International webinar series on Housing First

Housing First and the Costs
2021-January-21
CAMH Land Acknowledgement

CAMH is situated on lands that have been occupied by First Nations for millennia; lands rich in civilizations with knowledge of medicine, architecture, technology and extensive trade routes throughout the Americas. The site of CAMH appears in colonial records as the council grounds of the Mississaugas of the Credit First Nation. Toronto is now home to a vast diversity of First Nations, Inuit and Métis who enrich this city.

CAMH is committed to reconciliation. We will honour the land through programs and places that reflect and respect its heritage. We will embrace the healing traditions of the Ancestors, and weave them into our caring practices. We will create new relationships and partnerships with First Nations, Inuit and Métis – share the land and protect it for future generations.

Housekeeping

• The audio is being stream via your computers. For optimal sound, please use external speakers or earphones. If you are still having trouble hearing our presenters, you can dial into +1-415-655-0001 or access the list of Global call-in numbers.

• This webinar will be recorded and posted on the Col’s webpage following the presentation.

• Please also let us know via the chat box if someone is watching the webinar with you.

• We would appreciate having your feedback on today’s webinar. Your browser will switch to the survey after this webinar ends. Thanks in advance for the 3 minutes of your time to complete our online feedback survey!
AGENDA

1. Introduction: The Housing First Europe Hub, the OHFRN-CoI, and today’s presenters
2. Panel presentations on Housing First and the Costs
3. Discussant: Kevin Page

Q/A in between each presentation
Q/A session
The Housing First Europe Hub

The Hub was established by the Y-Foundation (Finland) and FEANTSA (European Federation of National Organisations Working with Homeless People), along with more than 15 partners, creating a network of organisations, public authorities and foundations working to scale up HF programs in Europe.

For more information, visit https://housingfirsteurope.eu/
The OHFRN-CoI

**Purpose:** To assist communities across Ontario, Canada, to develop, evaluate, and improve Housing First (HF) programs based on the Pathways model tested, adapted, and shown to be effective in the *At Home / Chez Soi Demonstration Project.*

**Goals:**
- **Build** local capacity for HF programs
- **Promote** high quality implementation, fidelity, and adaptation of the Pathways HF
- **Advocate** and influence public policy related to HF

This CoI is supported by Evidence Exchange Network, at the Centre for Addiction and Mental Health.

For more information, visit [https://www.eenet.ca/initiative/housing-first-community-interest#about](https://www.eenet.ca/initiative/housing-first-community-interest#about)
Today’s webinar

The goal of this webinar series is to:
• bring together the international HF community
• share evidence-based knowledge, experience and innovation,
• build capacity for HF programs, and
• promote high quality implementation of the HF model that includes both fidelity to and adaptation of the model.

During today’s webinar, you will learn about the current evidence on cost-benefit and cost-effectiveness of HF
Today’s presenters

Eric Latimer, Ph.D., is a Research Scientist at the Douglas Research Centre and Professor, Department of Psychiatry, at McGill University in Montreal, Canada. A health economist by training, he has carried out research on mental health services and services for homeless people for more than 25 years. He has carried out multiple studies on evidence-based practices for people with severe mental illness and homeless people, including Assertive Community Treatment, supported employment, Housing First and the strengths model of case management. He was lead researcher for the Montreal site of the $110 million At Home/Chez soi pan-Canadian trial of Housing First, an intervention to house and support people with mental illness who have been experiencing homelessness, and the lead economist for the national study. He has also led the analysis of surveys of homeless individuals in the province of Quebec, Canada.
Sandrine Loubière, PhD., is a health economics manager of clinical trials for APHM. At INSERM and French Health Authority (HAS), she has developed her experiences on economic evaluation and different aspects of financial sustainability of health technologies and then provided advices on public policies. At CEReSS unit, she is involved in health economics research programs investigating the field of evaluation of innovative health technologies and social innovations. As an example, she has been coordinated the economic component of the French Housing First program. Since 2016, she has been an associate coordinator with Pr. Pascal Auquier and DR. A Tinland of the Work Package 2 in the HOME_EU Project (H2020), in a consortium of 9 European countries; This WP assessed citizens’ experiences, knowledge, attitudes about homelessness and preferences for the Housing First solution.
Today’s presenters

