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Issue Brief:
Addressing Housing Challenges Faced by People with HIV in Ontario

21 June 2010

McMaster Health Forum

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KEY MESSAGES

What's the problem?

Many Ontarians with HIV struggle to find and maintain appropriate, stable housing, which affects their health and well-being as well as their access to health services.

- Existing housing and housing-related services often do not meet their needs.
- The way housing and HIV services are currently delivered often complicates access to these services.
- Funding arrangements and jurisdictional issues make it more difficult to provide services that meet the housing and health needs of people with HIV.
- Communities trying to develop housing programs for people with HIV face other barriers, such as HIV-related stigma, the small number of people with HIV in some communities (i.e., lack of critical mass to support a program), and lack of information about housing and support models.

What do we know (from systematic reviews) about three viable options to address the problem?

- Option 1 – Build on what's now in place
 - Existing supportive housing programs have a positive impact on people with mental health and addiction issues. Housing with supports is a powerful intervention that improves housing stability for people with mental illnesses.
- Option 2 – Build new programs
 - There is strong evidence that a 'housing first' model – getting people first into stable housing and then helping them access formal or informal support services, including life skills, counselling, case management, harm reduction, and medical care – is effective in reducing symptoms and hospitalization for people with mental illnesses, and in improving housing retention for people with addictions.
- Option 3 – Tackle the tough jurisdictional issues
 - There are no systematic reviews of the literature to support this particular model, but there is evidence that a multi-disciplinary team approach to delivering integrated services is effective for people with dual diagnosis.

What implementation considerations need to be kept in mind?

- Little research evidence is available about implementation barriers and strategies.
- All options have cost and resource implications.
- People with HIV are not the only group with complex health and social needs who would benefit from more stable, appropriate housing. There is competition for available housing and for resources for housing and support programs.
- All options require greater coordination and collaboration among those with expertise in HIV and those with expertise in housing programs.

REPORT

About 26,630 Ontarians are living with HIV and about 1,000 more are newly diagnosed each year.(1) Of those who are newly diagnosed, over 50% are gay men, about a quarter are members of the African and Caribbean community, and about 8% are injection drug users.(1)

Many Ontarians with HIV struggle to find and maintain appropriate, stable housing. According to *Positive Spaces Healthy Places*, a CIHR-funded longitudinal study of almost 600 Ontarians with HIV:

- almost half the study participants are experiencing some aspect of housing instability;
- 42% have significant difficulty meeting housing costs;
- one in three is at risk of losing their housing; and
- almost one-quarter had moved within the first year of the study, and of those, over half had moved twice or more.(2)

Even for those who are stably housed, the quality and appropriateness of their housing is an issue. According to the same study, one in four do not feel they belong in their neighbourhood, and only one in five feel their home provides a good place for them to live.(2) They would like to move but – because of income, discrimination, health needs or other factors – they cannot.

THE PROBLEM

The housing challenges faced by Ontarians with HIV, and the causes of these challenges, can be understood in relation to four domains: 1) housing and housing-related services do not meet the needs of many people with HIV; 2) service delivery arrangements complicate matters; 3) funding and jurisdictional arrangements complicate matters further; and 4) a number of barriers to implementation of housing programs to meet the needs of people with HIV have hampered progress.

Housing and housing-related services do not meet the needs of many people with HIV

Some of the complexities associated with shortfalls in housing and housing-related services include: 1) how a lack of access to appropriate housing affects health, well-being, and access to services; 2) how a lack of

Box 1: Background to the issue brief

This issue brief mobilizes both global and local research evidence about a problem, three options for addressing the problem, and key implementation considerations. Whenever possible, the issue brief summarizes research evidence drawn from systematic reviews of the research literature and occasionally from single research studies. A systematic review is a summary of studies addressing a clearly formulated question that uses systematic and explicit methods to identify, select and appraise research studies, and to synthesize data from the included studies. The issue brief does not contain recommendations.

The preparation of the issue brief involved five steps:

- 1) convening a Steering Committee comprised of representatives from the partner organization (Ontario HIV Treatment Network), key stakeholders, and the McMaster Health Forum;
- 2) developing and refining the terms of reference for an issue brief, particularly the framing of the problem and three viable options for addressing it, in consultation with the Steering Committee and select key informants, as well as with the aid of several conceptual frameworks that organize thinking about ways to approach the issue;
- 3) identifying, selecting, appraising and synthesizing relevant research evidence about the problem, options and implementation considerations;
- 4) drafting the issue brief in such a way as to present concisely and in accessible language the global and local research evidence; and
- 5) finalizing the issue brief based on the input of several merit reviewers.

The three options for addressing the problem were not designed to be mutually exclusive. They could be pursued simultaneously, or elements could be drawn from each option to create a new (fourth) option.

The issue brief was prepared to inform a stakeholder dialogue at which research evidence is one of many considerations. Participants' views and experiences and the tacit knowledge they bring to the issues at hand are also important inputs to the dialogue. One goal of the stakeholder dialogue is to spark insights – insights that can only come about when all of those who will be involved in or affected by future decisions about the issue can work through it together. A second goal of the stakeholder dialogue is to generate action by those who participate in the dialogue and by those who review the dialogue summary and the video interviews with dialogue participants.

stable housing contributes to HIV transmission; 3) the heterogeneity of people with HIV and their housing needs; and 4) limitations in the housing services people with HIV use now.

