubhouse provides support to the member at the member's requests to help with a particular job and help maintaining that role.

As already outlined, several recent reviews of the effectiveness of the Clubhouse model have now been published (Battin et al., 2016; McKay et al., 2018; Yan et al., 2021).

Battin et al., (2016) identified 15 studies that focus on the effectiveness of Clubhouses. They note that the evidence is promising but they do describe a variety of methodological problems with studies (e.g. lack of randomisation, lack of comparison groups and absence of longitudinal data). As a result, the authors describe evidence for the effectiveness of clubhouses in the domains of Quality of Life, employment and rate of hospitalisation. They suggest the low levels of evidence in the domains of symptomatology and functioning.

McKay et al. (2018) was somewhat more hopeful regarding the evidence of effectiveness of this model. They again concluded after reviewing 52 studies that Clubhouses are promising practice, but more rigor is need in their evaluation. The Randomised Controlled Trials they identified support the efficacy of the Clubhouse model in promoting employment, reducing

hospitalisations and improving quality of life. The further report that quasi-experimental and observational studies suggest efficiency on the educational and social domains.

A third, more recent, review (Yan et al., 2021) focused on the Clubhouse model in China and after reviewing 7 RCTs, concluded that the model had a significant effect on symptoms (especially negative symptoms like motivation and energy levels) and showed the model's importance in promoting social recovery, reducing family stress and burden and improving quality of life.

The Clubhouse model is a promising one and should be encouraged within Northern Ireland. The evidence, while encouraging may not justify large scale investment in such a model. However, many of its principles and key elements could easily be adopted by both statutory and voluntary services. Service users in need of mental health rehabilitation services certainly do need: a place to go; meaningful work; meaning relationships; and a place to meet. It is likely that such needs could potential be met by a wide variety of organisation models.

CASE STUDY: THE BANYAN

The Banyan offers comprehensive mental health services in a range of institutional and community settings for people with mental health issues living in homelessness and poverty in Tamil Nadu, Kerala and Maharashtra in India. With a focus on transformative social justice, they support individuals "with mental health conditions living in homelessness make journeys back to families and communities of choice, re-enter work, reclaim social relationships and pursue lives of their choosing." (https://thebanyan.org/aboutus/). One of their programmes, NALAM, mobilises community support and multidisciplinary outpatient teams to deliver mental health services within community settings. Home visits and home-based care enable people to access necessary entitlements, skills development, employment support and income and housing support to those most in need. The programme also supports children and carers affected by the family member's mental health needs and offer mentorship for children living with parental mental illness.

Fischer's PhD research identified the key principals and "active ingredients" (p. 25) for a day psychiatric rehabilitation programme:

- Integrating recovery/rehabilitation language into relevant agency materials, including the mission statement, brochures, staff training materials, and program manual(s).
- Providing individualized treatment planning and assessment.
- Building effective group curricula that are congruent with the principals of evidence-based practice.
- Effective staff training, both conceptually and practically.
- Establishing a social environment that is actively conducive to rehabilitation.
- Establishing the importance of/mechanisms for consistent shared decision-making.
- Implementing policies to ensure team-based care.
- Creating opportunities for non-administrative staff to engage in program development.
- Establish a mechanism for the identification and resolution of internal and external barriers to providing psychiatric rehabilitation services.
- Create a program manual that comprises the ingredients of the formula.

SUPPORTED EDUCATION

The Recovery College network is an obvious source of educational support and some evidence has demonstrated that attending a Recovery College can inspire students to look for and secure employment (Sutton et al., 2019). Recovery Colleges can also assist individuals to develop personal learning plans and identify goals that can contribute to the recovery process. A number of factors have been identified that may impede goal attainment, these include physical health problems, stressful life events and depending on others to attend College (Killaspy et al., 2022). There are mixed methods evaluations of UK and Australian recovery colleges (Ebrahim et al., 2018; Hall et al., 2018; Wilson et al., 2019) of varying quality that consistently report positive student satisfaction, improved mental wellbeing, self-confidence and reductions in social isolation. The Recovery College is considered by many participants as a stepping stone to mainstream courses, volunteering or future paid employment. Some Colleges also offer the opportunity for students to be involved in the design or co-delivery of courses.

