Exploring the Value of Mixed Methods Within the At Home/Chez Soi Housing First Project: A Strategy to Evaluate the Implementation of a Complex Population Health Intervention for People With Mental Illness Who Have Been Homeless

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ABSTRACT

Objective: This paper is a methodological case study that describes the At Home/Chez Soi (Housing First) Initiative's mixed-methods strategy for implementation evaluation and discusses the value of these methods in evaluating the implementation of such complex population health interventions.

Target Population: The Housing First (HF) model is being implemented in five cities: Vancouver, Winnipeg, Toronto, Montréal and Moncton.

Intervention: At Home/Chez Soi is an intervention trial that aims to address the issue of homelessness in people with mental health issues. The HF model emphasizes choices, hopefulness and connecting people with resources that make a difference to their quality of life. A component of HF is supported housing, which provides a rent subsidy and rapid access to housing of choice in private apartments; a second component is support. Quantitative and qualitative methods were used to evaluate HF implementation.

Outcomes: The findings of this case study illustrate how the critical ingredients of complex interventions, such as HF, can be adapted to different contexts while implementation fidelity is maintained at a theoretical level. The findings also illustrate how the project's mixed methods approach helped to facilitate the adaptation process. Another value of this approach is that it identifies systemic and organizational factors (e.g., housing supply, discrimination, housing procurement strategy) that affect implementation of key elements of HF.

Conclusion: In general, the approach provides information about both whether and how key aspects of the intervention are implemented effectively across different settings. It thus provides implementation data that are rigorous, contextually relevant and practical.

Key words: Homelessness; mental health; complex community interventions

La traduction du résumé se trouve à la fin de l'article.

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The purpose of this paper is to discuss and illustrate the value of mixed methods in evaluating the implementation of complex population health interventions. In it, we present a methodological case study focusing on the implementation evaluation of the At Home/Chez Soi initiative. This is a research demonstration project designed to address the issue of homelessness, which over the past 30 years has become recognized as a serious social problem affecting a disproportionate number of people with mental health issues, many of whom also have addictions and other problems (e.g., poverty, isolation, unemployment).[1,2] In the first part of the paper, we describe the demonstration project, the Housing First (HF) intervention it seeks to implement, as well as the evidence supporting it. We then discuss the methodology, both the rationale and the actual steps, of the project's evolving mixed-methods strategy for implementation evaluation. Finally, by presenting early findings on implementation, we illustrate the value of mixed methods for implementing and understanding complex interventions.

Intervention

At Home/Chez Soi is the largest mental health services intervention trial ever mounted in Canada. On behalf of the Mental Health Commission of Canada, it seeks to implement and evaluate in five different cities (Vancouver, Winnipeg, Toronto, Montréal and Moncton) the HF model (sometimes referred to as the Pathways model) for 2,234 people.[3] The HF model (see Box 1 for a more complete description) combines various research-based approaches, all with a recovery philosophy that emphasizes choices, hopefulness and connecting people with resources that make a difference to their quality of life. The first component is "supported housing", which in contrast to "supportive housing" – i.e., congregate housing with on-site support[4] – provides a rent subsidy and rapidly secures tenancy for individuals in private apartments in regular community dwellings. Rather than being provided on-site, support is provided to the individual by a mobile case management team, which is the second major component of the HF intervention.[5] For

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Box 1. Housing First (HF) Model[3]

The Housing First model merges the evidence-based practices of Supported Housing and case management (delivered in one of two formats, Intensive Case Management or Assertive Community Treatment, depending on level of need, see below).

Supported Housing: Basic Program Elements

- *Choice:* Housing is provided according to consumer choice (which, for the most part, is assumed to be private units in regular apartment buildings in the community, in contrast to the model known as "supportive housing" or "continuum housing", which places people in congregate residential facilities with built-in mental health support of different levels, where residents may have to move to different facilities as their level of need changes).
- *Availability (& access):* Compared with traditional supportive housing approaches, housing is made available to participants relatively quickly, with the expectation that the majority of participants move into their apartments within 6 weeks of entering the program; housing stock is procured through a housing agency that works for the program.
- *Affordability:* Rent supplements are provided so that participants can access housing in the private market: participants pay 30% or less of their income or the shelter portion of welfare.
- *Permanence/commitment to re-house:* Participants have standard leases and the tenancy protection that comes with this; should they be evicted, the program is committed to finding the participant another place.
- *Separation of treatment and support:* Use of mental health services is voluntary, with the exception of a minimum expectation that participants meet with mental health workers based off site (i.e., the case management team, see below) at least once per week; there are no requirements for "housing readiness", i.e., participants do not have to be deemed to have achieved a certain level of functioning to receive housing, nor do they have to participate in psychiatric or addictions-related treatment.
- *Note:* as outlined below, case management teams provide support using two different approaches, depending on level of need. Assertive Community Treatment, despite the name, is a more intensive form of support than Intensive Case Management, with lower caseload ratios, greater frequency of visits and more support provided directly (as opposed to brokered) to participants with relatively higher needs.

