CHAPTER 7

Supported Housing as a Promising Housing First Approach for People with Severe and Persistent Mental Illness

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Introduction

Since the 1970s, deinstitutionalization has been the main focus of mental health policies in provinces across Canada (Kirby and Keon 2006). A primary reason behind deinstitutionalization was the recognition of the negative consequences associated with long-term treatment in psychiatric institutions (Mechanic and Rochefort 1990). The main objective of deinstitutionalization has been to move people with severe and persistent mental illness from psychiatric institutions into the community by replacing institutional services with community supports. The end goal of this major transformation in psychiatric services is to assist the deinstitutionalized population in assuming normal roles and becoming integrated back into society.

Unfortunately, close to four decades after the onset of deinstitutionalization in Canada, the goal of integrating people with severe and persistent mental illness remains a work in progress. A primary reason has been the slowness in developing much-needed community services to replace institutional ones, including housing. As a consequence, a substantial number of people with severe and persistent mental illness across Canada are socially isolated, live in extreme

poverty and are either homeless or at constant risk of becoming homeless (Kirby and Keon 2006).

Only one Canadian survey has been completed to estimate the prevalence rates of mental illness in the homeless population. In a study conducted in Toronto, Goering, Tolomiczenko, Sheldon, Boydell and Wasylenki (2002) used a structured diagnostic interview among the city's homeless and found an overall lifetime prevalence rate of 67 percent for mental illness and 68 percent for substance abuse or dependence. Six percent of the sample reported having had a psychiatric hospitalization in the past 12 months. The lifetime prevalence of schizophrenia among the sample was 6 percent. A comparison of individuals who were experiencing homelessness the first time and individuals having had multiple episodes found no differences in prevalence rates of mental illness or substance abuse problems or in the percentage having had a psychiatric hospitalization in the past year.

In a review of 29 different studies conducted between 1979 and 2005 on the prevalence of major mental disorders among the homeless population in seven Western countries other than Canada, Fazel, Khosla, Doll and Geddes (2008) reported a pooled prevalence rate across studies for psychotic disorders of 12.7 percent with estimates from individual studies ranging from 2.8 percent to 42.3 percent. They found a similar pooled prevalence rate of 11.4 percent for major depression, with estimates in individual studies ranging from 0 percent to 40.9 percent. Among the disorders examined in the research, alcohol dependence had the highest pooled prevalence rate across studies with over a third of surveyed individuals (37.9%) identified with the problem. In response to the high prevalence rates of homelessness among people with mental illness and substance abuse problems, the development of effective housing and supports has been a preoccupation of mental health systems in Western countries, including in Canada (Nelson 2010).

The objective of this chapter is to review the current status of supported housing, a contemporary approach that is gaining increasing interest and support throughout North America and Europe for addressing homelessness of people with severe and persistent mental illness (Nelson 2010). In the Canadian context, the Mental Health Commission of Canada is in the process of investigating the effectiveness of supported housing through a large multi-site study in which housing and support of different levels of intensity are being

delivered to people with mental illness and a history of homelessness (MHCC 2011). In this chapter, we present a history of the development of housing in response to deinstitutionalization, followed by a description of the supported housing approach. Subsequently, we will review the outcome research on supported housing. Based on this review, we will present limitations of this research. The chapter will conclude with a discussion of future directions for research and implications of the current state of knowledge on policy and program development.

History of Housing for People with Severe and Persistent Mental Illness

In the wake of deinstitutionalization, the development of housing for people with severe and persistent mental illness has involved three distinct approaches: custodial housing, supportive housing and supported housing (Nelson 2010; Trainor et al. 1993). In tracing the policy stages with regard to housing in the province of Ontario, Trainor (2008) described the first type of housing created in response to the initial stage of deinstitutionalization in the 1970s as being custodial in nature. This was followed by the development of supportive housing in the 1980s and 1990s. Over the past 15 years, supported housing has emerged increasingly as the preferred housing approach. Table 7-1 presents a comparative description of the three approaches.

Custodial housing refers to board and care homes—often for-profit, semi-institutional facilities and single-room occupancy hotels (Parkinson, Nelson and Horga 1999). The residents are typically people with disabilities and support is provided by staff on-site (Parkinson, Nelson and Horga 1999). Custodial housing was critiqued for the segregation, social isolation and dependency that it fostered among its residents. As well, the quality of custodial housing was often very poor with residents lacking privacy or control over their living situation (Nelson 2010).

In response to these critiques, supportive housing was developed with the primary objective of helping residents develop life skills through community treatment and rehabilitation (Ridgway and Zipple 1990). Supportive housing was intended to be organized in a residential continuum (e.g., quarterway houses, halfway houses, group homes, etc.) in which the intensity of rehabilitation and the amount of autonomy varied in accordance with an individual's

Table 7-1. Description of different housing approaches implemented after deinstitutionalization

	Custodial Housing	Supportive Housing	Supported Housing
Definition	• Consumers receive shelter, medication and meals, but little or no rehabilitation or support.	• Consumers receive shelter and on-site rehabilitation. As their functioning improves, they move to less restrictive setting.	• Consumers choose, get and keep regular housing in the community. They often receive rent supplement; support is portable and not tied to housing.
Key Characteristics	• Special care homes or foster families • Congregate housing • Staff control • In-house staff provides custodial care	• Group home or clustered apartment with common areas • Shared control over household decisions • In-house staff provides rehabilitation services	• Apartment or other type of independent housing • Consumers are regular tenants and have control over their housing. • Staff are off-site and provide supports that are individualized according to needs.
Strengths	• Less expensive then institutions • Does not require trained staff	• Consumers have more control over housing arrangements • Housing includes an individualized rehabilitation program • Facilitates the development of a social network with other tenants	• Preferred housing for majority of consumers • Residents have choice and control over housing and support • Less expensive than other alternatives • Ongoing support

Table 7-1. (Continued)

	Custodial Housing	Supportive Housing	Supported Housing
Weaknesses	• Lack of privacy • Quality of the housing is often poor • Frequently fosters dependency • Consumers have little control • Can include people with different disabilities • No individualized support provided	• Full continuum of housing often lacking • Transitional housing and services lacking permanency • Interpersonal demands of group living • Discharge to affordable permanent housing with support may not be available	• Some consumers report being socially isolated and lonely • Lacks sufficient resources for consumers to pursue leisure activities and achieve community integration • Intensity of support may be insufficient

functioning level (Nelson 2010; Parkinson, Nelson and Horga 1999). Individuals were supposed to move along the continuum until they were ready to live independently. Although considered better living situations than custodial housing, supportive housing also had its share of detractors, who noted that a full continuum of housing options were rarely created in communities, moving in and out of housing was not in the best interest of consumers and individuals rarely achieved independent living (Blanch, Carling and Ridgway 1988; Nelson 2010; Ridgway and Zipple 1990).

Beginning in the late 1980s and early 1990s, mental health advocates called for the development of supported housing, wherein individuals with severe and persistent mental illness would be provided with the necessary support to live in regular housing as tenants (Blanch, Carling and Ridgway 1988; Carling 1993, 1995; Ridgway and Zipple 1990). The type of support in this approach usually involves Assertive Community Treatment (ACT) or Intensive Case Management (ICM) or some variant of these (Tabol, Drebing and Rosenheck 2010).

