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A Quasi-Experimental Study of the Outcomes and Cost-Effectiveness Associated with Housing First for Adults with Problematic Substance Use

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Housing First Research on Outcomes

- Compared to residential continuum model or treatment as usual, HF clients:
- Better housing outcomes, greater improvement in community functioning and subjective quality of life (Aubry et al., 2016; Greenwood et al., 2005; Stergiopoulous et al., 2015 ; Tsemberis et al., 2003, 2004
- ... for homeless individuals with a prominent and active problem addiction, the data on HF are mixed and unsettled (Kertesz et al., 2009)

Ottawa Supportive Housing for People with Problematic Substance Use



- Pathways Housing First Program for people with severe addictions in Ottawa, Canada
- Launched in May 2011 as part of a provincial initiative
- 96 clients served by 12 case managers (8:1)
- Scattered private market housing with portable support
- ICM guided by choice and individualized to needs
- Harm reduction & recovery philosophy
- Program located into a community health centre
- Partnership with community mental health agency

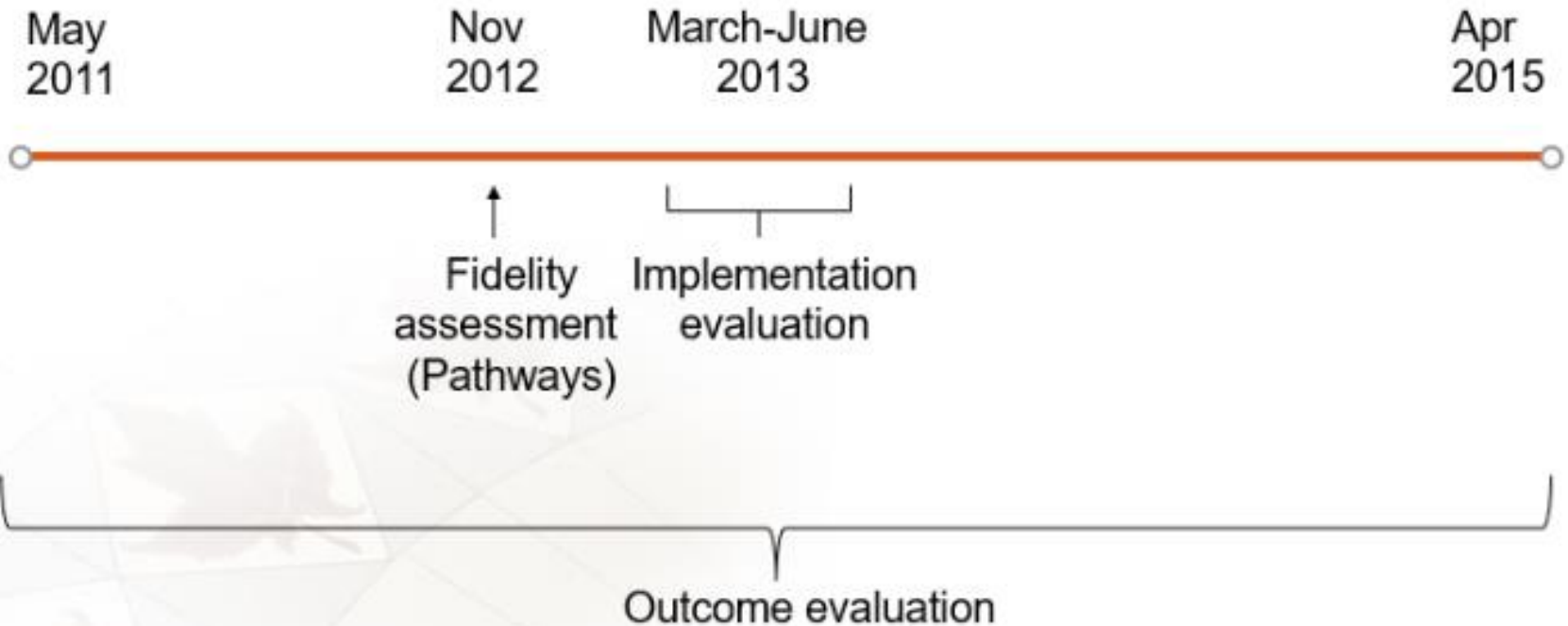
Overview of Study



- Study on the implementation and outcomes of a Pathways Housing First Program for people with severe addictions in Ottawa, Canada
 - Fidelity assessment
 - Implementation evaluation
 - Quasi-experimental two-group 2-year longitudinal design
 - Cost-benefit and cost-effectiveness study