Assertive Community Treatment (ACT) – High Need

- Recovery-oriented ACT team (provides illness management, supported education/employment).
- Team provides all (or most) services, rather than provision through a referrals or brokerage approach.
- Client/staff ratio of 10:1 or less and staff includes a psychiatrist and nurse.
- Program staff are closely involved in hospital admissions and discharges.
- Teams meet daily and include at least one peer specialist as staff.
- Seven day a week, 24-hour crisis coverage.

Intensive Case Management (ICM) – Moderate Need

- Recovery-oriented case management (illness management, supported education/employment).
- Team provides some services but brokers or refers most.
- Client/staff ratio of 20:1 or less.
- Workers accompany clients to appointments.
- Centralized assignment and monthly case conferences.
- Seven day a week, 12 hours per day coverage.

participants with the greatest support needs, HF provides case management using the Assertive Community Treatment (ACT) model, which delivers proactive, intensive, community-based support, often in the individual's own residence, available around the clock if necessary, and with close cooperation between the ACT team and inpatient services when needed.[6] For participants with more moderate support needs, the support component is delivered using the Intensive Case Management (ICM) model, in which single case managers serve as brokers, connecting consumers with various community supports and services. In contrast to usual practice, in which housing is offered through mental health services to people who are already compliant with psychiatric (and, if relevant, addictions) treatment, in the HF model participants are engaged by being offered immediate access to an apartment and thus becoming regular tenants in private dwellings in the community, regardless of whether they participate in treatment.[7]

Evidence regarding the effectiveness of HF in producing positive outcomes for homeless people with mental health issues has been reported in several recent reviews.[8-11] Evidence from longitudinal experimental and quasi-experimental studies has shown the intervention to reduce homelessness and hospitalization and to improve housing stability more than treatment as usual, the residential continuum of care (i.e., "supportive housing"), or ACT or ICM alone. On the other hand, the evidence regarding improved clinical and community adaptation outcomes and costs resulting from HF is more inconsistent.

Building an evidence base that balances rigour and relevance

While there has been solid evidence of the HF model's efficacy in several US cities, the At Home/Chez Soi leaders anticipated that it would be important for this demonstration project to generate findings from various settings in Canada in order to further the adoption and sustainability of the model in this country. They also believed that it was important to allow sites the flexibility to adapt the HF model to local circumstances in a way that was consistent with the underlying principles of the intervention. Thus, the challenge was to conceptualize a research design able to develop evidence that was both rigorous from a traditional scientific perspective and relevant to the implementation concerns of local stakeholders and decision-makers. As we describe below, the project did this by adopting a randomized controlled trial (RCT) design and an implementation evaluation strategy that was modified in keeping with the complex HF intervention.

From the standpoint of traditional scientific rigour, faithful implementation of critical intervention ingredients is essential to making sound inferences that observed trial outcomes are, in fact, attributable to the intervention. Towards this end, the At Home/Chez Soi project leaders worked with the model's founders to develop a practice manual, carry out regular cross-site staff training events and offer site-specific technical assistance as needed. Confirming faithful implementation also involved the use of a specially adapted quantitative fidelity assessment instrument and process using a scale that captured what were understood by HF experts to be the critical ingredients of the Pathways HF model.[12]

At the same time, in acknowledgement of the complexity of the intervention and in keeping with the ideas of population health intervention research, the project leaders recognized that fidelity would have to be conceptualized and ascertained appropriately, and, as described further below, that the project's evolving mixed-methods strategy could help complement the fidelity assessment (see Table 1 for an outline of the overall study methodology, as well as an outline of the overall qualitative and mixed-methods design). Complex interventions comprise numerous critical ingredients, whose mechanisms of action may have uncertain connections to outcome in different contexts. Given this, implementation of such interventions should achieve fidelity with presumed essential principles and functions across varied contexts rather than simply to a specific form of that component.[13] Also, given the potential complexity of mechanism-context-outcome pathways, it is important

