

# Development and testing of a distance-based strategy to improve Housing First implementation

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Presented at the Housing First Partners Conference 2018, Denver CO

# Housing First approach (Tsemberis & Asmussen 1999)



Permanent Housing

Low-threshold admissions

Minimal service requirements

\*Harm reduction

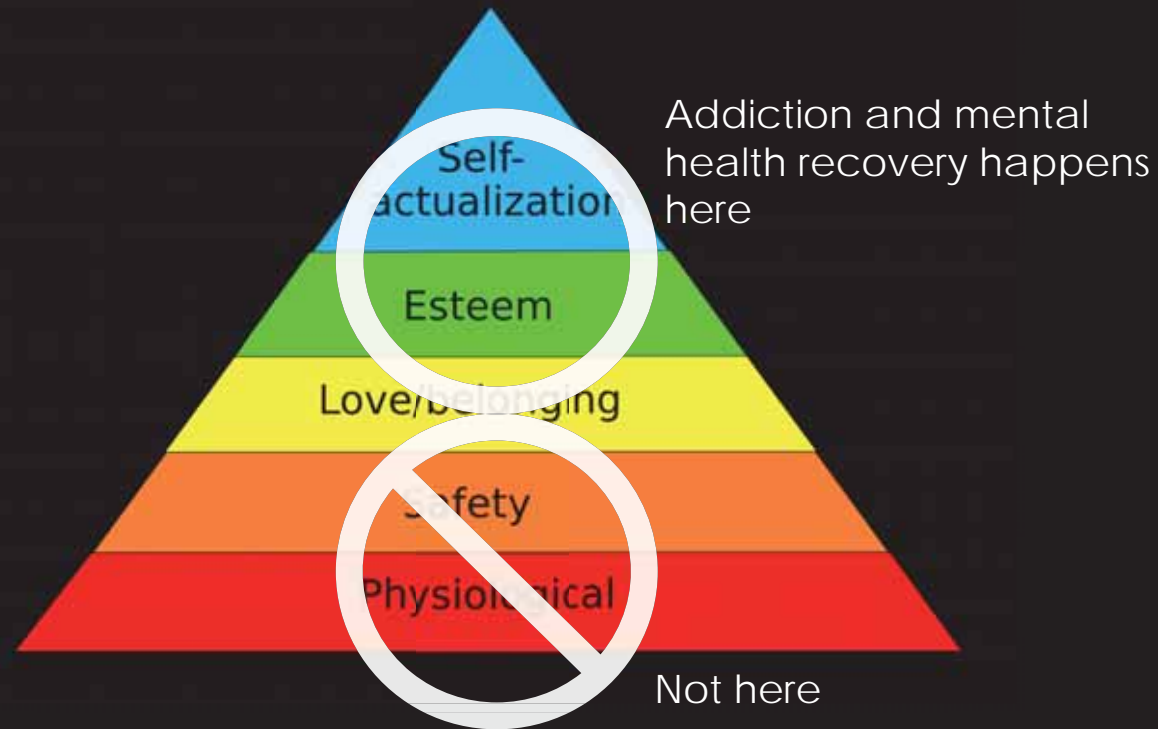


Street

# Harm reduction



# Where recovery happens



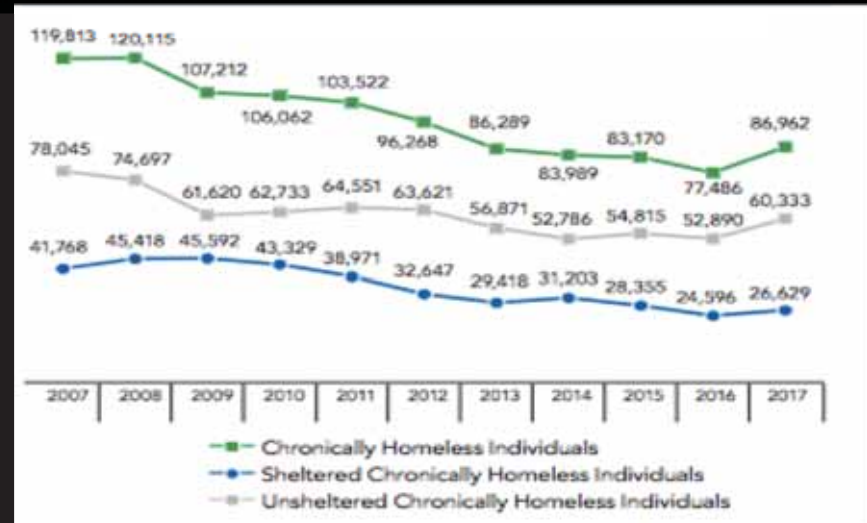


# Housing First works!

It leads to

- Reduced:
  - Substance use
  - Emergency care
  - Criminal behavior
- Higher:
  - Housing retention
  - Perceived choice
- Stronger relationships

## Estimates of Chronic Homelessness 2007-2017



US Department of Housing and Urban Development:

<https://www.hudexchange.info>

A 3D map of the United States, colored in shades of blue, with orange arrows indicating the spread of the Housing First model. The arrows originate from the Northeast and West Coast, moving towards the center and south. A yellow text box is overlaid on the map.

**Diffusion (vs. Dissemination) has  
led to Housing First model drift**

# Housing first fidelity work

Funding: NIDA R36 DA027770

Watson et al. Substance Abuse Treatment, Prevention, and Policy 2013, 8:16  
http://www.substanceabusepolicy.com/content/8/1/16

**RESEARCH** Open Access

## The housing first model (HFM) fidelity index: designing and testing a tool for measuring integrity of housing programs that serve active substance users

Dennis P. Watson<sup>1\*</sup>, John Orwat<sup>2</sup>, Dana E. Wagner<sup>3</sup>, Valery Shuman<sup>4</sup> and Randi Tolliver<sup>4</sup>