Lack of access to appropriate housing affects health, well-being, and access to services

Lack of appropriate housing is a problem that warrants significant attention in its own right. Combined with HIV, it becomes a more urgent issue because of the significant impact on health, well-being and access to health services. For example, in the *Positive Spaces, Healthy Places* study, people with HIV who are homeless or unstably housed were:

- more likely to have lower CD4 counts, higher viral loads, and higher mortality;
- less likely to initiate treatment, adhere to antiretroviral therapy or access healthcare and social services; and
- more likely to have addiction and substance use issues.(2)

They also experienced higher rates of depression.(2)

These findings are consistent with the results of a systematic review of (predominantly US-based) studies examining the relationship between housing and health status, which demonstrated the importance of housing status and stability on: access to and utilization of healthcare and social services; access and adherence to HIV treatment regimens; and health status and HIV risk-behaviour outcomes.(3)

In Ontario, according to the *Positive Spaces Healthy Places* study, the health-related impact of unstable housing is most severe for Aboriginal people, people from Africa and the Caribbean (particularly women with children), people with mental health and addiction issues, and/or people who have been incarcerated. (2) Conversely, people with HIV in Ontario who have access to supportive housing and other affordable, appropriate housing options:

- enjoy better physical and mental health;
- have lower rates of depression and are better able to cope with the stresses of living with HIV; and
- are more likely to access medical services and adhere to treatment regimens.(2)

These findings, which are consistent with studies of people with HIV in the US and on other populations that face health and housing issues (e.g., people with mental health and addiction issues, people with other chronic illnesses),(3) highlight the link between housing supports and housing stability, and between housing and access to services. The findings reinforce the importance of housing and supports for people with HIV.

Box 2: Equity considerations

A problem may disproportionately affect some groups in society. The benefits, harms and costs of options to address the problem may vary across groups. Implementation considerations may also vary across groups.

One way to identify groups warranting particular attention is to use “PROGRESS,” which is an acronym formed by the first letters of the following eight ways that can be used to describe groups†:

- place of residence (e.g., rural and remote populations);
- race/ethnicity/culture (e.g., First Nations and Inuit populations, immigrant populations, and linguistic minority populations);
- occupation or labour-market experiences more generally (e.g., those in “precarious work” arrangements);
- gender;
- religion;
- educational level (e.g., health literacy);
- socio-economic status (e.g., economically disadvantaged populations); and
- social capital / social exclusion.

The issue brief strives to address all of those with HIV in Ontario. As illustrative examples of equity considerations arising in the available data and research evidence, the issue brief gives particular attention to people living with mental illness and addictions.

Many other groups warrant serious consideration as well, and a similar approach could be adopted for any of them.

† The PROGRESS framework was developed by Tim Evans and Hilary Brown (Evans T, Brown H. Road traffic crashes: operationalizing equity in the context of health sector reform. *Injury Control and Safety Promotion* 2003;10(1-2): 11–12). It is being tested by the Cochrane Collaboration Health Equity Field as a means of evaluating the impact of interventions on health equity.

Lack of stable housing contributes to HIV transmission

Lack of stable housing is contributing to the ongoing epidemic. People with HIV who are unstably housed are two to four times more likely to have recently participated in activities that can transmit HIV, including unsafe sex and substance use.(4) When housing stability increases, risk behaviours are reduced by as much as half.(4) Research in the United States has shown that housing status itself independently predicts HIV risk and health outcomes, and that positive change in housing predicts less risk and better health, regardless of individual client characteristics, health status or service use variables.(4;5) This suggests that the condition of homelessness, and not simply traits of homeless individuals, influences risk behaviours and service utilization, making housing a strategic target for intervention.

There is also US-based evidence about how the costs of action to improve housing stability compare to the costs of inaction. Based on a comparison of the cost of a housing service with the cost of treating a case of HIV, a housing intervention would be cost saving if it prevented just one HIV infection for every 19 clients served, and cost effective if it prevented just one HIV infection for every 64 clients served.(6)

Box 3: Mobilizing research evidence about the problem

The available research evidence about the problem was sought from a range of published and “grey” research literature sources. Published literature that provided a comparative dimension to an understanding of the problem and that provided insights into alternative ways of framing the problem was sought using PubMed. Grey literature was sought by reviewing the websites of a number of Canadian and international organizations.

Priority was given to research evidence that was published more recently, that was locally applicable (in the sense of having been conducted in Ontario or in Canada more generally), and that took equity considerations into account.

Heterogeneity of people with HIV and their housing needs

The health and human service system’s ability to meet the housing and health needs of people with HIV is complicated by the fact that people with HIV are a heterogeneous group with heterogeneous needs – depending on whether HIV is their key health and social issue or one of several co-occurring stresses or co-morbidities, which can include:

- *Lack of income* - Based on *Positive Spaces Healthy Places* data, for about 42% of people with HIV who experience housing problems, the main problem is income: 75% of *Positive Spaces Healthy Places* study participants reported incomes of less than \$1,500 a month.(2) For this group, access to rent-geared-to-income housing or subsidized housing might be enough to meet their housing needs and improve their health.
- *Cultural issues* - Among Aboriginal people with HIV, about 72% have housing problems (e.g., moved often, homeless, at risk of losing their housing).(2) Aboriginal people also face a range of issues related to colonization and trauma,(2) and they may need a wider range of supports – in addition to help finding and maintaining housing.
- *Mental health and addiction issues* - About 17% of people with HIV who face housing issues also have mental health and/or substance use issues,(2) and require access to harm reduction and treatment services, as well as housing.
- *Justice issues* - In the *Positive Space Healthy Places* study, about 14% of participants had been released from prison in the last six months,(2) which often makes it harder for them to find housing and related services, and may mean they need other services to help them avoid re-offending.
- *Impact of aging with HIV* - About 22% of study participants were over age 50.(2) As people with HIV age, they will develop other chronic diseases, as well as neurological problems.(2) The combined impact of aging and HIV will affect their ability to work and function day-to-day, increasing the number of people who will need appropriate supports and services (including income support and housing) to continue to live independently.

For many, problems accessing housing are exacerbated by discrimination related to HIV, sexual orientation, race, culture, mental health issues, substance use and/or contact with the justice system.