Francesca Albanese is the Head of Research and Evaluation, Crisis. Francesca has worked at Crisis since 2016. She is also an editorial panel member at Thinkhouse and co-ordinates the Housing First Europe research cluster. Prior to Crisis Francesca worked at Homeless Link and Shelter and has a PhD in housing policy from Sheffield Hallam University.
Kevin Page is the founding President and CEO of the Institute of Fiscal Studies and Democracy at the University of Ottawa. Prior to this position, he was the Jean-Luc Pepin Research Chair in the Faculty of Social Sciences at the University of Ottawa from 2013 to 2016. He was Canada's first Parliamentary Budget Officer from 2008 to 2013. He has 27 years of experience in the federal public service with most of those years spent at three central agencies responsible for budgeting including the Department of Finance, the Treasury Board Secretariat and the Privy Council Office. He was the Assistant Secretary to Cabinet for Macroeconomic Policy before becoming Canada's Parliamentary Budget Officer. He was born in Fort William (Thunder Bay) Ontario.
On the Economics of Housing First

Housing First International Webinar
January 21 2021

Eric Latimer, Ph.D.
Douglas Hospital Research Centre
McGill University
Montreal, Québec, Canada
Acknowledgments

Funding from Health Canada via Mental Health Commission of Canada (MHCC)


† Paula Goering, Ph.D., Centre for Addictions and Mental Health and University of Toronto, National Research Lead

Approximately 40 investigators from across Canada
5 site coordinators, research coordinators and numerous research staff, persons with lived experience, service and housing providers.

Eric Latimer was lead investigator for the Montreal site and lead economist on the national research team.

Zhirong Cao: Statistician; Daniel Rabouin was principal analyst for the Montreal site

Angela Ly and Guido Powell: Research assistants working primarily on the economic evaluation

* Opinions expressed are those of the presenters and may not reflect those of Health Canada or the MHCC
Background

- Widespread reports in the media that HF makes sense because it saves more money than it costs.
- Assumes every homeless person is like “Million dollar Murray”
- Is this true?
In fact homeless people don’t all cost the same at all...

**Figure 2**: Distribution of total annualized costs per person across the sample (subtracting earned income from costs associated with use of health, social and justice services, including social assistance and disability benefits).
But on average there are significant opportunities to save, at least in Canada’s largest cities...
Costs of homeless people with mental illness per person per year in 5 Canadian cities (2016 CAN$, meds excluded)

- **Moncton**: $29,610
  - Social assistance net of income earned: $5,392
  - Shelters: $2,418
  - Psychiatric hospitalizations: $4,613
  - Incarcerations: $4,523
  - Other health and social care: $11,106
  - Supportive housing: $9,603

- **Montreal**: $56,405
  - Social assistance net of income earned: $17,186
  - Shelters: $9,416
  - Psychiatric hospitalizations: $7,475
  - Incarcerations: $5,879
  - Other health and social care: $19,012
  - Supportive housing: $5,879

- **Toronto**: $58,972
  - Social assistance net of income earned: $12,393
  - Shelters: $7,628
  - Psychiatric hospitalizations: $7,411
  - Incarcerations: $6,128
  - Other health and social care: $19,012
  - Supportive housing: $6,411

- **Winnipeg**: $45,565
  - Social assistance net of income earned: $5,392
  - Shelters: $4,062
  - Psychiatric hospitalizations: $3,771
  - Incarcerations: $5,569
  - Other health and social care: $20,709
  - Supportive housing: $1,628

- **Vancouver**: $53,143
  - Social assistance net of income earned: $17,660
  - Shelters: $11,308
  - Psychiatric hospitalizations: $4,279
  - Incarcerations: $2,335
  - Other health and social care: $4,244
  - Supportive housing: $9,629

Legend:
- Social assistance net of income earned
- Shelters
- Supportive housing
- Psychiatric hospitalizations
- Other health and social care
- Police
- Incarcerations
Can a program that costs about $14,500 per year (HF with ICM) or $20,500 per year (HF with ACT) reduce expenditures on other services enough to completely offset its cost?
In Review

Housing First Impact on Costs and Associated Cost Offsets: A Review of the Literature

Angela Ly, BCom, MHA; Eric Latimer, PhD

22 unpublished studies
8 other published studies, non-randomized
2 At Home papers (ICM & ACT)
2 other randomized studies
Lit review findings: By type of service

- Shelters
- ER visits
- Other health care use
- Justice-related services
Lit review findings: Net effect on overall costs

Before-after comparisons: Costs go down

Quasi-experimental with comparison group: Costs usually go down

Experimental studies (including AHCS): costs usually go UP
Why the difference in results by type of study?