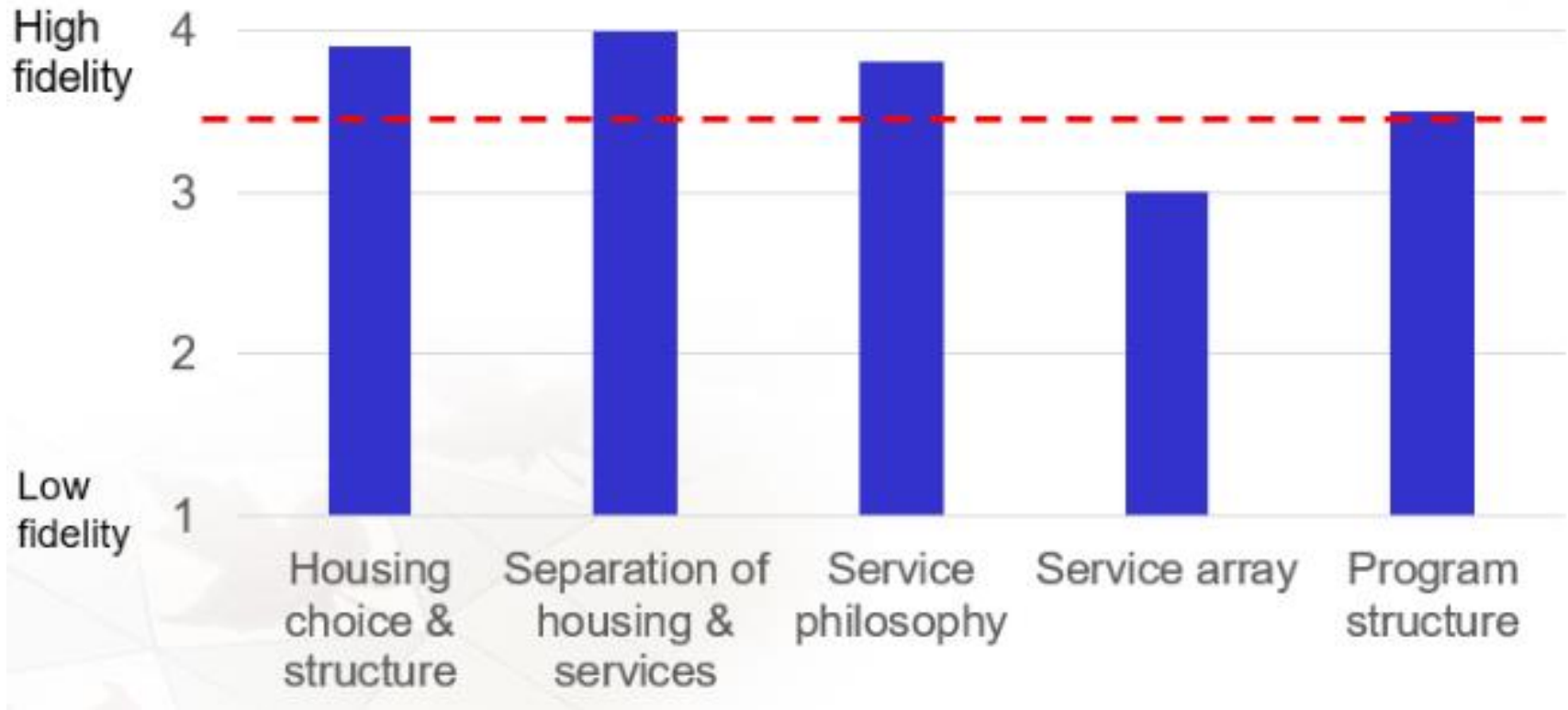


Components of the Evaluation





Fidelity assessment (at 18 months)



Outcome Evaluation



■ Intervention group (n = 89)

- Homeless or at risk; problematic substance use; heavy users of addiction systems
- Housing First and ICM
- Recruited between May 2011 & October 2012
- 93% response rate at 24m

■ Comparison group (n = 89)

- Homeless adults with problematic substance use
- Receipt of any other services in the community except ICM or ACT or from the program
- Recruited between November 2012 & February 2013
- 71% response rate at 24m



Baseline Characteristics

Characteristics	Housing First (N=89)	Standard Care (N=89)
% Male	45	58
Life-time homelessness (months)	76	78
Chronic Health Conditions (Mean)	5.85	5.98
% self-reported MD diagnosis	70	43
% Severe Alcohol Use	37	42
% Substantial or Severe Drug Use	47	57

