

Evaluation of Housing & Accommodation Support Initiative Plus (HASI Plus) – Literature Review

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Contents

Summary	1
1 Scope	5
2 Methodology	5
3 Concepts of mental illness and integrated support services.....	6
4 Concepts of recovery in severe mental illness	8
5 Outcomes and outcome measures	12
6 Outcomes for people with co-morbidity and transitioning from institutions	14
7 Outcomes for people with differing levels of cognitive and functional impairment.....	16
8 Australian and international programs.....	20
8.1 Neami Community Housing Program, Victoria	20
8.2 Integrated Services Program, NSW	21
8.3 Project 300, Queensland.....	22
8.4 Mental Health Disorders and Cognitive Disabilities research, NSW	24
8.5 The Multiple and Complex Needs Initiative – Victoria	25
8.6 The Community Justice Program (CJP), NSW.....	26
8.7 The At Home – Chez Soi project in five Canadian cities	27
8.8 The Care Program Approach (CPA), UK.....	28
8.9 Housing and Accommodation Support Initiative (HASI), NSW, 2012 evaluation	29
9 Conclusion	32
References	33

Summary

This brief literature review focuses on programs similar to HASI Plus that offer intensive, integrated community-based services for people with severe mental illness transitioning from institutional contexts. The aim of the review is to give an overview of the current evidence from evaluations of such programs. This will help to develop the conceptual basis for evaluating HASI Plus, including its recovery focus.

This review for HASI Plus has examined (1) literature on the concept of recovery and (2) studies and evaluations of programs and models identified as targeting a similar cohort as the HASI Plus program. The review focuses primarily on literature from Australia, the UK and Canada as English-speaking countries with similar health sectors to Australia. Search terms included (1) “recovery + “mental illness”; (2) “intensive” + “program” + “severe mental illness” + “substance”; (3) “outcomes” + “cognitive” + “functional”. A surfeit of literature was uncovered. Literature from Australia, the UK and Canada relevant to programs similar to HASI Plus and capable of reflecting on the questions implied in the scope was prioritised.

Mental health disorders affect an estimated one in five Australians in any given year (Australian Bureau of Statistics, 2007). The term mental health disorder is often used to cover a wide variety of diagnoses such as anxiety, depression or schizophrenia, and the symptoms and severity of an illness can range from mild to severe impairment (Slade, Johnston, Teesson, Whiteford, Burgess, Pirkis & Saw, 2009: 9). Previous research has shown that people with mental illness and disability often encounter difficulties in accessing and maintaining stable housing (Bleasdale, 2006), and many people who are homeless are affected by mental health disorders (Flatau, Zaretsky, Brady, Haigh & Martin 2008). ‘Severe’ mental illness is taken to mean diagnoses which typically involve psychosis including schizophrenia, schizoaffective disorder and severe forms of other disorders, such as major depression with psychotic features and bipolar disorder.

There is evidence that providing appropriate housing, clinical services and flexible support assists people with mental illness to maintain stable housing and that stable and secure housing contributes to people’s mental health and general wellbeing (Reynolds and Inglis, 2001). NSW is not alone in delivering integrated services to people with mental health disorders. Programs that are similar to HASI Plus currently operate in most other Australian States and Territories (Carter, 2008; Meehan, O’Rourke and Drake, 2001; Smith and Williams, 2006; Smith and Williams, 2008) as well as internationally. People with severe mental illness transitioning from institutional contexts with comorbid and substance use disorders are one group that such integrated programs are designed to assist.

The review examined a range of programs similar to HASI Plus. The programs were aimed at a similar client group (people with severe mental illness who had

experienced homelessness). All involved a housing element, clinical treatment and other supports.

- The evaluation of the Neami Community Housing Program showed that ‘some people who experience significant disability associated with mental illness can sustain tenancies and live in the community in the long term when provided with appropriate support. People who had been considered by their clinical workers and families to be unable to survive outside an institutional setting have not only ‘made it’, but established activities, relationships and routines of their own choosing, and have flourished’ (Carter, 2008: 27).
- The Integrated Services Program (ISP) coordinates cross-agency support for adults who have multiple and complex support needs and has operated in the Sydney metropolitan area since 2005. Using longitudinal data, the evaluation found significant reductions on contact with the criminal justice system (Purcal, Zmudzki & Fisher, 2016). In addition, the ISP was found to be generally effective in maintaining or improving clients’ independent living and social connections (Purcal et al., 2016).
- Project 300 assists clients with psychiatric illnesses to transition from long-stay institutional care to community-based arrangements (Disability Services Queensland, 2009). A longitudinal evaluation of the Project by Meehan, O’Rourke and Drake (2001) indicated that that clinical, housing and disability support services could be successfully brought together to meet the needs of this population. Eighteen months after discharge, individuals continued to demonstrate improvements in symptoms, clinical functioning and quality of life. Three of the 218 clients discharged returned to long-term care (McDermott, Bruce, Fisher & Gleeson, 2010).
- Mental Health Disorders and Cognitive Disabilities (MHDCD) research by Baldry, Dowse and Clarence (2012) used a data merging and pathway building method. They found that those with complex needs (dual/comorbid diagnoses and multiple combinations) have significantly earlier police events, higher juvenile justice involvement, offences, convictions and imprisonments than the single and no-diagnosis groups.
- The Multiple and Complex Needs Initiative (MACNI) in Victoria ran between 2004 and 2009, for 247 people with highly complex needs (Department of Human Services, 2007). The aim of the MACNI was to stabilise housing, health, social connection and safety for this group. It also identified therapeutic goals for each individual and emphasised coordination of services. An independent evaluation found significant reductions in hospital use and significant improvements across all four MACNI outcome areas for a majority of clients, improved service coordination and achieving adequacy of legislation.
- NSW ADHC runs the Community Justice Program (CJP) for up to 400 people with intellectual disability and serious histories of offending. The

support programs are tailored to the specific needs of clients, who are assessed as requiring a high level of supervision. Specific programs address their offending behaviours and ameliorate risks they pose to themselves and/or others. No publicly available evaluation of the CJP has been located, so outcomes are unknown.

- A Canadian study by Aubry, Nelson and Tsemberis of the At Home – Chez Soi demonstration project entailed a randomised control trial conducted in five Canadian cities between 2009 and 2013 to evaluate the effectiveness of the Housing First model relative to existing services available in each city. All participants were characterised as having high support needs. Quantitative outcome findings showed that during the course of the two-year study, Housing First participants spent 73% of their time in stable housing, compared with 32% among treatment-as-usual participants. Qualitative outcomes based on interviews with 195 participants identified positive life changes among 61% of people receiving Housing First, compared with 28% from the treatment-as-usual group.
- A study of participants in the Care Program Approach (CPA) in the UK in four health districts was conducted by Carpenter, Schneider, McNiven, Brandon, Stevens & Wooff (2004). The study was primarily survey-based and qualitative and based on perceptions of the users, specifically how much they felt involved in their own care and care plans. Most users gave high ratings on the indices of user involvement. Between 80 and 90% thought their care plan had worked out well or very well.
- A previous evaluation of the Housing and Accommodation Support Initiative (HASI) in NSW was completed in 2012 by Bruce, McDermott, Ramia, Bullen and Fisher (2012). HASI provides accommodation and support, including clinical and other support, to people who experience homelessness and have a history of mental illness. The evaluation was based on a wide variety of data and methodologically robust. It found that most people receiving support through this program successfully maintained their tenancies and used relevant mental and physical health services, and that they had improved mental health outcomes, decreased hospitalisations, improved social contact with family and friends and increased participation in community activities (Bruce et al., 2012).

In summary, while programs similar to HASI Plus tend to produce positive outcomes for many clients, positive outcomes are less assured for those with serious mental illness, lower cognitive function and substance abuse issues. None of the evaluations that were reviewed indicated an on-average *deterioration* among program participants. Findings related to service use indicate a reduction in the use and therefore the cost of mental and general health services, as well as reductions in incarceration. Cost-benefit analyses have identified and quantified savings for government due to intensive support programs (Meehan et al., 2007; Purcal, Zmudzki & Fisher, 2016). Finally, consumers themselves typically report being

satisfied with the housing and support received on the whole, and evaluations and studies found that very few returned to institutionalised forms of care (Carpenter et al., 2004; McCausland et al., 2013; McDermott et al., 2010). In summary it can be concluded that intensive support programs do, in general, provide benefits for many clients.