Limitations in the housing services people with HIV use now

Despite the fact that 75% of *Positive Spaces Healthy Places* study participants had incomes below \$1,500 a month, only 43% currently have access to rent-g geared-to-income housing.(2) Only 15% of study participants have access to housing with support services (e.g., skills training, case management and harm reduction services) that help them find and maintain appropriate housing and, at the same time, manage their health.(2)

Access to rent-g geared-to-income and supportive housing varies significantly in different communities and regions of the province – as does the available housing stock. For example, the percentage of *Positive Spaces Healthy Places* study participants receiving rent-g geared-to-income ranged from 8% in the Greater Toronto Area and 10% in Thunder Bay to 44% in Ottawa and surrounding area, 45% in Hamilton and surrounding area, and 53% in the City of Toronto.(2) Moreover, the percentage of study participants in supportive housing was 14%, whereas 80% were housed without support services (and 6% were in unstable housing).(2) In general, supportive housing services are only available to people with severe mental health problems and/or addictions, people with physical and developmental disabilities, and the frail and elderly. These services are not widely accessible for people with HIV – even though many have depression and other mental health problems.

People with HIV also struggle to access subsidized housing. At the beginning of the epidemic, when HIV was a fatal illness, people with HIV were given priority for subsidized housing in some communities, such as Toronto. Today, they compete on those wait lists with many others whose needs are thought to be more urgent, such as victims of domestic violence and the frail elderly. A significant proportion of people with HIV now rely – along with many other marginalized groups – on shelters or transitional housing, or live in substandard housing.

In the 1990s, some communities such as Ottawa, Toronto and London, developed hospice programs for people with HIV, which have since evolved into housing programs that try to provide more comprehensive services, including life skills, counselling, harm reduction, peer programs and, in some cases, case management and access to primary healthcare. These options are not available to people with HIV in small urban communities or rural areas.

Service delivery arrangements complicate matters

HIV-related services are provided by community-based agencies and clinics that often feel ill equipped to deal with housing issues, while housing services are usually provided by housing agencies that feel ill equipped to deal with people with HIV. As one civil servant in the Ministry of Municipal Affairs and Housing recently summarized, in Ontario the delivery of housing services is complicated by: the more than 30 housing programs overseen by three provincial ministries, funded and delivered by multiple jurisdictions (i.e., social housing is not funded by the province but by 47 municipal service managers), working with many groups who need housing assistance, and finite resources - particularly in the current economic climate.

Funding arrangements and jurisdictional issues complicate matters further

There are currently four different levels of funding / jurisdiction for the range of housing and health services that people with HIV in Ontario need: federal, provincial, regional (i.e., Local Health Integration Network), and municipal.

In Ontario, decisions about the amount and location of housing stock and services involve three levels of government: federal, provincial and municipal. The policy guiding housing and health services involves three provincial ministries: Health and Long-Term Care, Community and Social Services, and Municipal Affairs and Housing. The planning and funding for community-based HIV services are a provincial ministry responsibility, while the planning and funding for health-funded supportive housing programs are now a regional (Local Health Integration Network) responsibility.

The policymaking process is particularly challenging during times of fiscal constraint, when all public service sectors are being asked to do more with existing resources.

Having different public policies and payers for housing, health and income support – all with long-established programs – creates barriers to developing innovative comprehensive care and support programs that enhance health and well-being (e.g., levels of income support do not take into account the real cost of housing). The current structure inhibits the ability to align services to meet needs, and leads to fragmenting people's needs in order to match them to services.

This complex system of services exists within an environment focused on making the best use of scarce resources. Competition for resources leads to barriers, such as wait list priorities and lack of innovative, cross-cutting solutions. Shifting towards a human services model might create a space where scarce resources could be brought together and used more effectively. More work needs to be done to understand and demonstrate the benefits of cross-cutting approaches to service delivery.

A number of barriers to implementation have hampered progress

Implementation barriers faced by communities trying to develop housing programs to meet the needs of people with HIV include: the stigma associated with HIV, the small number of people in some communities (i.e., lack of critical mass to support/justify a dedicated HIV housing program), long wait lists for housing and supportive housing services, and the “competition” with other under-housed populations for limited housing and support services.(7-9)

Another implementation barrier is the lack of ongoing research, monitoring and evaluation to:

- analyze data about service patterns and impact of different housing and support models;
- examine the effectiveness of different models of housing and health services for people with HIV and – in many cases – for people with other complex health and social needs (e.g., mental health and addiction);
- synthesize research evidence;
- develop and disseminate resources and tools to improve programs; and
- develop and disseminate guidelines and other resources and tools to help providers and organizations improve access to affordable, appropriate housing and support services to different populations of people with HIV over the life course.

THREE OPTIONS FOR ADDRESSING THE PROBLEM

There is strong evidence to support the positive impact of housing and support services on access to healthcare services and adherence to treatment for people with HIV.(3) However, there is less evidence on the effectiveness of different models for delivering housing and support services.

There are a number of different ways to approach this problem. To encourage discussion about the pros and cons of different strategies, we explore three possible options: 1) building on what's in place now; 2) building new programs for people with HIV; and 3) tackling the tough jurisdictional issues that affect access to housing and healthcare services for all people with complex health needs.

In this section, we focus first on what is known about these options and their strengths and weaknesses. In the next section we focus on barriers to adopting these options and strategies to overcome those barriers.

Option 1 – Build on what's in place now

Expand existing subsidized housing programs, community-based mental health and addiction programs, and other supportive housing programs to meet the needs of people with HIV

In Ontario, there are a variety of housing programs, including shelters and transitional housing, housing subsidies and rent-geared-to-income units, supportive housing programs, and comprehensive 'housing first' programs. With this option:

- policymakers and organizations responsible for services for people with HIV would use a combination of education and advocacy with housing and housing-related service providers to change current eligibility criteria, thereby making existing housing and support programs more easily available for people with HIV and people at risk;
- organizations and care providers serving people with HIV would familiarize themselves with the housing and support services available in their communities and make appropriate referrals; and
- organizations providing services for people with HIV would work with housing organizations and programs to ensure they understand the complex needs of different populations affected by HIV and provide culturally competent services.