Table 1. Key Elements of the At Home/Chez Soi Research Design

Sites and Intervention Conditions*	Data Collection Periods and Outcome Measures	Conception, Planning and Implementation†
Vancouver ACT + HF for high needs ICM + HF for moderate needs Winnipeg ACT + HF for high needs ICM + HF for moderate needs Toronto ACT + HF for high needs ICM + HF for moderate needs Montreal ACT + HF for high needs ICM + HF for moderate needs Moncton ACT + HF for high and moderate needs	**Baseline:** 6, 12, 18, 24 months **Measures:** Eligibility screening (MINI International Neuropsychiatric Interview), Demographics, Housing, Vocational and Service Use History, Residential Follow-Back Timeline, Vocational Time-Line Follow-Back, Perceived Housing Quality Items, Landlord Relations, Objective Housing Quality, Health, Social and Justice Service Use Inventory, Health Service Access Items, Colorado Symptom Index, Global Assessment of Individual Need – Substance Problem Scale, Comorbid Conditions List, Multnomah Community Ability Scale, EQ-5D (health status), SF-12 Health Survey (health status), Quality of Life Index, Social Support Items and Food Security, Recovery Assessment Scale, Community Integration Scale, Working Alliance Inventory, Service Satisfaction Scale	Qualitative study of project conception Cross-site qualitative study of project planning and proposal development **Mixed-methods implementation evaluation:** Cross-site qualitative implementation evaluation (done twice, first year and second year, in conjunction with fidelity assessments) Fidelity assessments of each program at each site (done twice, first year and second year) Qualitative implementation evaluation is merged with quantitative fidelity evaluation at both points and analyzed using the methodology described in this article

* ACT, Assertive Community Treatment; ICM, Intensive Case Management; HF, Housing First, refers here to the Supported Housing intervention (HF is sometimes used to refer to the intervention as a whole, i.e., both the housing and support aspects of the program).
In the basic design, in addition to Treatment as Usual, each site has two intervention arms (high and moderate needs); each site also has a third, site-specific arm, but for purposes of simplicity this aspect of the design is not outlined.
The control condition for each site is Treatment as Usual (TAU) for both high and moderate needs. In TAU, participants experience the usual care at each site. In the course of this, should they be connected to housing with support, the housing approach would be consistent with the "supportive" (vs. supported) housing approach, as explained in Box 1; should they be connected to case management, the approach varies according to site, but in no site would they be offered the evidence-based approaches of ACT or ICM described in Box 1.

† Apart from the mixed-methods implementation/fidelity evaluation described in this paper, the conception and proposal development phases of the project are being studied using qualitative methods. A mixed-methods approach examining outcomes is emerging.

to ascertain how process and outcome may be linked within a setting and thus to refine theoretical knowledge about how these interventions can be optimized across settings.[13-17]

Developing a coherent mixed-methods methodology

In light of these considerations, mixed-methods approaches are increasingly considered useful and even necessary for RCT studies of complex interventions.[14] However, a systematic review of such studies showed that the majority failed to employ mixed methods.[16] Furthermore, those that did usually failed to "position their study within the on-going discussions about mixed methods research"[18](p. 326) and were conducted in such a way that the qualitative and quantitative aspects generally lacked coherence; for instance, they often failed to justify the use of mixed methods in methodological discussions, usually analyzed qualitative and quantitative data separately, and published these results separately.[16] In order to achieve more methodological coherence, At Home/Chez Soi reviewed relevant methodological literature and then developed a Discussion Paper, which identified two key issues requiring consideration: choice of research paradigm and design function that fit the purpose of the study. In the current case, achieving "coherence" meant identifying a design within the mixed-methods literature that appropriately measured implementation of a complex intervention, i.e., one that ascertained the fidelity of critical ingredients according to quantitatively operationalized forms but was also sensitive to intervention functions that were better understood qualitatively.

Choice of research paradigm: Pragmatism

The first question raised by the Discussion Paper was whether using mixed methods was even acceptable, given arguments that inductive qualitative research constitutes a specific knowledge paradigm that produces evidence incommensurable with positivistic quantitative research.[19] In consideration of the arguments of others,[20,21] however, project leaders were comfortable situating mixed methods within the standpoint of pragmatism. As opposed to maintaining a strict induction/deduction split, pragmatism is defined by abduction (where inferences are gleaned by working back and forth between theory and data) and transferability (whether generalizations inferred from one setting are workable within another setting).

