

# On the Economics of Housing First

Eric Latimer, Ph.D.

Research Scientist, Douglas Research Centre

Professor, Department of Psychiatry, McGill  
University

Montréal, Québec, Canada



Toronto Association for Business and Economics

June 7 2021

Centre intégré  
universitaire de santé  
et de services sociaux  
de l'Ouest-de-  
l'Île-de-Montréal

Québec 

*Douglas*  
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# Acknowledgments

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

**Catharine Hume (2014 - ), Cam Keller (2011 – 2014), Jayne Barker (2008 – 2011), MHCC Leads**

**† 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

DEPT. OF SOCIAL SERVICES FEBRUARY 13, 2006 ISSUE

# MILLION-DOLLAR MURRAY

*Why problems like homelessness may be easier to solve than to manage.*



By Malcolm Gladwell

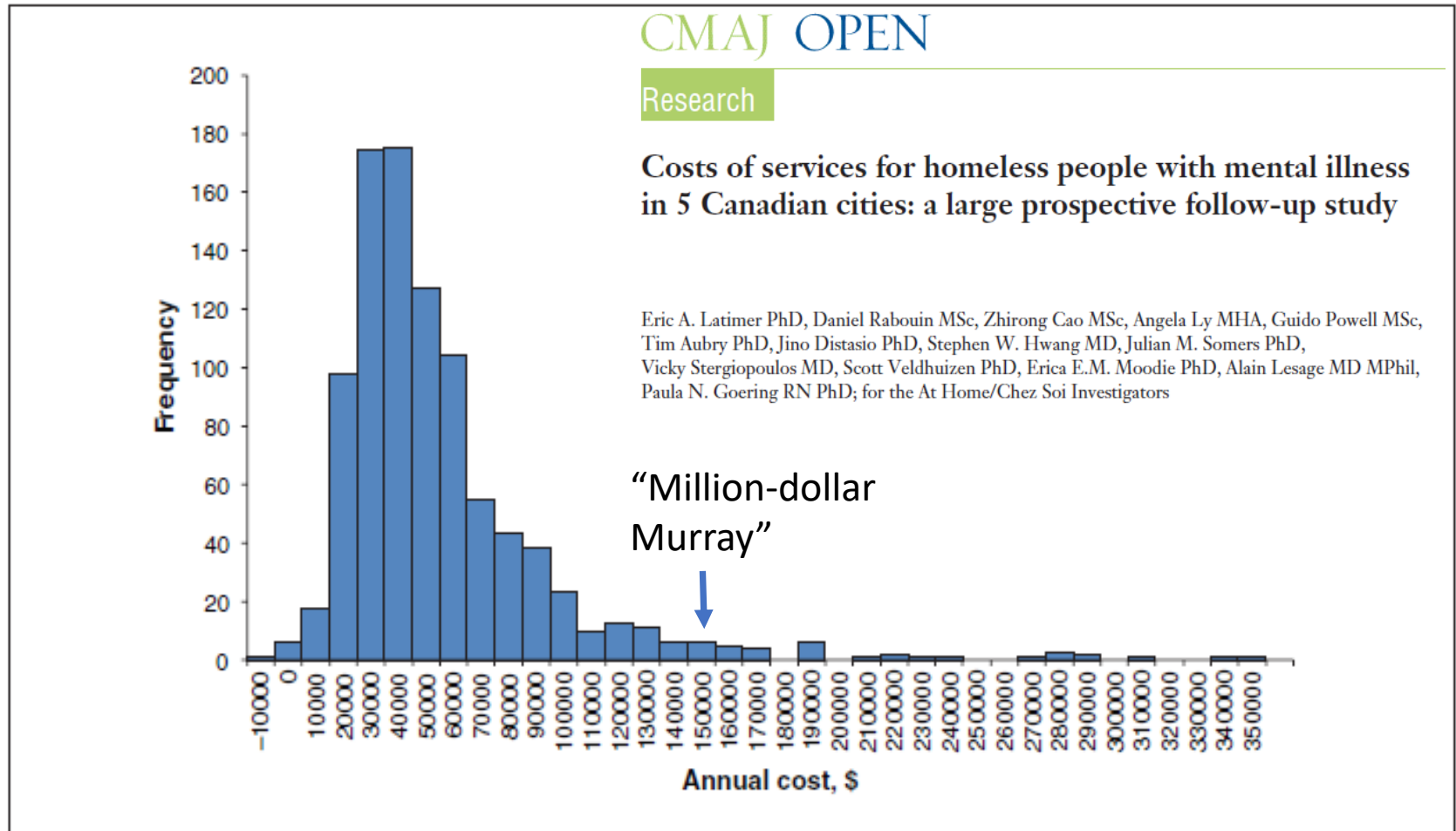
February 6, 2006



## 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?

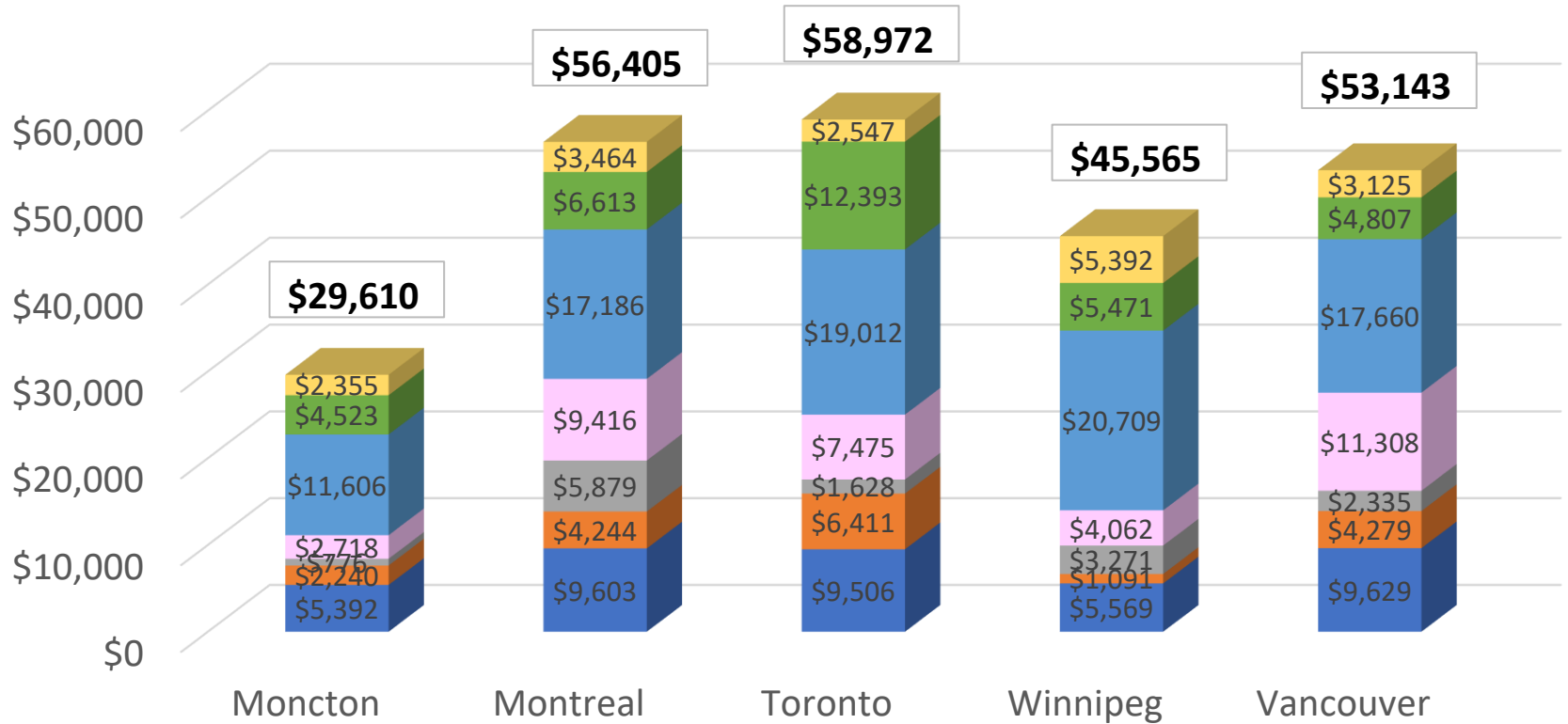
# In fact homeless people don't all cost the same at all...