1 Scope

The brief literature review focuses on programs similar to HASI Plus that offer intensive, integrated community-based services for people with severe mental illness transitioning from institutional contexts. It includes concepts of recovery in severe mental illness, and specific examination of outcomes for people with severe mental illness transitioning from institutional contexts with comorbid and substance use disorders, and outcomes for differing levels of cognitive and functional impairment. The aim of the review is to give an overview of the current evidence from evaluations of such programs. This will help to develop the conceptual basis for evaluating HASI Plus, including its recovery focus.

2 Methodology

This review for HASI Plus has examined (1) literature on the concept of recovery and (2) studies and evaluations of programs and models identified as targeting a similar cohort as the HASI Plus program. The review focuses primarily on literature from Australia, the UK, New Zealand and Canada as English-speaking countries with similar health sectors to Australia. Given the significant differences in the health system in the US, studies from the US were not included. We conducted the review by searching academic databases (Google Scholar, UNSW Library Collection, SCOPUS, INFORMIT, Medline, etc), grey literature and government websites. The following three searches using the following terms were used:

- (1) “recovery + “mental illness”;
- (2) “intensive” + “program” + “severe mental illness” + “substance”
- (3) “outcomes” + “cognitive” + “functional”

A surfeit of literature was uncovered. Due to space limitations, literature from Australia, the UK and Canada relevant to programs similar to HASI Plus and capable of reflecting on the questions implied in the scope were prioritised. No significant studies from New Zealand were identified, although New Zealand was included in the searches.

3 Concepts of mental illness and integrated support services

Mental health disorders affect an estimated one in five Australians in any given year (Australian Bureau of Statistics, 2007). The term mental health disorder is often used to cover a wide variety of diagnoses such as anxiety, depression or schizophrenia, and the symptoms and severity of an illness can range from mild to severe impairment (Slade, Johnston, Teesson, Whiteford, Burgess, Pirkis & Saw, 2009: 9). People with severe mental health disorders can experience detrimental impacts on both their psychological wellbeing as well as other aspects of their lives, such as housing and social relationships (Browne and Courtney, 2007). Previous research has shown that people with mental health disorders and disability often encounter difficulties in accessing and maintaining stable housing (Bleasdale, 2006), and many people who are homeless are affected by mental health disorders (Flatau, Zaretsky, Brady, Haigh & Martin 2008).

‘Severe’ mental illness is taken to mean diagnoses which typically involve psychosis. The Royal College of Psychiatrists (UK) categorises severe mental illness as psychosis where a person shows signs of having hallucinations, delusions, disordered thought and a lack of insight into their condition (Royal College of Psychiatrists, n.d.). Conditions that may require high levels of support, including hospital treatment, include schizophrenia, schizoaffective disorder and severe forms of other disorders, such as major depression with psychotic features and bipolar disorder. Comorbid and substance use disorders are taken to mean two or more disorders or illnesses occurring in the same person. About half of people who experience a mental illness will also experience a substance use disorder at some point in their lives and vice versa (Ross & Peselow, 2012; Kelly & Daley, 2013). Finally, institutional contexts are taken to refer to transitions from criminal justice establishments, hospitals or large hostels (Rosengard et al., 2007).

Several factors can support recovery from the impact of mental illness (Lysaker and Buck, 2008; Torrey and Wyzik, 2000). There is evidence that providing appropriate housing, clinical services and flexible support assists people with mental health problems to maintain stable housing and that stable and secure housing contributes to people’s mental health and general wellbeing (Reynolds and Inglis, 2001). Consumers’ quality of life improves as they move from institutional to community-based accommodation (Browne, 2004). The longer they stay in the community the more satisfied they are with their lives (Meehan, Rourke, Morrison, Posner & Drake, 2001; Trieman, 1997).

Intensive, integrated community-based services refer to programs that offer person-centred, integrated support packages, including housing, clinical and other supports, designed to meet the needs of the individual and delivered in a community, rather than institutional, setting. Typically, clientele in such programs is drawn from

persons who have experienced incarceration, homelessness, itineracy and have a history of mental health disorder as well as substance abuse. Given the scope of this review, programs targeting persons with disabilities that are not severe and psychiatric, and general ex-prisoner populations, are not considered. Similarly, programs that are delivered in institutional environments (i.e. in a correctional facility or adjunct residence, or in a congregate institutional care setting) have been excluded.

NSW is not alone in delivering integrated services to people with mental health disorders. Programs that are similar to HASI Plus currently operate in most other Australian States and Territories (Carter, 2008; Meehan, O'Rourke and Drake, 2001; Smith and Williams, 2006; Smith and Williams, 2008) as well as internationally. This literature review focuses on programs similar to HASI Plus that offer intensive, integrated community-based services for people with severe mental illness and substance use issues.

4 Concepts of recovery in severe mental illness

Over the past two decades, there has been a shift of focus from a medical perspective of symptom management to one of supporting consumer autonomy and reintegration into community life with the attendant elements of employment, social contribution and independent decision-making (Ramon, Healy and Renouf, 2007; Roe, Joseph & Middleton, 2010). Recovery has been conceptualised as a process rather than an outcome, consistent with the complexity of the human psyche and changing circumstances typical of the mental health and disease process (Brennaman and Lobo, 2011).

The recovery concept differs from medicalised concepts such as remission or cure, because recovery does not mean a return to baseline or normal functioning (Jacobson, Alternberg, Barnes, Cusson, Rowley & McKinnon 2005; Noiseux, St-Cyr Tribble, Leclerc, Ricard, Corin, Morissette & Lambert, 2010). Recovery is, in many versions of the concept, from the viewpoint of the consumer, rather than judged exclusively by external professionals such as clinicians or care givers. Recovery is a concept that can occur in many contexts but does not necessarily imply restoration of a past state. According to Brennaman and Lobo: 'Inherent in any context is the underlying sense of gaining or attaining something following a loss. The item or intangible object that is gained is not necessarily the same as that which was lost' (2011, p. 659).

William Anthony defined mental health recovery as, 'a journey, sometimes lifelong, through which a mental health consumer achieves independence, self-esteem and a meaningful life in the community (Anthony 2000, cited in NSW Department of Health, 2006: 2). The concept of recovery does not refer to a 'cure', but to '... a deeply personal, unique process of changing one's attitudes, values, feelings, goals, skills, and/or roles. It is a way of living a satisfying, hopeful, and contributing life even with limitations caused by illness' (Anthony, 1993: 15). Many definitions of recovery are process-oriented and pertain to the subjective experience of the consumer.

While recovery as process as determined by the consumer is perhaps the dominant conceptualisation of recovery, it can be conceptualised in three ways: clinical, service-defined and personal recovery. According to Le Boutillier, Chevalier, Lawrence, Leamy, Bird, Macpherson, Williams & Slade (2015), clinical recovery is a deficit-focused paradigm focused on stabilisation of problematic symptoms through medication and risk management. Service-defined recovery is based on the administrative and fiscal goals and criteria of mental health organisations, which define it through the lens of service discharge and accessibility. Le Boutillier et al. (2015) contend that the clinical recovery paradigm often informs service-defined recovery with its traditional medical conceptualisation of 'recovery from' mental

illness, characterised by stabilisation and a return to 'normal' or baseline functioning due to the eradication of symptoms and amelioration of deficits caused by illness (Davidson, Drake, Schmutte, Dinzeo, & Andres-Hyman, 2009; Davidson & Roe 2007). However neither of these types of recovery concepts may speak to a consumer's personal definition of his or her own recovery (Munro & Edward 2008). Brennaman and Lobo also note the presence of conflicted understandings of recovery, especially within the medical and psychiatric community. Whereas full or complete recovery indicates a return to a pre-illness level of function with no symptoms of illness present, social recovery refers to an individual who lives with economic independence and little interference in his or her social life (Jacobson, 2004; Ramon et al., 2007 cited in Brennaman and Lobo, 2011).

