Housing Needs in the Calgary Region for Persons with Severe And Persistent Mental Illness

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## TABLE OF CONTENTS

Summary 4

I. Background: Housing policy and issues affecting the availability of supported housing in Canada .......................................................... 5

II. Results of a literature review on the types of housing needed by persons with severe and persistent mental illness .......................................................... 6
   II.A. Permanent independent housing for persons with severe and persistent mental illness .......................................................... 6
   II.B. Housing needs of the “hard to house” .............................................. 7

III. Results of an environmental scan on the current availability of housing for persons with mental illness in the Calgary region ................................. 9
   III.A. Availability of housing for persons with mental illness in Calgary ... 9

IV. Needs Assessment ............................................................................ 10
   IV.A. Context: ....................................................................................... 10
   IV.B. Methodology. ............................................................................... 11

V. Mental Illness and Disability .............................................................. 12
   V.A. Background .................................................................................. 12
   V.B. Supportive and Supported Housing Needs for Calgary ................... 19

VI. The Homeless Mentally Ill................................................................. 22

VII. Currently unmet housing needs for persons with mental illness in the Calgary region........................................................................................ 23

References ............................................................................................. 24

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3
Summary

This report provides an estimate of the number of housing units needed in the city of Calgary for persons disabled by mental illness. It is based on several well established principles:

- Some, but not all, persons with a serious mental illness require housing supports
- Housing supports consist of financial assistance to pay for housing and utilities, as well as instrumental assistance with activities of daily living
- Many persons with a serious mental illness can live independently in the community if housing supports are provided
- Some persons are severely disabled by their illness and require a higher level of intensity in housing services. These persons are identified as requiring tertiary care.
- Some persons with modest disability caused by mental illness have co-occuring physical disabilities that necessitate a high level of housing support.

Housing needs in this report are based on the established prevalence of schizophrenia and well documented proportions of the various diagnoses presented by people living in existing housing programs. Both the rate per 100,000 and the current actual need are based on a population of 1,000,000, of whom 875,000 (estimated) are adults between the ages of 18 and 65. Rate estimations will permit calculations of future needs as the city grows in size. Rates can also be used by smaller communities to estimate their needs.

This report used several different sources of data to calculate housing need. All estimates fell within 5% of the average need calculated for Calgary. Most of these needs are for independent supportive housing. A small number (1198) are for tertiary care housing. The recommendation of the current need for **11,674 housing units, of which 10,071 are unmet needs, represents an accurate estimate of current need.**
Housing needs for persons with severe and persistent mental illness in the Calgary region

Community tenure for persons disabled by severe mental illness is predicated on the availability of affordable, accessible and appropriate housing with individualized supports. While numerous studies in Canada, the US, the UK, Europe and Australia have examined the types of housing and supports necessary for community tenure, information on estimating the size of the population requiring such supports is virtually non-existent. The following report provides a synthetic analysis of the needs for this population and provides estimates on current need for the City of Calgary. Housing ratios provided will permit future expansion of these estimates based on population growth.

I. Background: Housing policy and issues affecting the availability of supported housing in Canada

The challenge of providing stable housing options for persons with SMI is reflected in the estimated 67% of homeless persons that are believed to have a history of mental illness in their lifetime. This estimate is supported by the last available data from the Calgary Homeless count of 2002 that found at a minimum 26% of the homeless had an identifiable mental disorder and 67% a substance abuse disorder.

Traditionally, the institution–community interface has been conceptualized using a “Continuum of Care” (COC) model, whereby people with SMI are expected to pass through successive stages and types of accommodation (from the street or institutional living to permanent supportive housing). The COC continuum includes group homes, boarding homes, community residences, dedicated apartment buildings and scatter-site supervised apartments. At each stage, clients must demonstrate ‘housing readiness’, which generally includes a demonstration of ADL skills, being sober and complying with psychiatric treatment. Evaluations of a different, innovative model exemplified by “Housing First” initiatives, however, are now appearing in the literature. The Housing First model rejects the logic of housing readiness in the COC model, instead promoting the position that stable housing is, for many people with SMI, a precondition to participating successfully in psychiatric treatment and dealing with addictions.

In Canada, a large proportion of housing spaces available for people with SMI continue to be within the custodial model, even though homes of this type do not provide care in line with current best practices and the needs of consumers. While these types of homes do make sense from a custodial perspective (i.e. for those who require support for every day basic care), they make little sense from a rehabilitation or long-term stability perspective. Alternative housing models, emphasizing the rehabilitation model, skills training, and community integration are gaining prominence in Canada, although the actual housing spaces do not always reflect this orientation. People with SMI need safe and affordable places to live and the right level of support to make tenure a success. This
is increasingly difficult to accomplish given the shortage of affordable units and a lack of flexible models that best address the changing and diverse needs of people with SMI.

