Institute for Human Services

Housing First Program, Year 2 Evaluation

January 26, 2017

Anna S. Pruitt, MA
John P. Barile, PhD

Department of Psychology
University of Hawai‘i at Mānoa
2530 Dole Street
Sakamaki Hall, C404
Honolulu, HI 96822

This report presents the status of the Institute for Human Services (IHS) Housing First initiative evaluation for the City and County of Honolulu. This report includes background information on the evaluation approach, intended timeline, and preliminary findings. The procedures and findings in this document will likely change as new information and barriers are identified. As such, this document should only serve as a guide to the evaluation.

Table of Contents

I. Executive Summary		**p. 4**
II. Evaluation Overview		**p. 6**
Program Background	p. 7	
Evaluation Goals	p. 7	
Evaluation Timeline	p. 12	
III. Program Implementation		**p. 14**
Client Information/Demographics	p. 15	
Housing Placement	p. 19	
Program & Housing Retention	p. 27	
IV. Outcomes		**p. 29**
Findings from PhotoVOICE	p. 30	
Short-term Goals	p. 45	
Long-term Goals	p. 48	
V. Recommendations		**p. 54**
VI. Next Steps		**p. 55**
VII. Appendices		**p. 56**
Appendix A: Logic Model	p. 57	
Appendix B: Measurement Plan	p. 58	
Appendix C: Housing First Theory of Change	p. 62	
Appendix D: Housing First Fidelity	p. 63	
Appendix E: Housing First Analytical Plan	p. 65	
Appendix F: Interview Instrument, Staff	p. 69	
Appendix G: Interview Instrument, Client	p. 71	
Appendix H: Suitability Analysis Methods	p. 73	
Appendix I: 2016 Fidelity Assessment	p. 74	

I. Housing First Program Year 2 Evaluation

Executive Summary

Housing First Year 2 Executive Summary

Client Empowerment

- The program devoted time and resources to promoting client empowerment and autonomy.
- Clients, particularly members of the HF Community Group (CG), demonstrated continued progress toward self-defined goals that included sobriety, job attainment, reuniting with family, and medical and mental health treatment.
- The CG was an essential program component for many clients, increasing case manager-client interactions and fostering a sense of community among clients.

Client Retention

- Housing First has continued to demonstrate high program retention, retaining 94% of clients in 2015 and 87% in 2016, with an overall housing retention rate of 89% since 2014.
- Geographical analysis demonstrated that this high retention might be due to housing specialists working to place clients in appropriate housing that is close to transit and social services and in areas that are highly desirable to clients.

Client Well-being

- Clients continued to report improvements in their physical, mental and social well-being.
- Specifically, clients reported a 38% improvement in hope for the future, a 96% increase in connections to a community group, and 21% improvement in general health.
- Clients reported notable decreases in alcohol use (80% report never or almost never drinking) and drug use (92% report never or almost never using a drug) after one year in housing.

Societal Impact

- An analysis of HF clients' criminal histories revealed that clients experienced a 55% decrease in number of arrests after one year in housing and a 61% decrease in arrests after two years in housing.
- This decrease in arrests is even more dramatic when compared to a comparison group that had similar incarceration and housing histories. Over this same period of time, the comparison group's average number of arrests remained the same, while HF clients' arrest numbers decreased. Additionally, the comparison group's number of days incarcerated increased substantially, while HF clients' number of days incarcerated decreased by 52%.
- Finally, over the course of one year in housing, Housing First clients reported utilizing emergency room services 64% less and being admitted to a hospital 74% less frequently than before housing.

Housing First has had substantial impact at multiple levels, benefitting individuals, communities, and institutions. This evaluation suggests that success is likely due to the coordination between housing specialists, case managers, and landlords, the placement of clients in suitable locations, the staff's dedication to helping clients achieve their self-determined goals, and the increase in clients' self-efficacy to meet these goals. We recommend that the program continue to provide supportive services to clients.

II. Evaluation Overview

Program Background

Housing First (HF) is a community intervention that offers permanent, affordable housing as quickly as possible for individuals and families experiencing homelessness (United States Interagency Council on Homelessness, 2013). HF services are unique because they do not require individuals to demonstrate that they are "housing ready" before placement. Instead, HF services to place individuals experiencing homelessness into housing as soon as possible, regardless of current substance use, symptoms of mental illness, or employment status. Additionally, to support individuals being placed rapidly into housing, support services are provided in the form of intensive case management in order to help facilitate the housing process and address physical and mental health needs. HF has received acclaim nationwide as a promising intervention that helps individuals with serious mental illness and/or histories of substance use gain stability (Padgett, Stanhope, Henwood, & Stefancic, 2011; Pearson, Montgomery, & Locke, 2009; Tsemberis, Gulcur, & Nakae, 2004).

