

The Pathways Housing First Fidelity Scale for Individuals With Psychiatric Disabilities

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Pathways Housing First (PHF) is an innovative, evidence-based model of providing permanent housing and services to adults with severe mental illness. This approach has been widely and rapidly disseminated across the U.S. and internationally, but sometimes with considerable variability from the original PHF model. This study developed and validated a PHF fidelity scale. The PHF model's guiding principles and prospective ingredients were identified through reviews of PHF literature and relevant fidelity scales, interviews with PHF administrators, and a survey administered to HF providers. An expert panel developed the items into a fidelity scale, which was field-tested as part of two large-scale research initiatives in California and Canada. General guiding principles for PHF included (a) eliminating barriers to housing access and retention, (b) fostering a sense of home, (c) facilitating community integration and minimizing stigma, (d) utilizing a harm-reduction approach, and (e) adhering to consumer choice and providing individualized consumer-driven services that promote recovery. The provider survey demonstrated that 32 key ingredients, derived from these principles, had good face and content validity. An expert panel refined the wording of these ingredients, added new items when there was consensus, and developed operational criteria to measure them. The resulting 38-item fidelity scale generally had good internal consistency; it captured variability in program implementation; it demonstrated discriminant validity; and it was useful in guiding program implementation and technical assistance. In conjunction with other program materials, the fidelity scale can be used as a guide for program development and technical assistance and as a research tool. Examining how these key ingredients relate to the model's success will contribute to a broader understanding of how to end homelessness and facilitate recovery.

Keywords: Housing first; Fidelity; Mental illness; Homelessness; Supportive housing

Pathways Housing First (PHF) is an innovative model of providing permanent housing and services to homeless individuals with severe mental illness who have been unable to access or progress through traditional services that require treatment as a prerequisite to housing (Tsemberis, 2010). Guided by a consumer-driven philosophy, PHF offers immediate access to permanent independent housing, without prerequisites for treatment and sobriety, combined with comprehensive consumer-driven services. Services are typically provided by support teams such as assertive community treatment (ACT) and intensive case management (ICM) teams that have been modified to incorporate principles of recovery, psychiatric rehabilitation, and consumer choice (Anthony, Cohen, Farkas, & Gagne, 2002; Salyers & Tsemberis, 2007).

Compared with control groups pursuing permanent housing in more traditional programs, PHF participants obtain housing earlier,

remain stably housed at higher rates, spend significantly less time in psychiatric hospitals, and incur fewer residential costs (Gulcur, Stefancic, Shinn, Tsemberis, & Fischer, 2003; Stefancic & Tsemberis, 2007; Tsemberis & Eisenberg, 2000; Tsemberis, Gulcur, & Nakae, 2004). Studies have also documented that subsequent to enrollment in Housing First, consumers utilize fewer emergency care, shelter, and inpatient services that can translate to cost reductions (Larimer et al., 2009; Perlman & Parvensky, 2006; Hirsch, Glasser, & D'Addabo, 2007). PHF and similar independent supported housing arrangements are also associated with greater residential satisfaction (Siegel, Samuels, Tang, Berg, Jones, & Hopper, 2006) and greater choice (Greenwood, Schaefer-McDaniel, Winkel, & Tsemberis, 2005; Nelson, Sylvestre, Aubry, George, & Trainor, 2007), which leads to decreased psychiatric symptoms, partly as a result of increased mastery (Greenwood et al., 2005).

The PHF model for individuals with psychiatric disabilities was originally developed and validated by Pathways to Housing in New York City but has recently spread rapidly throughout the U.S. and internationally (Greenwood, Stefancic, Tsemberis, & Busch-Geertsema, 2013; Keller et al., 2013). Given this widespread dissemination, questions of model implementation, replication, and adaptation have become increasingly relevant. The effectiveness and advocacy surrounding Housing First has spurred both the creation of programs similar to that developed by Pathways, as well as programs that exhibit considerable variation from the original model. Core concepts such as consumer choice and independence, as well as what qualifies as housing, are susceptible to misinterpretation, inadequate funding, competing philosophical views, and desires to adopt an evidence-based label but not the practice that can produce unwelcome model drift. Simultaneously, however, responsiveness to local contexts can shape implementation in ways that lead to programs that are tailored to the unique needs of different populations and contexts, resulting in adaptations that represent enhancements versus drift (Stergiopoulos et al., 2012).