**Abstract**  
**Background:** The Housing First Model (HFM) is an approach to serving formerly homeless individuals with dual diagnoses or engage in is a result of positive in inconsistent M Fidelity Index. We

**Understanding the Critical Ingredients for Facilitating Consumer Change in Housing First Programming: A Case Study Approach**

Dennis P. Watson, PhD  
Dana E. Wagner, MA  
Michael Rivers, MA

**Abstract**  
*Housing First is a form of permanent supportive housing for chronically homeless consumers with mental health and substance abuse issues. In light of the model's growing popularity and wide diffusion, researchers and policy makers have identified a need to better understand its critical ingredients and the processes through which they affect consumer outcomes. Researchers used a bottom-up approach to understand the critical ingredients of Housing First within community-based programs. Interviews and focus groups were conducted with 60 informants (staff and consumers) across 4 "successful" Housing First programs. Outcomes include identified ingredients for Housing First to be successful: (1) a*

our HFM ten tested through ed of 51 programs

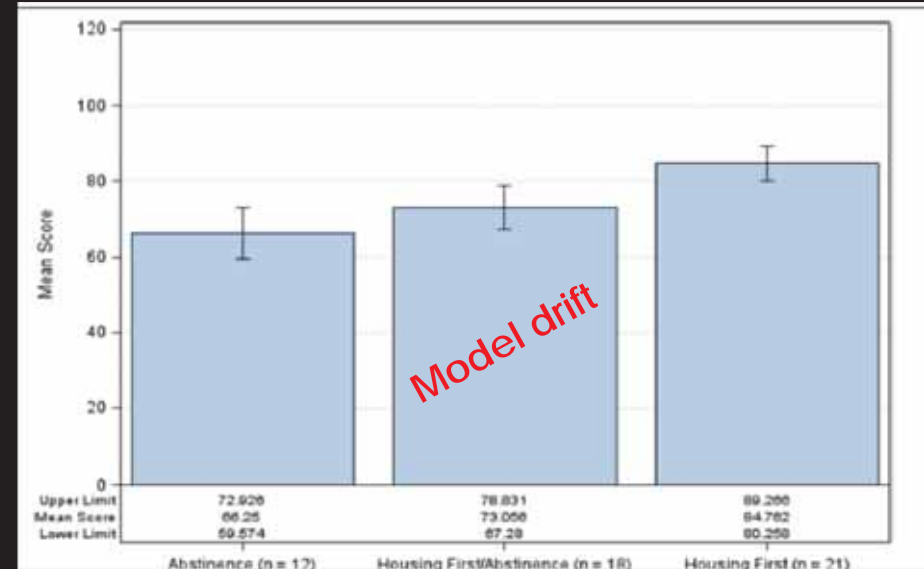
ams that employ ing to implement

Harm reduction,

nd the behaviors they any policies guiding sence-based approach obriety (typically for eligible for housing, remain sober to keep to more independent -based approach has as higher consumer