Consideration of mixed-methods design functions

According to pragmatism, the functions of the chosen design should fit the overall purpose of the study.[22] Thus, it became important to consider literature outlining the various functions of mixed-methods approaches. The most common functions include *triangulation* (using qualitative methods to provide a parallel outcome "measure" that could cross-validate the quantitative one) and *complementarity* (using a second method in parallel to provide an enriched understanding of the concept that the first has measured). A third function, *expansion*, entails using multiple methods to examine more than one facet of a phenomenon.[23] Expansion designs are particularly relevant for evaluation or trial research, as they can help explicate various components of a phenomenon[23] (e.g., the context, process, ingredients, outcome of an intervention); and in their "integrated" form they can help explore the possible links between these elements.[24]

Choosing and articulating an appropriate design

Drawing from a typology of expansion-type trial designs created by Cresswell et al.,[25] project leaders identified one particular integrated expansion design – namely, a within-trial fidelity/implementation evaluation – as fitting the purposes of the study. By providing complementary measures of the fidelity with which critical intervention components were implemented, it helped to provide implementation data that were both rigorous and relevant to various contexts. As discussed more fully below, the approach sought to understand the contextual factors (e.g., resources, structures, relationships) that either facilitated or hindered the implementation of critical ingredients within and across sites. It also sought to build theoretical understanding regarding the importance of such ingredients and to determine whether apparent discrepancies between actual and ideal implementation represented fidelity gaps or necessary adaptations to local context. As befits a complex intervention, this would help establish theoretical fidelity

(i.e., attention to essential functions of the intervention), rather than just attending to standardization of specific forms.

In terms of methodological coherence, the research team was confident that the use of mixed methods was justified and that the chosen form (mixed-methods fidelity evaluation) appropriately meshed form and function, given that the design enacts the mixed-methods functions of complementarity and expansion in order to ensure that there is appropriate implementation of critical intervention components and to build further understanding of the links between these components and outcomes of participants in this complex population health intervention.

Strategy of Inquiry

Using an instrument[12] adapted from validated scales measuring recovery-oriented ACT implementation and supported housing, an external fidelity team spent several days in each site observing the functioning of the housing, ACT and ICM teams, and subsequently produced program-specific reports that included overall ratings on the intervention's four main domains, as well as specific ratings on each of the dimensions within those domains. The ratings and accompanying comments and recommendations were communicated to the teams and were understood to reflect the team's experience after 1 year and to provide data that could be used for program improvement. All parties were aware that the fidelity team would conduct a subsequent rating when the teams were more fully established.

Approximately 1 month after the first fidelity assessments, site qualitative researchers began a complementary process, using interview guides developed by the project's National Qualitative Research Team, in collaboration with researchers at each of the project sites. While the purpose of the quantitative fidelity visits was to ascertain the extent to which critical ingredients had been implemented and to provide advice about program improvement, the purpose of the qualitative implementation evaluation was to delve further into the questions of how the implementation of critical ingredients was proceeding and how context was affecting their implementation and their possible relationship with outcomes.

Research Questions

For the purposes of this article, we describe only one of several key ingredient domains, "housing choice and structure". The part of the fidelity scale addressing this domain includes items that measure the extent to which the program offers rapid access to regular apartments of participants' choice. Two stakeholder-specific versions of the qualitative questionnaire addressed these research questions: How are critical ingredients of the intervention experienced/understood by key stakeholders (participants, service providers, principal investigators and site coordinators) as achieving the aims of that intervention? How do contextual factors such as resources, relationships and structures affect implementation? Are apparent discrepancies violations of fidelity or necessary adaptations of the model to context?

Sampling and Data Gathering

In each site, local qualitative researchers conducted key informant interviews with site coordinators, principal investigators, ACT and ICM team leaders, and housing team leaders. They also conducted separate focus groups with project participants and ACT and ICM staff. The number of people sampled varied by site but ranged roughly between 25 and 60 people over the course of 2 to 5 months. In addition, the National Qualitative Research Team conducted key informant interviews with seven informants. These included individuals who were involved with the fidelity visits and who were able to speak to cross-site issues affecting implementation, including governance, cross-site training and site-specific technical assistance. Finally, participants interviewed within a month of their entry into the project provided relevant information concerning the early impacts of the intervention. A total of 283 people were interviewed for the qualitative research on implementation.