Though fidelity scales exist for service and housing models with which Housing First has significant overlap, there are important distinctions as to precisely which subsets of ingredients are shared, as well as which ones are novel to Housing First, resulting in a unique constellation of ingredients for PHF. For example, programs that offer PHF can deliver services that resemble assertive

community treatment (ACT), but full ACT fidelity criteria may not be necessary for operation of an effective PHF program. As Matejkowski and Draine (2009) posit, the case may be that "ACT in support of HF is its own particular 'brand' of ACT" and providers may diverge from the model in order to operate in a consumer-driven, recovery-oriented fashion (Matejkowski & Draine, 2009; Salyers & Tsemberis, 2007). Further, there is less guidance on how to operate PHF programs using an ICM model for individuals with more moderate needs.

A fidelity assessment would provide a useful conceptual framework for mapping program practices, allowing us to document variation in philosophy, housing, and services along a continuum, while also allowing investigators to empirically determine which program components account for model effectiveness. This paper describes the development of the PHF Fidelity Scale (including identification of items, initial validation, and pilot testing) and discussion of how the key ingredients relate to the model's general principles and values.

METHOD

Fidelity scale development proceeded in two phases. The first phase identified the key ingredients of PHF and the second phase turned these ingredients into a fidelity scale that was subsequently field-tested. For Phase I, inasmuch as the PHF model has been fairly well described in the literature, we largely used confirmatory methods, adapted for the field of psychiatric rehabilitation, to identify key ingredients (Bond et al., 2000). These consisted of two steps: (a) specifying general program principles and deriving specific key ingredients and (b) examining the degree of consensus for these key ingredients among those who are highly familiar with the model (Bond et al., 2000). Step 1 was completed by reviewing literature on the PHF model and other relevant programs, reviewing existing fidelity scales, and interviewing PHF developers and administrators. Step 2, evaluating consensus, was completed by conducting a survey with Housing First providers, asking them to rate the importance of each potential ingredient from their perspective in efforts to explore the validity of the list. In Phase II, an expert panel adapted these ingredients into a fidelity scale, by refining the wording of items and developing operational criteria

to measure them. Data collection for developing the survey occurred September 2007–March 2009 and pilot testing occurred October 2010–July 2012.

Phase I: Specifying General Principles and Deriving a Pool of Key Ingredients

Step 1

The research team used a triangulation approach (Denzin, 1978) consisting of three different methodologies to identify program principles and generate an initial pool of potential key ingredients of PHF. First, a literature review was conducted to identify potential program principles and ingredients from the published research and descriptions available of PHF and similar programs. The team searched for articles listed in PubMed, PsychInfo, and the Social Science Citation Index containing the following terms: supported housing, supportive housing, and Housing First. Two members of the team independently identified themes from the articles and reached consensus on the final list of themes through discussion. Second, the team reviewed existing fidelity scales for evidence-based practices and selected ingredients with which PHF had some overlap. These scales included the Permanent Supportive Housing Fidelity Scale (SAMIISA, 2010), Dartmouth Assertive Community Treatment Scale (DACTS) (SAMHSA, 2008), the Tool for Measurement of Assertive Community Treatment (T-MACT) (Monroe-DeVita, Teague, & Moser, 2011), and a program characteristics measure developed as part of a cross-site homelessness research study (Williams, Banks, Robbins, Oakley, & Dean, 2001). Third, semistructured qualitative interviews were conducted with five Housing First experts, selected by the research team, to elicit principles and ingredients that they saw as essential features of their Housing First programs. Two members of the research team discussed and synthesized the findings from these three methods to develop consensus on a final list of the general principles of PHF and the prospective key ingredients derived therefrom.

Step 2: Initial Validation of Key Ingredients Through Provider Consensus

The prospective key ingredients were organized into a survey instrument consisting of a pool of 38 items divided into five

domains (5 to 12 items per domain): (a) housing choice and structure, (b) separation of housing and treatment, (c) service philosophy, (d) service array, and (e) program structure (Table 1). Following the recommendations in the fidelity development tool kit, (Bond et al., 2000), it also included six distractor items whose elements were considered prohibited by or antithetical to the PHF model. Distractors were included in attempts to reduce the likelihood of participants' overendorsing items and to detect the possibility that participants were uniformly rating all items without actually considering each one.