Wong and Solomon (2002) identified three factors as contributing to the development of the supported housing approach: (1) the criticism of supportive housing and the residential continuum model, (2) the recognition of homelessness as a significant social problem, particularly for individuals with severe and persistent mental illness

and (3) the development of effective approaches for providing treatment and support in the community, including ACT and ICM. Another important contributor to the ascendancy of supported housing has been the results of research on consumer preferences in relation to housing and support.

In a review of 26 studies of mental health consumers' preferences for housing and support conducted between 1986 and 1992, Tanzman (1993) reported that the most preferred living arrangement was independent living in a house or apartment. In 20 of the 26 surveys, at least 70 percent of the sample expressed this preference. Consumers in the reviewed studies also reported a preference for living alone or with a spouse or romantic partner and not living with other mental health consumers. With regard to staff support, consumers expressed a preference for having outreach staff that are readily available but separated from their housing. A majority of the respondents in the surveys also underlined the importance of income support and rent subsidies for them to be able to afford their preferred housing.

Two other Canadian studies had very similar findings concerning consumer preferences as Tanzman (1993). Nelson, Hall and Forchuk (2003) surveyed 300 individuals with severe and persistent mental illness in Ontario using the same instrument used in the American studies reviewed by Tanzman (1993). Of these respondents, 79 percent reported wanting to live independently in regular housing and only 38 percent actually lived in the housing that they preferred. Similar to the results of the American surveys, a very high proportion of survey respondents (82%) identified greater income support as being required for them to access their preferred housing. Less than one quarter of respondents (23%) wished to live with other mental health consumers. With regard to supports, consumers preferred supports that are external to their living situation and available on an on-call basis.

More recently, Piat and colleagues (2008) evaluated the housing preferences of a stratified random sample of 315 mental health consumers living in housing supervised by health and social service organizations in Montreal. Over three-quarters of the sample (77%) expressed a preference for living in their own apartment, social housing or a supervised apartment. In contrast, less than half of consumers' case managers (49%) chose these options for them and only 35 percent of case managers agreed with their clients' preferences.

Piat and her colleagues (2008) interpreted their results as showing that consumers preferred housing that offered them more independence than the housing in which they were currently living. Case managers also showed preferences in this direction but were generally more conservative in these preferences relative to their clients, wanting more structure and clinical involvement in the housing, such as that offered by supervised apartments. Overall, these findings show unequivocally that consumers prefer supported housing over custodial or supportive housing.

Core Principles, Dimensions and Elements of Supported Housing

Early writings advocating a supported housing approach argued that, compared to custodial housing or supportive housing, it was most conducive to facilitating consumer empowerment, community integration and normalization (Blanch, Carling and Ridgway 1988; Carling 1992, 1993; Ridgway and Zipple 1990). This represented a paradigm shift wherein former psychiatric patients would be supported to assume the normal role of tenant in regular and integrated housing through supported housing. A fundamental assumption of the approach was that people with severe and persistent mental illnesses can succeed in independent housing without first requiring a period of rehabilitation (Rog 2004).

The adoption of supported housing as a response to the chronic homelessness experienced by individuals with severe and persistent mental illness has gained momentum in North American cities because of the very promising findings emerging from research on the Pathways to Housing program in New York City (Greenwood et al. 2005; Stefancic and Tsemberis 2007; Tsemberis 1999; Tsemberis and Eisenberg 2000; Tsemberis, Gulcur and Nakae 2004). Four studies on the Pathways program have been completed in the United States, and their findings show participants remaining stably housed despite having a chronic history of homelessness (Greenwood et al. 2005; Pearson, Montgomery and Locke 2009; Stefancic and Tsemberis 2007; Tsemberis and Eisenberg 2000). A more detailed review of this research is conducted in a later section of the chapter.

Typically, the support includes a rent subsidy and there are no requirements for treatment of their mental illness and/or addiction for consumers to move into or stay in housing. For this reason,

supported housing is often referred to as 'Housing First'. It is important to note that most supported housing described in the literature is Housing First in nature. However, not all housing that is described as Housing First is necessarily supported housing since both custodial housing and supportive housing can adopt Housing First principles and not require their residents or participants to engage in treatment or remain abstinent from alcohol or drug use to qualify for the housing. We will examine the criteria of supported housing in more detail next.

Three reviews defining the core ingredients of supported housing have been conducted (Rog 2004; Tabol, Dreben and Rosenheck 2010; Wong, Filoromo and Tenille 2007). The core ingredients of supported housing identified in each of the reviews are presented in Table 7-2.

In an attempt to operationalize the supported housing approach, the Substance Abuse and Mental Health Services Administration's (SAMHSA) Centre for Mental Health Services, located in the United States, defined eight core dimensions to the approach (as cited in Rog 2004):

1. An individual owns the housing or holds a lease in his or her name as a tenant and the housing is considered permanent.
2. Housing and services are legally and functionally separate.
3. Housing is integrated in the community (i.e., regular in nature).
4. Housing is affordable (i.e., does not exceed 40% of gross income).
5. Participation in services is voluntary and not a condition of getting or keeping housing.
6. Individuals are given choice for both housing and services.
7. Services are community-based and external to the housing (i.e., no live-in or regular in-house staff).
8. Crisis services are available 24 hours per day and seven days per week.

Rog (2004) noted that descriptions of supported housing programs in research literature are frequently missing certain dimensions. As well, alternative housing programs to which supported housing is compared often are presented as having some of these dimensions.

In examining the implementation of supported housing in Philadelphia and based on a review of the literature, Wong, Filoromo

Table 7-2. Criteria of supported housing as defined in different reviews focusing on implementation issues

Criteria Areas	Rog (2004)	Wong et al. (2007)	Tabol et al. (2010)
Use of Regular Housing	• An individual owns the housing or holds a lease in his or her name as a tenant and the housing is considered permanent. • Housing is integrated in the community. • Housing is affordable (i.e., does not exceed 40% of of gross income).	• Typical and normalized housing	• Housing is affordable • 'Normal' tenancy agreement • Privacy over access to the unit • Appearance of residence fits with neighbourhood norms • Integrated with non-consumers • Long-term placement/ potentially permanent housing
Separation of Housing and Services	• Housing and services are legally and functionally separate. • Participation in services is voluntary and not a condition of getting or keeping housing. • Services are community-based and external to the housing (i.e., no live-in or regular in-house staff).	• Promotes the independence and control of consumers with regard to their relationships with support providers	• Housing and services legally/ functionally separate • Absence of requirements as condition of stay • No live-in/ regular in-house staff

Table 7-2. (Continued)

Criteria Areas	Rog (2004)	Wong et al. (2007)	Tabol et al. (2010)
Delivery of Flexible Supports	• Crisis services are available 24 hours per day and 7 days per week.	• Housing located close to community resources • Support delivered to consumers is individualized, flexible and of varying intensity based on needs	• Individualized and flexible support • Crisis services available 24/7 • Resources in close proximity
Facilitation of Choice	• Individuals are given choice for both housing and services.	• Consumer choice for housing • Promotes the independence and control of consumers with regard to their relationships with support providers	• Shared decision-making • Choice in housing options
Immediate Placement			• Immediate placement into normal housing (i.e., no preparatory setting)

and Tenille (2007) descried supported housing as being based on four core principles: (1) housing is a basic right for people with psychiatric disabilities, (2) people with psychiatric disabilities are to live in housing as regular tenants and community members, (3) empowerment is the practice goal for the relationship between consumers and support staff and (4) access to and the delivery of housing and mental health services are functionally separate. According to Wong, Filoromo and Tenille (2007), these principles produce five operational domains integral to supported housing and pertaining to either housing/tenancy or support/services. The first principle is ensuring 'consumer choice' particularly as it relates to the location and type of housing as well as with whom and how consumers will live. The second principle refers to consumers living in 'typical and

normalized housing' that corresponds to neighbourhood norms and is located in an environment (e.g., apartment block, neighbourhood) where there are a majority of non-disabled individuals. The third principle has housing located close to community resources and facilities that can facilitate community participation and integration. The fourth principle promotes the independence and control of consumers with regard to their relationships with support providers. Finally, the fifth principle holds that support delivered to consumers be individualized, flexible and of varying intensity based on needs.