For the last 20 years social housing in Canada has been a neglected step-child of federal initiatives and many provincial efforts. In the mid 1980’s the federal government cut back on social housing programs. By 1993 the annual growth of federal sponsorship had been reduced to zero (Hulchanski & Network, 2002). Provincial responses to this have been uneven, with some provinces such as Ontario developing a Ministry of Housing and making a commitment to gradually include all low income persons, regardless of disability, as eligible for social housing. Others, such as Alberta, have had no designated funds for capital development or ongoing housing support, and only minimal funds for rental supplements (Dreir & Hulchanski, 1993). Local responsibility for housing has also been influenced by provincial supports, or lack thereof, with most cities reluctant to supply anything other than acutely needed emergency shelters, primarily for homeless individuals. The net result is an uneven distribution of housing programs and resources, especially for the mentally ill, across the country (Carroll & Jones, 2000). While recent funding from the National Homelessness Initiative has made some development funds available from federal sources through its Supporting Community Partnerships Initiative (SCPI), the amounts allocated are minimal compared to the needs (Government of Canada, 2007). Furthermore, these funds are subject to the political will of the party in power and may not necessarily survive with a change in leadership.

Unlike some provinces, Alberta does not have a separate housing portfolio. Until early 2007 responsibility for social housing in Alberta resided with the Ministry for Seniors, although this appears to be in transition. This lack of political presence has complicated efforts to determine leadership and responsibility for housing programs for the mentally ill in the province. In this vacuum, SCPI funding has provided for some housing initiatives, but the effort is minimal compared to the perceived need. At the same time, there is lack of clarity about recommended and preferred housing programs for mentally ill persons.

II. Results of a literature review on the types of housing needed by persons with severe and persistent mental illness

The following is a brief synopsis of a comprehensive review of the literature (Schiff, Waegemakers Schiff, & Schneider, 2007).

II.A. Permanent independent housing for persons with severe and persistent mental illness

The housing needs of persons disabled by mental illness are well documented. Over 150 research studies in the last 15 years have emphasized the need to provide

- individualized living units,
- preferably not clustered in large projects which are stigmatizing.
• these units should be of the occupant’s choosing
• be readily accessible to community services and amenities.
• they should not be contingent upon meeting pre-conditions of “housing readiness”, sobriety, treatment compliance or use of mandatory services.

Persons housed under this model consistently show greater housing stability, reduced use of hospitalization and ancillary services, greater community integration and significantly higher satisfaction with quality of life.

This model, commonly called “housing first” is new to the Calgary community but has been successfully implemented in cities as diverse as New York, Portland and Toronto (which has a sizable number of units devoted to this model). Rental assistance and the availability of supports are essential components to success. Housing retention rates are significantly higher than in the traditional continuum of care model, ranging to over 80% after two to five years. Consumer reported satisfaction, quality of life, and psychiatric stability (reduced hospitalization) are all positively associated with this model. Furthermore, it supports the expressed needs of psychiatric consumers for control and empowerment in their housing choices. Housing first also relies on available housing stock scattered throughout the community, thus assuring community integration of the mentally ill and decreasing the possibility and negative consequences, of congregating too many disabled people in one location. Furthermore, this model provides community tenure for a seriously disabled population at a considerable cost savings over other models. Because it does not require the construction of specialized housing, or threaten neighbourhoods which may rebel with a NIMBY response, this housing model promises the most rapid, cost effective and permanent response to housing this vulnerable population.

Alternative housing, such as SRO’s (single room occupancy units) were very popular in the early 1980’s and still house considerable numbers of mentally ill people in various areas of Canada and the U.S. The city of Vancouver recently acquired several hotels specifically to provide this type of housing. They house persons who are able to be independent or semi-independent and can manage “activities of daily living” independently. People housed in these programs generally meet the criteria of those who are successfully housed by the “housing first” model. The housing literature does not support their use as meeting the preferences of consumers. They have been seen as an inexpensive way to house individuals, but do not provide the basic housing structure for dignified independence (i.e. self-contained cooking and bathroom facilities). They also congregate large numbers of mentally ill people in one building, a feature strongly denounced by housing researchers, advocates and mental health consumers.

