







# Identifying Predictors of Housing Instability Among Tenants with a High Level of Needs in Housing First Programs

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# Background

A majority of HF recipients become stably housing by 24 months (Goering et al., 2014; Tinland et al., 2019).

However, 15-30% of HF recipients not successful in achieving stable housing (Aubry et al., 2020).

Only a small amount of previous research has examined predictors of housing instability for tenants in HF programs (Parouchi et al., 2021; Volk et al., 2016)

# Previous Research

- In the AHCS study, Volk et al. (2016) found higher levels of lifetime homelessness, being incarcerated prior to program entry, lower levels of psychological integration, and living in Winnipeg associated with housing instability for HF recipeints at 12 months.
- Having a diagnosis of post-traumatic stress disorder or panic disorder, and living in Moncton at study entry, predicted housing stability. Predictors only accounted for a small amount of variance (4%) in housing outcomes.
- Among Vancouver HF participants, Pourpochi et al. (2021) found experience of homelessness in childhood or as a youth associated with housing instability.

# Study Objective

- Using an adapted version of the Gelberg-Andersen Model for Vulnerable Populations as a theoretical framework, the study was intended to identify predictors of housing instability among the characteristics of HF participants in two large multi-city trials located in Canada and France.
- The adapted Gelberg-Anderson Model grouped predictors in the study into **Predisposing Characteristics** (i.e., demographics), **Need Predictors** (i.e., clinical diagnoses), **Enabling Characteristics** (e.g., community integration & QoL), and **Health Behaviour Characteristics** (e.g., access to health services and other assistance).

## Method

Predictors of housing instability were examined in the AHCS study in Canada at 24 months across the five cities.

Predictors of housing instability in the UCSA study in France across the four cities at 36 months.

**Open Access Protocol** 



The At Home/Chez Soi trial protocol: **OPEN** a pragmatic, multi-site, randomised controlled trial of a Housing First intervention for homeless individuals with mental illness in five Canadian cities

> Paula N Goering, <sup>1</sup> David L Streiner, <sup>2,3</sup> Carol Adair, <sup>4</sup> Tim Aubry, <sup>5</sup> Jayne Barker, <sup>6</sup> Jino Distasio, <sup>7</sup> Stephen W Hwang, <sup>8</sup> Janina Komaroff, <sup>9</sup> Eric Latimer, <sup>10</sup> Julian Somers. 11 Denise M Zabkiewicz 12



#### **Original Investigation**

Effect of Scattered-Site Housing Using Rent Supplements and Intensive Case Management on Housing Stability Among Homeless Adults With Mental Illness A Randomized Trial

Vicky Stergiopoulos, MD; Stephen W. Hwang, MD; Agnes Gozdzik, PhD; Rosane Nisenbaum, PhD; Eric Latimer, PhD; Daniel Rabouin, MSc; Carol E. Adair, PhD; Jimmy Bourque, PhD; Jo Connelly, MSW; James Frankish, PhD; Laurence Y. Katz, MD; Kate Mason, MHSc; Vachan Misir, MSc; Kristen O'Brien, MSc; Jitender Sareen, MD; Christian G. Schütz, MD, PhD; Arielle Singer, MD; David L. Streiner, PhD; Helen-Maria Vasiliadis, PhD; Paula N. Goering, PhD; for the At Home/Chez Soi Investigators

## A Multiple-City RCT of Housing First With Assertive Community Treatment for Homeless Canadians With Serious Mental Illness

Tim Aubry, M.A., Ph.D., Paula Goering, R.N., Ph.D., Scott Veldhuizen, M.A., Carol E. Adair, M.Sc., Ph.D., Jimmy Bourque, Ph.D., Jino Distasio, Ph.D., Eric Latimer, Ph.D., Vicky Stergiopoulos, M.D., M.H.Sc., Julian Somers, Ph.D., David L. Streiner, Ph.D., Sam Tsemberis, Ph.D.

## Cost-Effectiveness of Housing First With Assertive Community Treatment: Results From the Canadian At Home/Chez Soi Trial

Eric A. Latimer, Ph.D., Daniel Rabouin, M.Sc., Zhirong Cao, M.Sc., Angela Ly, M.H.A., Guido Powell, M.Sc., Tim Aubry, Ph.D., Jino Distasio, Ph.D., Stephen W. Hwang, M.D., M.P.H., Julian M. Somers, Ph.D., Ahmed M. Bayoumi, M.D., M.Sc., Craig Mitton, Ph.D., Erica E. M. Moodie, Ph.D., Paula N. Goering, R.N., Ph.D., For the At Home/Chez Soi Investigators

# Canadian RCT At Home / Chez Soi Study Housing First for Peple with High Needs

- 5 cities: Moncton,Montreal, Toronto,Winnipeg, Vancouver
- 469 HF + ACT & 481 TAU
- Bipolar or psychotic disorder
- Less than 62 on MCAS
- Hospitalization history or diagnosis of substance use problem or arrested or incarcerated