**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)



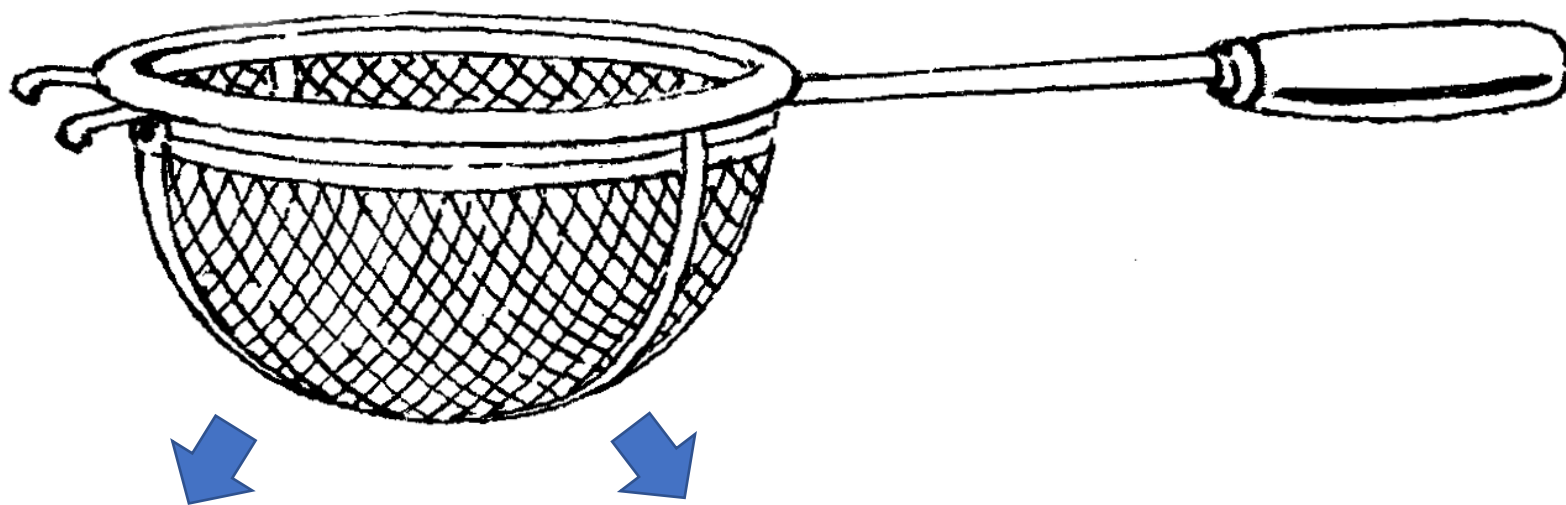
- Social assistance net of income earned
- Shelters
- Supportive housing
- Psychiatric hospitalizations
- Other health and social care
- Police
- Incarcerations

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<sup>1</sup>; Eric Latimer, PhD<sup>2</sup>



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”



Original Investigation | Psychiatry

# Cost-effectiveness of Housing First Intervention With Intensive Case Management Compared With Treatment as Usual for Homeless Adults With Mental Illness