Housing Outcomes

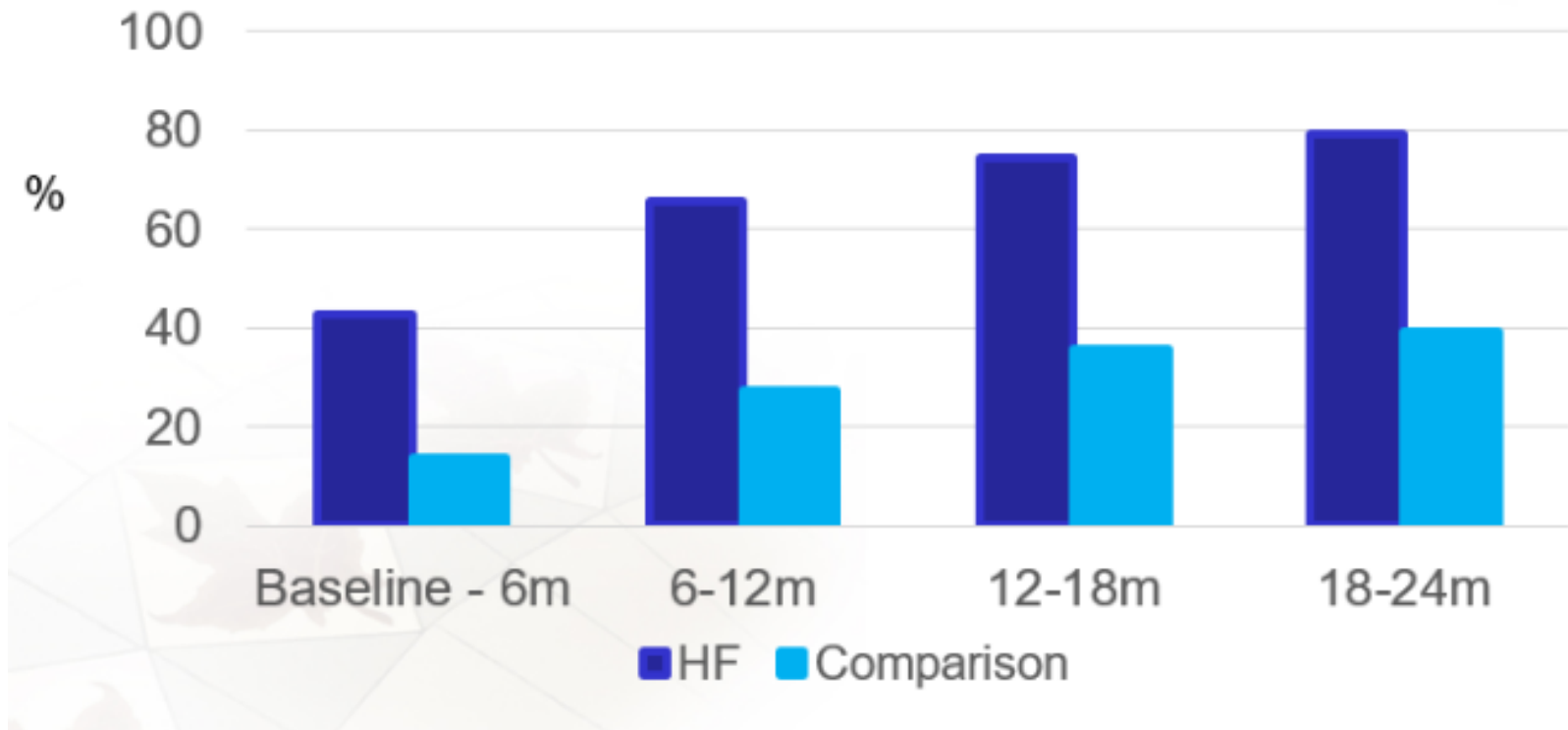


- Days to become housed (MD=68.73; $p < .05$)
 - HF = 104.59
 - TAU = 173.32

- Days consecutively housed at 24 months (all participants) (MD=188.52; $p < .001$)
 - HF = 486.11
 - TAU = 297.59