Wong, Filoromo and Tenille (2007) conducted an extensive analysis of data from housing providers and consumers to evaluate the extent that 27 housing programs for people with severe and persistent mental illness in Philadelphia demonstrated these five operational principles. Results showed substantial variations in housing and mental health support characteristics in terms of being in line with these principles. The researchers concluded that this variation reflects the existence of different versions of supported housing with some programs showing high fidelity to these principles while others deviate from them.

In a recent study, Tabol, Drebing and Rosenheck (2010) conducted a comprehensive review of the literature on supported housing programs and examined the degree of clarity of the approach and the degree of fidelity to the model in the descriptions of programs appearing in studies published in the research literature. For this review, key articles on supported housing were investigated to identify the critical elements of the model. A total of 15 elements were identified and clustered into five broader overarching categories—namely, (1) normal housing, (2) flexible supports, (3) separation of housing and services, (4) choice and (5) immediate placement (see Table 7-2). Using the identified elements in their conceptualization of supported housing, Tabol, Drebing and Rosenheck (2010) evaluated the descriptions of 38 different housing programs described in articles published in peer-reviewed journals between 1987 and 2008. In particular, they assessed if the descriptions of the programs in these articles included each of these elements and determined the extent they adhered to them. Of the 38 programs, 25 were characterized in the published articles as supported housing, seven programs as supportive housing and the remaining six programs as unlabelled or other.

Tabol, Drebing and Rosenheck's (2010) analysis found that although programs described as supported housing adhered to more

elements than those defined as supportive housing or other housing, less than half of the supported program adhered to most of the 15 elements. Based on these findings, the researchers concluded that the lack of clarity of the supported housing model along with the lack of fidelity to the critical ingredients of the model in many programs has hindered the broad dissemination, implementation and evaluation of the approach. Related to these issues is the inconsistency in the community mental health sector of the use of the labels *supported housing* versus *supportive housing* to describe programs. As a result, there is confusion in the field among researchers, practitioners, policy-makers and the public about the critical ingredients of these two approaches and how to differentiate them. In the next section of the chapter, we turn our attention to the outcome research on supported housing, focusing on those programs that show adherence to the key core elements of the approach.

As yet, there is no consensus on the criteria that should be used to evaluate the validity of a supported housing approach, nor has a fidelity measure for the approach been developed. Each of the reviews used a different process to establish their criteria. Rog (2004) used the early criteria developed by SAMHSA's Center for Mental Health Services that were based on a set of interviews and surveys with key informants. Wong, Filoromo and Tennille (2007) operationalized the key dimensions of supported housing appearing in the theoretical literature as defined by Carling (1995), Hogan and Carling (1992) and Ridgway and Zipple (1990). Tabol, Drebing and Rosenheck (2010) reviewed the criteria appearing in the extant research literature, including from the two previous reviews (Rog 2004; Wong, Filoromo and Tenille 2007), and developed what they considered an exhaustive list of key criteria of supported housing.

Review of Research on Effectiveness of Supported Housing

Criteria for Selection of Studies

An electronic literature search was conducted of the databases of published research, PSYCINFO and MEDLINE, by entering the keywords "housing first", "supported housing", "homeless", "homeless mentally ill", "assertive community treatment", "intensive case management" and "case management". We also examined recent literature reviews on housing in the area of community mental health (Aubry, Doestaler and Baronet 2004; Coldwell and Bender 2007; Leff et al.

2009; Nelson, Aubry and Lafrance 2007; Nelson 2010; Tabol, Drebing and Rosenheck 2010).

The selection of eligible studies emerging from our literature search was based on the following criteria: (1) the study needed to be published in a refereed journal, (2) the study involved a comparison of at least two groups, of which one of the groups comprised individuals living in supported housing and (3) the study examined effectiveness using at least some quantitative measures.

In order to determine if a study included at least one group in its design in which individuals received supported housing, the description of the housing and support in the paper reporting had to include the presence of four criteria which we considered the minimum critical ingredients of the approach. These criteria were selected from Rog's (2004) critical elements of supported housing: (1) housing and supports are provided separately by different organizations, (2) individuals in the program live in regular housing that is integrated into the community, (3) individuals live in housing that is affordable, defined typically as costing 40 percent or less of their income and (4) support services are delivered separately and externally from the housing (i.e., portable rather than involving live-in support). A total of nine studies were identified.

Description of Selected Studies

Table 7-3 presents descriptive information about the selected studies. All of the studies were conducted in cities in the United States. Of the nine studies, six adopted a true experimental design (i.e., participants were randomly assigned to different treatment conditions) and another three used a quasi-experimental design (i.e., participants of different groups were not randomly assigned but were matched on key variables instead).

In terms of comparison groups, four studies compared supported housing to a continuum model of housing (McHugo et al. 2004; O'Connell, Kasprow and Rosenheck 2009; Tsemberis 1999; Tsemberis et al. 2003), three studies compared supported housing to case management without housing or to standard care in the community (Hurlburt, Hough and Wood 1996; Rosenheck et al. 2003; Stefancic and Tsemberis 2007), one study compared supported housing to supportive housing (i.e., congregate housing with on-site case management) (Dickey et al. 1996) and one study compared supported housing to two types of housing models: (1) supportive housing and (2) multi-site

Table 7-3. Characteristics of selected supported housing studies

Study	Location	Sample	Comparison Group(s)	Experimental Group	Study Type	Follow-up
Hurlburt, Wood & Hough (1996); Hurlburt, Hough & Wood (1996); Wood et al. (1998)	San Diego	C1: 90 C2: 91 E1: 90 E2: 91	No Section 8 certificate with comprehensive (C1) or traditional case management (C2)	Supported housing: Section 8 certificate with either comprehensive case management (E1) or traditional case management (E2)	Experimental	24 months
Dickey et al. (1996); Goldfinger et al. (1999); Seidman et al. (2003)	Boston	C:63 E: 55	Evolving consumer households with congregate living (C)	Supported housing, independent living (E)	Experimental	18 months
Tsemberis (1999); Tsemberis & Eisenberg (2000)	New York	C: 3,811 E: 139	Residential continuum model (C)	Pathways supported housing with ACT (E)	Quasi-experimental	36 months (Tsemberis 1999); 60 months (Tsemberis & Eisenberg 2000)