LIFESTYLE INTERVENTIONS

PHYSICAL HEALTH

Physical health is acknowledged as a significant concern and challenge for people experiencing SMI (Morgan et al., 2021). The NICE guideline also highlights the importance of physical health and meeting the often complex and increased physical health needs in SMI populations whilst recognising the impact of medication, symptoms of fatigue and high rates of sedentary behaviour. Closing the significant mortality gap requires that every opportunity to talk about physical health and wellbeing should be maximised in order to 'make every contact count' and capture important data such as blood pressure, BMI and cholesterol and promote healthy lifestyle decision making around nutrition, physical activity and risk taking behaviours such as smoking, alcohol and drug use. Lim et al. (2021) scoped the literature for the important role that key workers can play in helping to improve physical health and the influence they have on ameliorating psychosis-induced effects and reducing organisational barriers to incorporate physical health needs.

PHYSICAL ACTIVITY

One of the important elements of physical activity interventions are the associated social benefits such as improvements in social connectedness and increased social capital demonstrated in a number of research studies. Improvements in physical health have been demonstrated in a number of studies even at low levels of intensity and home-based activities that can easily be integrated into daily routines (Harrold et al., 2018; Lee et al., 2020). There is evidence too that lifestyle interventions can have a knock-on effect on other behaviours, helping to reduce other lifestyle risks such as poor diet, tobacco and alcohol use.

WEIGHT LOSS

Community-based interventions for weight loss can be effective (Brown et al., 2018). One example is co-locating professionals within mental health teams; Furness et al. (2018) describe the pilot of a dietician within a community mental health service, demonstrating how it helped to increase empowerment and collaboration, overcoming some of the challenges faced when trying to promote healthy lifestyle changes.

ALCOHOL AND TOBACCO USE

Reducing or stopping alcohol and tobacco use will be a goal for some people's treatment plans and a trial of contingency management interventions for SMI has proved acceptable and positive for participants (Leickly et al., 2019). Social and living environments play an integral role in both enabling and stopping smoking and sometimes can be interpreted by staff as contrary to recovery-oriented care (Twyman et al., 2019).

HORTICULTURE

Lu et al. conducted a systematic review and meta-analysis of randomized controlled trials (RCTs) and quasi-experimental studies about horticultural therapy for people with schizophrenia, from January 2000 to December 2020, with a total of 23 studies involving 2024 people. All of the included studies were conducted in China apart from one in Korea. This review demonstrated that non-hospital environments have a better therapeutic effect on all indicators than hospital environments and horticulture is effective for symptoms, rehabilitation outcomes, quality of life, and social functioning in patients.

FAMILY INTERVENTIONS

The caregiver burden for SMI can be substantial and psychoeducational interventions that help manage the responsibility of caregiving can be beneficial in significantly reducing the psychological burden, reducing relapse rates and distress felt by family members using psychoeducational interventions (Mirshah et al., 2019; Mottaghipour & Tabatabaee, 2019).

Chien and Bressington (2019) undertook a systematic review and meta-analysis of family interventions for carers of people with recent-onset psychosis and while the risk of bias in the included 12 studies downgraded the evidence, family interventions were found to be more effective in reducing care burden at all follow-up junctures than usual psychiatric care. In one very recent review of evidence, Bighelli et al. (2022) concluded that almost all family intervention models were efficacious in preventing relapse in schizophrenia. Family

psychoeducation alone, without behavioural or skills training, was superior to the more complex models. Again, the provision of such approaches form a clear recommendation in NICE guideline for the treatment of schizophrenia.

Some interesting and hopeful family interventions have been developed over the years including some family-led peer support where family members are trained to deliver support to families.

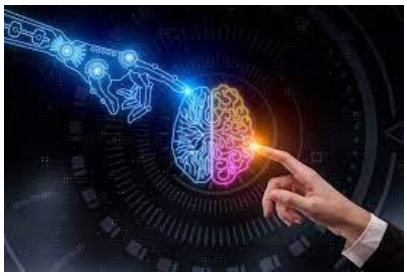
Rami et al. (Rami et al., 2018) translated and culturally adapted the Behavioral Family Psycho-Education Program (BFPEP) for Egyptian outpatients with schizophrenia. The 14-session programme was delivered to 30 service users and 30 individuals received treatment as usual. The intervention group demonstrated significant treatment effects with a greater reduction in psychotic symptoms (PANSS), improved social functioning and quality of life and attitudes towards medication compared to the control group.