% of Time Housed in Own Place in 6 Month Segments



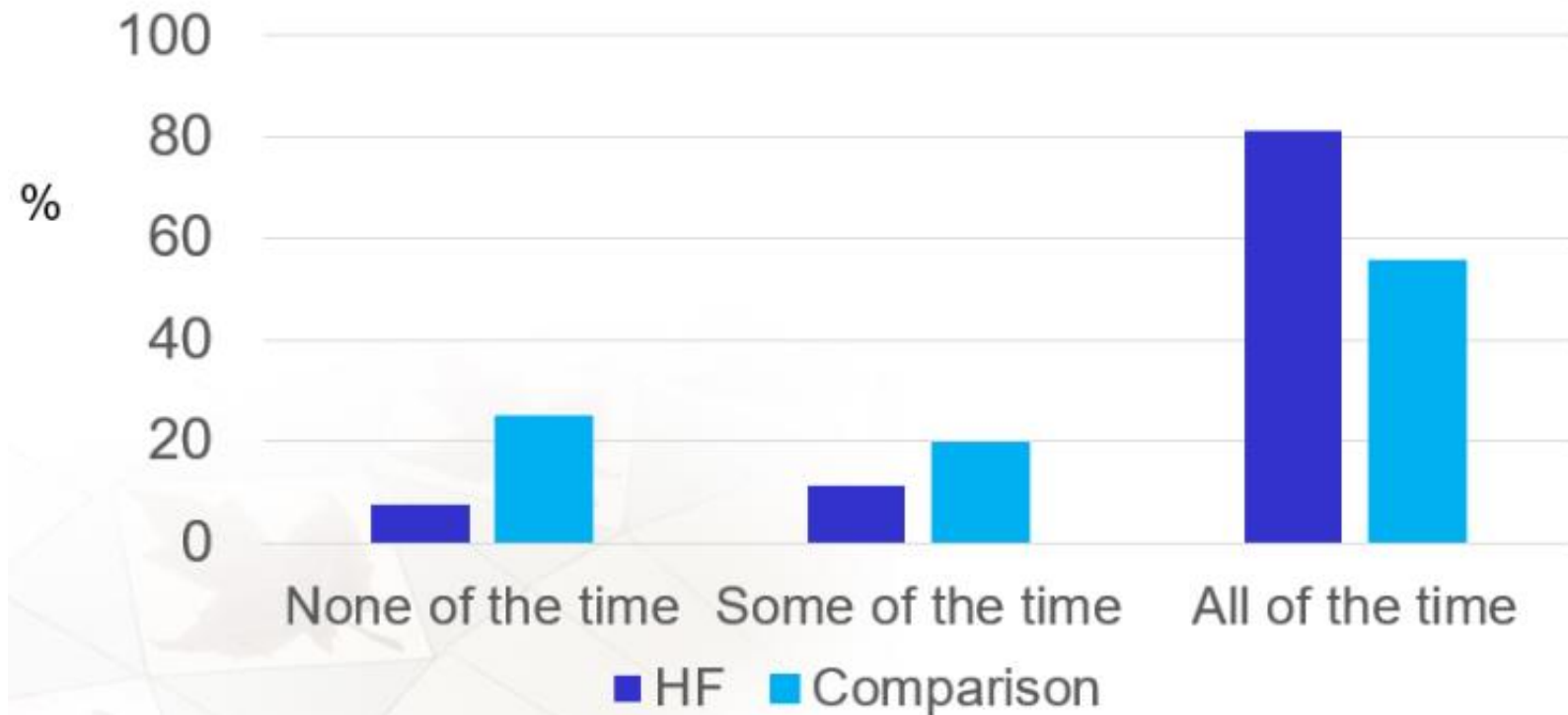


% Time Housed over 24 Months



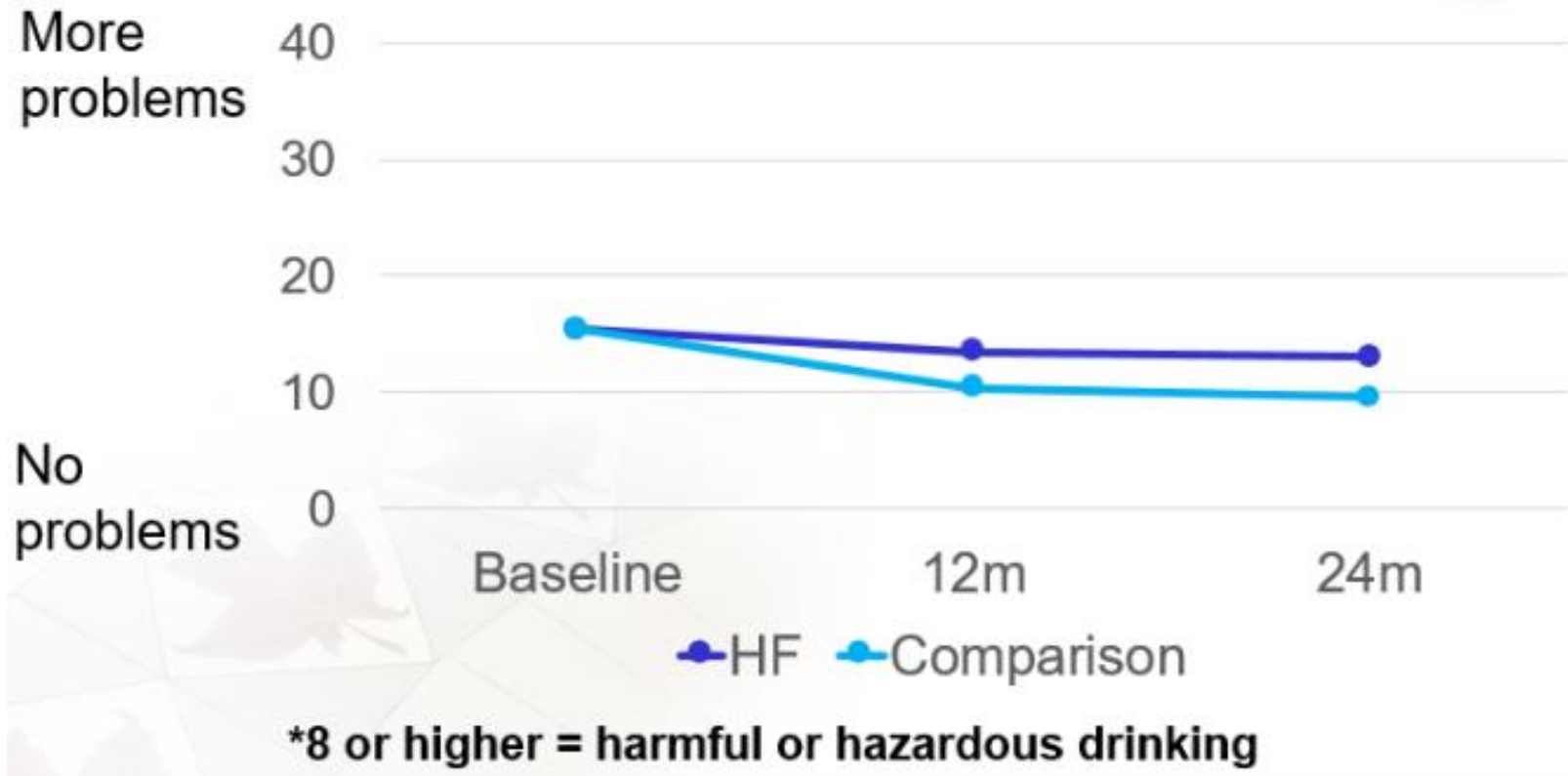