Study Participants and Setting. Five agencies participated in the PHF key ingredients survey. Agencies were selected because they were known by model developers to be operating housing and services in a manner that closely followed PHF, had received training in PHF, and had achieved high levels of residential stability for their consumers. Sites included the original PHF program and replications and Housing First programs being run by other agencies. Participating agencies were located in five different cities, and they varied in size; all served clients who were long-term homeless and had severe mental illness. All program staff members at each site, ranging from frontline workers to program directors, were invited to participate in the survey. Respondents did not receive any study incentives. Data was collected from all 99 staff members who agreed to participate in the study.

Procedures. Members of the research team visited each site to distribute the key ingredients survey, developed in Step 1, to staff members who completed them in a self-administered format in a group setting. No demographic or individually identifying information was collected other than the respondents' general position with the agency, how long they had been working in Housing First at the agency, and how long they had been working in the field of homelessness and mental health. As is common practice in validating key ingredients, staff were asked to rate the importance of each item to the operation of an ideal PHF program on a five-point Likert scale ranging from 1, not at all important, to 5, extremely important (Bond et al., 2000). Since no established rules currently exist for determining criteria for item inclusion (Bond et al.) in this study, items that were rated 4 (very important) or 5 (extremely important) by 60% or more of participants were included in the list of key

TABLE 1. Pathways Housing first key ingredients: Criteria for highest rating (phf-act*)

Key Ingredient: Criteria for Highest Rating	% Rating v/e Important**	Source***
I. HOUSING CHOICE & STRUCTURE		
1. Housing choice: Participants have much choice in location, decorating, furnishing, and other features of their housing.	83.5	New
2a. Housing availability (<i>Program with no specialized access to housing subsidies; intake to move-in</i>): 85% of program participants move into a unit of their choosing within 4 months of entering the program.	Added	New
b. Housing availability (<i>Programs with access to housing subsidies; Voucher/subsidy availability to move-in</i>): 85% of program participants move into a unit of their choosing within 6 weeks of having a housing subsidy or receiving a voucher.		
3. Permanent housing tenure: No expected time limits on housing tenure, although the lease agreement may need to be renewed periodically.	88.2	PCM
4. Affordable housing: Participants pay 30% or less of their income for housing costs.	85.9	PSH
5a. Integrated housing (<i>urban programs</i>): Participants live in private market housing where access is not determined by disability and less than 20% of the units in a building are leased by the program.	81.2	PSH (e,m)
b. Integrated housing (<i>rural programs</i>): 80% of participants live in bldgs. that satisfy the following criteria: 1-3 unit bldg = 1 partcprt; 4-6 unit bldg = 2 partcprts; 7-12 unit bldg = 3 partcprts.		
6. Privacy: Participants are not expected to share any living areas with other tenants.	Added	PSH (e,m)
II. SEPARATION OF HOUSING & SERVICES		
7. No housing readiness: Participants have access to housing with no requirements to demonstrate readiness, other than agreeing to meet with staff face-to-face once a week.	83.5	PSH
8. No program contingencies of tenancy: Participants can keep their housing with no requirements for continued tenancy, other than adhering to a standard lease and seeing staff for a face-to-face visit once a week.	72.9	PSH (m)
9. Standard tenant agreement: Participants have a written agreement (such as a lease or occupancy agreement) that specifies the rights and responsibilities of typical tenants in the community and contains no special provisions other than agreeing to meet with staff face-to-face once a week.	78.8	PSH (e,m)

(Continued)

TABLE 1. Continued

Key Ingredient: Criteria for Highest Rating	% Rating v/e Important**	Source***
10. Commitment to rehouse: Program offers participants who have lost their housing another unit and decisions to rehouse participants are (a) made on an individual case-by-case basis, (b) consumer-driven with a goal of minimizing requirements to demonstrate readiness, and (c) not informed by standardized limits on the number of possible relocations.	Added	New
11. Services continue through housing loss: Participants continue to receive program services even if they lose housing due to eviction or short-term inpatient treatment, although there may be a service hiatus during institutional stays.	91.8	New
12a. Off-site services: Social and clinical service providers are based off-site and do not maintain any offices on-site.	71.7, 95.3	PSH (m)
b. Mobile services: Program is extremely mobile & fully capable of providing services to locations of participants' choosing.		
III. SERVICE PHILOSOPHY		
13. Service choice: Participants have the right to choose, modify, or refuse services and supports at any time, except one face-to-face visit with staff per week.	83.5	PCM
14. No requirements for participation in psychiatric treatment: Participants with psychiatric disabilities are not required to take medication or participate in formal treatment activities.	62.4	PCM
15. No requirements for participation in substance use treatment: Participants with substance use disorders are not required to participate in substance use treatment.	82.4	PCM
16. Harm reduction approach: Participants are not required to abstain from alcohol and/or drugs, and staff work consistently with participants to reduce the negative consequences of use according to principles of harm reduction.	82.4	New
17. Motivational interviewing: Program staff are familiar with principles of motivational interviewing, which is used consistently in daily practice.	80.0	New
18. Assertive engagement: Program systematically uses a variety of individualized assertive engagement strategies and systematically identifies and evaluates the need for various types of strategies.	Added	T-MACT
19. Absence of coercion: Program does not use coercive activities such as leveraging housing or services to	Added	New