Key finding (n = 51 programs):

- Many "Housing First" programs prefer abstinence
- Higher fidelity scores = higher housing retention





# Housing First Technical Assistance & Training (HFTAT) implementation strategy

Funding: NIDA R34 DA03600  
NCATS KL2 TR 001106

Watson et al. *Implementation Science* 2014, **9**:138  
<http://www.implementation-science.com/content/9/1/138>



## STUDY PROTOCOL

## Open Access

### Development and testing of an implementation strategy for a complex housing intervention: protocol for a mixed methods study

Dennis P. Watson<sup>1\*</sup>, Jeani Young<sup>2</sup>, Emily Ahonen<sup>3</sup>, Huiping Xu<sup>4</sup>, Macey Henderson<sup>5</sup>, Valery Shuman<sup>5</sup> and Randi Tolliver<sup>5</sup>

#### Abstract

**Background:** There is currently a lack of scientifically designed and tested implementation strategies. Such strategies are particularly important for highly complex interventions that require coordination between multiple parts to be successful. This paper presents a protocol for the development and testing of an implementation strategy for a complex intervention known as the Housing First model (HFM). Housing First is an evidence-based practice for chronically homeless individuals demonstrated to significantly improve a number of outcomes.

**Methods/design:** Drawing on practices demonstrated to be useful in implementation and e-learning theory, our team is currently adapting a face-to-face implementation strategy so that it can be delivered over a distance. Research activities will be divided between Chicago and Central Indiana, two areas with significantly different barriers to HFM implementation. Ten housing providers (five from Chicago and five from Indiana) will be recruited to conduct an alpha test of each of four e-learning modules as they are developed. Providers will be requested to keep a detailed log of their experience completing the modules and participate in one of two focus groups. After refining the modules based on alpha test results, we will test the strategy among a sample of four housing organizations (two from Chicago and two from Indiana). We will collect and analyze both qualitative and quantitative data from administration and staff. Measures of interest include causal factors affecting implementation, training outcomes, and implementation outcomes.

**Discussion:** This project is an important first step in the development of an evidence-based implementation strategy to increase scalability and impact of the HFM. The project also has strong potential to increase limited scientific knowledge regarding implementation strategies in general.

**Keywords:** Implementation strategy, Protocol, Housing, Housing First, Fidelity, Training, Technical assistance

- Multifaceted/Packaged scale-up strategy (Leeman et al. 2017)
  - Training/E-learning
  - Community of practice
  - Distance-based technical assistance
- Delivered over 6 months



# Implementation strategies, organizational processes, & knowledge transfer

- Training is often necessary, never sufficient, and often the only strategy used (Fixsen et al. 2009)
- Multifaceted strategies are needed to address multiple factors in tandem (Aarons 2011)
- Promising evidence for consultation, technical assistance, and audit and feedback (Torrey et al., 2012; Nadeem et al. 2013)

# Implementation strategies, organizational processes, & knowledge transfer (cont.)

- Organizational management communicates the importance of implementation (Aarons et al. 2012)
- Structural components of interventions are easier to address than behavioral ones (Bond, 2009)
- Need to change both explicit and tacit knowledge (Ardichville et al. 2008)
- Facts don't change attitudes!!! (Greenhalgh 2002)

We need to change attitudes!





# E-learning modules



1

It was so much going on with me and I had no way put it in an order, that I could address these things simultaneously, you know?

It was like in these places, you almost had to address everything at once, and it wasn't no case management services, case managers only did tokens, they only get you bus cards, referral papers, they never did anything else other than that.

So I tried it but I was never successful with those places.