In August 2014, the City and County of Honolulu responded to Oahu's homelessness problem by releasing a request for proposals for programs modeled after HF. The Institute for Human Services (IHS) submitted a proposal and received funding for December 2014 through November 2015 with the possibility of funding renewal for an additional year. The initial funding contract included a budget item for a program evaluation to examine the program outcomes and fidelity to the HF model. After the first year report showed that the program demonstrated high fidelity to the model, employed necessary and culturally-specific adaptations, and maintained a high housing retention, the contract was renewed for another year (Smith & Barile, 2015). In July 2016, funding was extended through December 2018. This report is the second installment of this ongoing evaluation and examines the first 2 years of the program, highlighting the second year, in particular.

Evaluation Goals

This evaluation report will focus on the implementation of the HF initiative in the City and County of Honolulu between December 1st, 2014 and December 1st, 2016 and will briefly outline the evaluation methods used. In particular, the evaluation strives to:

- Understand aspects of HF process and implementation;
- Assess adherence to HF fidelity and extent of necessary program modifications;
- Detect outcomes and impacts; and
- Examine achievement of goals and objectives.

This report outlines progress achieved thus far and explains the evaluation plan in more detail.

Process and Implementation

In an effort to document the intended program process, the evaluation team, in collaboration with IHS, developed a logic model that details program activities (e.g., identification of vulnerable people, case management services, etc.) and expected outputs (e.g., number of people identified, number of people housed, types of services received, etc.). Additionally, the logic model lists anticipated short-term goals, long-term goals, and overall program impacts and delineates the process that leads to the attainment of these goals and objectives. These outcomes are predicated on a "Theory of Change" model that the evaluation team developed based on extant literature. The HF Theory of Change can be found in **Figure 1** on page 10 and in **Appendix C**. The overall program **Logic Model** can be found in **Appendix A**.

Program Fidelity

Fidelity refers to the degree to which a program is implemented as intended (Dusenbury et al., 2003). Sometimes programs must be adapted to better fit the communities in which they are implemented. However, it is important to measure fidelity by tracking what components are changed, how they are changed, and why as well as by documented what components are implemented as intended. Such tracking helps assess which program components can be changed while still achieving program effects. The HF model hinges on four essential principles: 1) Homelessness is first and foremost a housing problem; 2) Housing is a right to which all people are entitled; 3) People who are homeless or on the verge of homelessness should be returned to or stabilized in permanent housing as quickly as possible and connected to resources necessary to sustain that housing; and 4) Issues that may have contributed to a household's homelessness are best addressed once the family/individual is housed (The National Alliance to End Homelessness, p. 1, 2009).

These principles guide the **HF Fidelity Criteria Index** (Watson et al., 2013) detailed in **Appendix D.** These criteria are organized into five dimensions:

1. Human resources structure/composition (e.g., having a culturally diverse, appropriately educated staff knowledgeable in harm reduction);
2. Program boundaries (e.g., serves the chronically homeless and drug users);
3. Flexible policies (e.g., drug/alcohol use, relocation if client does not like housing);
4. Nature of social services (e.g., clients are not required to participate in services, small caseloads for case managers, case managers meet with clients 2-3 times a month); and
5. Nature of housing (e.g., scattered-site housing, fast placement upon intake, clients are the leaseholders).

In order to be considered a HF model, programs should contain most of the components outlined in the HF Fidelity Index. This evaluation will document the extent to which the program adheres to the fidelity criteria as well as makes the necessary adaptations to ensure program-community fit. The Year 1 program fidelity assessment can be found in **Appendix I**.

Outcomes and Impacts

The overall outcomes and impacts of this HF model are multi-level. A the societal level, outcomes include decreasing the total number of homeless individuals and families on O‘ahu and decreasing the financial burden on the healthcare system, housing service providers, and the legal system. At the individual level, outcomes will include increased physical and mental health, social and community connections, and access to services. Outcomes will also include a decrease in stress and substance abuse, an increase in life satisfaction and employment rates, and a decrease in hospital and jail stays.

For more information on how the evaluation team will measure outcomes and impacts, please see the **Measurement Plan** found in **Appendix B.**