(Continued)

TABLE 1. Continued

Key Ingredient: Criteria for Highest Rating	% Rating v/e Important**	Source***
promote adherence to clinical provisions or having excessive intrusive surveillance with participants.		
20. Person-centered planning: Treatment/service planning FULLY meets ALL 3 services: (a) development of formative treatment plan ideas based on discussions driven by the participant's goals and preferences, (b) conducting regularly scheduled treatment planning meetings, (c) actual practices that reflect strengths and resources identified in the assessment.	Added	T-MACT (m)
21. Interventions target a broad range of life goals: Program systematically delivers interventions that target a range of life areas. (Range exists across the program and among participants.)	Added	T-MACT (m)
22. Participant self-determination & independence: Program is a strong advocate for participants' self-determination and independence in day-to-day activities.	Added	T-MACT (m)
IV. SERVICE ARRAY		
23. Housing support: Program offers both assistance with move-in and ongoing housing support services including assistance with neighborhood orientation, landlord/neighbor relations, budgeting, shopping, property management services, assistance with rent payment/subsidy assistance, utility setup, and cosigning of leases.	96.5	PCM
24. Psychiatric services: Psychiatric prescriber serves ALL 5 treatment functions: (a) typically provides at least monthly assessment of consumers' symptoms & response to medications, including side effects; (b) monitors all consumers' nonpsychiatric medical conditions and nonpsychiatric medications; (c) if consumers are hospitalized, communicates directly with consumers' inpatient psychiatric prescriber to ensure continuity of care; (d) provides medication education; & (e) conducts home/community visits.	91.8	T-MACT (m)
25. Integrated, stagewise substance use treatment: Program FULLY provides ALL 3 services: (a) systematic and integrated screening and assessment; interventions tailored to those in (b) early stages of change readiness (e.g., outreach, motivational interviewing, accompanying consumers to treatment/meetings) and (c) later stages of change readiness (e.g., CBT, relapse prevention).	89.4	T-MACT (m)

(Continued)

TABLE 1. Continued

Key Ingredient: Criteria for Highest Rating	% Rating v/e Important**	Source***
26. Supported employment services: Program FULLY provides all 4 listed services: (a) engagement; (b) vocational assessment; (c) rapid job search and placement based on participants' preferences (including going back to school, classes); & (d) job coaching & follow-along supports (including supports in academic settings).	88.2	T-MACT (m)
27. Nursing services: Program FULLY provides ALL 4 listed nursing services: (a) managing participants' medication, administering & documenting medication treatment; (b) screening consumers for medical problems/side effects; (c) communicating & coordinating services with other medical providers; (d) engaging in health promotion, prevention, & education activities (i.e., assess for risky behaviors & attempt behavior change).	92.9	T-MACT (m)
28. Social integration support services: Program FULLY provides all 3 services: (a) Facilitating access to and helping participants develop valued social roles & networks within and outside the program, (b) helping participants develop social competencies to negotiate social relationships, (c) enhancing citizenship and participation in social & political venues.	80.0	New
29. 24-hour coverage: Program responds 24-hr/day by phone directly & links participants to emergency services as needed.	85.9	DACTS (m)
30. Involved in inpatient treatment: Program FULLY provides ALL 5 listed services: (a) initiates admissions as necessary, (b) consults with inpatient staff regarding need for admissions, (c) consults with inpatient staff regarding participant's treatment, (d) consults with inpatient staff regarding discharge planning, and (e) is aware of participant's discharge from treatment.	94.1	DACTS (m)
V. PROGRAM STRUCTURE		
31. Priority enrollment for individuals with obstacles to housing stability: Program selects participants who fulfill criteria of multiple disabling conditions including (a) homelessness, (b) severe mental illness, and (c) substance use.	75.2	PSH (m)
32. Contact with participants: Program meets with 90% of participants at least 4 times a month face-to-face.	91.8	New
33. Low participant/staff ratio: 10 or fewer participants per 1 FTE staff.	90.6	DACTS