There is little synthesized evidence on the effectiveness of different aspects of supportive housing, but there are individual studies that demonstrate that supportive housing programs have a positive impact on people

Box 4: Mobilizing research evidence about options for addressing the problem

The available research evidence about options for addressing the problem was sought primarily from Synthesized HIV/AIDS Research Evidence (SHARE), a continuously updated repository of syntheses of research evidence about HIV prevention, care and support. The reviews were identified by searching the database for reviews addressing housing for people with HIV.

The authors' conclusions were extracted from the reviews whenever possible. Some reviews contained no studies despite an exhaustive search (i.e., they were "empty" reviews), while others concluded that there was substantial uncertainty about the option based on the identified studies. Where relevant, caveats were introduced about the authors' conclusions based on assessments of the reviews' quality, the local applicability of the reviews' findings, equity considerations, and relevancy to the issue. (Please see the appendices for a complete description of these assessments.)

Being aware of what is not known can be as important as being aware of what is known. When faced with an empty review, substantial uncertainty, or concerns about quality and local applicability or lack of attention to equity considerations, primary research could be commissioned or an option could be pursued and a monitoring and evaluation plan designed as part of its implementation. When faced with a review that was published many years ago, an updating of the review could be commissioned if time allows.

No additional research evidence was sought beyond what was included in the systematic review. Those interested in pursuing a particular option may want to search for a more detailed description of the option or for additional research evidence about the option.

with mental health and addictions. As one reviewer said: “Although the number of studies is small and the results vary, the results indicate that housing with supports in any form is a powerful intervention that improves housing stability of individuals with mental illnesses.”(10) According to a systematic review of the research literature, people with HIV who receive housing assistance are more likely to receive primary healthcare services – although the researchers did not find a relationship between supportive housing and health status.(3) In the *Positive Spaces Healthy Places* study, people with HIV who had supportive housing reported better physical and mental health than those who did not, and researchers were able to document improvements in physical and health-related quality of life.(2)

Table 1: Summary of key findings from systematic reviews relevant to Option 1 – Build on what’s in place now

Category of finding	Summary of key findings
Benefits	<ul style="list-style-type: none"> • People with severe mental illness: There is good evidence that housing interventions benefit the homeless population. Housing with supports in any form is a powerful intervention that improves the housing stability of individuals with mental illness. Supportive housing has its greatest effects on residential outcomes.
Potential harms	<ul style="list-style-type: none"> • Supportive housing: Studies suggest that there is no increased risk in placing individuals in supportive housing. Those who do not do as well tend to be younger with relatively more impairments, including co-occurring substance use.
Costs and/or cost-effectiveness in relation to the status quo	<ul style="list-style-type: none"> • Dispersed versus clustered housing: One review found that there is no evidence that clustered housing can deliver the same quality of life as dispersed housing at a lower cost.
Uncertainty regarding benefits and potential harms (so monitoring and evaluations could be warranted if the option were pursued)	<ul style="list-style-type: none"> • Mixed-income housing developments: The effectiveness could not be ascertained because of lack of comparative research. Too few studies of adequate design and execution reported on the effectiveness of rental voucher programs on youth health risk behaviors, mental health status and physical health status. • Supported housing: In one review, no study comparing supported housing to outreach support or “standard care” for people with severe mental disorder(s) met the inclusion criteria. Less information is known about what aspects of housing may affect individual outcomes or the extent to which supported housing is more effective than other forms of housing. • People with severe mental illness: More research is needed for individuals with severe and persistent mental illness who are housed, but in precarious or inappropriate housing situations.
Key elements of the policy option if it was tried elsewhere	<ul style="list-style-type: none"> • None identified
Stakeholders’ views and experience	<ul style="list-style-type: none"> • None identified

The main strengths of this option are that it works with existing programs and services, will not duplicate services that are already available, and will be relatively easy to implement in more communities. The main weakness is that existing programs are unable to meet the housing needs of their target populations now, and wait lists are long. It may be difficult for the relatively small number of people with HIV to receive priority within current systems unless they also meet other criteria in these programs (e.g., mental health and addiction problems, disability, and frail and elderly).

Option 2 – Build new programs

Develop comprehensive community-based HIV, housing and health programs that provide a range of housing and support service options for people with or at risk of HIV, including case management, counselling, life skills, harm reduction, housing and ongoing supports, and access to medical care

In this option, organizations that provide services for people with HIV will use the lessons learned from other housing and supportive housing programs – particularly those for people with mental health and addiction problems – to develop comprehensive, one-stop HIV-specific programs, based on a ‘housing first’ model. In this option:

- community-based HIV organizations would shift their primary focus from prevention / education to structural interventions using a ‘housing first’ model;
- agencies would focus first on helping clients – both people with HIV and people at risk – find and maintain stable, appropriate housing and then, once they are housed, agencies can focus on helping people access a range of services as they become available, with the ideal being ‘wrap-around’ services based on each client’s needs, which can include counselling, social support, buddy programs, peer programs, case management, harm reduction and access to healthcare; and
- although traditional “health-care” type supports might be most desirable or suitable, even less formal or sporadic supports and social connections can assist simply because they are being provided to someone who is stably housed.

Although there is a lack of evidence that this model of care is effective for people with HIV, there is strong evidence that it is effective for people with mental illness and addiction. For people with mental illness, models that combine housing and support services contribute to stable housing as well as other favourable outcomes, such as fewer symptoms, lower rates of hospitalization, and greater client satisfaction.(11) For homeless people with active addiction, the ‘housing first’ model (i.e., permanent housing and access to wrap-around services such as screening and needs assessment, housing assistance, case management and sometimes healthcare) has contributed to high rates of housing retention – better than, for example, ‘linear’ programs that begin with treatment in emergency shelters, then shift to transitional housing, which is sometimes followed by permanent housing.(12) Evaluation of the ‘housing first’ approach in Toronto’s Streets to Homes program indicates that clients reported significant improvements in health (70%), food quality (63%), and personal safety (72%), and greater use of family doctors (32%) and specialists (233%).(13) Of those who reported using alcohol, 49% said their use decreased while 74% reported less drug use.(13) The combination of housing and support services has been shown to be more effective than intensive case management alone or assertive community treatment alone.(14) It may be reasonable to assume that people with HIV – many of whom have mental health and addiction issues – would experience the same benefits from a similar model.