II.B. Housing needs of the “hard to house”

While the housing needs of a vast majority of those disabled by mental illness can be addressed by the ‘housing first’ model, there is a smaller, but distinct group of people whose mental illness is so disabling that they are not able to be self-sufficient even though they may not require the intensive treatment of an inpatient psychiatric unit. They
range in age from their mid twenties to over 65. Not everyone responds adequately to
psychotropic medication, and thus some continue to be symptomatic and a management
challenge. They may be treatment resistant in that they are refusing treatment, or
treatment non-responsive. Many have concomitant physical disorders and some are
physically handicapped. The literature makes scant mention of this sub-group, despite the
fact that they require large resources, both physical and financial (O'Malley & Croucher,
2003).

The literature suggests that these “hard to house” individuals can be successfully
accommodated in a variety of alternative settings: specialized boarding homes and
hostels where there are varying degrees of support services and personnel available to
meet basic daily needs and – for some – to provide supervision. These settings are
identified in this study as providing tertiary care.

Approved boarding homes which house one to three adults in a family setting provide a
type of “family care” that meets the needs of some highly dependent and marginally
functional individuals. This is in contrast to the large scale “boarding homes” that arose
in the early 1980’s to function as quasi-institutional warehouses and are no longer
considered acceptable accommodation. Some of these have been successfully employed
in areas as diverse as the UK, Australia and Montreal (among others). However, these
models are not equipped to accommodate those with additional physical handicaps.

While this latter group may require a nursing home level of care, many long term care
facilities have neither the staff nor orientation to provide appropriate care and support
services to those whose primary diagnosis is a major mental illness. In a review of
existing specialized nursing home facilities in Calgary we found a long term care facility
that has evolved to accommodate only this hard to place group. Its philosophy and
program orientation appear to be fairly unique and should be further evaluated for
replication.

Thus the research on housing for persons with mental illness in many disparate locations
(Australia, Canada, the Netherlands, New Zealand, Norway, Sweden, the UK, the U.S.)
all supports a housing first model for most persons disabled by mental illness to meet the
needs of a majority of this group. This also recognizes that an important sub-group of
high needs individuals will require supervised, sheltered accommodation which may
include, in some instances, continued treatment approaches that supplement those
initiated in inpatient units. These highly specialized units for the most severely disabled
should parallel programs for the physically disabled.
III. Results of an environmental scan on the current availability of housing for persons with mental illness in the Calgary region

The following is a review of an environmental scan conducted on the availability of housing for persons with mental illness in Calgary.

III.A. Availability of housing for persons with mental illness in Calgary

**Long term housing** in Calgary designated for people with severe mental illness falls into four main groups.

1. Housing and support provided by Horizon Housing Society (landlord) and CMHA (support). Includes apartments, group homes and shared living situations. Varying levels of support available, depending on the setting.
2. Housing and support in apartments provided by LAMDA and Potential Place clubhouse.
3. Room and board in homes provided by private landlords, including Approved Homes, Personal Care Homes, and private landlords. Varying levels of support.
4. Long term care provided by Glamorgan Care Centre for individuals assessed as needing 24 hour nursing care.

These housing options provide a total of 527 spaces, with 22 more expected by 2008.

**Transitional housing** designated for people with severe mental illness is provided by Horizon Housing Society and CMHA through the SOS program (6 spaces) and the Mobile Response Team (2 spaces). Eight transitional spaces for people being discharged from hospital are planned by June 2007 and another eight by 2008. At any given time, approximately 30 “discharge ready” people reside in acute care hospital psychiatric wards, waiting for placement in the community. Total: 46 with 8 more spaces by 2008.

**Support services ONLY** to maintain people with severe mental illness housed in the community are provided to approximately 1300 people by the CMHA and the CHR. Some of the people receiving support services may live in the housing identified on the inventory e.g. CHC housing or Horizon on 8th. We estimate that about 1000 people not already in supported housing receive support.

**Long term housing not specifically designated for people with severe mental illness but used by the population** is provided by the Calgary Housing Company (CHC) in several sites in Calgary (approx. 7500 subsidized units). CHC provides no support for people with mental illness, but residents can use CMHA and CHR support. CHC does not track whether residents have mental illness, so CHC has no basis on which to provide an estimate of how many such people live in CHC housing. Some buildings (identified on the inventory) are known to house a number of people with mental illness. People with mental illness also find long term housing in Langin Place, Peter Coyle House (Trinity
Place Foundation) and Private Care Homes. Total: Approximately 7750 permanent subsidized units.

**Non-permanent or transitional housing not specifically designated for people with severe mental illness but used by the population** is provided by several agencies. These include the Mustard Seed, the Drop In Centre, the Salvation Army, and the Calgary Dream Centre, among others. Total: Approximately 550 spaces.