(Continued)

TABLE 1. Continued

Key Ingredient: Criteria for Highest Rating	% Rating v/e Important**	Source***
34. Team approach: 80% or more of participants have face-to-face contacts with at least 3 staff members in 4 weeks.	94.1	DACTS
35. Frequent meetings: Program meets at least 4 days per week.	95.3	DACTS
36. Daily meeting quality: Daily team meeting FULLY serves ALL 6 functions: (a) Conduct a brief, but clinically relevant review of all participants & contacts in the past 24 hr; (b) record the status of all participants. Program develops a daily staff schedule based on; (c) weekly consumer schedules; (d) emerging needs; (e) need for proactive contacts to prevent future crises & (f) staff are held accountable for follow-through.	Added	T-MACT
37. Peer specialist on staff: At least 1.0 FTE peer specialist per 100 participants who meets minimal qualifications and has full professional status on the team. No more than 2 peer specialists fill the 1.0 FTE.	Added	T-MACT
38. Participant representation in program: Program offers opportunities for participant input, including on committees, as peer advocates, and on governing bodies (3 modalities).	Added	New

Note. *Modifications for PHF-ICM model specified in text.

**% rating v/e important = % of providers surveyed rating item as very or extremely important.

***Source: Indicates whether item came from an existing scale or was newly developed; m = item was modified from existing scale;

e = item was based on an earlier draft version of the existing scale.

ingredients. Staff gave feedback on the survey after completion and suggested additional items for inclusion.

Phase 2: Developing and Field Testing a Fidelity Scale

A four-member expert panel—consisting of individuals with backgrounds in PHF, clinical services, and research—refined the wording of key ingredients, added new items when there was consensus for their inclusion, and developed operational criteria to measure them. For key ingredients that came from other established fidelity

scales, the expert panel used the same operational criteria as the original scales, or modified them to capture more aspects of actual service delivery versus structure/staff function. The expert panel initially developed the PHF scale to assess programs that utilize an ACT-like model of service delivery. In response to the Mental Health Commission of Canada's request to evaluate ICM programs as part of a demonstration project (described below), the panel adapted the scale for ICM.

Finally, the scale was pilot tested as part of two multisite research projects. The first was the At Home/Chez Soi Research Demonstration Project funded by the Mental Health Commission of Canada and described by Keller and colleagues (this issue). The At Home/Chez Soi project utilized random assignment to evaluate the effectiveness of Housing First and included intensive and ongoing training and technical assistance for programs in implementing PHF. Fidelity assessments consisted of a baseline and follow-up assessment of 13 programs. The second study was an evaluation of 20 programs sampled from California's Full Service Partnership (FSP) initiative, which provided housing and services to individuals experiencing homelessness, mental health, or substance abuse issues. Using a whatever-it-takes approach, the FSPs seek to provide comprehensive and integrated client-centered services supporting an array of recovery needs as well as "to establish safe, affordable, and permanent housing for each client." (CIMH, 2011, 102.) Most FSP programs did not explicitly follow Housing First, but their implementations had significant overlap with aspects of the HF model (Gilmer et al., 2013). Fidelity assessments consisted of one visit to each program. Because the scale was being pilot tested, multiple raters from various backgrounds of expertise (clinicians, researchers, administrators, peer support, and advocacy) were used to maximize the diversity of perspectives from which the program would be assessed. The At Home/Chez Soi project utilized four to six raters per visit, and the assessments were closely linked to the provision of technical assistance; the FSP project used three to five raters; it was conducted solely for research purposes. Fidelity assessments were conducted in full-day site visits that included staff meeting observations, interviews with staff and program directors, consumer focus groups, chart reviews, and reviews of other program documentation and materials (e.g., brochures, manuals, form letters). To assess the scale's reliability, Cronbach's alpha was calculated using

FSP study data to determine the scale's internal consistency.