Wang et al. (2022) conducted a meta-analysis to measure the effectiveness of family- and individual-led peer support for people with serious mental illness. No significant differences between intervention and control groups in family functioning or burden were observed however, positive effects were reported for the use of health services, patient functioning, psychotic symptoms, rehospitalization, and duration.

PEER SUPPORT

The Wang et al. (2022) review also reported positive effects for individual-led peer support on wellbeing, medication adherence, finances, and loneliness; but noted less effectiveness in self-efficacy, quality of life, recovery, hope, and activation. Of the 23 included articles for peer support, no significant differences were observed between peer support groups and control groups in social support, functioning, psychotic symptom improvement, self-esteem, substance use, legal charges, building relationships, empowerment, satisfaction, and use of health care. The authors conclude that further development of peer support models in rehabilitation is required.

Dealing with stigma and discrimination is common for people experiencing psychosis and can be a significant barrier to recovery and further research is recommended to explore the potential for peer interventions that help tackled internalised stigma experienced by so many (Pyle et al., 2018).



Digital technology has changed the landscape of healthcare delivery and a number of innovations have been developed to help improve outcomes for people with psychosis and related problems. Virtual reality (VR) has been used to provide job interview training for people in supported employment schemes and Smith et al. (2022) recently published results from an RCT of Virtual Reality Job Interview Training compared to TAU. While employment rates did not differ significantly between the two groups, the experimental group had greater odds of obtaining employment, achieved employment in a shorter time frame. The experimental group also demonstrated better interview skills and confidence and low interview anxiety. Schroeder and colleagues (2022) conducted a systematic review of VR interventions to improve psychosocial functioning in psychosis and using data from 18 studies concluded that they represent a promising adjunct therapy to improve psychosocial skills, community functioning, and quality of life in psychosis. Co-produced VR with young people experiencing early psychosis has also been used to deliver social cognition therapy and this approach is recommended for other technology development (Realpe et al., 2020).

Testing of computerised clinical decision aids have also been conducted to assess the impact on clinical decision-making in psychosis care (Roebroek et al., 2022). The authors demonstrated that the tool improved discussions about physical health and social wellbeing topics and increased evidence-based decision making for these areas that can be neglected and difficult to address.

The acceptability of a digital psychosocial intervention in low-resource settings (DIALOG+; Pemovska et al., 2021) has been reviewed positively by stakeholders in five low and middle-income countries in Southeast Europe. Other interventions that concentrate on improving attention (Lipskaya-Velikovsky et al., 2019) and supporting people via a mobile app in employment settings (Nicholson et al., 2018) have also been trialled.

MEASURING EFFECTIVENESS

There a number of validated measures that have been used widely that can help benchmark the effectiveness of approaches. They include:

The Quality Indicator for Rehabilitative Care (QuIRC; Killaspy et al., 2011), an international quality assessment tool for longer term inpatient and community-based mental health facilities.

The QuIRC consists of 145 items to be completed by the service manager and generates a combination of descriptive data and percentage score data on seven domains of care. A higher score indicates higher quality.

The domains are (with example questions in brackets):

- Living Environment ("What do you think of the general condition of the building outside?");
- Treatments and Interventions ("How many families of your current patients/residents have had family psychoeducation in the last 12 months?");
- Therapeutic Environment ("How often do you have meetings where staff and patients/residents discuss the running of the facility?");
- Self-Management and Autonomy ("Do your patients usually prepare their own meals (with support if necessary)?");
- Social Interface ("How many of your residents have regular contact with nonservice user friends?");
- Human Rights ("Is a welfare/benefits advice service available to your patients/residents?");
- Recovery-Based Practice ("Do clients who have legal capacity have full control over their finances?")

STAFF, TRAINING AND DEVELOPMENT

The NICE guideline specifies the staffing roles that MDT should involve and have access to and will include a MDT senior leadership team with the essential components:

- Clinical psychologists
- Occupational therapists
- Registered mental health nurses
- Social workers
- Mental health pharmacists
- Support time and recovery workers (star workers) – who may be peers support workers or generic support workers
- Junior medical staff
- Independent prescribers
- Approved mental health professionals
- Housing workers
- Employment specialists
- Drug and alcohol specialists
- Administrative assistants
- GP link workers

Secondary services should also be available including:

- Smoking cessation services
- Physical health care (primary and secondary care)
- Dieticians
- Personal trainers for tailored exercise plans
- Speech and language therapy
- Chiropodists
- Optometrists
- Therapists for music, drama and art
- Educational (including recovery colleges)
- Wider vocational services

People with complex needs are at risk of becoming institutionalised and staff need the appropriate training and support to provide high quality care.