Because data has not been collected by the agencies themselves, it is not possible to provide an accurate count of how many people with serious mental illness reside in non-designated permanent and transitional housing.

**Shelters used by people with severe mental illness** include such places as the Mustard Seed, the Drop In Centre, and the Salvation Army. Approximately 1500 such spaces exist, depending on the time of year and the willingness of the City of Calgary to offer additional space. Using the figure of 30% found widely in the housing literature, approximately 500 people with severe mental illness use shelters in Calgary.

Two housing settings, Langin Place and Peter Coyle House, operate on what they describe as a harm reduction model. The rest all operate on what is described in the housing literature as the continuum of care model.

**IV. Needs Assessment**

**IV.A. Context:**
A comprehensive analysis of the total number of persons with a disabling mental illness who have housing needs should include persons found in various locations:

- Homeless shelters
- Transitional housing
- Long term supportive housing
- Long-term psychiatric hospital placement
- Temporarily placed in substance abuse treatment facilities
- Nursing homes
- Those living in family and kinship care because of a lack of alternatives
- Those who are “doubled up” (temporarily living with others in accommodation not intended for multiple occupants)
- Those temporarily living with friends and acquaintances
- Those who are in marginal and substandard housing

While there is data available on those in institutional settings, those who reside in the community are usually not counted in any housing needs assessment. **It is important, however, to include all those who are disabled by mental illness, both those in institutions and those in the community, in the determination of need for supportive**
housing requirements for the mentally ill. These housing supports will range from help with ADL to rental supplements and supervised residences.

IV.B. Methodology.

We conducted a systematic search of the following electronic databases:
Academic Search Premier,
Canadian Reference Centre,
CINAHL Plus with Full Text,
Family & Society Studies Worldwide,
Humanities International Complete,
MEDLINE,
Psychology and Behavioral Sciences Collection,
PsychInfo,
SocINDEX with Full Text
Journals@Ovid (ovft),
CDSR (coch),
HealthSTAR (hstr),
Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations (prem),
Ovid MEDLINE(R)

We supplemented this search with a search of Google and Google Scholar for any additional information and access to government and NGO reports dealing with housing for the mentally ill. This search used the following key words, either alone or in combination: Housing, mentally ill, psychiatric patients, supportive housing, supported housing, continuum of care, homeless mentally ill, community supports, housing needs, housing gaps, and housing allocation. We supplemented this search with direct contact with key researchers in housing in Toronto, Ottawa, Montreal, Ohio and at the federal level in Washington, DC, to determine if there were untapped sources of information about assessing the housing capacity necessary to adequately serve the disabled mentally ill. These sources were unable to identify other resources. We were unable to locate definitive algorithms or calculations of housing needs specific to the mentally ill in this literature and thus set out to use other methodologies to determine housing need.

Most of the information about housing the mentally ill focuses on the type of accommodation that is necessary, helpful and appropriate and is based on individual needs and preferences. A systemic analysis of the overall housing needs of the mentally ill population in a given geographic area appears to be non-existent. The search generated information on needs, which fell into a general classification of service and treatment needs of those with SPMI. These studies did not examine current or needed capacity for supportive housing. A second type of housing need reports on housing allocation, and consists of defining the parameters to be used in determining if an individual needs housing and qualifies under a rating system. A third approach examines housing gaps, but does so in the context of homeless studies that look at shelter needs and availability for all homeless, of which the mentally ill are counted as one component. Most of the
needs assessments that we identified were based on the total homeless population in a
given locality, and on the number of persons with mental illness occupying emergency
shelter or transitional housing.

When other firm data is unavailable, a synthetic analysis may be used to best estimate the
extent of a problem. This type of analysis involves the use of existing, confirmed
information from several sources to extrapolate the target data. We used a population-
based approach to calculating housing needs. The justification for this approach is that
there is solid evidence about the incidence and prevalence of certain mental disorders,
especially schizophrenia, and that the evidence on the extent of disability for those with
schizophrenia is well established. Large scale studies also supply reliable information on
the proportion of those with schizophrenia and other disorders in existing housing. These
proportions were used to determine the relative proportion of persons with schizophrenia
and other disorders living in Calgary.