Table 2: Summary of key findings from systematic reviews relevant to Option 2 – Build new programs

Category of finding	Summary of key findings
Benefits	<ul style="list-style-type: none"> • Comprehensive community-based HIV, housing and health programs: ‘Housing first’ studies document excellent housing retention. • Housing models: All models achieve significantly greater housing stability than non-model housing. Different housing models achieve different outcomes for different subgroups. • Best outcomes for housing stability were found for programs that combined housing and support, followed by assertive community treatment alone.
Potential harms	<ul style="list-style-type: none"> • None identified

Costs and/or cost-effectiveness in relation to the status quo	<ul style="list-style-type: none"> • None identified
Uncertainty regarding benefits and potential harms (so monitoring and evaluations could be warranted if the option were pursued)	<ul style="list-style-type: none"> • Comprehensive community-based HIV, housing and health programs: Several linear programs cite reductions in addiction severity, but have shortcomings in long-term housing success and retention. The current research data are not sufficient to identify an optimal housing and rehabilitation approach for an important homeless subgroup.
Key elements of the policy option if it was tried elsewhere	<ul style="list-style-type: none"> • None identified
Stakeholders' views and experience	<ul style="list-style-type: none"> • None identified

The strength of this approach is that the services will be culturally appropriate for people with HIV and take into account their unique needs. Services will be easier to access than the current complex array of housing programs because they will integrate all services within a client-based model. The weaknesses of this approach are the cost and the resources that community-based organizations would require to implement this option, including funding for actual housing units, as well as the potential for costly duplication. One question that would be asked is whether it's cost-effective to set up a parallel housing system for people with HIV. Other weaknesses are the possible stigma associated with HIV housing projects, as well as the practical challenges associated with implementing this option in communities that do not have the "critical mass" of people with HIV required to justify this type of program.

Clients may not want to be associated with a housing unit or program that is strongly HIV-identified: 80% of participants in the *Positive Spaces Healthy Places* study said they do not want to live in HIV-identified or HIV-specific residences/buildings.(2) This weakness could be overcome by adopting some of the dispersed housing strategies currently being used in some communities by the Canadian Mental Health Association. In those strategies, agencies buy four or five units in a condominium complex so that clients have some social support and the agency has some economies of scale for delivering services; however, clients are part of a mixed community and not associated, in this case, with a mental health program. According to a systematic review, dispersed housing is better than clustered housing on most indicators of quality of supportive housing – although it is slightly more expensive to provide due to staff travel time.(15)

Option 3 – Tackle the tough jurisdictional issues

Broker and support the implementation of a cross-payer, cross-discipline model of client-centred housing, health care and supportive services for all people with health conditions that put their housing at risk

In this option, access to a mix of services would not be based on a specific diagnosis or on being linked with one particular service system, such as health, social services or housing. A full range of human services would be available to anyone with an illness or condition that affects their ability to find and maintain stable, appropriate housing. The services would be client-centred and needs-based, with service providers able to ‘assemble’ the right mix of services to meet each person’s needs at different stages in their disease and their life course.

There are no systematic reviews of the research literature to support this particular model – largely because efforts to develop cross-sector models of care are in their infancy. However, there is evidence for the efficacy of a multi-disciplinary team approach to delivering integrated services for people with dual diagnosis.⁽¹⁶⁾ Cook reported consensus on the benefits of certain service design features, including: a credentialed, experienced team leader; specialty area supervision for team members; services provided in ‘natural’ environments (rather than in a facility or office); consumers included as providers on the team; and services organized in a way that offered ongoing support with no time limits, smooth transitions between providers, and consumer choice.

Table 3: Summary of key findings from systematic reviews relevant to Option 3 – Tackle the tough jurisdictional issues

Category of finding	Summary of key findings
Benefits	<ul style="list-style-type: none"> • None identified
Potential harms	<ul style="list-style-type: none"> • None identified
Costs and/or cost-effectiveness in relation to the status quo	<ul style="list-style-type: none"> • None identified
Uncertainty regarding benefits and potential harms (so monitoring and evaluations could be warranted if the option were pursued)	<ul style="list-style-type: none"> • None identified
Key elements of the policy option if it was tried elsewhere	<ul style="list-style-type: none"> • Multi-disciplinary team: there is considerable evidence for the efficacy of a multi-disciplinary team approach.
Stakeholders’ views and experience	<ul style="list-style-type: none"> • Implementation recommendations: The teams should be led by a credentialed, experienced team leader. Specialty-area supervision should be made available to the specialist team members. Most ‘level three’ services should be provided in natural environments and consumers should be included as providers. No specifically defined group of consumers should be prioritized above others to receive specialty services and services should be organized in ways that offer ongoing support from both case managers and specialist provider. Centrality of consumer choice was also a consensus-based principle.

Despite the lack of published research on models to provide integrated housing, health and other services, this approach is being implemented at the ‘front lines.’ A growing number of municipalities are developing departments of human services, where funding from various provincial ministries and the municipality are combined to provide one-stop shopping for a range of social and housing programs. Much of the work of community health centres (CHCs) in Ontario is based on this model, where centre staff work with community partners to access and assemble services and create supportive communities. In 2009, at the federal level in the United States, the President instructed federal government programs – including the Centres for Disease Control, Housing and Urban Development (HUD), and the Department of Health and Human Services – to collaborate to prevent HIV and meet the needs of people living with HIV.(17)

At the provincial level within Canada, Saskatchewan has already moved in this direction, establishing the Human Services Integration Forum (HSIF) in 1994 to coordinate government initiatives and meet the “growing demand for holistic and integrated human services.”(18) The HSIF includes seven government departments: learning, justice, health, community resources and employment, corrections and public safety, culture, youth and recreation, and First Nations and Métis relations. Its role is to establish and maintain mechanisms to “promote and facilitate interagency collaboration and integrated planning and service delivery, identify and address barriers, provide funding and policy support, provide education supports to human service providers, and make effective, efficient use of resources.”(18) The HSIF vision is that human services will “contribute to self reliance and individual well-being while recognizing the interdependence of all Saskatchewan citizens.”(18) The HSIF has established Regional Intersectoral Committees responsible for integrating services within regions. As a result of the strong provincial policy support for cross-sectoral services, local communities report that it is much easier for services to work together to provide one-stop access to a range of client-centred services (personal communication, Cecile Hunt, CEO, Prince Albert Parkland Regional Health Authority, Saskatchewan, 10 May 2010).