In a person-centred notion of recovery, recovery is conceptualised not as an 'event' or point in time; rather, as a non-linear process, determined by the individual's own interpretation of, and relationship with, their mental illness (Davidson & Roe, 2007). Strategies that support personal and social recovery are fundamental to the work of Recovery-Oriented Practice (ROP), which is based on values of person-centredness, collaboration, empowerment and a strengths- rather than deficit-based approach (Davidson et al., 2009). Fundamental to ROP is the partnership between service providers (i.e., mental health services and the health professionals who work with consumers) and consumers themselves. This way of working empowers consumers to see themselves as active participants in partnership with health professionals, yet this shift may present challenges for health professionals who may work in environments that treat the patient as a passive recipient of clinical care (May, 1995).

Chester, Ehrlich, Warburton, Baker, Kendall & Crompton (2016) emphasise various elements of recovery-oriented practice such as embracing a perspective whereby multi-level support is given to prevent escalation of symptoms and moving away from pathologising language and practice. This implies a less authoritarian approach by medical health professionals and developing insight into the consumer's existence outside of the boundaries of the professional relationship. A collaborative relationship with the consumer is central, as are non-institutional settings. Ennals and Fossey (2009) emphasise that, as part of practical assistance to recovery, institutionalised care should be replaced with community care and opportunities for social participation. In line with the multidimensional approach, practice includes an interdisciplinary approach including external organisations that can support health professionals' responses (Chester et al., 2016) and ensure consumers are having their needs met to the highest degree possible based on their particular circumstances. For someone with both mental health and substance misuse problems, relevant professions may include, for example, a social worker, a GP, a housing officer, support workers, an occupational therapist, mental health services and/or addiction services (Petch et al., 2000).

Brennaman and Lobo examine the concept of recovery in relation to serious mental illness specifically. Their definition of recovery from serious mental illness is 'a

nonlinear process of self-organization and adaptation that offsets the personal disintegration of mental illness and enables the individual to reconceive his or her sense of self and well-being on all biopsychosocial levels' (2011: 660). Based on a literature review of phenomenological studies, they define the elements of recovery as:

- (1) introspection with discovery of purpose and meaning in life
- (2) pride of accomplishment and self-respect
- (3) autonomy or freedom of action
- (4) capacity for decision-making
- (5) goal-directed adaptation
- (6) empowerment
- (7) fighting spirit (resilience and perseverance) and
- (8) incremental advances (2011: 655).

Recovery-focused rehabilitation aims to enhance the capabilities of people with serious and persistent mental health disorders to meet their own goals to maximise independence. Rehabilitation includes 'a range of social, educational, occupational, behavioural, and cognitive interventions that can take place in four domains: skills training; peer support; vocational services; and consumer-community resource development of an array of community support' (Barton, 1999: 526).

As indicated above, the term 'recovery' can be used in various ways. In Australian policy discourse, for consumers, it conveys personal recovery as a continuing process involving empowerment, hope, choice, self-defined goals, reclaiming meaning and purpose, healing, wellbeing and control of symptoms; for public mental health services, the meanings may range from consumer-defined recovery to clinical recovery; and in the NGO sector, recovery can also be related to functional and social recovery (Deegan, 1995; Mental Health Coordinating Council, 2008; NSW Consumer Advisory Group - Mental Health Inc., 2009; Ramon, Shera, Healy, Lachman & Renouf, 2009). Browne asserts that 'for consumers, recovery is not just the result of treatment but includes finding ways to deal with the stigma, accepting that they have a mental illness, and dealing with community attitudes and the social consequences of their illness' (2004:7) and that housing is a critical element for recovery. Therefore, recovery thus refers not only to processes and conditions of the person but also to external conditions and social processes (Jacobson and Greenley, 2001; Schon, Denhov & Topor, 2009).

This shift in approach towards a recovery model is consistent with the mental health NGO sector's promotion of a recovery-oriented process that is defined and led by

the consumer (NSW Health, 2008). Recovery-orientated mental health services offer hope and new meaning to consumers, allowing them to grow beyond the limits imposed by the early stages of their illness (Browne, 2004). Consumer-defined recovery is used in policy documents such as the National Mental Health Policy (Commonwealth of Australia, 2009) and various State/Territory government policies (e.g. NSW Consumer Advisory Group - Mental Health Inc and Mental Health Coordinating Council, 2009; NSW Health, 2008). Organisations such as Partners in Recovery and Neami National have operationalised the approach in the NGO sector in Australia.

At the level of service provision, the shift from hospital or similar accommodation to having a home and support in the community is a key feature of the shift to a recovery model (NSW Consumer Advisory Group - Mental Health Inc., 2009). A home-like environment is usually a necessary precondition for recovery: it not only provides shelter but supports social and economic participation, a sense of belonging and control over one's environment and an opportunity to develop skills and responsibility and thus a greater sense of self-worth (Mental Illness Fellowship of Victoria, 2008; Psychiatric Disability Services of Victoria, 2008). In Australia, there is clear recognition that services and governments should continue their efforts towards embracing the new paradigm of consumer participation in their own care and provision of housing (Browne, 2004).

The NSW HASI Plus program explicitly situates itself within the recovery paradigm – one of the program's specific aims is to provide people with ongoing clinical mental health services and rehabilitation within a recovery framework (NSW Health, n.d.). It provides assistance with accommodation and support services linked to clinical care and rehabilitation provided by specialist mental health services (NSW Department of Health, 2006).

5 Outcomes and outcome measures

Before examining studies and evaluations of relevant programs, the question of what 'outcomes' are and how they are measured is discussed here. Broadly there are three types of outcomes:

- 1) Did a program meet its aims? These process and implementation type outcomes typically focus on whether a range of targets were met, such as number of clients assisted, retention of tenancy, engagement with services, as well as program fidelity (was the program implemented as it should have been?)
- 2) Was a program cost-effective? Outcomes in this case may be cost savings, coming from a cost-benefit approach, typically attempting to calculate the cost savings of a particular program by quantifying reduced use of expensive service use (such as hospital admissions, time in gaol, etc)
- 3) Did a program help the person, as judged by the person? Typically, these evaluations focus on the self-reported wellbeing and activities of the clients in a program to see whether they made a difference on their lives, in a range of domains.

Evaluations may focus on one, two or cover all three types of outcomes depending on how narrow or broad their scope, and may take a mixed-methods, qualitative or quantitative approach. As Hudson notes 'It is important to be clear about the conceptual framework that comprises an outcomes-based approach. Outcomes refer to the effects or impacts on the welfare of service users and should be distinguished from outputs which are, strictly speaking, service product' (Hudson et al, 2004, p.4). This review considers a range of outcomes that fit into the three broad groups above.

In regard to program outcomes of intensive support programs a range of measures or indicators can be used. Typical quantitative measures applied to a period of time include percentage/number of tenancies that are maintained, number and length of hospital admissions, percentage compliant with medication regimes. These evaluations often use longitudinal designs to track a cohort before and after the intervention.

Another way of measuring outcome is based on progression towards a goal or incremental change. For example, some homelessness organisations have developed 'distance travelled' measures. St Mungo's (Rosengard et al., 2007) assessment maps the individual's situation in eight areas: personal responsibility; living skills; social networks; substance use; physical health; mental health; meaningful use of time; and accommodation (Rosengard et al., 2007: 88). For clinicians, adherence to treatment and medication regimes and symptom control, resulting in reduced hospital admission and periods of acute care, may be the measurable outcomes of importance.

Cost-benefit measures attempt to put a monetary figure onto the cost of the program/intervention to the non-intervention counterfactual, thus quantify actual savings. For example, days in hospital or gaol are costed and a saving is calculated based on the average effect of the intervention (as performed by McCausland, Baldry, Johnson & Cohen, 2013).

With respect to self-perceived changes, standardised measures including tools such as the Personal Wellbeing Index – Adult (PWI-A), Kessler Psychological Distress Scale (K10) and others may be used on their own to obtain quantitative data to estimate effects of an intervention on a person’s wellbeing and mental health, and may also be augmented with qualitative interviews with consumers, support staff and clinicians, such as was performed in an earlier evaluation of HASI by Bruce, McDermott, Ramia, Bullen and Fisher (2012).