Likely answer: “Regression to the mean”
Cost-Effectiveness of Housing First With Assertive Community Treatment: Results From the Canadian At Home/Chez Soi Trial


Psychiatric Services in Advance (doi: 10.1176/appi.ps.202000029)
HF with ACT: Most (69%) of intervention costs offset by savings in other costs (e.g., incarcerations), reducing net annual cost of intervention to about Can$6,311 per person.

HN average intervention cost nationally: $20,367 per person per year
HF with ICM: Almost half of intervention costs (46%) offset by savings in other costs (e.g., ambulatory visits), reducing net annual cost of intervention to about Can$7,868 per person.

MN average intervention cost nationally: $14,496 per person per year
HF with ACT: $20,367 per person per year

HF with ICM: $14,496 per year

Much bigger efficiency gain
Cost per day of stable housing

- HF with ACT: $41.73 (95% CI: $1.96, $83.70)
- HF with ICM: $56.08 (95% CI: $29.55, $84.78)

At every site, the cost offset is greater for HF with ACT than with HF with ICM

The results suggest that both HF with ACT and HF with ICM should be funded.

...or at least, that there is a significant opportunity for savings by intervening effectively with high-need participants

--- This does not seem to be happening in Canada currently.

Also of note, the cost of the intervention per day, even HF+ACT and even ignoring cost offsets, is only $56! About the same as the cost of a night in an emergency shelter.
Long-Term Cost-Effectiveness of Housing First for Homeless People with Mental Illness

Hannah Rochon

Department of Epidemiology, Biostatistics, and Occupational Health
McGill University, Montreal
June 2020

Supervisor: Eric Latimer
Co-supervisor: Dimitra Panagiotoglou

A thesis submitted to McGill University in partial fulfillment of the requirements of the degree of Masters of Epidemiology
Approach: Markov model with 10-year horizon

• Montreal AHCS sample divided into 8 subgroups
  • Need level (high or moderate)
  • Homelessness history (more than one year or less)
  • HF or TAU
• 9 possible housing states defined (shelter, prison, etc.)
• Average costs per day associated with each state
• Assume discount rate, “autonomization rate”, death rate
Results: Over 10 years...

- HF yields 1501 more days in stable housing than TAU
- HF costs $26,527 less than TAU
- Largest savings for people with longer history of homelessness and higher need level
- TAU groups tend to spend more time in expensive forms of unstable housing (emergency housing, substance abuse treatment)
- Results robust to plausible changes in parameter values...
- ... however probabilistic sensitivity analysis underway
Conclusions

• HF usually won’t pay for itself over a 2-year horizon
  • Unless you target only the highest-cost users
  • But would that be a humane policy?
• However it yields better outcomes with better spent (fewer wasted) resources: Therefore it is more efficient... especially for high-need participants – the most challenging to help
• The net cost of the outcomes is modest in relation to the cost
• In the longer run, HF may become cost-saving due to the intrinsically lower cost of housing people with as-needed flexible supports (compared to shelters etc.)
Thank you

eric.latimer@mcgill.ca
Questions for Eric Latimer, Research Scientist, Douglas Research Centre; Professor, Department of Psychiatry, McGill University, Canada
Cost-effectiveness of the French Housing First intervention in homeless people with severe mental illness

Sandrine Loubière
Support Unit for clinical research and economic evaluation, DRC, APHM – Marseille, FR
AMU, School of medicine – La Timone Medical Campus, EA 3279: CEReSS - Marseille
More than 4 millions homeless people in Europe
141 500 homeless people in France
>30% of the homeless people suffer from severe mental illness

Objective
To assess the effectiveness and costs of the HF programme:

- Healthcare resource use
- Housing stability
- Recovery
- Quality of life
- Mental symptoms
- Addiction disorders
- COSTS

RCT at 24 months
Evaluation of the Housing First program in patients with severe mental disorders in France: study protocol for a randomized controlled trial

Aurelie Tinland¹ ² ³, Cecile Fortanier¹ ² ³, Vincent Girard¹ ² ³, Christian Laval¹, Benjamin Videau¹, Pauline Rhenter¹, Tim Greacen¹, Bruno Falissard⁴, Themis Apostolidis⁵, Christophe Lançon¹ ² ³, Laurent Boyer¹ and Pascal Auquier¹**

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 recovery-oriented approach on hospital and emergency department use by homeless people with severe mental illness: a randomised controlled trial