The municipality of Prince Albert, Saskatchewan is in the process of using this approach to meet the complex needs of its Aboriginal population, which is currently experiencing extremely high rates of HIV and risk behaviours, particularly injection drug use (personal communication). The community sees HIV as a symptom of larger, more fundamental social and health problems, and is using a variety of social development programs – including early years services, youth-based programs (given 32% of its population is under age 20 and there are high rates of injection drug use and HIV infection in youth), addiction programs and services, food security initiatives, and housing and homelessness initiatives (personal communication). As part of its overall housing strategy, Prince Albert is initiating the Horizontal Pilot Project specifically to meet the needs of people with or at risk of HIV. Local partners include: Health; Justice; Corrections Public Safety and Policing; Social Services; Education; the Prince Albert Grand Council; housing authorities; community-based organizations; the Catholic and Anglican Dioceses; and the Saskatchewan Human Rights Commission. The project is using a ‘housing first’ approach, accompanied by intensive case-management services to address the complex needs of 15 to 20 individuals: some of whom will be at risk for HIV, some newly diagnosed, and some with chronic disease (personal communication). The goal is not just to meet housing needs and improve health and quality of life, but to decrease the use of acute care services and involvement with the justice system, and increase engagement in the labour force and sense of belonging to the community.

The strengths of this approach are its client-centred nature and its applicability to a larger population than people with HIV. In the case of Prince Albert, the pilot project is applicable to the community’s large Aboriginal population as well as to others with chronic housing problems and other complex needs. The challenges relate to shifting established service systems and changing system and agency dynamics.

IMPLEMENTATION CONSIDERATIONS

The following table summarizes potential barriers for each option:

Level	Option 1: Build on what's in place now	Option 2: Build new programs	Option 3: Tackle the tough jurisdictional issues
Client/ Individual	<p>People with HIV will “compete” with people with many other health and social factors that lead to unstable housing and may not be considered ‘high priority’ for services. Moreover, there are long wait lists for these services now.</p> <p>Current services focus mainly on people with complex mental health and addiction needs, and may not be able to provide the range of options to meet the needs of all populations with HIV.</p>	HIV-specific or HIV-identified programs may be stigmatizing.	This option may be more effective for people with complex needs; it may not be an effective way to help people with or at risk of HIV who simply require subsidized housing.
Service/care provider	Providers working within existing housing programs are under pressure to serve a wide range of populations in need. They may not understand the needs of people with HIV, or consider them a priority.	Providers currently working with people with HIV may not have the knowledge/skills to develop and operate effective housing programs. This model would require a shift away from some of the programs and services currently provided.	This option requires change in professional culture.
Organization	<p>Existing housing organizations are hard pressed to meet current needs. Eligibility for services does not necessarily mean access.</p> <p>Service costs would increase.</p>	<p>Depending on the housing model being used, HIV organizations may begin to compete with other housing providers for available rental units/housing stock.</p> <p>Service costs would increase within the HIV sector.</p>	This option requires change in organizational culture.
System	This option requires changes in eligibility criteria that could lead to demands from other populations who face housing issues – thereby creating equity issues. This option will increase the cost of these services (if capacity is increased to meet HIV needs).	This model may lead to unnecessary duplication of services, and may increase the cost of services for people with HIV.	This option requires change in system culture.

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	This option is relatively easy to implement because it builds on existing programs and will not duplicate existing services.		
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APPENDICES

The following tables provide detailed information about the systematic reviews identified for each option. Each row in a table corresponds to a particular systematic review and the reviews are organized by option element (first column). The focus of the review is described in the second column. Key findings from the review that relate to the option are listed in the third column, while the fourth column records the last year the literature was searched as part of the review.

The fifth column presents a rating of the overall quality of the review. The quality of each review has been assessed using AMSTAR (A MeaSurement Tool to Assess Reviews), which rates overall quality on a scale of 0 to 11, where 11/11 represents a review of the highest quality. It is important to note that the AMSTAR tool was developed to assess reviews focused on clinical interventions, so not all criteria apply to systematic reviews pertaining to delivery, financial, or governance arrangements within health systems. Where the denominator is not 11, an aspect of the tool was considered not relevant by the raters. In comparing ratings, it is therefore important to keep both parts of the score (i.e., the numerator and denominator) in mind. For example, a review that scores 8/8 is generally of comparable quality to a review scoring 11/11; both ratings are considered “high scores.” A high score signals that readers of the review can have a high level of confidence in its findings. A low score, on the other hand, does not mean that the review should be discarded, merely that less confidence can be placed in its findings and that the review needs to be examined closely to identify its limitations. (Lewin S, Oxman AD, Lavis JN, Fretheim A. SUPPORT Tools for evidence-informed health Policymaking (STP): 8. Deciding how much confidence to place in a systematic review. *Health Research Policy and Systems* 2009; 7 (Suppl1):S8.)