Table 7-3. (Continued)

Study	Location	Sample	Comparison Group(s)	Experimental Group	Study Type	Follow-up
Gulcur et al. (2003); Tsemberis et al. (2003); Tsemberis, Gulcur & Nakae (2004); Greenwood et al. (2005)	New York	C: 119 E: 87	Residential continuum model (C)	Pathways supported housing with ACT (E)	Experimental	24 months (Gulcur et al. 2003; Tsemberis et al. 2003; Tsemberis et al. 2004) 36 months (Greenwood et al. 2005)
Rosenheck et al. (2003); Cheng et al. (2007); O'Connell, Kasprow & Rosenheck (2008)	San Francisco, San Diego, New Orleans, Cleveland	C1: 90 C2: 188 E: 182	No Section 8 certificate with case management (C1) or standard treatment (C2)	Supported housing: Section 8 certificate with intensive case management (E)	Experimental	36 months (Rosenheck et al. 2003; Cheng et al. 2007); 60 months (O'Connell et al. 2008)
McHugo et al. (2004)	Washington, DC	C: 61 E: 60	ICM with congregate housing or non scattered-site housing (C)	Supported housing with ACT (E)	Experimental	18 months

Table 7-3. (Continued)

Study	Location	Sample	Comparison Group(s)	Experimental Group	Study Type	Follow-up
Stefancic & Tsemberis (2007)	New York, NY	C: 51 E1: 105 E2: 104	Standard care (C)	Supported housing with ACT (Pathways) (E1); Consortium of treatment and housing agencies (E2)	Experimental	20 months (E1, E2, & C); 47 months (E1, E2)
O'Connell, Kasprow & Rosenheck (2009)	15 sites across the United States	C: 183 E: 139	Section 8 voucher with multistage housing and case management (C)	Section 8 voucher with direct placement into independent housing and case management (E)	Quasi-experimental	24 months
Pearson, Montgomery & Locke (2009)	Seattle (DESC); San Diego (REACH); New York (Pathways)	DESC : 25 (C1); REACH 29 (C2); Pathways: 26 (E)	Supportive housing (C1); Multi-site housing with modified ACT (C2)	Supported housing with ACT (E)	Quasi-experimental	12 months

housing with modified ACT support (Pearson, Montgomery and Locke 2009).

Some of the studies were reported in several different articles, sometimes with different sample sizes or overlapping samples. When there were overlapping samples in different reports, it was decided to count them as one study, rather than separate studies, using the article with the largest sample size reported. There was great variability in the supported housing models across the studies in terms of fidelity criteria for supported housing. A full description of the different supported housing programs examined in the literature was often lacking. As well, few studies conducted fidelity assessments to determine how adequately the program components were being implemented. In general, as Tabol, Drebing and Rosenheck (2010) reported, there was great variability in the housing programs described in the different studies in terms of fidelity to the supported housing criteria.

Description of Population in Selected Studies

The samples of participants in the selected studies are characterized by a preponderance of non-white, middle-aged men. Only one study had a majority of white participants (Hulburt, Wood and Hough 1996) and only one study had a majority of women (McHugo et al. 2004).

Most studies targeted a population with severe and persistent mental illness as reflected by the relatively high prevalence of schizophrenia among study participants in seven of the nine studies. The remaining two studies were conducted on military veterans (O'Connell, Kasprow and Rosenheck 2009; Rosenheck et al. 2003), and less than 10 percent of participants from those studies had a diagnosis of schizophrenia. In these studies, the eligibility criteria included having a serious mental disorder (e.g., schizophrenia, psychotic disorder, depression, post-traumatic stress disorder) and/or addiction in addition to being homeless. The samples in eight of the studies show a high prevalence of substance use, indicating the presence of concurrent disorders in a majority of study participants.

A large proportion of participants in the reviewed studies had experienced lengthy periods of homelessness leading up to their participation in the study. Upon admission to the study, they were either living in emergency shelters, on the street, in transitional housing, in jail or in a psychiatric hospital.

Findings on Outcomes

Table 7-4 presents a summary of results of studies examining the effectiveness of supported housing in relation to other housing models or to standard care. In discussing the findings, outcomes will be summarized into the categories of housing outcomes (e.g., length of time housed), service use outcomes (e.g., number of hospital admissions, length of hospitalizations and satisfaction with services), clinical outcomes (e.g., client functioning and symptoms), community adaptation (e.g., quality of life, employment, and community integration) and costs.

Housing. Overall, individuals placed in supported housing had better outcomes in relation to housing compared to individuals placed in residential continuum housing. In particular, supported housing resulted in superior housing outcomes including the achievement of stable housing in five of the nine studies when compared to residential continuum housing models (Tsemberis 1999; Tsemberis et al. 2003), programs providing case management without housing (Hulburt, Hough and Wood 1996; Rosenheck et al. 2003), supportive housing, and standard care (e.g., Rosenheck et al. 2003; Stefancic and Tsemberis 2007).

In one of the studies, tenants in supported housing achieved comparable housing outcomes to tenants in supportive housing and residential continuum housing but reported having fewer housing problems (Pearson, Montgomery and Locke 2009). In two of the studies, supportive housing was found to yield superior housing outcomes to supported housing (Dickey et al. 1996; McHugo et al. 2004). Finally, in the remaining study, housing outcomes were mixed, with tenants in supported housing showing a greater reduction of homelessness over 24 months than tenants in residential continuum housing (O'Connell, Kasprow and Rosenheck 2009). However, tenants in supported housing had more days of homelessness over the course of the study. The non-equivalence of the housing history of the two groups was interpreted as contributing to these differences in findings.

Service use outcomes. In three of the six studies that looked at service use outcomes, tenants in supported housing were found to experience less time in hospital in comparison to tenants in residential continuum housing (Gulcur et al. 2003; O'Connell, Kasprow and

Table 7-4. Summary of outcomes in effectiveness studies on supported housing

Studies	Housing	Service Use Outcomes	Clinical Outcomes	Community Adaptation	Costs
Hurlburt, Hough & Wood (1996); Hurlburt, Wood & Hough (1996); Wood et al. (1998)	(+) shorter amount of time to being housed (+) % independent living at 2 yrs.	(+) greater continued contact with services			
Dickey et al. (1996); Goldfinger et al. (1999); Seidman et al. (2003)	ND % housed at 18 mos. (−) lower % experiencing homelessness, mean # of days homeless	ND hospitalizations ND use of mental health and addiction services	ND neuropsychological functioning over time (−) decreased executive functioning over time		
Tsemberis (1999); Tsemberis & Eisenberg (2000)	(+) % housed at 5 yrs.				
Gulcur et al. (2003); Tsemberis et al. (2003); Tsemberis, Gulcur & Nakae (2004); Greenwood et al. (2005)	(+) time stably housed	(+) less time in hospital (−) substance abuse treatment	NC drug use, alcohol use, psychiatric symptoms	ND self-esteem, ND quality of life	(+) lesser hospitalization/ housing/shelter costs

Table 7-4. (Continued)