Analysis and Integration

Local qualitative researchers employed thematic analysis using constant comparative analysis consistent with grounded theory.[26] All sites employed a team-based approach to generating themes, which were either open-ended or generated according to several categories from the research instrument itself. Each team then submitted a report, after which the National Qualitative Research Team worked with the fidelity team to produce a synthesis report that reflected cross-site themes emerging from the qualitative site reports, national key informant interviews and the site fidelity reports.[27]

Initial findings and insight into the value of the approach

At the time this paper was submitted, the demonstration project had passed the midway point in its 5-year timeframe. Below, we outline some initial implementation findings, as well as the value and challenges associated with the process. We do so using the domain of housing choice and structure, an important early implementation issue, as an example. While the quantitative findings identify problems implementing this particular program ingredient, the qualitative findings illuminate systemic implementation barriers. The qualitative data also provide insight into the significance of rapid housing choice to participants, as well as suggesting how contextual differences affect the meaning of "choice".

Initial Quantitative Findings

As mentioned, the HF model seeks to offer participants immediate access to an apartment, where they receive a rent subsidy and become residents in a private dwelling in the community. Participants are meant to have much choice in the location and other features of their housing. Ideally, 85% of program participants move into a unit of their own choosing within 6 weeks of receiving a housing subsidy. Accomplishing this requires efforts and coordination on the part of mental health and housing teams. Mental health teams help to elicit participant choices. Programs' housing teams are responsible for building relationships with potential landlords, doing the initial legwork to procure appropriate housing and helping the participant make the transition from the street into his or her own place. When measured against the ideals of the model, however, the quantitative fidelity reports suggested that providing such rapid access to dwellings of choice has been a challenge for some sites. The average rating for the item "housing availability" across the sites was 2.2 on a 1-4 scale, where 4 indicates maximum fidelity to the model.

Initial Qualitative Findings

In terms of implementation barriers or facilitators, qualitative site reports affirmed the importance of rent subsidies and housing team procurement strategies in expanding potential housing supply. However, the qualitative data also highlighted how systemic barriers, such as inadequate supply and discrimination, present significant challenges that hinder the housing team's ability to ensure that participants have adequate choice. These reports also identified continuity of relationships as critical to achieving quicker access. One site needed to develop a better system of removing bottlenecks at the project screening phase and then referring, to the housing team, individuals who had completed the initial research screening. Other sites needed to develop closer working relationships between housing and ACT and ICM teams so that yet-to-be housed individuals could be identified and engaged.

The qualitative data also provided an enriched understanding of the significance of rapid access as a critical ingredient in the project's overall theory of action. First of all, from the service provider perspective, the qualitative data highlighted the importance of rapid access to housing as an opportunity to "fulfill a promise" to the individual and thus as a vehicle for early engagement. From the consumer perspective, data from the narrative interviews suggested how unimpeded access to permanent housing provides an opportunity for initial healing and an orientation towards the future, thus representing a critical building block to the longer-term recovery process. The qualitative data also indicated, however, that private housing may raise concerns about isolation for some individuals.[28] This suggests that for some participants, the meaning of "choice" connotes not only the opportunity to live in a private apartment but also the opportunity to choose among other options, including places with built-in support and on-site opportunities for social engagement.

The cross-site implementation evaluation report[27] also highlighted the importance of culture in relation to access to private apartments of people's choice. It was important to have housing teams based in organizations possessing a "nimble" enough organizational culture to quickly develop relationships with potential landlords. Culture in the ethnocultural sense also emerged as a relevant issue, as some key informants suggested that private apartments may be less attractive to individuals who, for cultural reasons, placed less value on privacy and individual choice and more on inter-connectedness.