The last three columns convey information about the utility of the review in terms of local applicability (with reviews containing a number of studies conducted in Ontario specifically or Canada more generally having a higher likelihood of being locally applicable), applicability concerning prioritized groups (people living with mental health conditions and/or with addictions), and issue applicability (housing and health among people with HIV). The third-from-last column notes the proportion of studies that were conducted in Canada, while the second-from-last column notes the proportion of studies included in the review that deal explicitly with the prioritized group and the last column notes the proportion of studies that deal explicitly with housing and health among people with HIV.

All of the information provided in the appendix tables was taken into account by the issue brief’s authors in describing what is known about the three options.

Appendix 1: Systematic reviews relevant to Option 1 – Build on what’s in place now

Option element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with the prioritized group	Proportion of studies that focused on housing and health for people with HIV
Supportive housing	Providing affordable family housing and reducing residential segregation by income. A systematic review	The effectiveness of mixed-income housing developments could not be ascertained by this systematic review because of a lack of comparative research. Scientific evidence was sufficient to conclude that rental voucher programs improve household safety as measured by reduced exposure to crimes against person and property and decreased neighborhood social disorder. Effectiveness of rental voucher programs on youth health risk behaviors, mental health status, and physical health status could not be determined because too few studies of adequate design and execution reported these outcomes.	2000	3/10	0/23 (only studies from the U.S. were included)	2/23 – mental health status	0/23
	Supported housing for people with severe mental disorders	The objective of the review was to determine the effects of supported housing schemes compared with outreach support schemes or 'standard care' for people with severe mental disorder/s living in the community. Although 139 citations were acquired from the searches, no study met the inclusion criteria	2006	9/9	0/0 (no studies included in review)	n/a	n/a
	Effects of housing circumstances on health, quality of life and healthcare use for people with severe mental illness: a review	Twenty-nine studies met the suitability criteria, of which 14 reported healthcare utilisation outcomes; 12 examined mental status outcomes; and 9 reported quality-of-life outcomes. The findings of the review suggest that there is good evidence that housing interventions benefit the homeless population; however more research is needed about housing solutions for individuals with SPMI who are housed, but in precarious or inappropriate housing situations. Study	Not stated	5/10	5/29	12/29 (mental health status)	0/29

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Option element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with the prioritized group	Proportion of studies that focused on housing and health for people with HIV
		<p>methodologies could be improved by emphasizing longitudinal designs that focus on participant retention and by implementing matched control groups or randomized interventions to strengthen internal validity. Ensuring that a person is adequately housed upon discharge from hospital should be a treatment priority. When housing eligibility is not dependent on psychiatric treatment compliance and sobriety, providing permanent housing minimizes harm and may free people to voluntarily seek treatment. Housing that offers an unlimited length of stay is recommended because SPMI is a chronic and fluctuating condition that requires stable surroundings to maintain health.</p>					
	<p>The effects of housing status on health-related outcomes in people living with HIV: a systematic review of the literature</p>	<p>Of the 17 studies that were reported in details, one study (quality rated as 'good'), reported findings related to people living HIV/AIDS receiving housing assistance. In this study, receipt of housing assistance was significantly associated with increased likelihood of reporting receipt of any primary care services. 25.5% of the sample was receiving housing assistance and 32.9% patients need housing assistance but do not receive it. No relationship between receipt of housing assistance and health status was found.</p>	<p>2005</p>	<p>5/10</p>	<p>1/29</p>	<p>13/17 (mental health and addictions) *detailed information only available for the 17 studies that received a quality rating of 'good' or 'fair'</p>	<p>29/29</p>
	<p>Dispersed or clustered housing for adults with intellectual disability: A systematic review</p>	<p>Based on 19 papers describing 10 studies, dispersed housing appears to be superior to clustered housing on the majority of</p>	<p>Not stated</p>	<p>2/10 (based on the full report and</p>	<p>0/19</p>	<p>0/19</p>	<p>0/19</p>

Addressing housing challenges for people living with HIV/AIDS

Option element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with the prioritized group	Proportion of studies that focused on housing and health for people with HIV
	*Based on a full report, which is available through the National Disability Authority ¹ .	quality indicators studied. The only exception to this is that village communities for people with less severe disabilities have some benefits; this is not, however, a model which can be feasibly provided for everyone. Clustered housing is usually less expensive than dispersed housing but this is because it provides fewer staff hours per person. There is no evidence that clustered housing can deliver the same quality of life as dispersed housing at a lower cost.		not the journal publication)			
	The evidence on supported housing	<p>Fifteen studies have provided data on the outcomes of supported housing. Although the number of studies is small and the results vary, the results indicate that housing with supports in any form is a powerful intervention that improves the housing stability of individuals with mental illnesses. The results indicate that individuals with severe mental illnesses can, and do, live in the community with supports and that most can remain in the housing for long periods of time. The findings thus far also suggest that supportive housing has its greatest effects on residential outcomes.</p> <p>There is less known from the studies thus far as to what aspects of housing may affect individual outcomes or the extent to which supported housing is more effective than other forms of housing. We do know that housing with supports makes a difference over no housing, affordability is key, and there is some</p>	Not stated	3/10	0/15	15/15 (mental health and addictions)	0/15

¹ <http://www.nda.ie/cntmgmtnew.nsf/0/292BC9700CF60D7C802575BD003C1CD4?OpenDocument>

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Option element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with the prioritized group	Proportion of studies that focused on housing and health for people with HIV
		<p>suggestion that housing with more well-defined services may be even more effective than other forms of housing with supports. Moreover, if one looks at the findings from the perspective of whether there is increased risk in placing individuals in supported housing, the data would suggest that the risk is no greater (at least for those groups studied).</p> <p>There is a need for greater investigation into what aspects of the housing and supports make the most difference and for whom. In particular, there has been a call for research on the housing and service factors that influence an individual's integration into the community, a major goal of mental health policy and of housing in particular. In addition, there is a need to know more about the individuals who do not succeed in housing and the interventions needed to improve their chances. Despite the population differences that do exist among the studies, there is a great consistency in the characteristics associated with poorer outcomes. Those who do not fare as well tend to be younger with relatively more impairments, including co-occurring substance abuse.</p>					