% of Participants Housed During Last 6 Months



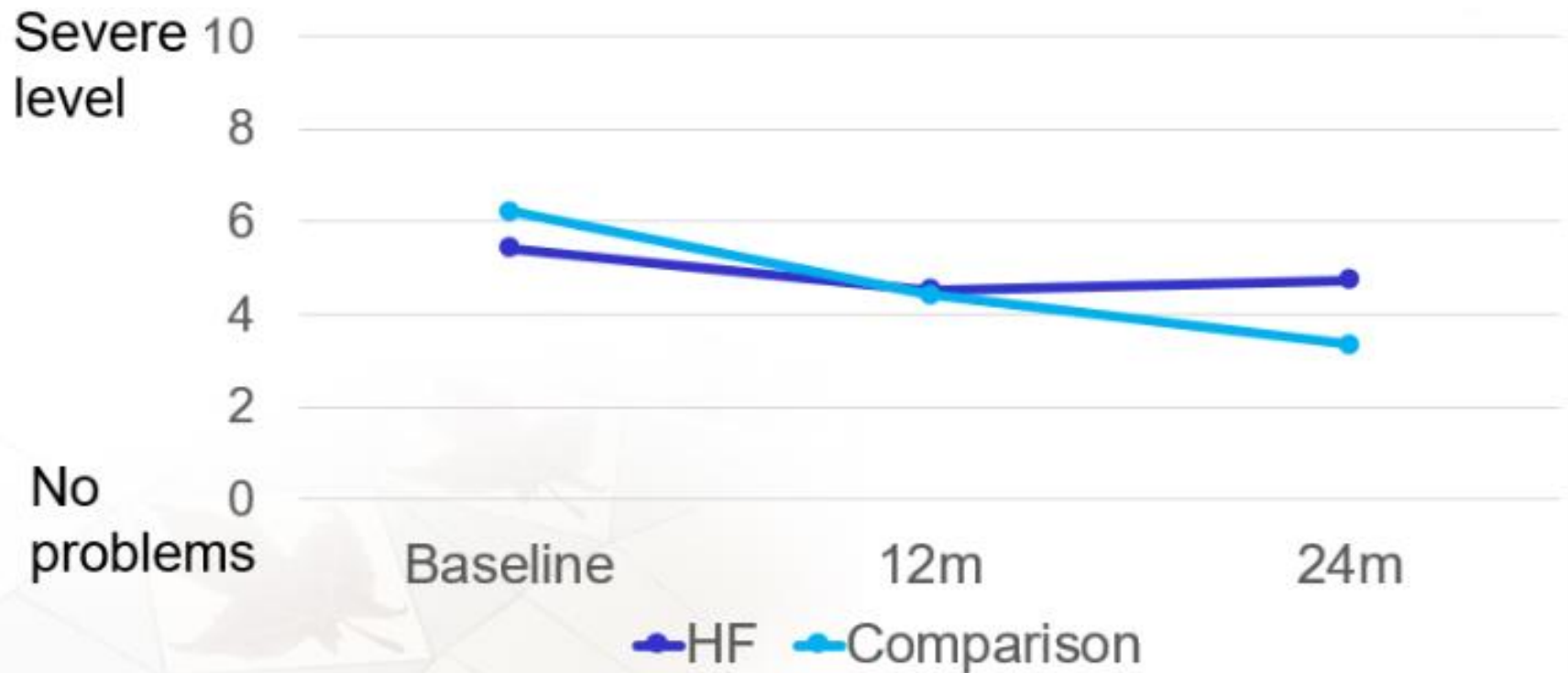


Problematic Alcohol Use (AUDIT*)





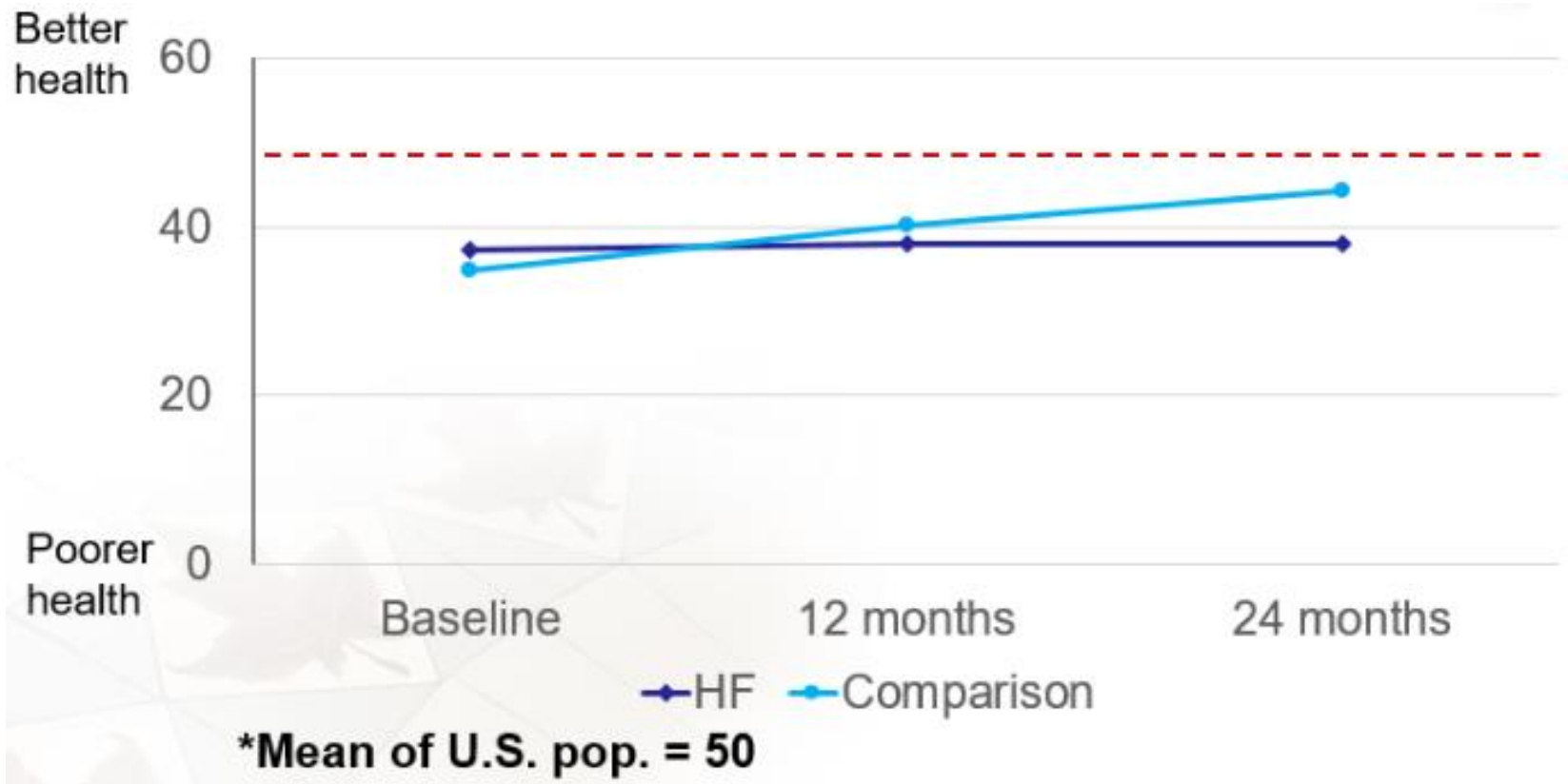
Problematic Drug Use (DAST*)