Scattered site private market units



Maximum of 30% of income for rent

Participants hold their own lease



#### **ACT**

- Multidisciplinary team
- Wrap around services
- 24/7 coverage;
- 1:10 ratio;
- Proactive eviction prevention







#### STUDY PROTOCOL

**Open Access** 

## Evaluation of the Housing First program in patients with severe mental disorders in France: study protocol for a randomized controlled trial

Aurelie Tinland<sup>1,2</sup>, Cecile Fortanier<sup>1,6</sup>, Vincent Girard<sup>1,2</sup>, Christian Laval<sup>1</sup>, Benjamin Videau<sup>1</sup>, Pauline Rhenter<sup>1</sup>, Tim Greacen<sup>3</sup>, Bruno Falissard<sup>4</sup>, Themis Apostolidis<sup>5</sup>, Christophe Lancon<sup>12</sup>, Laurent Boyer<sup>1</sup> and Pascal Auguier<sup>1\*</sup>

> Epidemiology and Psychiatric Sciences

cambridge.org/eps

#### **Original Article**

Cite this article: Tinland A, Loubière S, Boucekine M, Boyer L, Fond G, Girard V, Auquier P (2020). Effectiveness of a housing support team intervention with a recoveryEffectiveness of a housing support team intervention with a recovery-oriented approach on hospital and emergency department use by homeless people with severe mental illness: a randomised controlled trial

A. Tinland<sup>1,2</sup>, S. Loubière<sup>1,3</sup>, M. Boucekine<sup>1,3</sup>, L. Boyer<sup>1,3</sup>, G. Fond<sup>1,4</sup>,

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Cost-effectiveness analysis of housing first intervention with an independent housing and team support for homeless people with severe mental illness: A Markov model informed by a randomized controlled trial

Coralie Lemoine a,b, Sandrine Loubière a,b,\*, Mohamed Boucekine a,b, Vincent Girard a, Aurélie Tinland a,c, Pascal Auquier a,b, for the French Housing First Study Group

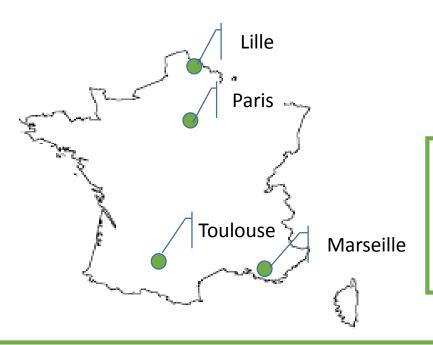
# French RCT Un chez Soi d'Abord















100%
Severe mental illness

70% Schizophrenia

## Intervention



353







Support team

## **Control**



350

#### **Usual care - TAU**

Outreach teams, shelters and day-care facilities, etc.

# Definition of Housing Instability

Participants housed <u>less</u> <u>than</u> **90**% of time in the <u>last 6</u> <u>months</u> of study

Time spent in **institutions** <u>not</u> included in calculating percentages of time stably/not stably housed

Participants <u>removed</u> from analysis if in institutions at least 66% of time in the last year of the study

Participants <u>removed</u> from analysis if **missing** data for final 6 months of the study

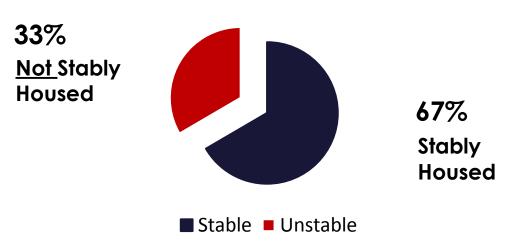
### **Canadian AHCS Quantiative Results**

Maryann Roebuck, Ayda Agha, Geoffrey Nelson, Jino Distasio, John Ecker, Stephen W. Hwang, Eric Latimer, Sarah Purcell, Julian M. Somers, Sam Tsemberis, Tim Aubry

#### **Methods**

Hierarchical logistic regression entering variables in blocks after controlling for site as predictors of dichotomous variable of housing instability

#### % Housing Stability / Instability at 24 Months



### Results<sup>1,2,3</sup>

Signifiant Predictors (< .05)	OR	95% CI			
Step 2: Predisposing Characteristics (Baseline)					
Age at Enrolment	1.05	1.02–1.07			
Lifetime Homelessness	0.995	0.992-0.999			
Step 3: Need Characteristics (Baseline)					
Substance Use Problems	0.86	0.76–0.99			
Community Functioning	1.06	1.02-1.10			
Cognitive Disability	0.52	0.30-0.92			
Step 4: Enabling Characteristics (18 months)					
Landlord Relations	1.06	1.002-1.123			
Step 5: Health Behaviour Characteristics (18 months)					
Family Doctor	2.25	1.29-3.93			
Access to Health Care	0.50	0.27-0.93			