Studies	Housing	Service Use Outcomes	Clinical Outcomes	Community Adaptation	Costs
Rosenheck et al. (2003); Cheng et al. (2007); O'Connell, Kasprow & Rosenheck (2008)	(+) days housed at 36 mos., housing satisfaction, retention at 60 mos. (+) fewer days homeless	(+) fewer days institutionalized (+) greater use of mental health services	(+) fewer days of alcohol use (+) fewer days intoxicated, days using drugs, drug index score (+) reduced alcohol index score	(+) greater housing satisfaction, social network, quality family relations (+) fewer housing problems employment, legal involvement and income	(−) lesser societal costs
McHugo et al. (2004)	ND % in stable housing at 18 mos. (−) increased time in stable housing, decreased homelessness ND housing satisfaction ND neighbourhood satisfaction	ND medical or dental care, treatment for alcohol and drug use, psychiatric services	ND decreased psychiatric symptoms over time (−) fewer psychiatric symptoms ND days of alcohol use & days of drug use	ND exposure to community violence ND increased life satisfaction over time (−) greater life satisfaction	
Stefancic & Tsemberis (2007)	(+) % retention of housing at 2 yrs.				(+) lesser program costs vs. emergency shelter costs

Table 7-4. (Continued)

Studies	Housing	Service Use Outcomes	Clinical Outcomes	Community Adaptation	Costs
O'Connell, Kasprow & Rosenheck (2009)	(−) fewer days homeless ND increased days housed in past 90 days (+) decreased days homeless over time	(+) fewer days institutionalized (+) fewer days institutionalized over time (+) greater use of outpatient services	ND decreased psychiatric symptoms and substance abuse over time	ND increased employment, quality of life, income, social network, days of drug use over time ND decreased minor and major crimes over time (−) increased employment over time	(+) lesser health care costs
Pearson, Montgomery & Locke (2009)	ND % housed at 12 mos. (+) fewer housing problems				

Note. (+) outcomes in favour of supported housing, (−) outcomes in favour of comparison group, ND = no difference, NC = no change over the treatment time.

Rosenheck 2009) or those receiving case management or standard care (O'Connell Kasprow and Rosenheck 2008). With regard to participation in substance abuse treatment, individuals in the residential continuum group reported significantly greater participation in substance abuse treatment programs than individuals living in supported housing (Tsemberis, Gulcur and Nakae 2004). In terms of utilization of outpatient services, supported housing tenants showed greater utilization in comparison to tenants living in a residential continuum program (O'Connell, Kasprow and Rosenheck 2009). Finally, two studies found no differences between tenants of supported housing group and those in a residential continuum program with regard to overall health care utilization (Dickey et al. 1996; McHugo et al. 2004).

Clinical outcomes. Of the five studies evaluating clinical outcomes, mixed results were found. Two studies found no differences in changes over time in the severity of psychiatric symptoms or substance use between supported housing and residential continuum housing tenants (O'Connell, Kasprow and Rosenheck 2009; Tsemberis, Gulcur and Nakae 2004). McHugo and colleagues (2004) and O'Connell, Kasprow and Rosenheck (2009) also report no group differences in psychiatric symptoms or substance use between individuals in supported housing and individuals in residential continuum program, but McHugo and colleagues (2004) did find that the residential continuum group had significantly greater improvements in their psychiatric functioning. Pearson, Montgomery and Locke (2009) report that although individuals experienced month-to-month variation in their levels of impairment, there were no significant decreases in psychiatric impairment or substance use over the course of the first year in either of the three housing programs (i.e., supported housing, supportive housing, multi-site housing with modified ACT support).

The Rosenheck set of studies found perhaps the most compelling results. In particular, Cheng, Lin, Kasprow and Rosenheck (2007) found that the group of individuals receiving supported housing had substantially and significantly fewer days of alcohol and drug use, fewer days on which they drank to intoxication and lower scores on a composite drug problem index than the groups receiving either case management or standard care. O'Connell, Kasprow and Rosenheck (2008) also report lower scores on alcohol and drug scales for their supported housing clients, as well as less money spent on substances.

Seidman and his colleagues (2003) looked at different clinical outcomes than the other studies. They assessed the neuropsychological functioning of tenants in supported housing and supportive housing. Overall, neuropsychological functioning improved significantly across both groups from baseline to 18 months. However, the executive functioning of the tenants in supported housing had a significant decline across the study period, while supportive housing tenants had a slight, but non-significant, increase in their executive functioning.

Community adaptation. The studies assessing community adaptation outcomes also yielded mixed results. Specifically, tenants of supported housing were found to either have achieved superior outcomes in this area or showed no difference from consumers receiving services from other programs. Tenants of supported housing perceived their choices to be more numerous than did tenants in a residential continuum program (Tsemberis, Gulcur and Nakae 2004). Supported housing tenants also reported fewer housing problems, larger social networks and greater satisfaction with their family relationships in comparison to consumers receiving case management or standard care (Rosenheck et al. 2003). As well, tenants in the supported housing group reported higher quality of life scores in terms of their overall life, their finances, their health and their social relations in comparison to consumers receiving case management (Rosenheck et al. 2003). There were no differences in the same study between tenants in supported housing and consumers receiving standard care.

On the other hand, there were no differences found between consumers in supported housing and consumers in residential continuum programs with regard to increases in self-esteem (Tsemberis et al. 2003), improvements in family relations (Wood et al. 1998), size of social networks (O'Connell, Kasprow and Rosenheck 2009), increases in satisfaction with neighbourhood, decreases in exposure to community violence (McHugo et al. 2004) or increases in quality of life (O'Connell, Kasprow and Rosenheck 2009; Tsemberis et al. 2003).

In terms of employment, individuals living in residential continuum housing had higher than average scores on an employment index and a greater number of days worked in comparison to individuals in supported housing (O'Connell, Kasprow and Rosenheck 2009); however, both groups reported significant increases in the number of

days worked in the past 30 days and in their total income. With regard to legal involvement, one study found no significant differences among individuals in supported housing, case management only or standard care (Rosenheck et al. 2003). O'Connell, Kasprow and Rosenheck (2009) report that although no differences were found between their groups, both the residential continuum and the supported housing tenants demonstrated decreases in occurrences of minor and major crimes.

Costs. In relation to costs, tenants in supported housing were evaluated as having hospitalization, residential and shelter costs that were lower than tenants in residential continuum programs (Gulcur et al. 2003), program costs that were lower than emergency shelter costs for individuals in standard care (Stefancic and Tsemberis 2007) and health care costs that were lower than for tenants in residential continuum housing (O'Connell, Kasprow and Rosenheck 2009). In contrast to supported housing tenants having lower costs relative to other approaches, one study found the opposite, with services consumed by supported housing tenants costing more than those for consumers receiving case management or standard care (Rosenheck et al. 2003). However, unlike the other studies, which conducted costing on a limited range of health and social services, this latter study used a comprehensive costing to assess societal costs associated with a full range of services consumed by individuals.

Limitations of Research to Date

Based on our review of the extant research literature, an important limitation is the relatively small number of studies that have been conducted on supported housing to date. Our review of the peer-reviewed literature found only nine studies, even though liberal criteria were set for programs being considered supported housing. Of those studies examined in our review, several of them had small samples, limiting the power to detect differences between groups. In fact, three of the nine studies had groups with fewer than 65 participants (Dickey et al. 1996; McHugo et al. 2004; Pearson, Montgomery and Locke 2009). Another limitation to the samples of studies in our review was the overrepresentation of participants who are male, non-white and diagnosed with schizophrenia and substance use problems.