Measures from the consumer perspective may be across a range of domains, such as feelings/wellbeing, social life, housing, mental and physical health, employment, and education. Using a recovery paradigm however would imply looking at a spectrum of outcomes from the individual’s perspective across different domains (qualitatively).

6 Outcomes for people with co-morbidity and transitioning from institutions

It has been noted that people who have substance misuse, mental ill health, offending and homelessness histories may have accessed several services for their different issues and experienced exclusions from services due to restrictive eligibility criteria. An oft-noted failure to treat the whole person involves the splitting of mental illness from substance use at the service delivery level, resulting in exclusion from one service or another, or the failure to treat both at once. Keene (2001) argues that many services focus on particular needs (for example on one challenge or problem an individual is facing) rather than on wider problems. Further, the lack of appropriate accommodation and support services serves to compound problems and difficult behaviours, for example after being in prison (Rosengard et al., 2007).

The approach to treatment for those with co-morbidities changed in the 1980s and 1990s – at the most basic level, integrated treatment is where both mental health and substance abuse treatments are simultaneously (not sequentially) provided by the same person, team, or organisation (Mueser, Drake and Miles, 1997), and material and psychosocial assistance are also given (housing, other support services, assistance with employment). People with severe mental illness transitioning from institutional contexts with comorbid and substance use disorders are one group that such integrated programs are designed to assist.

Programs that attempt to reduce substance abuse seem important as substance abuse worsens outcomes for persons with mental illness, for example it is 'a significant obstacle to the effective treatment of persons with schizophrenia (Blanchard, Brown, Horan, & Sherwood, 2000; Siris, Addington, Azorin, Falloon, Gerlach & Hirsch, 2001) (Browne, 2004: 66). US research has found that, compared with people who suffer from mental illness alone, those with concurrent substance use show increased levels of medication non-compliance, psychosocial problems, depression, suicidal behaviour, rehospitalisation, homelessness, have poorer mental health and place a higher burden on their families (see Bartels, Drake, & McHugo, 1992; Clark, 1994; Drake & Wallach, 1989; Drake, Osher, Noordsy, Hurlbut, Teague & Beaudett, 1990; Osher, Drake, Noordsy, Teague, Hurlbut and Biesanz & Beaudett, 1994; Pristach & Smith, 1990). Persons with both types of disorders have also been recognised as being more difficult to treat than those with mental disorders alone (Drake, Mueser, Clark, & Wallach, 1996; Lehman, Herron, Schwartz, & Myers, 1993).

According to Drake et al. (1996), people with co-occurring substance abuse and severe mental illness are vulnerable to negative outcomes, in particular in relation to substance use disorders. Drake et al. reviewed 13 intensive support programs between 1987 and 1990, which were targeted at a variety of high-risk groups with dual disorders. They found all were successful in engaging clients in outpatient dual-

diagnosis services, and all reduced engagement with in-patient and institutional services, however minimal or no reduction in substance use was found.

In another study by Mueser, Drake and Miles (1997), 215 patients in New Hampshire with severe mental illness (schizophrenia, schizo-affective disorder or bipolar disorder) plus substance abuse disorder were assigned to two forms of integrated treatment: Intensive case management by a team with a client ratio of 1:10 versus the same with client management ratios of 1:30. The programs integrated treatments for both substance abuse and mental illness. After three years it was found that hospitalisation rates were dramatically reduced during the first six months of the study, and global improvements in functional status were continuous over the three years (Mueser, Drake & Miles, 1997). However, a review examining the work of Drake et al. (among other studies) found that the evidence for effective treatment options for this group is less than compelling, pointing to the paucity of well-designed research to specify best practice for the treatment of comorbidity (Proudfoot, Teesson, Brewin and Gournay, 2003).

The ACT-based Throughcare program is targeted at exiting correctional facility inmates. The Program aims to reduce recidivism, improve integration into the community post-release, and improve the social and health outcomes of clients (Griffiths, Zmudzki & Bates, 2017). Ultimately, the Program is designed to reduce recidivism and therefore costs. It commenced in June 2013 and is tailored to each individual. It begins before release and continues for a period of 12 months post-release with the support of community organisations.

While the evaluation report did not identify outcomes in a disaggregated manner to isolate those with mental health disorders and substance misuse issues, the qualitative data indicated that “participants highlighted the role that the Program had played in positively affecting their drug use by providing the type of general support that can act as an alternative to drug use. These examples highlight the fact that for many ex-offenders, feelings of isolation, loneliness or a lack of alternatives leave drug use as a ‘default’ path” (Griffiths, Zmudzki & Bates, 2017: 35). The evaluation indicated that the provided support made a significant difference to the level of drug use; lack of support or disengaging from the program was associated with increased drug use and re-offending leading to re-incarceration. Participants highlighted that the combination of housing and support made a big difference to what they did post-release, as did stakeholders including support workers, who felt that the program was meeting its aims to successfully reintegrate ex-offenders into the community and decrease recidivism rates (Griffiths, Zmudzki & Bates, 2017).

7 Outcomes for people with differing levels of cognitive and functional impairment

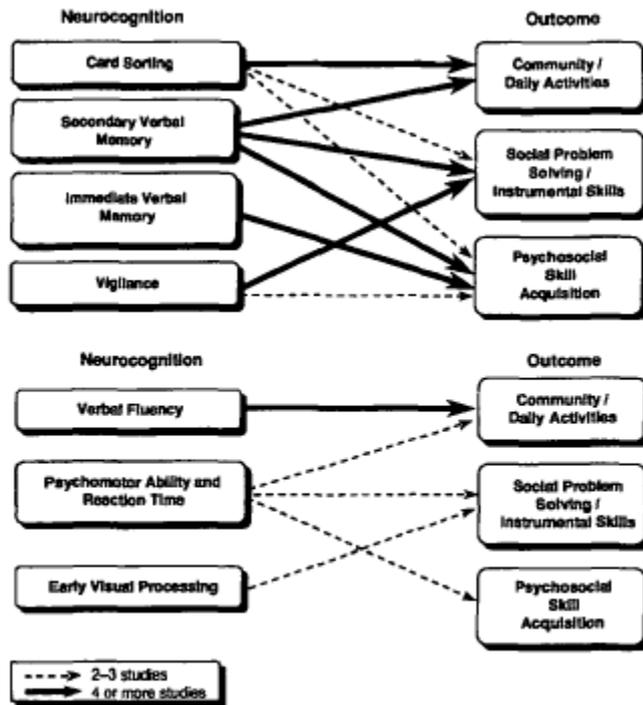
There are few studies of intensive support programs in community settings that disaggregate outcomes on the basis of the specific mental health disorder of the client of the program. The previous evaluation of HASI in 2012 (Bruce et al., 2012) did try to isolate who benefited the most, stating that most consumers from every group benefited from the program. No difference in gender was noted, and nor was there much of a difference between consumers on higher and lower support packages (which could be a proxy for the severity of mental illness). People from all age groups benefited, as did consumers with and without prior stable housing. In short, there was no particular pattern identified in this evaluation for people with differing levels of cognitive and functional impairment.

Psychiatric literature provides some guidance on clinical as well as independent living outcomes. The theory that cognitive impairment, rather than symptoms, influences functional outcomes is backed up by various studies. Velligan, Mahurin, Diamond, Hazleton, Eckert & Miller (1997) tested the pathways between positive symptoms, negative symptoms, cognition and activities of daily living in two separate samples. A global measure of cognition accounted for 48% and 42% of the variance in the activities of daily living for the first and second samples, respectively.

Harvey, Howanitz, Parrella, White, Davidson, Mohs, Hoblyn, and Davis (1998) considered three separate groups of elderly schizophrenia patients that differed substantially in level of adaptive functioning. In each group a composite measure of cognition correlated most strongly with adaptive functioning, explaining about 40 to 50% of the variance.

Green, Kern, Braff and Mint (2000) attempted to visualise the relationships between scores on a range of cognitive measures and outcomes. Figure 1 (below) shows neurocognitive constructs on the left, and the three functional outcome domains on the right. Associations are shown by two types of arrows that represent the number of replications – a heavy arrow indicates that at least four separate studies found a significant relationship between the neurocognitive construct and the outcome domain. The smaller arrows indicate that two or three studies reported a significant relationship. (Green et al., 2000).