2



3

- Guided by adult and eLearning theory
  - Self-paced and asynchronous
  - Activities and reflection
- Storytelling to convey information
- Digital badging

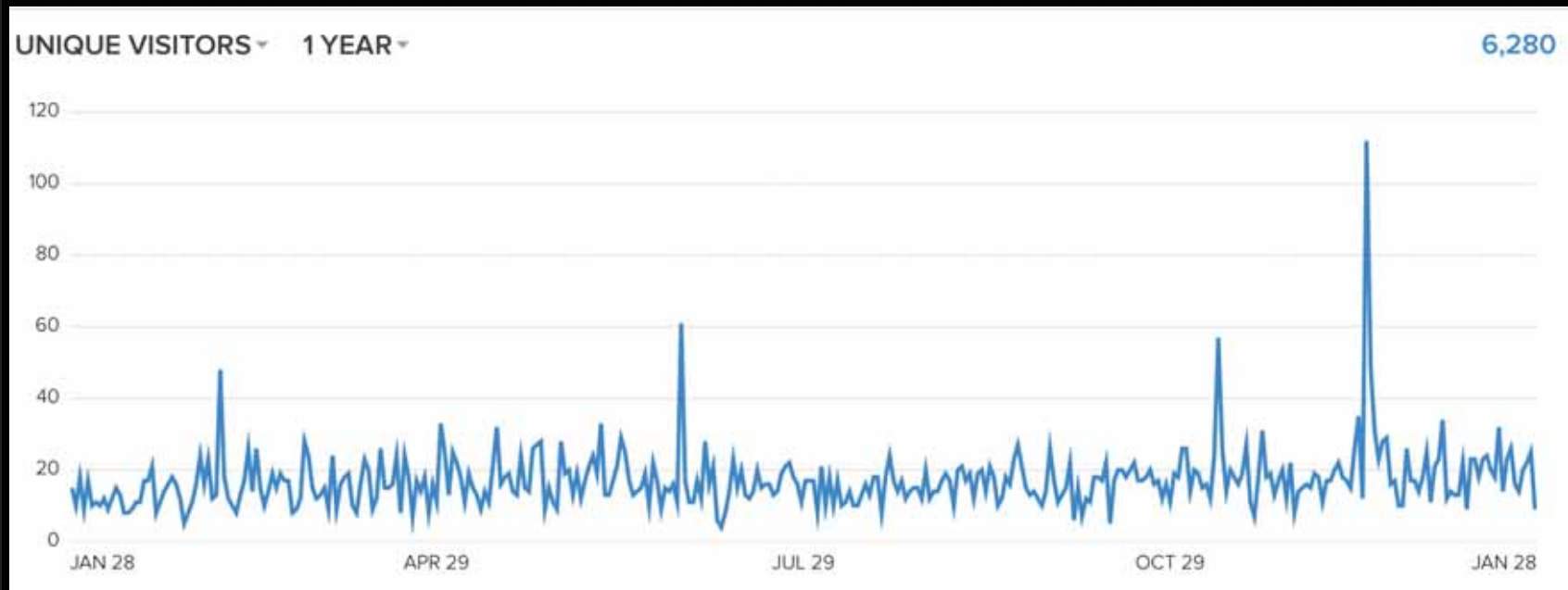


# Community of practice



- Elements of HFTAT CoP
  - Forum linked to eLearning
  - Blog
  - Toolkit

# Community of practice visitors





# Consultation & technical assistance

- Components for HFTAT
  - Weekly for 6 months
  - Phone-based
  - Fidelity audit and feedback



# Testing of entire HFTAT (Nov 2015-March 2017)

- Mixed method (convergent parallel design)
  - Quant = Computer administered instruments and fidelity reviews
  - Qual = Staff focus groups & administrator interviews
- 3 organizations
  - Indianapolis = new, small, single-site program
  - Cincinnati = established housing first, large, multiple-site program
  - Chicago suburbs = abstinence-only, large, single-site program
- 113 individual participants

# Satisfaction with HFTAT

Satisfaction with eLearning and technical assistance				
	eLearning modules <sup>a</sup> (n = 91)		Technical assistance <sup>b</sup> (n = 20)	
	mean (sd)	Alpha	mean (sd)	Alpha
Overall score	4.04 (0.55)	0.92	4.12 (0.53)	0.95
Objective and content	4.09 (0.68)	0.88	4.07 (0.55)	0.83
Method and training context	3.94 (0.54)	0.83	4.10 (0.57)	0.92
Usefulness and overall rating	4.09 (0.63)	0.81	4.20 (0.56)	0.81

<sup>a</sup>All questions measured using Training Satisfaction Rating Scale, a 1-5 Likert-type scale (Holgado et al. 2006).