A. Tinland¹ ² ³, S. Loubière¹ ² ³ ○, M. Boucekine¹ ² ³, L. Boyer¹ ² ³, G. Fond¹ ² ⁴ ○, V. Girard¹ and P. Auquier¹ ² ³

Journal Pre-proof
Methods of the CEA

- 703 homeless people followed 24 months
- Data collected from interviews (previous 6 months)
- Effectiveness: days spent in independent housing
- Costs: healthcare, justice and residential structures use, welfare benefits and program
- Markov model: 6-month cycles and a life-time horizon
- Deterministic and probabilistic sensitivity analyses were performed to assess the impact of uncertainties
Results (1) Costs/Effectiveness

Over a lifetime horizon (35 years of follow up)

<table>
<thead>
<tr>
<th></th>
<th>HF</th>
<th>TAU</th>
<th>Differences (HF – TAU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total costs</td>
<td>€ 320,039</td>
<td>€ 309,876</td>
<td>€ 10,163</td>
</tr>
<tr>
<td>Total effectiveness</td>
<td>2,685</td>
<td>775</td>
<td>1,910</td>
</tr>
</tbody>
</table>

**Ratio**

\[
\text{Ratio} = \frac{\Delta C}{\Delta E} = 5.32 \text{ € / day in stable housing}
\]
Results (2) - Sensitivity analysis

- Sensitivity analysis
- X*Mortality in unstable (1 to 8)
- X*Mortality in stable (1 to 4)
- Cost/day in pub psych hosp (€350 - 1,360)
- Cost HF progr half-year (€4,900 - €9,100)
- Start cycle for decrease HF cost (4 to 10)
- Cost/day in priv psych hosp (€150 - 1,000)
- Cost/day in trans shelter (€30.1 - 55.9)
- Mean age cohort (26 to 50)
- Nb. cycles bef.decrease in prog costs (1 to 6)
- Cost/day in residen struct (€12.6 -23.4)
- Discount rate (0.01 to 0.06)
- Cost/day health rehabil accom. (€77 -143)
The HF model is effective in stabilizing housing for homeless individuals with severe mental disorders.

Over the first 14 years, the costs of the HF programme were compensated by overall cost savings.

The HF model is a cost effective intervention .... “ ? “
HOME_EU: ISPA et al

HOME_EU
Homelessness as unfairness

WP2: Citizen Survey
Europeans' opinion about homelessness

- April to Sept 2017
- 8 countries
- 5,300 valide questionnaires
Citizens’ survey: Europeans’ perception of homelessness: 3 objectives

1. To assess Prevalence of Homelessness among European citizens
2. To assess Opinions about homelessness among European citizens
3. To assess Europeans’ preferences for Housing First (Willingness to pay - Contingent valuation method)
• Describe the current situation, the standard homelessness services available on the territory

• Describe the HF program, its **social impact / social improvement** on the field

• Realistic and fair **way of paying** for the innovative program: taxes

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**Willingness-to-pay (WTP) question:**

Please tell me what you would be willing to pay each year through **taxes** for this program. Would you be willing to pay 10 € per year? 25 €? ...

*Bidding game (Bids ranged from 10 € to a maximum of 400 €)*
Results WTP

Willing to pay for HF?

- Yes: 51%
- No: 49%

Mean WTP values for HF programme (Euros) with 95% CI

- WTP ≥ 0 without protest
- WTP > 0

Results WTP
Europeans’ willingness to pay for ending homelessness: A contingent valuation study

Sandrine Loubière, Owen Taylor, Aurelie Tinland, Maria Vargas-Moniz, Branagh O'Shaughnessy, Anna Bokszczanin, Hakan Kallmen, Roberto Bernad, Judith Wolf, Massimo Santinello, Anderson Loundou, Jose Ornelas, Pascal Auquier, Home-Eu consortium study group
Frontier of cost effectiveness

\[
\text{Ratio} = \frac{\Delta C}{\Delta E} < \lambda = \text{WTP}
\]

- € 30 = WTP of each citizen for French HF program / year
- 35 M French citizens paying income tax
- 145 days housed gained per year
- 140 000 people homeless in France

\[
\lambda = € 51 / \text{day spent in independent housing}
\]

CE Ratio (€ 5.3) < (€ 51) WTP by society
Discussion

- HF is effective for improving housing stability
- HF is effective for reducing overall costs
- High level of support from the Citizens for the HF model
- Public is willing to pay for HF model

- The HF model should be incorporated into public health programs as an innovative solution to end homelessness

HF is cost-effective!
THANKS!