RESULTS

Phase 1

Step 1: Specifying General Principles and Deriving a Pool of Key Ingredients

From literature reviews and interviews, the authors derived a set of general guiding principles for the program: (a) eliminating barriers to housing access and retention (i.e., no housing readiness), (b) creating a sense of home by separating housing and services, (c) facilitating community integration and minimizing stigma, (d) utilizing a harm reduction approach, and (e) adhering to consumer choice and providing individualized consumer-driven services that promote recovery. First, eliminating barriers to housing access and retention means that PHF programs should be inclusive for their target population, have minimal requirements for getting and keeping housing, and be able to provide housing rapidly. Achieving high retention rates also requires rehousing consumers experiencing difficulty in one apartment or neighborhood. Second, PHF structures housing so that it is conducive to fostering a sense of home: Thus, it should be permanent and private, and it should allow consumers to enjoy the same rights and responsibilities as other tenants. Third, PHF housing and services should facilitate community integration by using housing that is in regular buildings not identified as specialized program housing. This allows consumers to live and participate in community life in a manner that is indistinguishable from any other resident (Harding, 1987a, b). Fourth, PHF programs should practice harm reduction with respect to substance use, engaging consumers to minimize harmful consequences of their use and work toward changing use, but not enforcing abstinence or treatment mandates as a condition of housing or services. Finally, and perhaps most importantly, services should be responsive to consumer choice and be highly flexible, allowing each person to fashion his or her individual path to recovery. Using these general principles as a guide, the team derived a list of 38 potential ingredients, to be used in the key ingredient survey, that describe how to implement a program that is consistent with these principles.

Step 2: Initial Validation of Key Ingredients Through Expert Consensus

Ninety-nine Housing First program staff members completed the survey asking them to rate the list of potential ingredients (and distractors) in terms of importance to HF. Fourteen respondents rated three or more of the six distractor items as "very important" or "extremely important," and were thus excluded from data analysis due to their tendency to uniformly endorse all items. The remaining 85 respondents had been working at their Housing First programs for a median of 2 years, and had experience in the field of homelessness and mental health for a median of 6 years. The proportion of the sample that rated survey items 4 or higher ranged from 29.4% to 97.7%. Thirty-two of the original 38 survey items had been rated very important or higher by at least 60% of the sample, and were thus considered for inclusion on the final key ingredients list.

Phase 2

An expert panel made several changes to the list of potential ingredients based on their expertise as well as open feedback from the providers surveyed. Table 1 presents the final items incorporating survey results and panel feedback. Ten new items were added to represent dimensions not adequately covered. The additional items represent key ingredients for which there was informal consensus for their inclusion. Five of the new items, four of which were taken from the T-MACT, replaced the single item from the survey ("services provided by the program are recovery-oriented"), which was deemed overly broad. The modified T-MACT items and the additional item were judged better at operationalizing what recovery-oriented services specifically meant in practice, making potential ratings more feasible. Four other items were added in the housing choice/structure and program structure domains to account for ingredients that emerged as important during survey feedback and expert panel discussions. One survey item discussing use of evidence-based practices was also eliminated after being deemed overly broad, but was incorporated into individual items modified from the T-MACT that defined the delivery of specific services such as substance use treatment and employment. Two items were combined into one item consisting of two subratings ("a. off-site services and b. mobile services," location of services delivered based on participant preference), and one item was split into two

("substance use treatment not required;" "program uses harm reduction approach").

Finally, two items that had initially achieved the 60% importance rating threshold were excluded from the final survey. Because housing subsidies for independent apartments and other funding streams outside the program's control often significantly constrain household size and composition, the survey item indicating that participants can choose whether to have a roommate was removed. However, an item was added indicating that participants are not expected to share their living arrangements. The survey item, "Program staff are hired by, and responsible to, one agency (all team members are employed by the same agency)," was also removed because the panel was uncertain whether there was enough support beyond providers' ratings to warrant its inclusion as a prescriptive dimension at this time.

The final list of key ingredients consists of 38 items representing five domains of the PHF model. It consists of items taken verbatim or modified from draft and final versions of the Permanent Supportive Housing KIT (8 items), the DACTS (5 items), the T-MACT (10 items), and the Program Characteristics Measure (Williams et al., 2001), as well as 10 items developed by the expert panel. Table 1 reflects the criteria for each ingredient that results in the highest score for PHF programs utilizing an ACT-like model. For programs that use an ICM approach, several items are modified. Services in items 24–27 are not expected to be provided directly by the program; instead, the program is assessed on its ability to successfully broker the specified services (i.e., program has formal and informal links with outside providers; assesses and matches participant needs and preferences to appropriate providers; assists participants in locating, obtaining, and meeting providers; and conducts follow-up including communicating with and providing consultation for regularly external providers to coordinate care). Caseload ratios are also expected to be higher (15–20:1). Using all aspects of a team-based model was not included for ICM programs because most utilize individual caseloads; however, field testing revealed that many ICM programs would benefit from partially adopting a team approach wherein staff have familiarity with each other's caseloads and the flexibility to see each other's clients. For organizational meetings, ICM programs are assessed in terms of whether they meet at least weekly, and quality is determined by whether programs meet the following

criteria: conduct a brief but clinically relevant review of at least half the caseload; discuss participants with high priority emerging issues in depth to collectively identify potentially effective strategies and approaches; identify new resources within and outside the program for staff or participants; discuss program-related issues such as scheduling, policies, procedures, and so forth.