The Value of the Approach

In general, this implementation strategy provided a picture of not only whether a critical ingredient was implemented, but also what factors contributed to or hindered its implementation. It also added insight about why certain ingredients are important to the program's theory of action and how these ingredients may operate across different contexts; in this case, it suggested why choice over housing helps engage participants in care, as well as offering an understanding of how the ingredient of choice may play out differently depending on the individual or cultural context. This supports arguments made by Hawe et al[13] and Hawe and Potvin[15] that fidelity standards for ingredients of complex interventions (in this case, housing choice) in some cases are less well understood and measured in terms of form (e.g. whether an individual has access to a private apartment) than by functions or principles (i.e., whether a range of options are offered in response to the individual's preference) and that mixed methods can help build fidelity at a functional or theoretical level. In doing so, this approach helps establish fidelity in a way that is appropriate for diverse contexts. At a practical level, our findings also remind HF proponents to provide an array of choices in addition to private apartments, as long as doing so does not impinge upon other critical ingredients (e.g., housing permanence) or violate the model's fidelity standards.

In summary, by describing how the qualitative and quantitative approaches were conceptualized and carried out in tandem, we hope to have illustrated how a coherent mixed-methods approach can produce implementation data that are rigorous, contextually relevant and have practical benefit for guiding ongoing implementation of the Housing First intervention.

Challenges and future directions

As the At Home/Chez Soi initiative proceeds, the research teams will make some changes in order to maximize the potential of the mixed-methods approach to implementation fidelity. The project is a huge, complex undertaking that involved large amounts of data gathering, even before the mixed-methods strategy was conceived. Given competing priorities, it is understandable how qualitative implementation evaluation was seen by many as extra work. Further, the amount of work took several weeks and in some cases several months to complete, making it more difficult to feed back timely and useful information that could improve the quality of implementation.

In light of these challenges, research team members have planned ways in which the second phase of the qualitative implementation evaluation will be easier and quicker to do, as well as more closely integrated with the fidelity visits. During the first phase, the fidelity instrument was not finalized before the protocol for qualitative implementation evaluation had been developed. In the second phase, the fidelity assessment visits will dovetail more closely with the qualitative implementation evaluation, thus allowing for more focused questions that can help the project participants understand and guide the implementation of this intervention across various Canadian contexts.

CONCLUSION

In conclusion, while the RCT is generally considered to be the "gold standard" for inferring that an intervention caused a given outcome, qualitative research is key to ascertaining just what the intervention is and how it can be best implemented within a given context. Together, qualitative and quantitative methods help verify and guide implementation and extend our understanding of how to implement complex population health interventions successfully within different contexts, so that they can achieve the desired outcomes for the people they seek to help. We hope that this description of our approach illustrates how rigorous and relevant evidence for implementing and evaluating complex population health interventions can be created.

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RÉSUMÉ

Objectif : Ceci est une étude de cas méthodologique décrivant la stratégie à méthodes mixtes qui évalue la mise en œuvre du modèle de priorité au logement de l'initiative Chez Soi/At Home; nous traitons aussi de l'utilité de telles méthodes pour évaluer la mise en œuvre d'interventions complexes en santé des populations.

Population cible : Le modèle de priorité au logement (PL) est appliqué dans cinq villes : Vancouver, Winnipeg, Toronto, Montréal et Moncton.

Intervention : Chez Soi est un essai d'intervention qui s'attaque au problème de l'itinérance chez les personnes aux prises avec la maladie mentale. Le modèle de PL met l'accent sur les choix, l'espoir et la mise en rapport des gens avec des ressources qui comptent pour leur qualité de vie. L'un des éléments du modèle est le logement subventionné : une partie du loyer est payée par le projet, et les bénéficiaires ont un accès rapide à un appartement privé de leur choix; un deuxième élément est le soutien. Des méthodes quantitatives et qualitatives ont été utilisées pour évaluer la mise en œuvre du modèle.

Résultats : Selon les constatations de cette étude de cas, les ingrédients essentiels d'une intervention complexe, comme le modèle de PL, peuvent être adaptés à différents contextes tout en respectant la mise en œuvre de l'intervention sur le plan théorique. On a aussi constaté que l'emploi de méthodes mixtes facilite ce processus d'adaptation. Une autre utilité de cette approche est qu'elle permet de repérer les facteurs généraux et organisationnels (p. ex., l'offre de logements, la discrimination, la stratégie d'obtention de logements) qui influent sur la mise en œuvre des éléments clés du modèle de PL.

Conclusion : Dans l'ensemble, l'approche mixte permet de savoir si les aspects clés de l'intervention sont mis en œuvre efficacement à différents endroits, et de quelle façon. Elle fournit donc des données de mise en œuvre à la fois rigoureuses, pratiques et adaptées au contexte.

Mots clés : itinérance; santé mentale; interventions communautaires complexes