French Housing First Study Group:
Vincent Girard, Aurélie Tinland, Pascal Auquier, Coralie Lemoine, Mohamed Boucekine, Thémis Apostolidis, Philippe Birmes, Thomas Bosetti, Raphael Bouloudnine, Jacques Debieve, Bruno Falissard, Tim Greacen, Christophe Lancon, Patrick Le Cardinal, J. Mantovani, Delphine Moreau, Jean Naudin, Anderson Loundou, and Benjamin Videau

HOME_EU Group:
Maria J. Vargas-Moniz, Maria F. Jorge-Monteiro; Ronni M. Greenwood, Rachel M. Manning, Branagh O’Shaughnessy, Inês Almas, Teresa Duarte; Francesca Disperati, Marta Gaboardi, Michela Lenzi, Massimo Santinello, Alessio Vieno; Rita P. Marques, Maria Carmona, Américo Nave, Freek Spinnewijn, Roberto Bernad, Borja Rivero, Martin Julián; Anna Bokszczanin, Barbara Zmaczynska–Witek, Skalacka Katarzyna, Aleksandra Rogowska, Sandra Schel, Yvonne Peters, Tessa van Loenen, Liselotte Raben, Judith R. Wolf; Ulla Beijer, Mats Blid, Hakan Kallmen; Teresa Bispo, Tiago Cruz, Carla Pereira, Pascal Auquier, Junie M. Petit, Owen Taylor, Sandrine Loubière, Aurélie Tinland

Questions for Sandrine Loubière, Health Economist, Assistance Publique des Hôpitaux de Marseille, France
Housing First and the costs

Francesca Albanese @CescaAlbanese
Head of Research and Evaluation  @Crisis_uk
Scale of Housing First in England – need versus delivery

Housing First Need (16,450) vs Places (2,000), by English Region

- North East
- Yorks & Humber
- North West
- East Midlands
- West Midlands
- South West
- East
- South East
- London

- HF Need
- HF Places 2020
Why does measuring costs matter?

- Cost benefit or cost effectiveness is only one part of the picture but still important in driving investment decisions at a local and national level.
- Commissioners want to understand and justify value for money and based on costs and outcomes.
- Cost evidence is important for the specific context Housing First is operating in e.g. policy, housing and welfare context.
- Can help to support long term investment alongside outcomes and systemic change needed.
- Be realistic with costs. HF is expensive for a reason – effective for a specific cohort of people and need experienced staff to deliver good quality services.
Constraints of undertaking cost studies

- Small scale studies – pilots can be 10 to 20 people only
- Short term funding often means it is difficult to look at longer term or longitudinal costs/benefits/effectiveness
- Transparency of data on costs available especially for non-homelessness services e.g. mental health, substance misuse services
- Accurately numerating BAU services can difficult as a comparison
- Access to administrative data sets not always possible
- Important to situate costs in the wider system and be upfront about what data is/isn’t able to say
Examples of cost studies

- Unit costs showing average costs per person per year e.g. Crisis Liverpool City Region feasibility study, Homeless Link cost effectiveness study

- Multi-site study – is it possible to join up and look at costs across a larger area/scale? E.g. At Home/Chez Soi,

- Quasi-experimental design – can a control group be looked from similar contexts to support a cost study

- Case for more robust cost effectiveness studies with longitudinal data
Kevin Page is the founding President and CEO of the Institute of Fiscal Studies and Democracy at the University of Ottawa. Prior to this position, he was the Jean-Luc Pepin Research Chair in the Faculty of Social Sciences at the University of Ottawa from 2013 to 2016. He was Canada's first Parliamentary Budget Officer from 2008 to 2013. He has 27 years of experience in the federal public service with most of those years spent at three central agencies responsible for budgeting including the Department of Finance, the Treasury Board Secretariat and the Privy Council Office. He was the Assistant Secretary to Cabinet for Macroeconomic Policy before becoming Canada's Parliamentary Budget Officer. He was born in Fort William (Thunder Bay) Ontario.
Questions for Kevin Page, founding President and CEO, Institute of Fiscal Studies and Democracy, University of Ottawa, Canada
Upcoming events

Stay tuned for our next webinar in this series on Influencing Policy. This webinar will take place on Thursday February 25, 2021 at 9:30am EST. Register here.

Fourth International Housing First Conference - Let us know your preferred topics and formats! Due to the COVID-19 pandemic, the conference has been postponed and will now take place virtually in 2021. As we plan for this virtual conference, we would like to know your preferred topics, formats, and dates. Results will be used by the planning committee to tailor the virtual conference for an international housing first audience. Please complete this survey by end of today, January 21, 2021.
Thank You!

Thanks to all presenters and participants for joining today’s webinar! Please also take a few minutes to answer a feedback survey on today’s webinar and give us suggestions on future webinar topics.

The webinar recording will be posted on the Col’s webpage shortly.