Results from field testing revealed that program ratings for almost all items spanned the rating spectrum from 1 or 1.5 (lowest fidelity) to 4 (highest fidelity), suggesting that the items are relevant and vary across programs. The exceptions were services continuing through housing loss (minimum = 3) and commitment to rehouse, service choice, interventions targeting a broad range of goals, social integration, housing support, low staff/client ratio, and 24-hr coverage (for which minimum for all = 2). Cronbach's alpha coefficients were computed for the scale based on fidelity ratings from the California FSP project data. The scale showed acceptable to good internal consistency for these four domains: housing choice and structure (.80), separation of housing and services (.83), service philosophy (.92), and service array (.71). The fifth domain of program structure was not conceptualized as a homogeneous construct that reflects HF, but rather as a set of diverse items that represent good operations across programs in general (e.g., low participant/staff ratio, frequent meetings, participant representation in the program). Both the ACT and ICM versions of the scale were able to differentiate between programs.

In terms of validity, as expected, programs that were part of the Canadian At Home/Chez Soi initiative, which by intentional design had explicitly followed the PHF model and received intensive technical assistance, had higher scores across several domains than programs that were part of the California FSP initiative and not based on the PHF model. The Canadian programs scored significantly higher on the domains of housing choice and structure, $t(29) = 7.88$, $p < .01$; separation of housing and services, $t(29) = 5.75$, $p < .01$; and service philosophy, $t(29) = 2.21$, $p < .05$; but not on the domains of service array or program structure. There was a tendency for ICM programs to score slightly lower in the domain of service array. This is most likely attributable to the fact that ICM programs must rely on external providers for many of their consumers' needs, so these ratings reflect not only how well the program can broker the services but also the general availability of the service in the community. Thus, if services in the community are

lacking, it will be difficult to connect consumers to services despite significant efforts. Overall, program staff found the fidelity assessment to be a valuable tool for receiving feedback regarding program strengths, challenges, and recommendations, and for tailoring technical assistance to specific program needs.

DISCUSSION

This study developed a fidelity scale to assess the degree to which programs are implementing the PHF model. It identified the general principles and key ingredients of the PHF model, validated the key ingredients among a sample of providers known to be practicing Housing First, utilized an expert panel to refine ingredients and finalize operational criteria by which to anchor ratings, and field tested the scale as part of two research projects. This discussion reviews how the fidelity scale items relate to the model's principles and values.

Housing Choice and Structure

Because choice is the foundation of PHF, programs must offer consumers a choice of neighborhood options, individual units, and a say in their living environment, given what they can reasonably afford. Beyond honoring choice, this arrangement fosters personal attachment and belonging in the home and community. In accordance with eliminating barriers to housing, programs must provide access to housing quickly, by having ready access to rent stipends, subsidies, or housing stock, all of which should translate into short waiting periods to move-in, setting the stage for consumers' increased engagement with services, as the program quickly makes good on its offer of housing. Offering housing that is permanent, affordable, not reserved solely for individuals with disabilities, and does not require shared living spaces can promote a sense of home (vs. the feel of a program), security, and privacy, and set the stage for community involvement.

Separation of Housing and Services

To consistently eliminate barriers to housing and practice harm reduction, PHF programs must not have any criteria for "housing

readiness" such as sobriety, medication compliance, completion of a period of treatment, or adherence to other clinical provisions, in order to receive or stay in housing. In practice, this means that clinical status should not be confounded with achieving housing tenure. Program participants should have the same rights and responsibilities of tenancy as all other persons who are governed by standard leases, and personal freedoms should not be restricted in ways that are not common among other neighborhood residents (e.g., curfews). In instances wherein consumers lose their housing, program services should continue uninterrupted with a long-term view of recovery, and the program should minimize housing instability by facilitating access to another unit. Although consumer choice might become more restricted with repeated housing losses, the program should avoid standardized limits on the number of possible units, but instead make rehousing decisions on a case-by-case basis that balances both consumer-driven services and the need to assure consumer well-being. To further facilitate a sense of home, services and housing should not be colocated. In accordance with consumer choice, programs must also have the capacity to deliver services to participants based on their preferences, whether in the community or in program offices.