***Score of 3 or greater = problematic drug use**

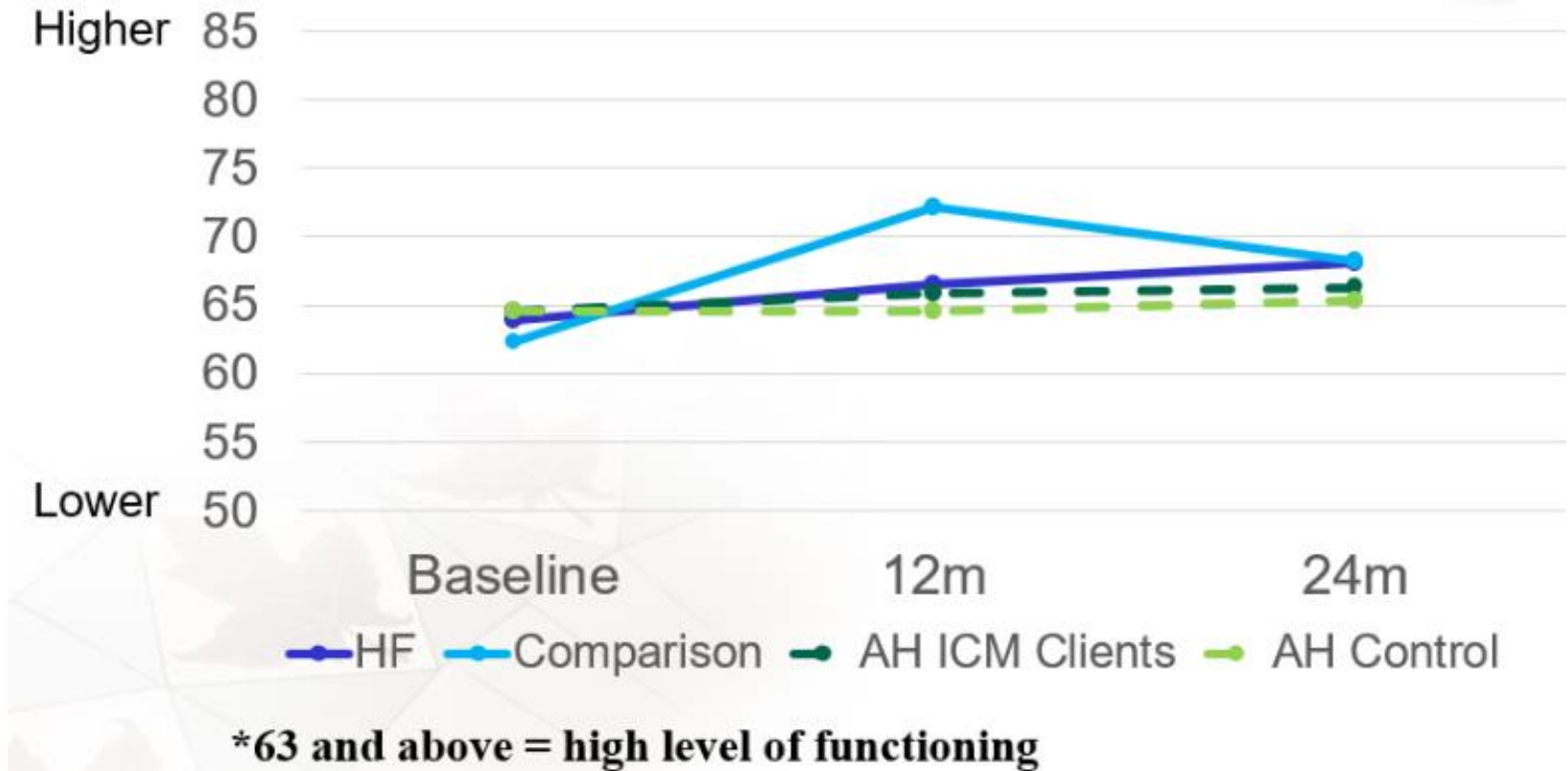


Mental Health (SF-12)