As noted by Tabol, Drebing and Rosenheck (2010) and Wong, Filoromo and Tenille (2007), the definition of supported housing varies in the research literature, with programs described in this way being

implemented in different ways in different locales. Some programs appear to adopt criteria that make them a hybrid of supported and supportive housing. Other programs adopt only some of what are considered critical ingredients of supported housing. We purposely kept in our review only programs that had these critical ingredients. However, the description of housing programs in published studies does not always provide enough information to accurately identify if critical ingredients of supported housing are present or not. Moreover, a majority of the outcome studies we reviewed did not report having undertaken an evaluation of program implementation or an assessment of program fidelity in terms of the criteria of supported housing.

Another limitation of the research in this area is the narrow range of outcomes that have been examined in the majority of studies. In particular, studies have relied heavily on housing, service use and clinical outcomes in examining the effectiveness of supported housing programs. Limiting outcomes to just these areas is inconsistent with the goals of recovery-oriented programs such as supported housing, which are intended to assist individuals with severe mental illness to live successfully in the community in a manner similar to that of non-disabled persons.

As presented in our review, the variety of comparison groups used in the small number of studies, which included standard care, case management without housing and supportive housing, limit the conclusions that can be drawn at this point from the literature. As well, the examined outcomes vary across the studies making it difficult to compare them to each other or draw reliable conclusions about the effectiveness of supported housing in relation to different outcomes. Also related to outcomes, most of the outcomes were measured in the studies through the use of self-report measures.

A further limitation of research conducted in this area is the relatively short follow-up period for many of the studies. Given the complex needs of persons with severe mental illness with a history of homelessness, an examination of outcomes over periods longer than two years seems necessary to capture the full range of positive benefits experienced by participants over time. Early treatment often focuses on engaging participants, building a trusting relationship and stabilizing functioning (Foster, LeFauve, Kresky-Wolff and Rickards 2010). Once progress has been made in these areas, treatment can focused on improving an individual's quality of life in the community.

Finally, the large majority of studies we reviewed were conducted in large cities in the United States. Given the differences in the mental health systems of the United States and other Western countries such as Canada, findings from American studies are not necessarily generalizable. A major difference in the delivery of health care between the United States and Canada is the universal coverage provided in Canada, including in the area of mental health services. Other contextual differences between the United States and Canada that may limit generalizability include the larger size of cities in the United States and the different racial and ethnic origins of urban populations in the two countries.

Future Directions for Research

Based on these limitations, a number of suggestions for future research are indicated. Firstly, there is a clear need for studies with larger and more diverse samples. The use of multi-site research designs can provide the necessary power and diversity to examine effectiveness and cost-effectiveness as well as identifying the types of individuals who benefit from the approach. A large multi-site trial that is currently being conducted in five cities in Canada testing a number of different supported housing approaches adapted to local needs can be expected to address limitations related to sample size and sample makeup as well as knowledge gaps (MHCC 2011). Given the eligibility criteria for participation in this study, which includes having mental health diagnoses of psychotic disorders or non-psychotic disorders, including affective disorders and some anxiety disorders, it is expected that this study will extend our understanding of with whom supported housing can be effective.

In our reviewed studies, there are a minority of individuals placed in supported housing who fail to achieve housing stability and return to homelessness. In a critique of the Housing First approach including supported housing, Kertesz, Crouch, Milby, Cusimano and Schumacher (2009) question the effectiveness of the approach for people with active and severe addictions. The researchers note that the approach has been tested on individuals with severe mental illness whose addictions are at a low to moderate level. Consequently, they conclude that the current state of the evidence on supported housing is not strong enough for it to be applied as a singular strategy for people with active and severe addictions. Instead, they recommend the continued need for residential treatment programs

such as therapeutic communities that adopt a residential continuum approach to promote recovery for this subpopulation.

Secondly, there is a need for studies on supported housing to use fidelity scales and report in a clear manner how programs being examined meet the criteria of supported housing. The work of Tabol, Drebing and Rosenheck (2010) that outlines 15 criteria characterizing supported housing can be very helpful in guiding fidelity assessments. It would probably be helpful if the criteria for supportive housing could also be defined in a similarly distinct and detailed manner.

Thirdly, future research needs to examine how supported housing can be combined with vocational services, peer support and integrated concurrent disorders treatment. To date, research shows that the most prevalent outcome produced by supported housing is the achievement of housing stability. Outcomes in other areas such as participation in work or school, community integration and reduction in alcohol or drug use have not been achieved, at least not consistently, across studies. A likely reason for this inconsistency in outcomes in these areas is that they have not been targeted in a systematic manner in many of the investigated supported housing programs.

Further rigorous studies comparing the outcomes of supported and supportive housing are also needed. The research to date indicates that supportive housing produces positive outcomes including housing stability (Nelson 2010; Nelson, Aubry and Lafrance 2007). In fact, the two studies from our review in which supported housing had inferior housing outcomes involved comparisons to supportive housing (Dickey et al. 1996; McHugo et al. 2004). In a 16-year follow-up of participants in the study by Dickey and colleagues (1996), Schutt (2011) reports that tenants of supportive housing experienced a higher level of housing retention than tenants of supported housing.

To date, as reported in our review, only a small number of studies have evaluated the costs of supported housing with only one study using a comprehensive costing method, which produced mixed findings. Future research is required to examine the cost–benefit and cost-effectiveness of supported housing using a comprehensive costing methodology.

It is recommended that future studies follow participants for greater lengths of time. In addition to determining if the housing stability achieved by participants is enduring, longer study periods will

also determine if outcomes in areas other than housing are achieved as a result of individuals receiving long-term support.

Finally, most of the studies on supported housing have relied on self-report measures to evaluate outcomes. The combination of self-report measures and observational measures can strengthen the conclusions that can be drawn from studies on the effectiveness of supported housing, particularly as it relates to severity of mental health symptoms, functioning and substance use.

Implications for Policy and Program Development

Our review of the small number of studies focusing on supported housing suggests that it is effective for what it targets—namely, the exiting from homelessness and the achievement of housing stability. The combination of these findings favouring supported housing with the values promoted by the approach and the fact that it is the type of housing preferred by a vast majority of consumers make it an attractive intervention for mental health policy development in Canada. In addition, the nature of the approach, which relies on private market housing, lends itself to being implemented in communities in a rapid manner As well, it does not require the major capital outlay associated with building residential facilities. This is particularly important in the Canadian context, where there has been a paucity of investments over the last two decades by provincial governments and the federal government in the creation of affordable housing including social housing (Hulchanski 2002).

Although communities throughout North America are implementing supported housing as a Housing First strategy to address chronic homelessness, custodial housing continues to be very prevalent in mental health systems, particularly in Canada (Trainor 2008); however, there are examples of communities in Canada shifting housing from custodial housing to supported housing (Nelson 2010). This shift is an important policy direction for systems to take up in order to finally integrate people with severe and persistent mental illness fully into the community. Of course, in order for supported housing to be in sufficient supply to meet the demand, the development of an affordable housing stock is needed, something that is sorely lacking and which has contributed to the growing homeless population in cities across Canada (Hulchanski 2002).