Incidence rates for schizophrenia have been well documented by national (Health
Canada, 2002), US (Jans, Stoddard, & Kraus, 2004), and international (World Health
Organization (WHO), 2006) bodies and are widely accepted as valid. These rates vary
from .7% to 1.5% of the population and seem to have some geographic variability as
rates are higher in temperate as opposed to very hot or cold climates (McGrath et al.,
2004). Although not all persons with a diagnosis of schizophrenia are disabled, most are
unable to hold full-time employment. The disability rate for schizophrenia is reported to
be about 75% of the population (Harrow, Sands, Silverstein, & Goldberg, 1997). The
prevalence of schizophrenia and the proportion of those disabled by this disease
provided a baseline from which all other calculations were achieved. Given this basis, it
is possible to provide an estimate of the number of persons with this disorder residing in a
given location (based on population estimates).

V. Mental Illness and Disability

V.A. Background

Most of the work on disability and mental illness using large epidemiological databases
comes from the United States.¹ The World Health Organization (2006) estimated the
number of DALYS (Death and Disability Adjusted Life Years) per 100,000 for Canada at
1,197 and the US at 12,288. This over ten-fold increase parallels the population
differences between the two countries. While this does not necessarily indicate identical
data from Canada, the demographic composition of the two countries is sufficiently
similar to suggest an approximation of Canadian rates of mental illness disability.
Distinction is made between serious and severe mental illness, with the former generally
not resulting in disability. Figure 1 provides an estimate of the number of people in 1990
with serious and not serious mental illness in the US. This figure also provides an

¹ The information and charts in this section comes from The National Institute on Disability and
Rehabilitation Research (Jans et al., 2004).
estimate of those with/without serious mental illness in 2 categories: non-institutionalized and; institutionalized or homeless.

**Over 12 million adults in the U.S. have a serious mental illness.**

<table>
<thead>
<tr>
<th></th>
<th>With serious mental illness</th>
<th>No serious mental illness</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-institutionalized civilian population</td>
<td>10,000,000</td>
<td>175,000,000</td>
<td>185,000,000</td>
</tr>
<tr>
<td>Synthetic estimates of population in institutions and homeless</td>
<td>2,200,000</td>
<td>2,800,000</td>
<td>5,000,000</td>
</tr>
<tr>
<td>Estimates of total population</td>
<td>12,200,000</td>
<td>177,800,000</td>
<td>190,000,000</td>
</tr>
</tbody>
</table>

*Figure 1: Estimates of U.S. adults with and without serious mental illness, 1990*


While these specific numbers may not be accurate today due to increases in total population size, they do provide a basis for determining the percentage of persons with serious mental illness. From these base percentages, it may be possible to determine the number/percent of persons with specific severe mental illness. Figure 2 shows the percentage of persons in the US with schizophrenia, major depression, bipolar disorder, obsessive-compulsive disorder, and panic disorder.
About 2.8% of the U.S. adult population have severe mental illness, most commonly schizophrenia, major depression, or bipolar disorder.

Several studies have investigated the effects of mental illness on employment and work disability. As Figure 3 (following page) demonstrates, people with any mental illness are less likely to be employed than those without mental illness, while those with serious mental illness and schizophrenia are employed at the lowest rates.

Figure 2: Percentage of adults with disorders included in the category of severe mental illness, by disorder (Jans et al., 2004)
People with any mental illness are employed at lower rates than people with no mental illness; rates for people with serious mental illness are even lower.

**Figure 3: Percentage employed among adults with and without mental illness in 4 nationally representative surveys, 1989-98**

**Source:** (Mechanic, Bilder, & McAlpine, 2002)

**Surveys:** NHIS-Mental Health Supplement, 1989 (National Center for Health Statistics (NCHS), 1989); National Comorbidity Survey (NCS), 1990-92 (R.C. Kessler et al., 1994); NHIS-D, 1994-95 (National Center for Health Statistics (NCHS), 1994-95); Healthcare for Communities, 1997-98.(Wells, Sturm, & Burnam, 1997-98),

The lower employment rates for those with mental illness may be partially explained by the rates of work disability associated with the mentally ill. As Figure 4 (following page) shows, of those with a serious mental illness, over two-thirds report some type of disability and nearly one third report a work disability. However, less than half of those with a work disability receive income assistance under a disability program. These rates of disability for persons with mental illness are much higher than rates for the general population.

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- insufficient cases
- † source data reported without decimal places

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Types of disabilities reported by persons with severe mental illness.