Service Philosophy

This domain describes how services should be delivered. Consumers direct their receipt of services, and there are no requirements for participating in psychiatric or substance use treatment (e.g., taking psychiatric medication, participating in support groups), although these services are available. Programs operate with a framework oriented toward both mental health and substance abuse recovery, utilizing a harm reduction approach. Using motivational interviewing, a client-centered style of interaction that evokes and resolves ambivalence can help providers assist participants make positive changes (Miller & Rollnick, 2002).

Assertive engagement techniques are used to ensure that staff continue to try and engage consumers who have been reluctant to engage or who are avoiding program support. Simultaneously, however, programs must ensure that this engagement does not include coercive activities such as leveraging participants' housing or money to promote adherence or excessively intruding on participants' priv-

acy. Nevertheless, because enrollment in a PHF program does require some receipt of services (because for populations with extensive needs, providing only housing without appropriate support is often ineffective), programs are expected to have minimum required contact with participants (typically once a week). Such contact can serve as a check-in and it can be informal and unrelated to treatment, but it ensures participants' well-being and promotes engagement, and it can forestall housing and clinical crises.

Person-centered planning creates mechanisms to ensure that consumers' goals and preferences drive services and that practices reflect identified strengths and resources. These plans and services should target a broad range of life areas. Finally, programs should adjust service intensity depending on individuals' needs and preferences, while operating with an eye toward fostering greater self-determination and independence. Altogether, these items ensure that services remain individualized and that programs operate with a focus on recovery, harm reduction, elimination of barriers to housing access, and consumer choice.

Service Array

This domain represents which services PHF programs deliver, including housing support, psychiatric treatment, substance use treatment, supported employment, nursing, and services to assist with social integration. As noted, programs using an ACT (or ACT-like) approach are expected to deliver these services directly, while ICM teams generally link participants to other providers for many services. Programs should have the capacity to respond to crises 24 hr a day by phone and be involved in inpatient admissions and discharges. Together, these elements ensure that a program remains accessible, facilitates different facets of recovery, and provides adequate services to promote housing stability and respond to consumers' needs.

Program Structure

Priority enrollment of participants who encounter multiple obstacles to housing stability translates into the program's targeting consumers in great need of comprehensive services, thus minimizing the likelihood of the program's "creaming." Functioning as a team, holding frequent meetings that serve both clinical review and

scheduling functions, and having a low consumer-to-staff ratio helps ensure that all staff are familiar with the consumers, that consumers can access a wide spectrum of services from team members with different specialties, and that services remain individualized. Programs with multidisciplinary staff should also have at least one full-time staff member who is a peer, further demonstrating a commitment to a vision of recovery. Finally, opportunities for consumer representation at all levels, including on advisory committees and governing bodies, encourage consumer voice and oversight in program operations.

CONCLUSION

Most of the key ingredients included in the provider survey were rated high in importance by HF program staff, suggesting that the items chosen for inclusion have acceptable face and content validity and that there was consensus in specifying the key elements of PHF. Although selection for the study was limited to the pool of HF programs known to closely follow the original Pathways' model, with most primarily offering scatter-site housing and off-site services, the intent of the study was to develop a fidelity scale specific to the PHF model. Scale field testing yielded promising results in terms of its internal consistency, relevance, usefulness, and discriminant validity. Results suggest that the domains of housing choice and structure, separation of housing and services, and service philosophy be particularly important in distinguishing a PHF approach from other programs.

Even though the fidelity scale items are central to model implementation, programs operate in contexts in which organizational structures and local environments vary in culture, values, and resource availability, contributing beyond fidelity to a diversity of program and client outcomes. Forthcoming reports will explore the scale's predictive validity as well as factors that facilitate or hinder implementation. In conjunction with a program manual (Tsemberis, 2010) and other training materials, the fidelity scale can be used as a research tool, a guide for program development, and a means of technical assistance. Examining how these key ingredients relate to the model's success in making housing readily accessible to persons with severe mental illness and helping them maintain that housing long-term will contribute to a broader understanding of how to facilitate recovery.

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