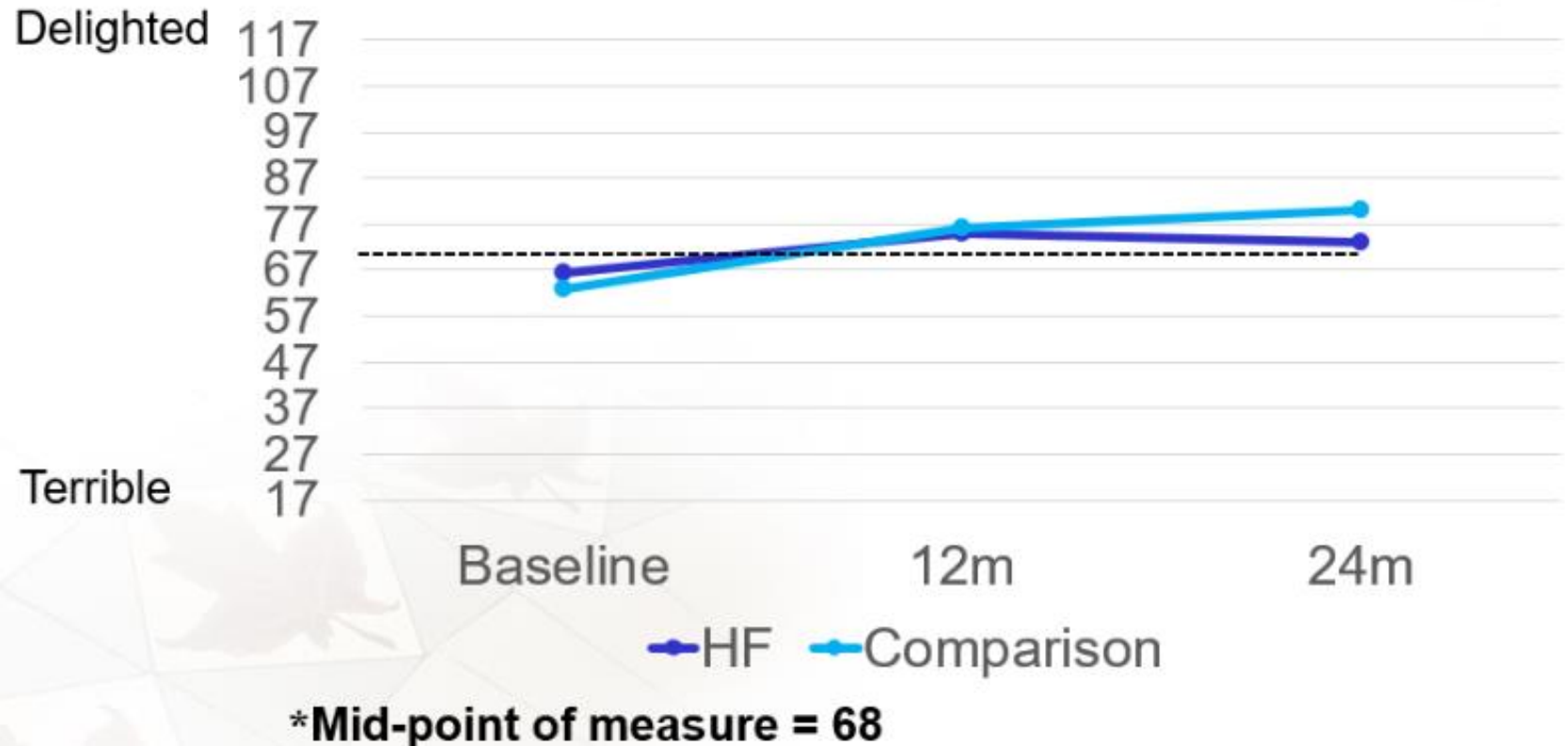


Community functioning (MCAS*)





Subjective Global Quality of Life (QoLI*)



Cost-Benefit & Cost-Effectiveness Analysis (Jetté, 2017)