Figure 1: Neurocognitive prediction of functional outcome



Source: Green et al., 2000: 129.

Another study by Green, Kern and Heaton (2004) indicated longitudinal associations between cognition and community outcome in schizophrenia, demonstrating that cognitive assessment was predictive of later functional outcomes. They concluded that improvements of disease-related cognitive deficits, through cognition-enhancing drugs, may provide essential building blocks for rehabilitation in this disorder.

Schizophrenia is a severe and disabling illness that affects the individual's capacity to interpret reality and also impacts on the ability to maintain resources (including housing), as well as meaningful relationships that help maintain quality of life (Browne, 2004). An Australian study by Browne (2004) that focused on housing and schizophrenia found that housing affects outcomes. The author found in his literature review that there is evidence that, like other people, people with schizophrenia have a better quality of life and maintain better mental health if they live in decent housing (Kirkpatrick, Younger, Links & Saunders, 1996), however that housing has not been taken particularly seriously in social policy affecting people with severe mental illness in Australia. This is evidenced by the fact that housing options may be limited, and boarding houses are often the de facto housing choice for people with mental illnesses like schizophrenia and few resources (Browne, 2004). Browne's study used a combination of qualitative and quantitative methodologies. Stage one consisted of a quantitative analysis of Queensland Health archival data on people with schizophrenia, including type of accommodation to which patients are discharged. Stage two consisted of qualitative exploration of individual experiences of 13 people with schizophrenia discharged from hospital

either to their own home or to a boarding house. Browne used a grounded theory approach. Severity of symptoms was measured using the Health of the Nation Outcomes Scale (HoNOS); level of functioning was measured using a shortened version of the Life Skills Profile (LSP 16).

Results indicated that the level of functioning, measured using an LSP 16, is significantly different for people with schizophrenia living in a private home when compared to those living in a boarding house. The findings also indicated that while there were no differences in the level of psychiatric symptoms experienced (in line with other studies cited here including Carter, 2008), people with schizophrenia living in boarding houses had less access to social support, meaningful activities and work and had lower levels of global functioning (Browne, 2004). It should be noted that the sample size was small (N = 13) however results were backed up by other studies, for example a NSW Department of Health study by Berger, Bashir, Armitage, Hunt, Hornsey, Shea, Puru, Skelton, Meehan, Bach, Waghorn, Maybury, Cleary & Lynch (1997) found that a key determinant for the high rates of readmission for people with schizophrenia was the type of accommodation to which they were discharged.

A study by Martinez-Arán, Reinares, Colom, Torrent, Sánchez-Moreno, Benabarre, Goikolea, Comes & Salamero (2004) of people with bi-polar disorder aimed to determine relationships among clinical features, neuropsychological performance and psychosocial functioning across different states of bi-polar disorder. Several domains of cognitive function were examined for 30 depressed bipolar patients, 34 manic or hypomanic bipolar patients, and 44 euthymic bipolar patients, and a comparison group of 30 subjects without history of neurological or psychiatric disorders. A neuropsychological battery assessed executive function, attention, and verbal and visual memory. The study found that bipolar performance on verbal learning and memory tasks significantly correlated with psychosocial functioning, chronicity and the numbers of hospitalisations and suicide attempts, as well as with the number of manic episodes. The study indicated that poor functional outcome was related to cognitive dysfunction and that such dysfunctions were also observable in patients in remission. There was impairment in daily functioning among the bipolar group (Martinez- Arán et al., 2004).

The project 300 initiative in Queensland (see section 8.c) tested clients for cognitive impairment. The evaluation found an association between the severity of cognitive impairment and number of support hours required. It also found that readmission to acute care was strongly associated with high support hours. The more disabled clients receiving 21 or more hours of support a week were 3 times more likely to be admitted to acute care (Meehan et al., 2007).

From this review of the literature, one can conclude that neurocognitive variables are indeed related to functional outcome and that the effect sizes (20%-60% for the composite measures) are significant. While cognitive function and community outcomes have been found to be strongly related, Green, Kern and Heaton (2004)

indicate that community functioning is also affected by a host of factors beyond the control of clinical trial studies, such as motivation, social support and educational/vocational opportunities. This would suggest that while cognitive function can be highly predictive of outcomes including in community living, so too can programs affect outcomes (including housing programs), however the current psychiatric literature indicates that neurocognitive abilities are a key determinant.

8 Australian and international programs

The above discussion is based on primarily psychiatric interventions, with or without other supports such as the elements provided by community-based intensive support programs. Based on the search criteria referred to in the Scope and Methodology sections above, programs with all elements operating in Australia, UK and Canada are examined below. Most had evaluations available. The section focuses on recent programs.

8.1 Neami Community Housing Program, Victoria

In 1995, the non-government organisation Neami was funded to provide housing and support for 30 former long-stay patients from a local psychiatric institution in Melbourne. The patients were aged between early 20s and early 50s and had been diagnosed with schizophrenia or related conditions and assessed by clinical staff as being unable to cope in the community without intensive support (Carter, 2008). The Neami Community Housing Program grew out of the supported housing model established through Housing and Support Program (HASP) in Victoria. Tenants leased properties directly from Supported Housing Limited, with standard conditions under the Residential Tenancies Act. Rent was set at 25 per cent of the Disability Support Pension, with automatic payment made through Centrepay. Tenure was ongoing and did not depend on engagement with a specific program of rehabilitation or other support. As with many similar programs, clients had a primary worker (known as a 'keyworker'), as well as contact with the support team (Carter, 2008). Over time the program evolved and developed and became more formalised, using the clinical instrument BASIS-32¹ with clients, as well as Individual Support Plans.

The report on the community housing program is a good source of longitudinal data on outcomes as it details outcomes for clients one year and twelve years after leaving hospital. Twenty-eight clients entered the Neami Community Housing Program in 1995, and of these, in 2007 14 remained in contact with Neami, of which 11 agreed to participate in the research. Of the 11, nine had been diagnosed with schizophrenia, and two with schizo-affective disorder, and all had been in hospital for varying lengths of time previously. A qualitative approach was taken, with in-depth interviews being conducted with clients. Interviews were also carried out with workers and family members and were designed to elicit accounts from respondents' perspectives of the client's experience of housing and support (Carter, 2008). While no measurement tools were used with clients of Neami during the research, one clinical instrument was completed in respect of the clients throughout the program: the Life Skills Profile (LSP16). However, data was only available for nine of the 11 persons interviewed, and baseline data (collected in 1995) was only

¹ Behaviour and Symptom Identification Scale.

available for five of these nine clients (total score only) (Carter, 2008), thus severely limiting this as a source of longitudinal data due to the small sample size.

LSP16 data for the nine current clients for which it was available indicated relatively low levels of disability across the 39 areas assessed. Greater levels of disability were demonstrated on items 26 (capability of working), 39 (making and keeping friendships), 20 (keeping active), 22 (attending social organisations), 15 (not neglecting physical health) and 16 (maintenance of adequate diet) (Carter, 2008). On these items, the scores reflected moderate problems on average. Social isolation and lack of activity were also noted as issues of concern in case notes. Few problems were noted with regard to adherence to medication. Case material indicated few problems with violence or anti-social behaviour. Four of the five individuals where baseline data was available had improved their LSP scores over the 12-year period. As with the findings of other studies, clients continued to experience symptoms of their illness but were able to maintain tenancies and live independently, despite ongoing levels of anxiety and fear associated with symptoms (Carter, 2008). Physical health outcomes were mixed with most clients smoking and overweight, and some having diabetes or heart conditions. All were happy with their housing – the type and location, as well as affordability (Carter, 2008). Unlike other programs, clients had to share with flatmates, which reportedly caused tensions from time to time (about housework and other issues).

The Neami report concludes that the Community Housing Program ‘has shown that some people who experience significant disability associated with mental illness can sustain tenancies and live in the community in the long term when provided with appropriate support. People who had been considered by their clinical workers and families to be unable to survive outside an institutional setting have not only ‘made it’, but have established activities, relationships and routines of their own choosing, and have flourished’ (Carter, 2008: 27). Central to its success in the estimation of the author, apart from the contribution of clinical and other support, is the good quality, affordable housing located in areas allowing for social contact and close to transport and shops.