<sup>&</sup>lt;sup>1</sup>Cities entered in Step 1

<sup>&</sup>lt;sup>2</sup>Model accounts for 33% of variance

<sup>&</sup>lt;sup>3</sup>Correctly predicts 46% of the unstably housed group and 86% of the stably housed group

# French UCSA Quantitative Results



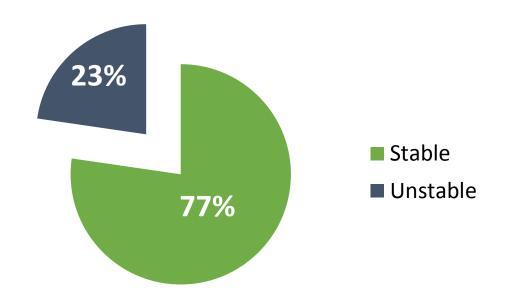




## Methods

Hierarchical logistic regression entering variables in blocks after controlling for site as predictors of dichotomous variable of housing instability

#### % Housing Stability / Instability at 36 Months (N=141)



Significant Predictors <sup>1</sup>	OR	95% CI		
Step 2: Predisposing Characteristics (Baseline)				
Lifetime Homelessness	1.02	1.00- 1.03		
Step 3: Need Characteristics (Baseline)				
Community Functioning	1.47	0.67 – 0.98		
Step 4: Enabling Characteristics (24 months)				
Mental Health Functioning	0.67	0.50 – 0.90		
Length of Team Support	0.59	037-096		
Step 5: Health Behaviour Charactertics (24 months)				
Access to Material Help	0.21	0.05 - 0.88		

<sup>&</sup>lt;sup>1</sup>Cities entered in Step 1

## **Canadian AHCS Qualitative Analysis**

Geoff Nelson, Maryann Roebuck, Ayda Agha, Tim Aubry, Sarah Purcell, Oeshi Faruquzzam, Maritt Kirst, Eric Macnaughton, & Corinne Isaak

#### **Methods**

- A sub-sample of 190 participants were interviewed as part of the qualitative component of the At Home study
- Participants from both HF and TAU were interviewed at <u>baseline</u> and <u>18-month</u>

#### Sampling

- A total of **46** participants from the **HF** group included the current analysis
- 10 participants were selected per site:
- 5 <u>stable</u> & 5 <u>unstable</u> (Toronto, Montreal, Winnipeg, Vancouver)
- Only 6 participants were included from Moncton with only 1 unstable

#### **Analysis**

- Thematic analysis was guided by the Gelberg-Anderson Behavioral Model for Vulnerable Populations and findings from the quantitative predictors analysis
- Analysis included baseline and 18-month interviews

Unstable: Participants housed <u>less</u> <u>than</u>90% of time in the <u>last 6 months</u> of study



## **Canadian AHCS Qualitative Results**

	Gelberg-Anderson Domains	Significant Predictors of Unstable Housing	Qualitative Observations
Ī	Site	Winnipeg	In Winnipeg, participants discussed moving to different areas of the city or leaving the city to get a fresh start
	Predisposing Characteristics	Younger Age Lifetime Homelessness	Examples of young Indigenous participants in Vancouver and Winnipeg who were unstably housed. Unstably housed participants described evictions and multiple housing losses, as well as more recent incarcerations, or current involvement with the court system.
	Needs	Substance Use Problems Community Functioning Cognitive Disability	While both groups engaged in substance use, stably housed individuals described motivation to manage and reduce their use. Participants described challenges related to having friends who use substances and provide a sense of community. Both groups described dealing with depression, anxiety and mood disorders.
	Enabling Factors	Landlord Relationships	Evictions and apartment takeovers were related to substance use and unstable housing. Stably housed participants also spoke of positive relationships with HF staff.
	Health Behaviours / Access	Family Doctor Access to Health Care	Stably housed participants spoke of engagement with community programs in addition to HF.

## Conclusions

- 1. A greater cumulative duration of lifetime homelessness and lower level of community functioning emerge as need characteristics predictive of housing instability in both studies.
- 2. Other significant need characteristics predicting housing instability evident in the Canadian study included the presence of substance use problems and a cognitive disability.
- 3. Enabling and health behaviour characteristics predictive of housing stability included having positive landlord relations and access to primary care and more generally health care in Canada.

# Conclusions (contd.)

- 4. Longer length of team support and having access to material help were predictive of housing stability in France.
- 5. Findings identify characteristics of individuals that may be risk factors for failing to establish housing stability in HF programs. Targeted enriched supports directed at these needs may prove helpful to address these needs.
- 6. Facilitating access to primary care and more generally health care seems particularly important as a resource that contributes to housing stability for participants in Canadian HF programs.
- 7. Facilitating access to material help emerges as an important resource in the French context.

# THANKS!





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