Overall, our review of research on supported housing found relatively little evidence of supported housing achieving superior

outcomes than other housing approaches in terms of reducing psychiatric symptoms or substance use or improving community adaptation. These findings are not surprising given that the support provided in most of the programs studied through ACT or ICM is generic in nature. As suggested in the section on future research directions, it would seem important that supported housing evolve so that more targeted support be integrated in the approach that is intended to address substance use, vocational needs, leisure needs and social support needs. The development and evaluation of the effectiveness of treatments and supports addressing these need areas are an important part of the multi-city trial of supported housing currently being conducted in Canada (MHCC 2011).

As discussed, supported housing originated from the mental health field in response to the deinstitutionalization of people with severe and persistent mental illness. In the context of high levels of homelessness throughout Canada, supported housing is now being applied increasingly as a response for people who are experiencing chronic homelessness, most of whom have a severe mental illness and substance use problem. Although they use a high proportion of shelter beds, the latter group makes up only a small minority of the homeless population (Kuhn and Culhane 1998; Aubry et al. 2013). Given the success of supported housing at achieving housing stability, it makes sense that variants of it could be developed in response to homelessness of other groups in Canada such as youth, families, and individuals with less severe mental health problems. In particular, the intensity and length of support provided could be shaped in response to the needs of these different homeless groups.

Conclusion

Supported housing has been heralded as representing a transformative change of the mental health system and with how we assist people with severe and persistent mental illness to become fully integrated into the community (Nelson 2010). The approach alters the view of individuals from being patients or clients to being seen as tenants and neighbours with the same housing rights and responsibilities as other citizens. Based on our review of the research on the effectiveness of the approach, we conclude that supported housing is a promising approach to ending homelessness for individuals with

severe and persistent mental health problems who have experienced chronic homelessness.

Specifically, the research evidence to date is indicative of supported housing being effective in assisting a majority of this population to achieve housing stability. Although all of the studies on supported housing to date involve relatively small samples and have been conducted in the United States, the large multi-site demonstration research project being conducted in five cities by the Mental Health Commission of Canada will provide a rigorous evaluation of its effectiveness in the Canadian context. We also believe that supported housing has the potential to serve as a platform on which housing and support can be evolved to help other subgroups within the homeless population who require assistance to exit homelessness and achieve stable housing.

References

Aubry, T., T. Doestaler and A. M. Baronet. 2004. "Revue des etudes empiriques sur l'efficacité du suivi communautaire." In *Le suivi communautaire: Une invitation à se bâtir une vie,* ed. R. Emard and T. Aubry. Ottawa: University of Ottawa Press, 129–202.

Aubry, T., S. Farrell, S. Hwang and M. Calhoun. 2013. "Identifying Patterns of Emergency Shelter Stays of Single Individuals in Canadian Cities of Different Sizes." *Housing Studies,* 28(6): 910–27. doi: 10.1080/02673037.2013.773585.

Blanch, A. K., P. Carling and P. Ridgway. 1988. "Normal Housing with Specialized Supports: A Psychiatric Approach to Living in the Community." *Rehabilitation Psychology,* 33: 47–55.

Carling, P. J. 1995. *Return to Community: Building Support Systems for People with Psychiatric Disabilities.* New York: Guilford Press.

_____. 1993. "Housing and Supports for Persons with Mental Illness: Emerging Approaches to Research and Practice." *Hospital and Community Psychiatry,* 44: 439–49.

_____. 1992. "Homes or Group Homes? Future Approaches to Housing, Support, and Integration for People with Psychiatric Disabilities." *Adult Residential Care Journal,* 6: 87–96.

Cheng, A., H. Lin, W. Kasprow and R. A. Rosenheck. 2007. "Impact of Supported Housing on Clinical Outcomes: Analysis of a Randomized Trial Using Multiple Imputation Technique." *Journal of Nervous and Mental Disease,* 195: 83–88.

Coldwell, C. M. and W. S. Bender. 2007. "The Effectiveness of Assertive Community Treatment for Homeless Populations with Severe Mental Illness: A Meta-analysis." *American Journal of Psychiatry,* 164: 393–99.

Dickey, B., O. Gonzalez, E. Latimer, K. Powers, R. K. Schutt and S. M. Goldfinger. 1996. "Use of Mental Health Services by Formerly Homeless Adults Residing in Group and Independent Housing." *Psychiatric Services,* 47: 152–58.

Fazel, S., V. Khosla, H. Doll and J. Geddes. 2008. "The Prevalence of Mental Disorders among the Homeless in Western Countries: Systematic Review and Meta-Regression Analysis." *PLoS Medicine,* 5(12): e225. doi: 10.1371/journal.pmed.0050225.

Foster, S., C. LeFauve, M. Kresky-Wolff and L. D. Rickard. 2010. "Services and Supports for Individuals with Co-occurring Disorders and Long-Term Homelessness." *Journal of Behavioral Health Services & Research,* 37: 239–251.

Goering, P., G. Tolomiczenko, T. Sheldon, K. Boydell and D. Wasylenki. 2002. "Characteristics of Persons Who Are Homeless for the First Time." *Psychiatric Services,* 53: 1472–74.

Goldfinger, S. M., R. K. Schutt, G. S. Tolomiczenko, L. Seidman, W. E. Penk, W. Turner and B. Caplan. 1999. "Housing Placement and Subsequent Days Homeless among Formerly Homeless Adults with Mental Illness." *Psychiatric Services,* 50(5): 674–79.

Greenwood, R. M., N. J. Schaefer-McDaniel, G. Winkel and S. J. Tsemberis. 2005. "Decreasing Psychiatric Symptoms by Increasing Choice in Services for Adults with Histories of Homelessness." *American Journal of Community Psychology,* 36: 223–38.

Gulcur, L., A. Stefancic, M. Shinn, S. Tsemberis and S. N. Fischer. 2003. "Housing, Hospitalization and Cost Outcomes for Homeless Individuals with Psychiatric Disabilities Participating in Continuum of Care and Housing First Programmes." *Journal of Community & Applied Social Psychology,* 13: 171–86.

Hogan, M. F., and P. J. Carling. 1992. "Normal Housing: A Key Element of a Supported Housing Approach for People with Psychiatric Disabilities." *Community Mental Health Journal,* 28(3): 215–26.

Hulchanski, J. D. 2002. *Housing Policy for Tomorrow's Cities.* Discussion Paper F27. Family Network. Ottawa: Canadian Policy Research Networks Inc.

Hurlburt, M. S., R. L. Hough and P. A. Wood. 1996. "Effects of Substance Abuse on Housing Stability of Homeless Mentally Ill Persons in Supported Housing." *Psychiatric Services,* 47: 731–36.

Hurlburt, M. S., P. A. Wood and R. L. Hough. 1996. "Providing Independent Housing for the Homeless Mentally Ill: A Novel Approach to Evaluating Long-Term Longitudinal Housing Patterns." *Journal of Community Psychology,* 24(3): 291–310.

Kertesz, S. G., K. Crouch, J. B. Milby, R. E. Cusimano and J. E. Schumacher. 2009. "Housing First for Homeless Persons with Active Addiction: Are We Overreaching?" *Milbank Quarterly*, 87: 495–534.