## Secondary Analysis of a Randomized Clinical Trial

Eric A. Latimer, PhD; Daniel Rabouin, MSc; Zhirong Cao, MSc; Angela Ly, MHA; Guido Powell, MSc; Carol E. Adair, PhD; Jitender Sareen, MD; Julian M. Somers, PhD; Vicky Stergopoulos, MD; Andrew D. Pinto, MD; Erica E. M. Moodie, PhD; Scott R. Veldhuzen, PhD; for the At Home/Chez Soi Investigators

JAMA Network Open. 2019;2(8):e199782. doi:10.1001/jamanetworkopen.2019.9782

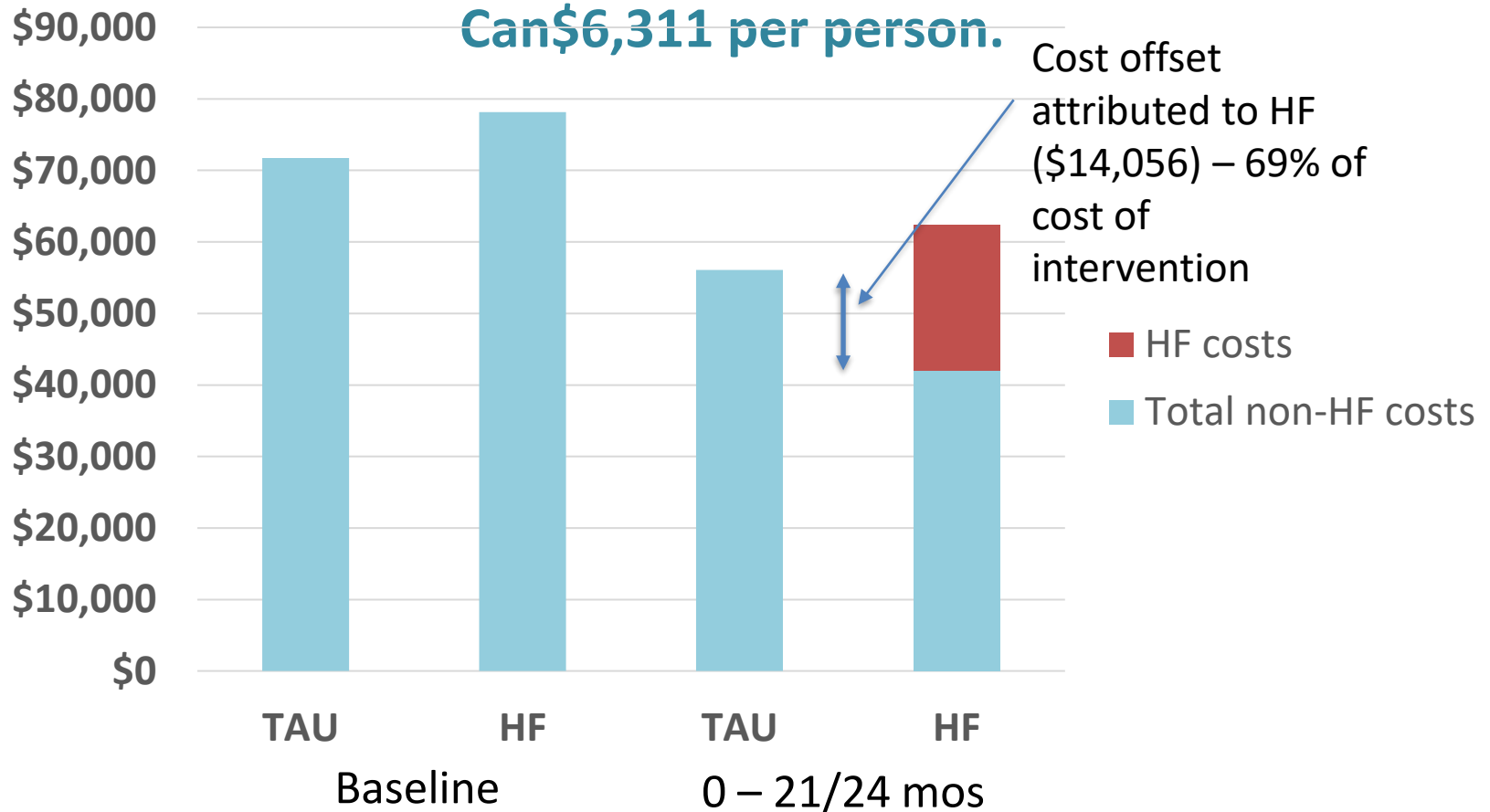
August 21, 2019 1/15

# 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

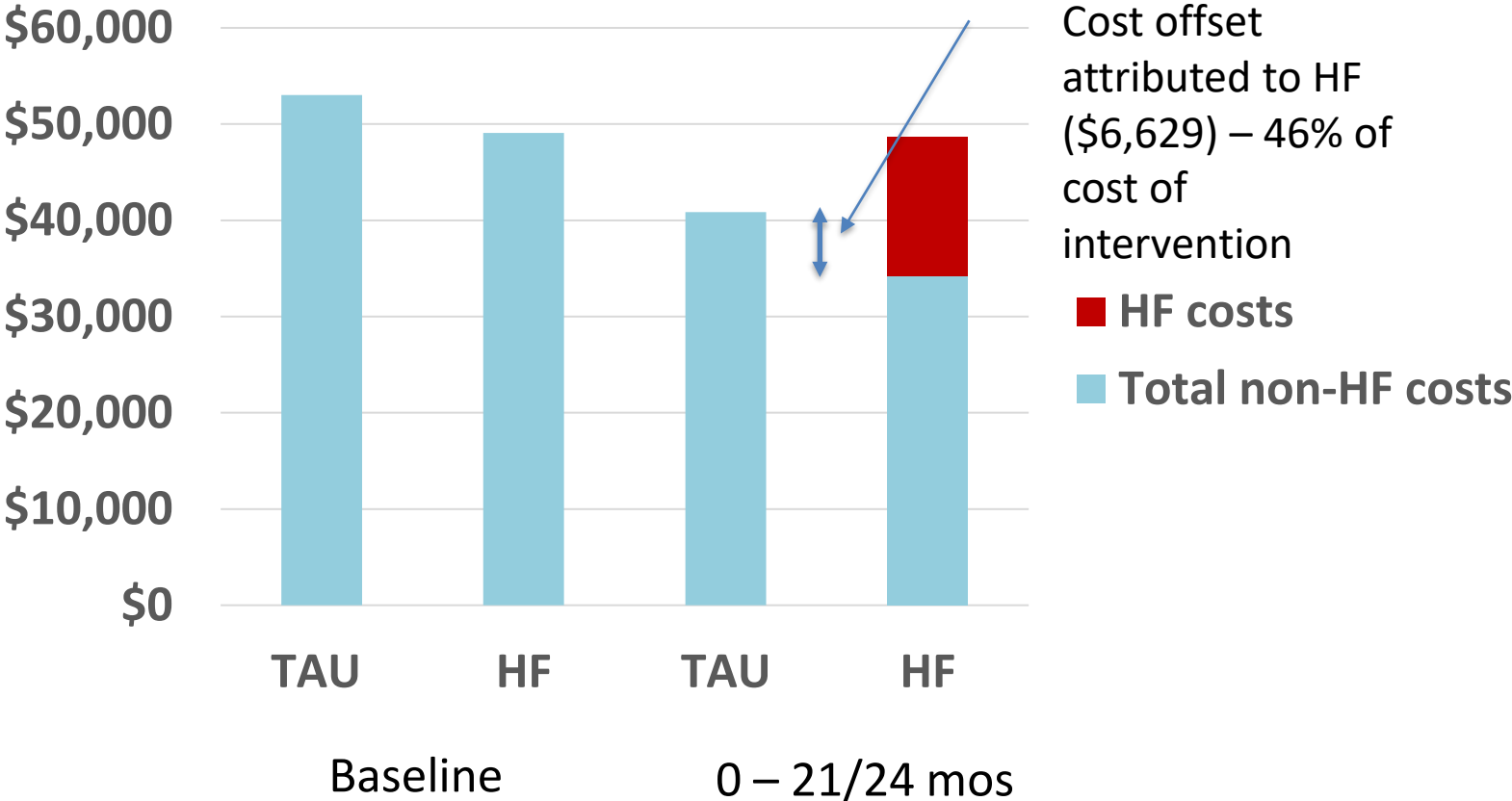
*Psychiatric Services in Advance (doi: 10.1176/appi.ps.202000029)*