<sup>a</sup>Questions administered to all individuals involved in HFTAT activities.

<sup>b</sup>Questions only asked of individuals engaged in technical assistance activities.

## Qualitative findings

- Modules necessary, but not adequate without technical assistance
- Liked eLearning pace, interactivity, & reality of narrative stories
- Did not really understand digital badges or community of practice

"I do like the combination of the modules and the technical assistance. I feel like it's definitely a **one-two-punch** that's needed." (Org3 Administrator)

"They [the stories] seemed realistic. They seemed pretty typical of clients we might see." (Org2 Administrator)



# Housing First knowledge

Knowledge scores at end of training and 3-month follow-up				
	End of training	3-month follow-up	Difference between time points <sup>a</sup>	
	mean (sd)	mean (sd)	mean (sd)	p-value
Overall score	0.92 (0.310)	0.98 (0.21)	0.04 (0.03)	0.19
<sup>a</sup> Calculated using mixed-effects model				

## ○ Qualitative findings

- Helped them understand what they thought they understood
- Administrators focused on how the model helped them connect HF to the bigger picture from a system perspective

"I just am extremely grateful for all the training and technical assistance that has been given...I thought that I had an understanding, I had a very simple understanding of Housing First. I thought really Housing First was just about, oh, encouraging people to reduce their usage of their drug or alcohol." (Org1 Admin)

# Housing First acceptability & appropriateness

**Participant attitudes toward evidence-based practices**

	T-1 Baseline		T-2 End of training		T-3 End of technical assistance		Difference T1 & T2		Difference T1 & T3 <sup>a</sup>	
	n	mean (sd)	n	mean (sd)	n	mean (sd)	n	mean (sd)	n	mean (sd)
<b>Participant baseline score less than 4</b>										
Overall score	93	3.32 (0.59)	75	3.47 (0.55)	44	3.47 (0.43)	75	0.12 (0.06)*	44	0.11 (0.07)
Requirements subscale	66	3.30 (0.85)	53	3.68 (0.86)	31	3.69 (0.89)	53	0.33 (0.12)**	31	0.43 (0.15)**
Appeal subscale	65	3.37 (0.81)	50	3.75 (0.75)	28	3.88 (0.46)	50	0.35 (0.11)**	28	0.46 (0.14)***
Openness subscale	76	3.42 (0.62)	59	3.80 (0.75)	33	3.65 (0.69)	59	0.35 (0.09)****	33	0.17 (0.11)
Divergence subscale	112	2.17 (0.71)	89	2.17 (0.91)	50	2.16 (0.76)	89	0.01 (0.08)	50	-0.01 (0.10)

\* All questions measured using Evidence-Based Practice Attitudes Scale, a 1-4 Likert-type scale, with higher scores indicating more accepting attitudes of evidence-based practices (Aarons 2004)