Kirby, M. J. and W. K. Keon. 2006. *Out of the Shadows at Last: Highlights and Recommendations of the Final Report on Mental Health, Mental Illness and Addictions.* Ottawa: The Standing Senate Committee on Social Affairs, Science and Technology.

Kuhn, R. and D. P. Culhane. 1998. "Applying Cluster Analysis to Test a Typology of Homelessness by Pattern of Shelter Utilization: Results from the Analysis of Administrative Data." *American Journal of Community Psychology*, 26: 207–32.

Leff, H. S., C. M. Chow, R. Pepin, J. Conley, I. E. Allen and C. A. Seaman. 2009. "One Size Fit All? What We Can and Can't Learn from a Meta-analysis of Housing Models for Persons with Mental Illness." *Psychiatric Services*, 60: 473–82.

Mechanic, D. and D. A. Rochefort. 1990. "Deinstitutionalization: An Appraisal of Reform." *Annual Review of Sociology*, 16: 301–27.

McHugo, G. J., R. R. Bebout, M. Harris, S. Cleghorn, G. Herring, H. Xie et al. 2004. "A Randomized Controlled Trial of Integrated versus Parallel Housing Services for Homeless Adults with Severe Mental Illness." *Schizophrenia Bulletin*, 30: 969–82.

MHCC (Mental Health Commission of Canada). 2011. "At Home." In Initiatives and Projects [on-line]. Mental Health Commission of Canada. http://www.mentalhealthcommission.ca/English/Pages/homelessness.aspx [consulted June 15, 2013].

Nelson, G. 2010. "Housing for People with Serious Mental Illness: Approaches, Evidence, and Transformative Change." *Journal of Sociology and Social Welfare*, 37: 123–46.

Nelson, G., T. Aubry and A. Lafrance. 2007. "A Review of the Literature on the Effectiveness of Housing and Support, Assertive Community Treatment, and Intensive Case Management Interventions for Persons with Mental Illness Who Have Been Homeless." *American Journal of Orthopsychiatry*, 77: 350–61.

Nelson, G., G. B. Hall and C. Forchuk. 2003. "Current and Preferred Housing of Psychiatric Consumer/Survivors." *Canadian Journal of Community Mental Health*, 22: 5–19.

O'Connell, M. J., W. Kasprow and R. Rosenheck. 2009. "Direct Placement versus Multistage Models of Supported Housing in a Population of Veterans Who Are Homeless." *Psychological Services*, 6: 190–201.

_____. 2008. "Rates and Risk Factors for Homelessness after Successful Housing in a Sample of Formerly Homeless Veterans." *Psychiatric Services*, 59: 268–75.

Parkinson, S., G. Nelson and S. Horga. 1999. "From Housing to Homes: A Review of the Literature on Housing Approaches for Psychiatric Consumer/Survivors." *Canadian Journal of Community Mental Health,* 17: 145–64.

Pearson, C., A. E. Montgomery and G. Locke. 2009. "Housing Stability among Homeless Individuals with Serious Mental Illness Participating in Housing First Programs." *Journal of Community Psychology,* 37: 404–17.

Piat, M., A. Lesage, R. Boyer, H. Dorvil, A. Courure, G. Grenier and D. Bloom. 2008. "Housing for Persons with Serious Mental Illness: Consumer and Service Provider Preferences." *Psychiatric Services,* 59: 1011–17.

Ridgway, P. and A. M. Zipple. 1990. "Challenges and Strategies for Implementing Supported Housing." *Psychosocial Rehabilitation Journal,* 13: 115–20.

Rog, D. J. 2004. "The Evidence on Supported Housing." *Psychiatric Rehabilitation Journal,* 27: 334–44.

Rosenheck, R. A., W. Kasprow, L. Frisman and W. Liu-Mares. 2003. "Cost-Effectiveness of Supported Housing for Homeless Persons with Mental Illness." *Archives of General Psychiatry,* 60: 940–51.

Schutt, R. K. 2011. *Homelessness, Housing and Mental Illness.* Cambridge, MA: Harvard University Press.

Seidman, L. J., R. K. Schutt, B. Caplan, G. S. Tolomiczenko, W. M. Turner and S. M. Goldfinger. 2003. "The Effect of Housing Interventions on Neuropsychological Functioning among Homeless Persons with Mental Illness." *Psychiatric Services,* 54: 905–08.

Stefancic, A. and S. Tsemberis. 2007. "Housing First for Long-Term Shelter Dwellers with Psychiatric Disabilities in a Suburban County: A Four-Year Study of Housing Access and Retention." *Journal of Primary Prevention,* 28: 265–79.

Tabol, C., C. Drebing and R. A. Rosenheck. 2010. "Studies of 'Supported' and 'Supportive' Housing: A Comprehensive Review of Model Descriptions and Measurement." *Evaluation and Program Planning,* 33: 446–56.

Tanzman, B. 1993. "An Overview of Surveys of Mental Health Consumers' Preferences for Housing and Support Services." *Hospital and Community Psychiatry,* 44, 450–455.

Trainor, J. N. 2008. "Housing and the Development of a Personal Resource Base." In *Hébergement, logement et rétablissement en santé mental,* ed. J-F. Pelletier, M. Piat, S. Côte and H. Dorvil. Boisbriand, QC: Prologue, 33–51.

Trainor, J. N., T. L. Morrell Bellai, R. Ballantyne and K. M. Boydell. 1993. "Housing for People with Mental Illnesses: A Comparison of Models and an Examination of the Growth of Alternative Housing in Canada." *Canadian Journal of Psychiatry,* 38: 494–501.

Tsemberis, S. 1999. "From Streets to Homes: An Innovative Approach to Supported Housing for Homeless Adults with Psychiatric Disabilities." *Journal of Community Psychology,* 27: 225–41.

Tsemberis, S. and R. F. Eisenberg. 2000. "Pathways to Housing: Supported Housing for Street-Dwelling Homeless Individuals with Psychiatric Disabilities." *Psychiatric Services,* 51: 487–93.

Tsemberis, S., L. Gulcur and M. Nakae. 2004. "Housing First, Consumer Choice, and Harm Reduction for Homeless Individuals with a Dual Diagnosis." *American Journal of Public Health,* 94: 651–56.

Tsemberis, S. J., L. Moran, M. Shinn, S. M. Asmussen and D. L. Shern. 2003. "Consumer Preference Programs for Individuals Who Are Homeless and Have Psychiatric Disabilities: A Drop-in Center and a Supported Housing Program." *American Journal of Community Psychology,* 32: 305–17.

Wong, Y. I. and P. L. Solomon. 2002. "Community Integration of Persons with Psychiatric Disabilities in Supportive Independent Housing: A Conceptual Model and Methodological Considerations." *Mental Health Services Research,* 4: 13–28.

Wong, Y. I., M. Filoromo and J. Tennille. 2007. "From Principles to Practice: A Study of Implementation of Supported Housing for Psychiatric Consumers." *Administration and Policy in Mental Health and Mental Health Services Research,* 34: 13–28.

Wood, P. A., M. S. Hurlburt, R. L. Hough and C. R. Hofstetter. 1998. "Longitudinal Assessment of Family Support among Homeless Mentally Ill Participants in a Supported Housing Program." *Journal of Community Psychology,* 26: 327–44.