**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.**



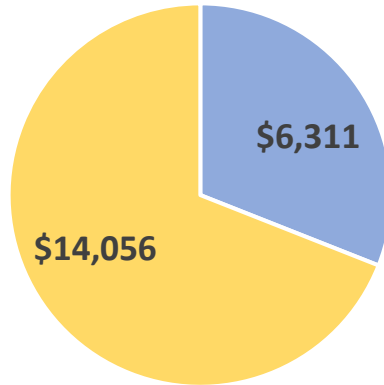
***HN average intervention cost nationally:  
\$20,367 per person per year***

**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.**



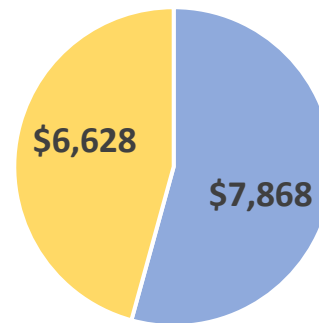
***MN average intervention cost nationally:  
\$14,496 per person per year***

# HF with ACT: \$20,367 per person per year



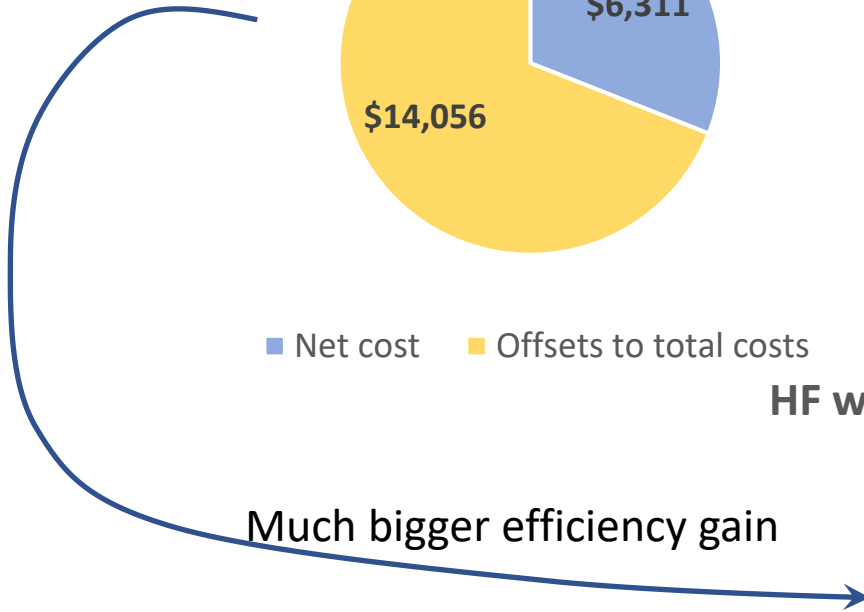
■ Net cost ■ Offsets to total costs

# HF with ICM : \$14,496 per year



■ Net cost ■ Offsets to total costs

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 with 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.)

# *Question for discussion*

Should we expect Housing First to pay for itself?



*Thank you*

eric.latimer@mcgill.ca