8.2 Integrated Services Program, NSW

The Integrated Services Program (ISP) coordinates cross-agency support for adults who have multiple and complex support needs, often as a result of mental illness, intellectual disability or drug and alcohol use. The ISP has operated in the Sydney metropolitan area since 2005 and is funded by the NSW Government (Purcal, Zmudzki & Fisher, 2016). Clients may have one or multiple disabilities, significant medical conditions, alcohol and/or drug issues, behaviours causing harm to themselves or others, issues relating to past trauma or neglect, insufficient family support and/or involvement in the criminal justice system (Purcal, Zmudzki & Fisher, 2016). Since the advent of the program in 2005, 71 persons were accepted into the

program and nearly one-half of these have exited the Program, so the sample size is fairly small.

Like HASI Plus, the ISP uses a partnership approach to service provision. It is led by ADHC and managed in conjunction with NSW Health and Housing NSW (Purcal, Zmudzki & Fisher, 2016). The evaluation conducted in 2016 sought to examine the longer-term client outcomes achieved by the ISP for the approximately 59 people who had been through or were in the program in relation to a control group, and to inform policy makers about cost and operationally effective models of service provision for people with complex needs (Purcal, Zmudzki & Fisher, 2016).

Outcome data indicated that 'clients who exit the ISP can live in the community with adequate support and considerably lower cost to the service system compared to before they entered the ISP, and compared to non-clients' (Purcal, Zmudzki & Fisher, 2016: 2). In terms of criminal justice outcomes, the program data indicated that current ISP clients had relatively infrequent contact with the criminal justice system except for police contacts, which were concentrated among a small number of clients. Using longitudinal data from a previous evaluation conducted in 2010, the evaluation found significant reductions on contact with the criminal justice system (Purcal, Zmudzki & Fisher, 2016).

In addition, the ISP was found to be generally effective in maintaining or improving clients' independent living and social connections (Purcal, Zmudzki & Fisher, 2016). In terms of wellbeing, 21 client interviews reflected an overall positive picture of personal wellbeing, with a majority stating that they were at least partly satisfied with their situation and development (Purcal, Zmudzki & Fisher, 2016). It should be noted that attempts were made to use the Personal Wellbeing Index-Adult in 2010 and 2018, however the number who completed this in 2018 was small, which did not allow any generalisable findings to be made.

The evaluation found also that average health service usage decreased as clients spent longer in the ISP. In conclusion, while the evaluation had limited available data on longer-term outcomes, indications were that ISP was helping to maintain stability and independence of clients, and to reduce criminal justice involvement in particular.

A previous evaluation of the ISP, then called the Integrated Services Project for Clients with Challenging Behaviour, made similarly positive findings (McDermott, Bruce, Fisher & Gleeson, 2010; McCausland, Baldry, Johnson & Cohen, 2013).

8.3 Project 300, Queensland

Another example of a community-based intensive support program is Project 300, developed by Disability Services Queensland (DSQ) to assist clients with psychiatric illnesses to transition from long-stay institutional care to community-based arrangements (Disability Services Queensland, 2009). It is similar to the ISP in that

it is an integrated service approach combining aspects of specialist disability and clinical support, and supported accommodation, in order to improve clients' social and community participation and independent living skills (Disability Services Queensland, 2009). The program is targeted at adults living in one extended treatment facility in Queensland, and who have consented to taking part in the Project.

A longitudinal evaluation of the Project by Meehan, O'Rourke and Drake had the aim of assessing changes in functioning and quality of life of those people supported by Project 300 following their discharge to the community (Meehan et al., 2007). The methods used were mixed. Researchers attempted to collect outcome data on all 218 people who had accessed the Project 300 program by 30 June 2000. They used recognised scales to monitor changes in quality of life, functioning, life skills, symptoms, medication utilisation and general satisfaction with living situation. Using convenience sampling, 53 people were interviewed in hospital six weeks prior to their discharge and again at six weeks and six months post-discharge, over the four years of the evaluation. This qualitative data provided useful information on consumer perspectives.

The evaluation found that, while clients experienced mixed outcomes in relation to clinical functioning and quality of life, most were able to maintain residences in the community and to engage in structured activity outside the home (Meehan et al., 2007). In terms of changes in client functioning over time, approximately 41% of clients improved, 38% remained the same and 21% showed some deterioration in their general functioning during their first 18 months in the community. The mean number of support hours provided had decreased from an average of 25 at discharge to 21 per week at 18 months. While quality of life for the clients improved between six months and 18 months, the changes in improvement did not reach statistical significance. Clients rated their satisfaction with Occupational Activities and Physical Health lower at 18 months than at 6 months post-discharge.

Case managers and clients had quite different perceptions of quality of life. In five of the seven domains assessed, case managers tended to rate the quality of life of their clients lower than the clients did themselves. However, in two domains (Activities of Daily Living and Physical Health) the case managers rated the clients' quality of life higher than the clients did (Meehan et al., 2007).

Interviews with clients revealed a strong preference for community living. Of the 181 enrolled in the evaluation only three had returned to long-term care by 18 months. They were overwhelmingly positive about their new homes in the community and the support provided to them, especially by support workers. The evaluators commented that 'While they missed the company of staff and the other patients in hospital, they felt that the freedom, autonomy, dignity, and the sense of hope that community living has to offer more than compensated for this' (Meehan et al, 2007: 22). What they did want more of was money and meaningful activity including work, to more fully socially participate.

While there was nothing to compare it to, incidences of acute care were noted. 30% of clients were admitted to 'acute' care by 6 months post-discharge and some 49% by 18 months post-discharge. Most clients had only one re-admission, however the highest number was ten. Clients who had significantly lower functioning and higher levels of positive symptoms at the time of relocation to the community were more likely to require acute inpatient care. There was a very small drop in use of antipsychotic medications (chlorpromazine equivalents) – a reduction of 19mg. on average.

While 14.9% of the clients in the sample had secured some form of paid employment by 18 months, most were working 8 hours a week or less. Only three were in full time work.

Housing was provided through Queensland Housing and was key to the success of the project. Ninety-five per cent of clients were satisfied with the accommodation provided to them.

Based on a cost analysis by Johnson and Leahy, the average value of a community support package was \$57,437 (in 2007 dollars). However, this costing was for the support packages only and did not include general medical costs, or costs of hospital admissions. When the cost of an 'average' Project 300 client was calculated (including average medical costs) this resulted in a cost of \$69,000. The evaluators costed other forms of treatment and noted that this figure was 'considerably less expensive than the alternative forms of treatment', i.e. in an institutional setting (Meehan et al., 2007: 25).

Overall, the evaluation indicated that that clinical, housing and disability support services could be successfully brought together to meet the needs of this population. Eighteen months after discharge, individuals continued to demonstrate improvements in symptoms, clinical functioning and quality of life. Few disadvantages for the clients were identified. Only 3 of the 218 clients discharged returned to long-term care (McDermott, Bruce, Fisher & Gleeson, 2010).

8.4 Mental Health Disorders and Cognitive Disabilities research, NSW

Mental Health Disorders and Cognitive Disabilities (MHDCD) research by Baldry, Dowse and Clarence (2012) used data merging and pathway building method. The project linked and merged data from a large number of human service and criminal justice agencies on 2,731 persons whose MHDCD diagnoses are known and had been in prison, to create an administrative de-identified life course trajectory for each individual. These were aggregated, allowing for pathway analysis for various sub-groups. Of the 2,731, 965 had a mental health disorder and 1276 had a substance use disorder (noting that these groups overlapped with each other, and with other categories also). The cohort was divided into several categories including

a mental health-only category, and a co-occurring disorder (a) category (history of mental health problems and history of substance abuse).

Baldry et al.'s (2012) pathway analysis found that those with complex needs (dual/comorbid diagnoses and multiple combinations) have significantly earlier police events, higher juvenile justice involvement, offences, convictions and imprisonments than the single and no-diagnosis groups. The authors noted that the cohort "appeared to be cycling around in a liminal, marginalised, community/criminal justice space in which housing / homelessness is a key factor" (Dowse, Baldry & Snoyman, 2009).