Appendix 2: Systematic reviews relevant to Option 2 – Build new programs

Option element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with the prioritized group	Proportion of studies that focused on housing and health for people with HIV
Comprehensive community-based HIV, housing and health programs	<p>Housing first for homeless persons with active addiction: Are we overreaching? <u>Programs assessed:</u> i) Housing first: Housing is permanent. Types of housing provided vary with the program (multiunit dwellings, scattered site, private market). Services provided often include screening and needs assessment, housing assistance, varying levels of support services, case management, sometimes on-site medical or mental health care. ii) Voucher programs ii) Linear approach: A continuum spanning emergency shelters with “in-house” treatment programs, addiction stabilization programs, transitional housing, sometimes followed by permanent supportive housing, group residence, or independent housing. Services vary by setting, but substance abuse or psychiatric problem treatment is required.</p>	<p>According to reviews of comparative trials and case series reports, Housing First reports document excellent housing retention, despite the limited amount of data pertaining to homeless clients with active and severe addiction. Several linear programs cite reductions in addiction severity but have shortcomings in long-term housing success and retention.</p> <p>This article suggests that the current research data are not sufficient to identify an optimal housing and rehabilitation approach for an important homeless subgroup. The research regarding Housing First and linear approaches can be strengthened in several ways, and policymakers should be cautious about generalizing the results of available Housing First studies to persons with active addiction when they enter housing programs.</p>	Not stated	1/11	Number of included studies not stated	All (included studies had to include a target population that was homeless with addiction or mental illness. Number of included studies not stated)	Not stated
	<p>Does one size fit all? What we can and can't learn from a meta-analysis of housing models for persons with mental illness</p> <p>A meta-analysis of 44 unique housing alternatives described in 30 studies was conducted, which were categorized as residential care and treatment, residential continuum, permanent supported housing, and nonmodel housing. Outcomes examined included housing stability, symptoms, hospitalization, and</p>	<p>All models achieved significantly greater housing stability than nonmodel housing. This effect was greatest for permanent supported housing (effect size=.63, $p<.05$). No differences between housing models were significant. For reduction of psychiatric symptoms, only residential care and treatment differed from nonmodel housing (effect size=.65, $p<.05$). For hospitalization reduction, both residential care and treatment and permanent supported housing differed from nonmodel housing ($p<.05$).</p>	Not stated	4/11	Countries in which studies were conducted was not stated.	30/30 (mental health and addictions)	0/30

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Option element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with the prioritized group	Proportion of studies that focused on housing and health for people with HIV
	satisfaction.	Permanent supported housing achieved the highest effect size (.73) for satisfaction and differed from nonmodel housing and residential care and treatment ($p < .001$ and $p < .05$, respectively). The meta-analysis provides quantitative evidence that compared with nonmodel housing, housing models contribute to stable housing and other favorable outcomes. The findings also support the theory that different housing models achieve different outcomes for different subgroups.					
	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	A review of 16 controlled outcome evaluations of housing and support interventions for people with mental illness who have been homeless revealed significant reductions in homelessness and hospitalization and improvements in other outcomes (e.g., well-being) resulting from programs that provided permanent housing and support, assertive community treatment (ACT), and intensive case management (ICM). The best outcomes for housing stability were found for programs that combined housing and support (effect size = .67), followed by ACT alone (effect size = .47), while the weakest outcomes were found for ICM programs alone (effect size = .28).	2004	4/10	0/10	10/10 (mental health and addictions)	0/10

Appendix 3: Systematic reviews relevant to Option 3 – Tackle the tough jurisdictional issues

Option element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with the prioritized group	Proportion of studies that focused on housing and health for people with HIV
Cross-payer, cross-discipline model of client centred housing, healthcare and support services	Combining evidence-based practice with stakeholder consensus to enhance psychosocial rehabilitation services in the Texas Benefit Design Initiative	<p>The panel agreed that evidence regarding the implementation issues was uniformly weak or nonexistent for each issue except one—service organization. In each psychosocial rehabilitation area (with the exception of peer support/consumer operated services), there was considerable evidence for the efficacy of a multi-disciplinary team approach to delivering services. For all other implementation questions (e.g., staff competencies, target populations, duration and intensity of services), the consensus-building process used criteria such as fairness, practicality, efficiency, maximization of consumer choice, and cost considerations, to reach recommendations about the different Benefit Design Initiative alternatives being considered.</p> <p>The first consensus-derived implementation recommendation was that teams should be led by a credentialed, experienced team leader. The second was that specialty-area supervision should be made available to the specialist team members (such as employment or dual-diagnosis specialists), who might not receive such supervision from a more case management-oriented team leader. A third expectation was that most Level Three services would be provided in natural environments (i.e., the “real world”) rather than at a facility or in an office-based setting. A fourth was that consumers should be included as providers in the roles described above</p>	Not stated	Not a systematic review	n/a	n/a	n/a

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		<p>and/or in additional roles such as operating independent drop-in centers or leading self-help groups. A fifth was that no specifically defined group of consumers should be prioritized above others to receive the specialty services offered in the Level Three package, other than the targeting of dual-diagnosis services to active substance users. A sixth implementation guideline derived by consensus was that services should be organized in ways that offered ongoing support (i.e., with no time-limits) from both case managers and specialist providers, as well as smooth transitions between providers to preserve continuity of relationships. A seventh consensus-based principle involved the centrality of consumer choice, which included several elements: 1) shared decision making in which consumers would make decisions after receiving full information on available options from providers; 2) that choice should be cultivated through education and encouragement of consumers who might initially be reluctant to pursue rehabilitation goals; 3) that service delivery would be preceded by a comprehensive, person-centered planning process; 4) that every effort should be made to give consumers choices about who their providers would be, especially their psychiatrists and case managers; and 5) that consumer choice would be an ongoing process, giving clients opportunities to reconsider and revise their choices as their needs and situations changed, and as their experience with this type of service delivery grew.</p>					
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