<table>
<thead>
<tr>
<th>Disability status</th>
<th># in millions</th>
<th>% of U.S. population</th>
<th>% of people with mental disorders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any disability (1 or more of 4)</td>
<td>16.4</td>
<td>6.3%</td>
<td>69.8%</td>
</tr>
<tr>
<td>1) Functional disability</td>
<td>15.0</td>
<td>5.8%</td>
<td>63.8%</td>
</tr>
<tr>
<td>2) Work disability</td>
<td>6.1</td>
<td>2.3%</td>
<td>30.0%</td>
</tr>
<tr>
<td>3) Perceived disability</td>
<td>8.4</td>
<td>3.2%</td>
<td>35.8%</td>
</tr>
<tr>
<td>4) Disability program recipient</td>
<td>4.3</td>
<td>1.7%</td>
<td>18.3%</td>
</tr>
</tbody>
</table>

Figure 4: Prevalence of disability among those with mental disorders

Source: (Jans et al., 2004)

People with mental illness of any severity have a significantly lower rate of participation in the workforce as compared both with the non-disabled population and with those who have a physical disability. The participation rates cited do not distinguish between those who are temporarily disabled and those who are permanently disabled and will not return to the work force. Nor do these rates differentiate between those employed on full or part time bases. These differences between workforce participation rates are demonstrated in Figure 5 (following page). The lack of specificity in the disability data make it difficult to determine the number of persons with long-term mental health disabilities (and thus persons in need of housing supports).
Labour force participation of people with mental illness has been consistently lower than that of others.

![Chart showing labour force participation rates for people with mental illness, with any disability, and with no disability, from NHIS 1983-1994](image)

**Source:** (Jans et al., 2004)

Disability and workforce participation data do not translate directly into housing need. Some disabled persons are able to work for a sufficient amount of time or at a rate of pay that allows them to acquire market rental housing. Other people are housed in homes of their own, acquired through inheritance, gifts of family or previous employment. Housing supports for those disabled by mental illness consist of financial supplements to afford housing and instrumental help in paying bills, home maintenance and ADL (activities of daily living) activities to remain housed. The extent to which disabled people require housing supports is unknown, but presumed to be high in Canada and nearly 100% in the US. Any extrapolation of disability rates to housing need rates should consider this factor. **Table 2** presents prevalence rates of mental illness and resulting disability per 100,000 people from a variety of sources. We have extrapolated those results to Calgary.

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2 In Alberta, persons receiving AISH (Assured Income for the Severely Handicapped) are allowed to own their own homes. In the US, home ownership is considered part of capital assets and will disqualify a person from income supports such as SSI, SSD, and SSDI. This affects the number of people who own their own housing.
Table 2: Prevalence Estimates of Schizophrenia in Calgary

<table>
<thead>
<tr>
<th>Source</th>
<th>Methodology</th>
<th>Rate per 100,000</th>
<th>Current Calgary housing need (based on population of 855,400 (ages 18 – 65))</th>
</tr>
</thead>
</table>
| Health Canada (2002)          | Rates for schizophrenia: 1% of population                                  | With schizophrenia: 1000  
Disabled by schizophrenia: 750   | Schizophrenia only: 6415                                                  |
| NIMH (2006)                   | 1.1% of the population                                                     | With schizophrenia: 1100  
Disabled by schizophrenia: 825   | Schizophrenia only: 9409  
Disabled by schizophrenia: 7056 |
| World Health Organization (2006) | Rate for schizophrenia internationally: 7 per 1000 (.07%)^3               | 700              | Schizophrenia only: 5988                                                     |

^3 There is some variation in schizophrenia rates by regions of the world which accounts for higher rates reported in North America.
The National Institute on Disability and Rehabilitation Research (Jans et al., 2004) indicate that approximately 10,614 persons are disabled by mental illness in a city the size of Calgary. We assume that all persons disabled by mental illness require some form of support to remain housed. However as noted above, some of these persons receive instrumental help from family.

Table 3 (following page) draws on information from several reports in the research literature. It again provides calculations of housing need based on a rate per 100,000 and extrapolated to Calgary.

No comparable data is available to estimate the proportion of persons with other disorders who are disabled to the extent that they require supportive housing. An examination of the research literature on supportive housing provides some guideline for the relative proportion of those with schizophrenia and other mental illness living in supportive housing. We used the results of two major housing studies that had subject populations ranging from 2,939 to 5395 persons along with one report of a meta-analysis of 17 housing studies. These studies reported that the prevalence of schizophrenia in these housing programs ranged from 50 to 55% of the total population. Although one study reported rates ranging from 45% to 87%, the mode was 55% and we chose this as the most reasonable representation of the prevalence of a diagnosis of schizophrenia across programs. These rates allowed us to establish probable rates of mental illness related disability across the major diagnostic categories. Finally, we compared these results to disability attributable to mental illness as reported by The National Institute on Disability and Rehabilitation Research (Jans et al., 2004) in the US. The results were relatively closely matched and allow a reasonable level of confidence in the accuracy of the results.