The limitation of this study for the purposes of this literature review is that, while the findings are particularly robust as they are based on analysis of a large dataset, the primary focus is on the characteristics of people who go to prison and have MHDCD, rather than an assessment of post-release programs offering intensive support to such persons. However, the study quantifies the types and percentages of inmates that have severe mental health disorders and/or substance abuse issues and are a similar cohort to those who may later enter the HASI Plus program or other intensive support programs. Such data may allow for forward planning in terms of post-release programs, as well as better early interventions.

8.5 The Multiple and Complex Needs Initiative – Victoria

The Multiple and Complex Needs Initiative (MACNI) in Victoria ran between 2004 and 2009. The Victorian Department of Human Services identified and profiled 247 people at the extreme end of the continuum of complexity (Department of Human Services, 2007), where service responses were provided at high cost: on average, an estimated \$248,000 per person per annum, due to the relatively high cost of reactive and crisis-based services. The *Human Services (Complex Needs) Act 2003* (Victoria) established powers for a time-limited, specialist intervention for individuals 16 years and older with multiple and complex needs.

The aim of the MACNI was to stabilise housing, health, social connection and safety for this group. It also identified therapeutic goals for each individual and emphasised coordination of services. Clients in the program needed to have at least two of the four defined diagnostic criteria—mental disorder, drug and/or alcohol dependence, intellectual impairment and acquired brain injury, and be at risk to self or others. Nearly half were living in situations of primary or secondary homelessness, 58% of the eligible individuals had known custodial histories, and 20% of referrals were individuals in custody or prison (DHS 2007).

An independent evaluation resulted in a report (Department of Human Services, 2007) and a 'Snapshot Study' utilising detailed case studies (Department of Human Services, 2009). Findings were as follows: hospital-related data was available for

clients and showed a 76% reduction in presentations to hospital emergency departments; a 34% reduction in number of hospital admissions and a 57% reduction in hospital bed days (Department of Human Services, 2007). The 'Snapshot Study' (Department of Human Services, 2009) of the clients' status pre and post-MACNI for 19 out of 22 of the MACNI clients who had exited the initiative reported improvements across all four MACNI platforms of accommodation, health and well-being, social connectedness and safety for 13 of the 19 individuals; a 63% improvement in the area of stable accommodation; a 69.5% improvement in health and well-being; a 51% improvement in social connectedness and a 46% improvement in safety (DHS 2009). In summary, the quantitative outputs/outcomes evaluation (DHS 2007) concluded that improvement in individual (client) outcomes, improvement in service coordination and the adequacy of legislation had all been achieved. Due to insufficient agency data and lack of time no cost-benefit analysis could be conducted. Another limitation noted was that the numbers in this study were small (N = 22) and therefore caution needs to be taken in drawing conclusions from these data (Hamilton, 2010).

8.6 The Community Justice Program (CJP), NSW

NSW ADHC runs the Community Justice Program (CJP) for up to 400 people with intellectual disability and serious histories of offending. The program is designed to accommodate and support young people and adults with an intellectual disability who have had criminal justice involvement and are at risk of serious re-offending. The program was funded for 200 places in the period from 2006 to 2011, to grow to 400 places by 2016 (Simpson, 2014). It should be noted that presence of mental illness and substance abuse are not explicit criteria for joining the program. Typically, the CJP Intensive Residential Support facilities are located on a rural property or large residential block with a spacious house or a co-located accommodation facility for up to five residents. The support programs are tailored to the specific needs of clients assessed as needing a high level of supervision as well as specific programs to address their offending behaviours and ameliorate the risks they pose to themselves and/or others. The CJP includes two Clinical Teams and one Casework Team. The CJP accommodation support service models consist of: (1) Intensive Residential Support; (2) On-site Supported Living; (3) Tailored Support Packages; (4) Drop-in Support (NSW Human Services, 2010).

Clients require a highly structured environment in which they feel secure whilst developing living skills and managing their health issues (NSW Human Services, 2010). The aim is to move clients towards independence or into the community 'as their skills develop, their support needs permit and their risk behaviours reduce' (Human Services NSW, 2010: 11). While the program contains elements similar to HASI Plus, it differs in that it is a congregate residential care model that is somewhat isolated from the community at large and focuses on a slightly different but overlapping demographic to HASI Plus clients. No publicly available evaluation of the CJP has been located, so outcomes are unknown.

With the advent of the NDIS various groups have expressed concern that clients of the CJP may miss out on receiving NDIS support: As many CJP clients are engaged in behaviours that place them at serious risk to themselves and others, i.e. 'non-compliance with medication, extensive drug and alcohol misuse, impulsivity, aggression and criminal activity...[m]any of our clients do not recognise the negative outcomes of these behaviours due to their intellectual disability. To self-identify a need for support for these issues by this client group (as required under NDIS) is highly unlikely' (Churchill, Sotiri & Rowe, 2016: 7). In addition, the Council for Intellectual Disability (CID) noted in a submission that 'the NDIA appears to be taking a narrower view of its responsibility than did the CJP based on a false dichotomy between challenging behaviour which is the responsibility of the NDIS and offending behaviour which is seen as the responsibility of the justice system' (CID, 2018: 29).

In line with the withdrawal of the NSW government as disability service provider due to the implementation of the National Disability Insurance Scheme, the NSW government is ceasing to be a disability support provider and has been tendering out to the non-government sector the services previously provided by ADHC, including the CJP Program and ISP are being separately tendered out (Council for Intellectual Disability, 2018). It remains to be seen what implications this will have for the intensity of support in both programs and client outcomes.

8.7 The At Home – Chez Soi project in five Canadian cities

In Canada, as in Australia, deinstitutionalisation for people with mental illnesses was intended to replace institutional care with community-based housing and treatment, and as in Australia, there was a shortfall of adequate community-based treatment (Aubry, Nelson & Tsemberis, 2015). The result was increased homelessness. The At Home – Chez Soi model draws upon the Housing First pathways model. The four key theoretical principles described as central to the model are:

1. Immediate provision of housing and consumer-driven services
2. Separation of housing and clinical services
3. Providing supports and treatment with a recovery orientation
4. Facilitation of community integration (Aubry, Nelson & Tsemberis, 2015: 469).

The At Home – Chez Soi demonstration project entailed a randomised control trial conducted in five Canadian cities between 2009 and 2013 (in Vancouver, Winnipeg, Toronto, Montreal and Moncton). The trial was intended to evaluate the effectiveness of the Housing First model relative to existing services available in each city. All participants were characterised as high needs, with a diagnosis at enrolment as having one or more severe mental illnesses (34% had a psychotic disorder and 71% had a nonpsychotic disorder). About two-thirds (67%) were also

diagnosed as having a substance use problem, and more than 90% reported having one or more chronic physical health conditions. Eighty-two per cent of participants were homeless, while the other 18% were precariously housed.

Mixed methods were used to examine the implementation of Housing First programs and participant outcomes, comparing 1158 people receiving Housing First plus assertive community treatment or intensive case management to 990 people receiving treatment as usual (Aubry, Nelson & Tsemberis, 2015). Data collected included quantitative data from structured interviews with all participants using standardised measures and qualitative data with a subgroup of participants, collected through in-depth interviews.

Quantitative outcome findings, in terms of housing outcomes, indicated that during the course of the two-year study, Housing First participants spent 73% of their time in stable housing, compared with treatment-as-usual participants spending 32% of their time in stable housing. Numbers were similar in all five cities. In addition, Housing First participants showed greater improvements, on average, in community functioning and quality of life measures than the treatment-as-usual group. A small proportion of people in the Housing First group (13%) did not achieve housing stability after 1 year of the intervention. They were more likely to have had longer lifetime histories of homelessness, lower levels of education, stronger sense of belonging to their street social network, and more severe mental illnesses, than other participants.

Qualitative outcomes based on interviews with a subset of 195 participants that compared life changes found 61% of people receiving Housing First, compared with 28% of those from the treatment-as-usual group, identified positive life changes. Moreover, 36% of people receiving treatment as usual reported experiencing a negative life course since the start of the study, compared with 8% of those in the Housing First group. "Interview analysis identified living in stable housing and having positive social and supportive contacts as key factors behind positive life courses. In contrast, negative social contacts, social isolation, and continued substance use were cited as significant contributors to negative life courses (Aubry, Nelson & Tsemberis, 2015: 471). This study is particularly relevant and robust in its findings as it used a longitudinal, randomised control trial, mixed-method approach with a large cohort, in five different locations in Canada. As such it provides concrete evidence that, at least in the short term, Housing First approaches did create significant and positive outcomes.