<sup>a</sup>Calculated using mixed-effects model

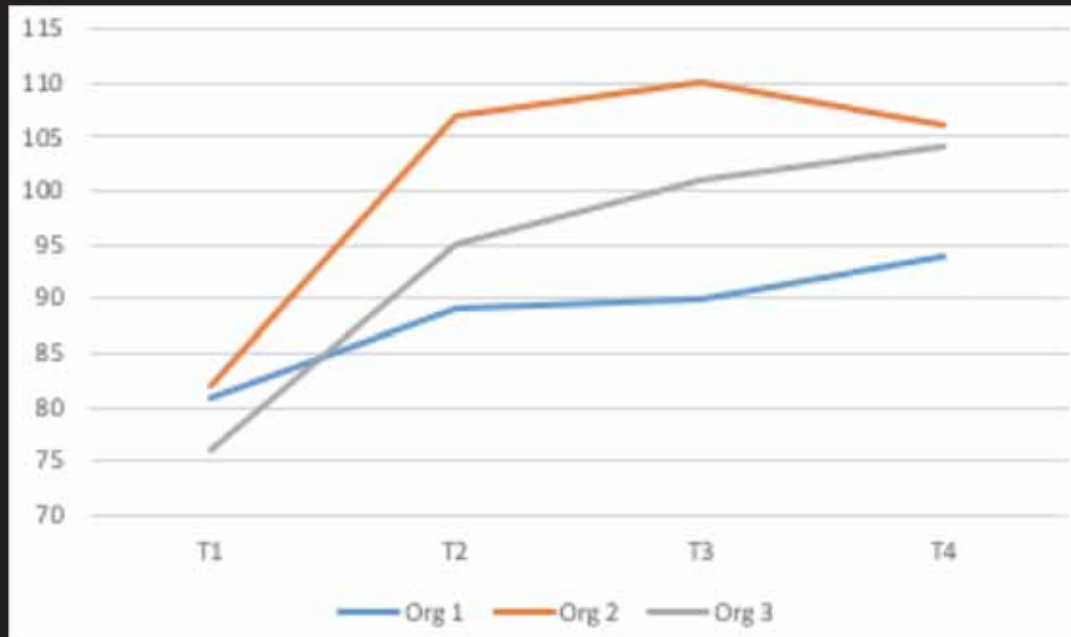
\*p ≤ 0.05; \*\*p ≤ 0.01; \*\*\*p ≤ 0.001; \*\*\*\*p ≤ 0.0001

## ○ Qualitative findings

- Housing first generally acceptable, but not always seen as appropriate
- Longer-term staff have issues with 'enabling'

"... I think that just learning more about Housing First... I think that's kind of widened staff's eyes a little bit. And then by seeing some of that stuff, I think, then, it kind of trickles down to just being a little bit more tolerant sometimes when the day isn't going your way." (Org2 Admin)

# Fidelity score over time



“...[T]here were a few elements that I think were more surprising...things they didn’t really realize were necessarily part of Housing First...It [the audit and feedback process] was an opportunity for quite a conversation around maybe elements of Housing First that we should look at implementing better...” (Org3 Administrator)

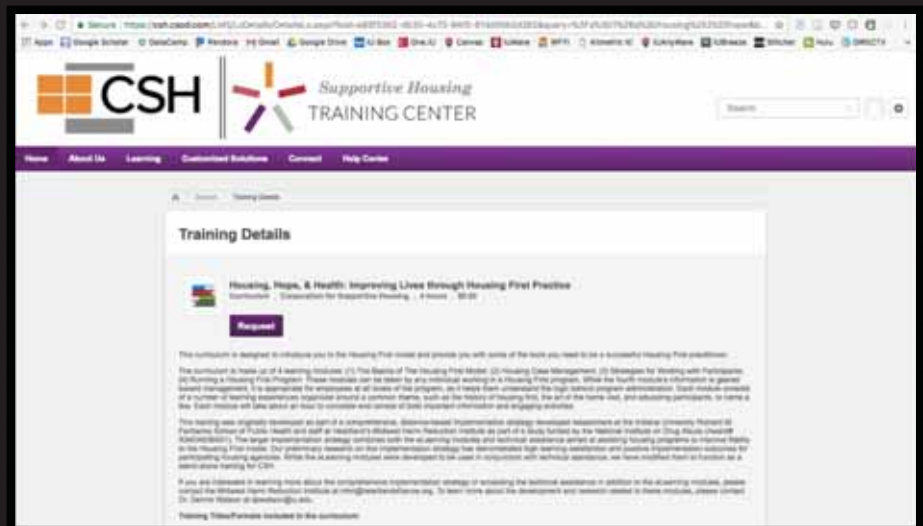
# Key takeaways

- A multifaceted strategy was a useful approach Housing First implementation.
  - High satisfaction
  - Improved attitudes
  - Improved knowledge
  - Improved fidelity
- Training and consultation activities provided different benefits.
  - Training is the foundation
  - Consultation helps with application of knowledge
- Narrative stories were a useful approach to educating people because they reflected their actual experiences.





- R01 with larger sample
- Vary elements of the HFTAT to understand if some are more important than others



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