V.B. Supportive and Supported Housing Needs for Calgary

Three tables presented below summarize our results. Table 3 is a summary of the designated housing currently available in Calgary for people with severe and persistent mental illness. Tables 4 and 5 present two different approaches to estimating the housing needs in Calgary.

There are presently 571 designated housing spaces for persons with mental illness and an additional approximately 1000 persons supported in the community by mental health agencies. These community supported people may (or may not) have access to financial housing supports (rent subsidies, social housing).
Table 3: Housing Currently Available in Calgary for People with Mental Illness

<table>
<thead>
<tr>
<th>Housing Designated for People with Mental Illness in Calgary</th>
<th>Number of clients presently being served</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Term Care*</td>
<td>52 (+ some in other nursing homes)</td>
</tr>
<tr>
<td>Glamorgan Care Centre (and other nursing home settings)</td>
<td></td>
</tr>
<tr>
<td>Personal Care Homes*</td>
<td>29</td>
</tr>
<tr>
<td>Approved Homes and other Private Landlords*</td>
<td>146</td>
</tr>
<tr>
<td>Group Homes* (CMHA/Horizon)</td>
<td>60</td>
</tr>
<tr>
<td>Independent Supported Apartments (CMHA/Horizon, Lamda, Potential Place)</td>
<td>240</td>
</tr>
<tr>
<td>Transitional Housing*</td>
<td></td>
</tr>
<tr>
<td>Existing</td>
<td>46</td>
</tr>
<tr>
<td>Planned</td>
<td>8</td>
</tr>
<tr>
<td>Long term housing planned</td>
<td>22</td>
</tr>
<tr>
<td>Support Only</td>
<td>1000 (estimated)</td>
</tr>
<tr>
<td>Total</td>
<td>1603</td>
</tr>
</tbody>
</table>

* indicates housing that would be considered tertiary care under the definition provided by Lesage (2003)

The calculations shown in Table 4, on the next page, indicate that the number of adults (ages 18 – 65) disabled by mental illness in Calgary ranges from 11,101 to 12,258. This is an average of 11,674 individuals. These results from three different sources fall within a 5% range (from the average) and can be accepted as reliable. These numbers closely align with the numbers calculated based on prevalence rates for mental disorders in Table 2.

Lesage (2003) reports a rate of 177 per 100,000 beds are required for persons who need tertiary care such as nursing, boarding and family care homes. This translates into 1513 tertiary care beds for a city the size of Calgary. The above chart indicates the existence of 333 tertiary care places. These housing placements are included in the overall need of 11,674 housing units for persons with a mental health disability.
Table 4
Estimated Housing Needs Based on relative prevalence of various diagnoses.

<table>
<thead>
<tr>
<th>Study</th>
<th>Prevalence of disorders in Housing Programs</th>
<th>Rate per 100,000 extrapolated from schizophrenia incidence (Canada)</th>
<th>Rate per 100,000 disabled by mental illness</th>
<th>Calgary incidence extrapolated from national (Canada) schizophrenia rate (based on population of 855,400 (ages 18 – 65))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mares &amp; Rosenheck (2004) Access programs N = 18, total population 5,325</td>
<td>Rates of schizophrenia across all programs providing intensive case management 53% Other disorders 47%</td>
<td>Schizophrenia 1000 Other disorders 887</td>
<td>Schizophrenia 750 Other disorders 665</td>
<td>Schizophrenia 6415 Other disorders 4686 Total 11,101</td>
</tr>
<tr>
<td>Lipton et al. (2000) [Housing survey N = 2939]</td>
<td>50% schizophrenia 37% mood/bipolar 7% other psychotic 6% other</td>
<td>Schizophrenia 1000 Mood/bipolar 740 Other psychotic 140 Other 120</td>
<td>Schizophrenia 750 Mood/bipolar 740 Other psychotic 140 Other 120</td>
<td>Schizophrenia 6415 Mood/bipolar 4047 Other psychotic 898 Other 898 Total: 12,258</td>
</tr>
<tr>
<td>Newman (2001) Review of 17 studies:</td>
<td>Of those in housing Schizophrenia diagnosis ranged from 45% to 87%. Mode 55%</td>
<td>Schizophrenia 1000 Other diagnoses 818</td>
<td>Schizophrenia 750 Other disorders 613</td>
<td>Schizophrenia 6415 Other mental illness 5248 Total 11,663</td>
</tr>
<tr>
<td>Jans et al. (2004) Several national surveys: combined results population rate: 1.7% of population disabled with mental illness.</td>
<td>N/A</td>
<td>Disabled by mental illness: 1700</td>
<td>@ 1.7% 14,541</td>
<td>@75% disabled Total disabled: 10,906</td>
</tr>
<tr>
<td>Lesage et al (2003) Tertiary care only Survey of need for tertiary care in a catchment area in Montreal</td>
<td>N/A</td>
<td>All diagnoses 177</td>
<td>tertiary care only Nursing homes, group homes, personal care homes 1314</td>
<td></td>
</tr>
</tbody>
</table>
VI. The Homeless Mentally Ill.