Staff training and development is as important as building the right organisational structure with clear roles, well-trained staff in every part of the organisation, who are skilled in working with the SMI population. Farkas and Anthony (2001) identified three types of training for integrated teams to provide competent rehab services:

1. Exposure – didactic training to disseminate information.
2. Experience – real-life training opportunities including internships, workshops or programme visits.
3. Expertise – ongoing, intensive supervision, practice, feedback and training exercises.

Providing information for staff to help them engage with service users and applying a rehabilitation and recovery lens rather than a medical model can help build a positive culture.

Gee et al. (2017) looked at the factors that achieved lasting change after recovery-oriented training for staff working in inpatient rehabilitation services. Using a realist review approach, they examined the contexts and mechanisms that enabled, blocked or encouraged change following recovery-based training. Training staff that were receptive to the concept of recovery and felt supported by colleagues enabled lasting change and contextual factors that blocked recovery-oriented services included the team environment, organisational structures and systems, availability of resources, the type of training programme and dealing with external pressures.

The authors identified 'priority theories' underpinning change when mental health rehabilitation staff undertake recovery-oriented training:

- Collaborative action planning – between staff and service users enables staff to feel engaged, valued and involved and 'receptive to change'. Imposing an action plan on staff will block 'receptiveness'.
- Incorporating recovery into existing change programmes may help staff with engagement, enthusiasm and their receptiveness.
- Dealing with a climate of job uncertainty and fear – this will prevent staff from feeling involved, engaged or valued.
- Regular collaborative meetings between the staff, the training team and the local change lead.
- Appointing a change agent or 'champion'.
- Management support, supported role flexibility

- Modify organisational structures to support change

PEER SUPPORT WORKERS

Given the Mental Health Strategy's commitment to developing a peer workforce, consideration should be given about how to engage, involve and implement this within rehabilitation services. There are other models working with psychosis populations to draw learning from including rehabilitation services in Australia (Parker et al., 2016; Parker et al., 2022), Ireland (Norton, 2022) and Taiwan (K.-Y. Cheng & C.-F. Yen, 2021).

EFFECTIVENESS OF REHABILITATION SERVICES

Several reviews of the effectiveness of rehabilitation services similar to the pathway envisaged by the NICE guideline have been published.

Dalton-Locke et al. (2021), in their review, included a total of 65 studies and used a broad definition of rehabilitation services – multi-disciplinary inpatient and community services that provided care over a long time period (over 6 months) to people with severe mental health problems that aimed to enable the person to gain skills for independence and community living. They conclude that the most consistent finding of studies evaluating contemporary rehabilitation services was reduced acute inpatient use after periods of admission to inpatient rehabilitation units i.e. rehabilitation units reduce the pressure on inpatients beds (Awara et al., 2017; Bunyan et al., 2016). The finding that one form of inpatient care reduces the use of another form is not overwhelming evidence. However, this review also noted a much more substantial finding – the importance of such services for homeless people with severe mental health problems.

Bunyan et al. (2016) is a notable study in that it is one of the few that evaluates inpatient rehabilitation units in the UK. They carried out a retrospective evaluation of three inpatient rehabilitation units across one London National Health Service trust. They found statistically significant reductions in hospital admission days in the 2 years following rehabilitation compared with the 2 years before. A substantial proportion of the sample entered greater independent living, some with no further admissions at follow-up. While they acknowledge that their study lacked an extended follow-up period they argue that the cost benefits in terms of inpatient admission (if sustained) would eventually offset the cost of the rehabilitation placement (within 3.5 years).

Dalton-Locke et al. (2021) do note that results of studies evaluating community rehabilitation teams are also few and have mixed results. Chan et al. (2020) conducted the first study to investigate longitudinal outcomes for users of a community rehabilitation team in the UK. They found 23% of service users moved on to more independent accommodation during the 51 months of the study. The authors acknowledge that moving on is not always the most appropriate target of intervention and a maintained community placement (with fewer admissions) is often a successful outcome.