8.8 The Care Program Approach (CPA), UK

Carpenter, Schneider, McNiven, Brandon, Stevens & Wooff (2004) conducted a study of participants in the Care Program Approach (CPA) in the UK in four health districts. The study was based on interviews with a stratified random sample of service users. The sample size was reasonably large – 260 users at Time 1 and 230

at Time 2 (six months later). Three-quarters of the sample had a diagnosis of schizophrenia (53%) or bipolar disorder (22%), and 21% had a diagnosis of severe depression. A quarter of users had concurrent substance abuse problems. Half the sample had been admitted to hospital compulsorily at least once, and 30% had been in hospital for six months on at least one occasion.

The study was primarily survey-based and qualitative and based on perceptions of the users, specifically how much they felt involved in their own care and care plans. Almost all users were able to give their key worker's names and reported that they felt comfortable with them and considered that they were treated with respect. The majority of users gave high ratings on the indices of user involvement. Between 80 and 90% thought their care plan had worked out well or very well. Sources of dissatisfaction related to the lack of written care plans and lack of explanation of medication including possible side effects and alternatives (Carpenter et al., 2004). A limitation is that the study did not gather information about hospitalisations, participation in employment or the housing situation and tenancy maintenance of the clients and therefore is limited in its reporting on outcomes in such domains. It did however note many users were satisfied with the integrated care they received in the community setting.

8.9 Housing and Accommodation Support Initiative (HASI), NSW, 2012 evaluation

A previous evaluation of the Housing and Accommodation Support Initiative (HASI) in NSW was completed in 2012 by Bruce, McDermott, Ramia, Bullen and Fisher (2012). HASI provided accommodation and support, including clinical and other support, to people who had experienced homelessness and had a history of mental illness. In practice, this meant a combination of social housing, outreach services and clinical treatment.

Two main types of data were analysed in the evaluation: interviews with consumers, families and HASI partners in three evaluation sites (metropolitan, regional and rural) and data from secondary sources (including mental health scores, hospital visits, housing indicators, monitoring data from accommodation support services and selected consumer outcomes such as community participation) (Bruce et al., 2012). The evaluation measured mental and physical health outcomes through use of hospital services, mental health clinical measures (K10, HoNOS and LSP16²), consumer and worker perceptions and the use of other health services, including community mental health.

All HASI consumers had at least one mental health diagnosis, the most common of which was schizophrenia (65%), followed by schizo-affective disorder (11%),

² Kessler Psychological Distress scale (K10), Health of the Nation Outcome Scale (HoNOS) and Life Skills Profile (LSP16).

depression/anxiety (10%), and bipolar disorder (9%), so without knowing the severity of the individual conditions, at least 85% could be classified as having a 'severe mental illness'. The evaluation, after analysing qualitative and quantitative primary and secondary data, found that outcomes for consumers were positive in relation to indicators including mental health hospital admissions, mental health, stable tenancies, independence in daily living, social participation, community activities and involvement in education and voluntary or paid work (Bruce et al., 2012). However physical health had not moved towards average levels of the general population. Based on qualitative interviews, most consumers believed that HASI had contributed to improving their quality of life compared to before joining the program (Bruce et al., 2012).

Mental health hospitalisations: The use of hospital services decreased. Improvements included a 59% decrease in the average number of days spent in a mental health inpatient hospital per year; and a 24% reduction in the number of admissions to hospital per year. This equated to a saving of \$30 million per year (estimated in 2009/10 dollars). The greatest improvements for days spent in mental health inpatient services were for higher support HASI consumers (Bruce et al., 2012).

Psychological distress, life skills and behavioural issues: Analysis using well-established measures (K10, LSP16 and HoNOS) showed significant improvements in consumers' mental health since joining the program. More women, lower support consumers and younger consumers experienced improvement in all three mental health assessment scores, while men, higher support or older consumers were more likely to experience greater improvements in absolute scores (i.e. the difference between the mental health score during and before HASI was larger for these consumers). HASI consumers' life skills increased and behaviour issues decreased (both statistically significant) compared with before consumers became involved in the program (LSP16 and HoNOS outcome measures). Consumers' K10 scores decreased overall, flagging a general improvement in their mental health (Bruce et al., 2012).

Use of other mental and physical health services: Changes in service use over time showed more frequent use of psychiatrists and allied health and less frequent use of community mental health services after an initial increase, consistent with appropriate use of services (Bruce et al., 2012).

Housing: The HASI program included clients with a history of unstable housing. Almost half were experiencing homelessness immediately prior to entering HASI. Most HASI consumers successfully maintained their tenancies (90%). Interviews with consumers and their family members found that overall, they were satisfied with the housing and tenancy management that they received (Bruce et al., 2012).

Participation: Consumers overall reported benefits in community, education and employment areas and felt positive about living independently in the community.

Some consumers still felt marginalised and stigmatised, and some had limited social contact and reported having no or few friends (Bruce et al., 2012). They wanted greater participation in mainstream services and activities with other community members.

Daily living skills: At least 60% of consumers were reported to be independent or supported less than half the time in all activities of daily living including personal care, cooking, taking medication and transport, cleaning and exercise (Bruce et al., 2012).

Work, training and education: Thirty-one per cent of HASI consumers were involved in some type of activity (paid or voluntary work, education and training) (Bruce et al., 2012).

The evaluators also discussed in general terms which consumers were most likely to benefit from HASI. They found that 'Most consumers from every group benefit from the program, including men and women, consumers on higher and lower support packages, all age groups (Bruce et al., 2012: 101) but did not disaggregate benefits by type of mental health disorder or by co-morbidity. Some workers reported that 'consumers who were most willing and motivated to engage with HASI support were most likely to benefit', whereas those with persistent substance use issues were least likely due to a reduction in motivation (Bruce et al., 2012: 102).

In summary, the previous evaluation of HASI was based on a wide variety of data and methodologically robust. It found that most people receiving support through this program successfully maintained their tenancies and used relevant mental and physical health services, and that they had improved mental health outcomes, decreased hospitalisations, improved social contact with family and friends and increased participation in community activities, including engagement in work, education and training for some consumers (Bruce et al., 2012).

9 Conclusion

The above review of programs similar to HASI Plus that provide integrated support services in community settings indicates that a range of benefits can flow from such programs in the domains of health, wellbeing, independent living, maintenance of tenancies and social contact. The evaluations and studies reviewed reported improvements in the areas of housing, employment and training, and social inclusion. Some improvements were statistically significant. Few studies reported outcomes by level of need or severity of mental health disorder and/or co-occurring substance use.

However, psychiatric literature and the previous HASI evaluation support the findings from the above evaluations and studies that a minority of clients experience fewer benefits and that this is correlated with lower levels of cognitive functioning (Baldry et al., 2012; Green et al., 2004) as well as substance abuse. The latter worsens outcomes for persons with mental illness, presenting obstacles to treatment (Blanchard, Brown, Horan, & Sherwood, 2000; Siris, Addington, Azorin, Falloon, Gerlach & Hirsch, 2001). Therefore, while programs similar to HASI Plus tend to produce positive outcomes for many clients, for those with serious mental illness, lower cognitive function and substance abuse issues, positive outcomes are less assured. None of the evaluations that were reviewed indicated an on-average *deterioration* among program participants.

Findings related to service use indicate a reduction in the use and therefore the cost of mental and general health services, as well as reductions in incarceration. Cost-benefit analyses have identified and quantified savings for government due to intensive support programs (Meehan et al., 2007; Purcal, Zmudzki & Fisher, 2016). Finally, consumers themselves typically report being satisfied with the housing and support being received on the whole, and evaluations and studies found that very few returned to institutionalised forms of care (Carpenter et al., 2004; McCausland et al., 2013; McDermott et al., 2010). In summary it can be concluded that intensive support programs do, in general, provide benefits for many clients.

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