All persons with severe and persistent mental illness can be considered as at high risk of homelessness. However, the housing needs estimates in the preceding sections are based on calculations of all persons with severe and persistent mental illness. This includes those presently housed as well as the absolutely homeless who are living in shelters and on the streets. Estimating the size of the absolutely homeless population who have a severe and persistent mental illness is problematic.

Canada lacks a national understanding of the size and complexity of the homeless mentally ill population (Florez, 2005). The size of the homeless mentally ill population in Canada is difficult to determine for several reasons. There has been no systematic, nation-wide study of the various sub-groups that comprise the homeless population. Existing information has generally been collected by local municipalities with differing methodologies and inclusion criteria. Existing studies give a wide range of the extent of the problem. In a systematic study of the homeless in Toronto, 67% of the population was found to have a history of mental illness (Goering, Tolomiczenko, Sheldon, Boydell, & Wasylenki, 2002). In contrast, the Calgary homeless count of 2002 found 28% of absolutely homeless people to be mentally ill (Gardiner & Cairns, 2003). However, this study lacked the methodological rigour of the Toronto study. Other municipalities, such as Vancouver and Edmonton, failed to capture data specific to persons with mental illness or a history thereof.

American homeless studies may shed some light on the proportion of persons with mental illness who lack housing. However, the differing social policies and financing of housing does not permit more than a tentative comparison. American studies indicate that approximately 25% of homeless adults are mentally ill (Rosenheck, Bassuk, & Salomon, 1999). These estimates align with the Calgary homeless count and present a reasonable minimum approximation.

The 2006 homeless count in Calgary was 3436 persons. Given the proportions presented above, the size of the mentally ill homeless population is estimated to be a minimum of between 859 and 962 persons (using the Calgary count and the Rosenheck data) and 2302 (using Toronto population proportions. These calculations include those who are dually diagnosed, but does not include those whose primary problems are substance abuse.
VII. Currently unmet housing needs for persons with mental illness in the Calgary region.

The findings on unmet needs for supportive housing and tertiary care for persons with mental illness in the Calgary region are outlined below in Table 5.

<table>
<thead>
<tr>
<th>Source</th>
<th>Percent Mentally Ill</th>
<th>Number of homeless mentally ill in Calgary (based on 2006 data)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calgary Homeless count 2002</td>
<td>28%</td>
<td>962</td>
</tr>
<tr>
<td>Goering et al (Toronto)</td>
<td>67%</td>
<td>2302</td>
</tr>
</tbody>
</table>

Table 5: Unmet needs for housing for persons with mental illness in the Calgary region

| Existing tertiary care        | 333                                                               |
| Estimated tertiary care need  | 1531                                                              |
| Unmet need for tertiary care  | 1198                                                              |
| Unmet need for supportive housing | 8873                                                             |
| Total Housing Needed          | 11,674                                                            |
| Existing housing              | 1,603                                                             |
| Unmet need for housing        | 10,071                                                            |

These numbers do not include persons who have a co-occurring developmental disability since these persons are not usually included in schizophrenia prevalence rates. Seniors, those over 65, are also not included in these numbers. While some persons included in the count of those in nursing homes are seniors, the overwhelming majority (80%) are under 65. The seniors with mental illness (excluding dementia) represent a significant and growing portion of persons with mental illness, and the disabling aspects may be more reflected in a loss of daily living skills than in work productivity. Nonetheless, they will require skilled supportive housing. As the community-based population of persons with schizophrenia and other major mental illness quickly ages these seniors will pose a significant demand on housing and other support services.
References

Carroll, B. W., & Jones, R. J. (2000). Road to innovation, convergence or inertia: devolution in housing policy in Canada. Canadian Public Policy/Analyse de Politiques, 26(3), 277 -293.


Schiff, R., Waegemakers Schiff, J., & Schneider, B. (2007). Housing the disabled mentally ill: A 20 year survey of the housing literature.