NICE (2020) also review the evidence underlying their recommendations. This included five studies, 1 systematic review (Dietrich, 2017 in 40 randomised controlled trials (RCTs), 1 RCT (Salkever et al., 2014) and 3 observational studies (Bunyan et al., 2016; Lavelle, 2011;

Macpherson et al., 1999). They conclude that the evidence is such that the availability of inpatient and community rehabilitation is warranted and as such be offer to all those with treatment resistant symptoms and impairments in functioning.

One large American randomised trial (Salkever et al., 2014) focused on evaluation of a recovery-oriented, comprehensive and coordinated package of community-based treatment and rehabilitation services for people with severe and enduring mental health problems (it contained similar components to community rehabilitation including care coordination, vocational help and support in accessing community resources such as housing and transportation). They concluded that such an approach is effective in four outcome domains (hospital stays, A&E visits for mental health problems and crisis team visits). They estimated an annual saving of approximately $900-$1400 per patient (mainly saved from inpatient costs).

DATA

Work of the 'Getting it Right First Time' (Kalidindi, 2022) initiative has considered recommendations for the delivery of mental health rehabilitation and underpinning their findings is the central importance of data. They recommend the use of a data dashboard using a QI approach that will help to:

- Establish robust systems for measuring rehab data
- Includes timely analysis
- Records and reports outcomes consistently
- Measures outcomes using the RCPsych Rehabilitation Faculty Outcomes Framework and locally relevant outcome data including economic wellbeing and opportunities to work
- Measure characteristics to help reduce inequalities
- Ensure supported housing leaders have access to and contribute to rehab data with shared outcomes for measurement
- Establish access and wait times data including accessing evidence-based interventions and services
- Identify all people who meet the criteria for rehabilitation services as set out in the NICE guideline – be inclusive
- Time to access of rehabilitation evidence-based interventions should be measured, reported on, monitored and minimised

- Provide in-reach into acute inpatient units for those who meet inclusion criteria
- Include appropriate access to supported accommodation or specialist placements
- Monitor and report on patients coming from early intervention in psychosis services into rehabilitation services, particularly optimising early intervention for rehabilitation
- Record physical health comorbidities

THE ECONOMIC CASE

The 'Getting it Right First Time' report highlights the evidence on the high economic cost of mental health service use for a relatively low number of service users, investment levels are relatively low. The problem of additional hidden costs of people needing mental rehabilitation sitting in other parts in the mental health system is also flagged. A small number of people will require specific, specialist rehabilitation services that currently are unavailable in Northern Ireland and will receive care elsewhere in the UK or Ireland. This is contrary to the recommended guidance, can separate service users from their families, and communities of support and is extremely costly.

Contrasting adult acute costs compared to mental health rehabilitation costs in NHS England illustrates the differences in investment.

TABLE 4. ADULT ACUTE COSTS COMPARED TO MENTAL HEALTH REHABILITATION COSTS

Placement	Expenditure	Source
NHS adult acute inpatient*	£1,017m	NHSBN
NHS mental health rehabilitation inpatient	£279m	NHSBN/GIRFT
Adult acute out of area placements	£113m	NHS Digital
Psychiatric rehabilitation out of provider placements	£281m	GIRFT/CQC
Total acute inpatients cost	£1,130m per year	
Total mental health rehabilitation costs	£560m per year (55% of the spend on adult acute inpatients)	

* Two adult acute providers were unable to provide NHS costs and are therefore excluded from the above, so the adult acute costs are likely to be an underestimate.

IMPLICATIONS FOR NORTHERN IRELAND

Action 25 of the Mental Health Strategy is consistent with the rehabilitation pathway envisaged in the NICE guideline. While the evidence underpinning the guideline is not overwhelming, it does exist – both as a direct evaluation of the model of services suggested or indirect inference based on other international models. Our review of the evidence for the effectiveness of rehabilitation services retrieved nothing to suggest that Northern Ireland should depart from the guideline in terms of service provision.

Delivering trauma-informed care within a compassionate workplace environment should underpin rehabilitation services. The intergenerational impact of the conflict continues to manifest in the population and by adopting trauma-informed approaches, the right care and support can form part of an individual's recovery journey. We noted the lack of literature on trauma-informed mental health rehabilitation (despite high levels of reported traumatic experiences in this populations and evidence it affects functioning (Davidson et al., 2009)). There is an opportunity for Northern Ireland to lead the way in developing such services and opportunities to explore and develop the evidence for integrating trauma-informed systems and other research priorities relevant to this important but under-researched population would be welcomed.