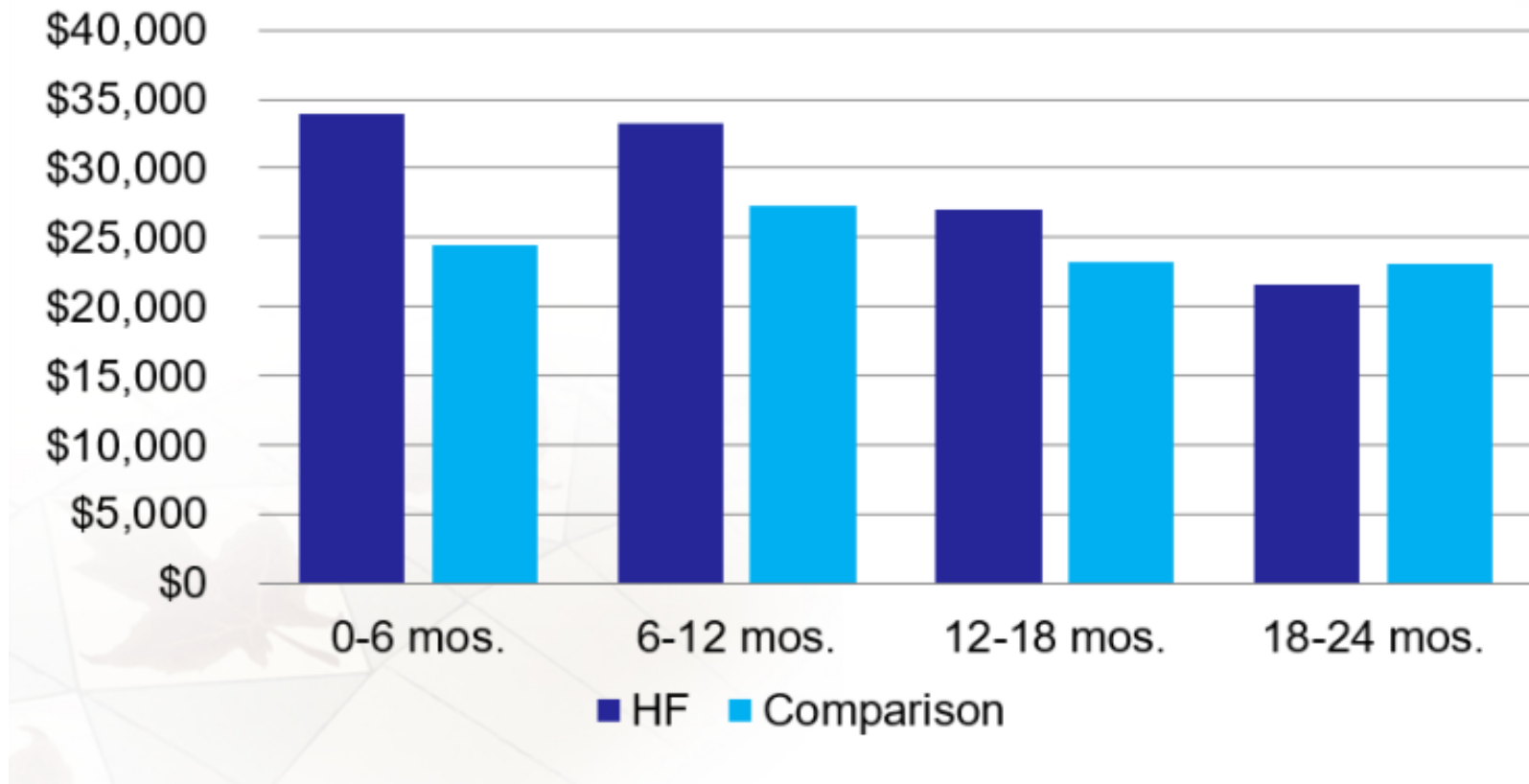
- Use of a societal approach
- Comprehensive costing of health care, social services, and justice-related services
- Self-reported service use using a tool developed for At Home / Chez Soi project
- Costs calculated by multiplying service use X unit cost
- Comparison of costs for service consumption by two groups to calculate cost-offset associated with HF
- Calculation of costs per night of additional stable housing achieved by HF recipients

Costs of Services Consumed Over 24 Month Period (Jetté, 2017)



Perspective	Housing First (N=89)	Comparison Group (N=89)
Societal	\$115,729	\$97,963
Justice-Related Services	\$22,458 (19%)	\$23,416 (24%)
Incarcerations	\$6443	\$6811
Other	\$16,015	\$16,604
Health Care (including HF)	\$79,228 (69%)	\$53,946 (55%)
Hospitalizations	\$34,365	\$22,281
Emergency Department	\$10,944	\$4408
Outpatient / Community	\$15,449	\$11,287

Total Costs for Services Consumed (Jetté, 2017)





Cost-Effectiveness Analysis

- ▶ A mathematical ratio used to compare the costs and outcomes of two treatment alternatives
- ▶ Incremental Cost–effectiveness Ratio (“ICER”):

$$\frac{\Delta C}{\Delta E} = \frac{C1 - C2}{E1 - E2}$$

We want the ICER as small as possible.

Cost-Effectiveness Findings (Jetté, 2017)



- Cost of HF = \$18,000 per person per year
- Overall, 49% of costs associated with HF are offset by a decrease in overall costs of services over 24 months
- ICER = \$106.80 per night of stable housing
 - \$177.98 per night of stable housing in YR 1
 - \$ 31.74 per night of stable housing in YR 2



Conclusions

1. Housing First with persons with problematic substance use is associated with similarly positive housing outcomes as with persons with SMI
2. HF recipients show similar level of improvements as individuals receiving standard care in some areas
3. However, Individuals receiving standard care have bigger gains in other areas
4. More tailored & intensive interventions may be needed for HF to improve its effectiveness on non-housing outcomes
5. Cost per night of stable housing in second year (\$32) is one-half the cost per night in an emergency shelter (\$64)

Thank You



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