Asking for, and listening to, the views and experiences of those that use rehabilitation services, their family members and carers and the staff responsible for delivering care should inform that design, development and delivery of services. There are a number of successfully tested models that are effective in coproducing healthcare. Co-production should underpin the development of services.

Peer support will form part of this ongoing coproduction of services and this element of the workforce has to be appropriately trained, managed, supported and remunerated to promote job roles with parity of esteem with other health professionals.

Threat to welfare and security benefits could potentially destabilise any progress towards independence that can not only affect the service user, but those who provide ongoing care when needed. A system that is knowledgeable about the needs of service users and their carers, and one that does not create unnecessary stressors is vital for this small but vulnerable population.

The provision of good quality, well supported housing accommodation can be transformational and should form a core element of rehabilitation services. This is a shared

responsibility (as with the previous point about social security and welfare support) beyond health and social care and extends to other Government departments.

Good quality data can support quality improvement and advice and guidance on how this should be done is readily available. This review further highlights the need for reliability and comprehensive data of the prevalence of mental health problems in the adult population in Northern Ireland.

CONCLUSION/RECOMMENDATIONS

The NICE guideline provides a template on which to base service developments and this review concludes that following this structure is appropriate for services in Northern Ireland. The review supports the investment in community rehabilitation teams and inpatient units.

We note that any inpatient units should be based in a non-stigmatising community setting and should focus on having as short a stay as possible. Current capacity legislation does facilitate great flexibility in community settings and makes it possible that rehabilitation units do not have to be a traditional hospital ward. However, it is important that any rehabilitation units are staffed appropriately and provide the necessary intensive support as inpatient settings with teams that retain the same powers of admission and discharge.

The review highlights not just the importance of rehabilitation teams but of a whole system approach to rehabilitation. Services vital to the effectiveness of such an approach (e.g. housing, employment, education services and social spaces) are often based in the voluntary and community sector. An effective rehabilitation service will need "a network of services across a wide spectrum of care". To this end it may be useful to scope not only clinical statutory rehabilitation services in Northern Ireland but the host of other services run by the community/voluntary sector.

It is important to acknowledge the links between rehabilitation services and other actions in the Mental Health Strategy. Effective rehabilitation services need to draw heavily, in particular, on a recovery focus to facilitate full participation in the life of the community.

The evidence on which current NICE guideline is based is relatively sparse. Any new services in Northern Ireland should be robustly evaluated and researched, including any economic evidence to demonstrate cost-effectiveness. There exists an opportunity for such data on the effectiveness of new rehabilitation services to be of worldwide significance.

APPENDIX 1

SEARCH TERMS

Database

APA PsycInfo <1806 to January Week 2 2023>

Variations of the PsycInfo search were applied to the following databases: Embase, MEDLINE, Social Science Citation Index, and SCIE.

TABLE 5. DATABASE SEARCH TERMS

#	Query	Results from 16 Jan 2023
1	exp Psychosocial Rehabilitation/ or exp Rehabilitation/ or exp Mental Health Services/ or mental health rehabilitation.mp. or exp Community Mental Health Services/	99,151
2	exp Rehabilitation Centers/	1,209
3	exp Psychiatric Units/ or exp Psychiatric Hospitalization/ or exp Psychiatric Patients/ or exp Psychiatric Hospitals/	44,938
4	1 or 2 or 3	139,557
5	exp Schizophrenia/ or exp Psychosis/ or complex psychosis.mp.	125,814
6	treatment resistan*.mp. or exp Treatment Resistant Disorders/	10,499
7	bipolar disorder.mp. or exp Bipolar Disorder/	46,256
8	exp Serious Mental Illness/ or SMI.mp.	7,243
9	5 or 6 or 7 or 8	176,080
10	4 and 9	12,955
11	exp Independent Living Programs/ or supported housing.mp.	859
12	employment.mp.	70,278
13	intervention.mp.	327,871
14	12 and 13	4,446
15	exp Vocational Rehabilitation/ or exp Supported Employment/ or supported employment.mp.	8,392
16	14 and 15	657
17	exp Community Involvement/ or exp Community Services/ or community participation.mp.	61,036
18	14 or 16 or 17	65,269
19	10 and 18	1,415

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