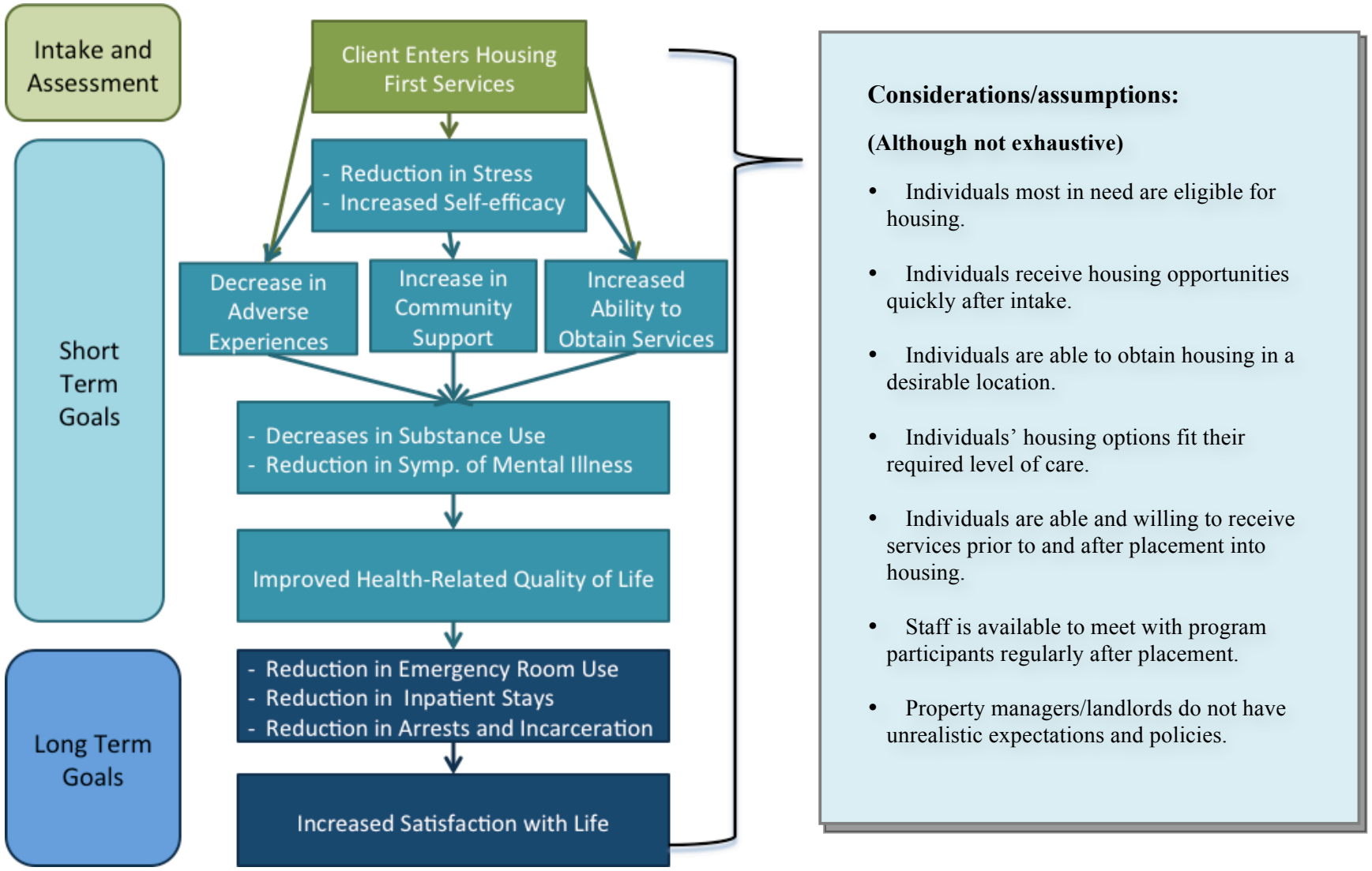
Specific Goals and Objectives

These outcomes can be seen as short-term or long-term goals. Short-term goals are focused on physical aspects of clients’ daily lives. Short-term goals include decreasing the occurrence of substance use, decreasing the perception and feelings of stress, increasing mental and physical health, increasing social and community connections, and providing increased access to healthcare and other services. Long-term goals focus on stability and include overall satisfaction and enjoyment in life, decreased time spent in hospitals and jail, and increasing rates of employment.

For more information on how the evaluation team will measure achievement of goals and objectives, please see the **Measurement Plan**, found in **Appendix B**

The anticipated progression of program short-term and long-term goals as well as multi-level outcomes is outlined in Figure 1 Theory of Change on the following page.

Figure 1. Housing First Theory of Change



Methods

The following research questions – as stated in the Logic Model (**Appendix A**) – address four main areas of concern: HF attainment of goals (Q1-2), potential factors that may affect the attainment of desired outcomes (Q3), comparison of HF to clients receiving other housing services (Q4), and fidelity to national HF program model (Q5):

1. Is HF participation associated with attaining short-term (ST) goals (e.g., decreased substance use, increased access to healthcare and services, etc.)?
2. Is HF participation associated with attaining long-term (LT) goals (e.g., decreased hospital and jail stays, increased employment, and increased life satisfaction)?
3. Does place of residence and length of time to placement affect attainment of ST and LT goals?
4. Is participation in HF associated with better attainment of LT and ST goals than participation in other programs?
5. To what extent does IHS-HF adhere to HF model?

This plan is meant to remain flexible in order to adapt to changing needs of the program and its clients. Thus, we added PhotoVOICE and geographic information systems (GIS) methodologies to our evaluation plan.

PhotoVOICE
In March 2016, the evaluation team, the program staff, and HF clients collaborated to conduct a PhotoVOICE project in order to more accurately capture clients' experiences with the program and to give clients a formal avenue to communicate concerns to the program. More information on this methodology can be found on page 30.

GIS Mapping
In August 2016, the evaluation team began conducting geographic information systems (GIS) mapping to assess some of the assumptions of the Theory of Change model. For example, we explored the likelihood that clients will stay housed and will participate in services once they are housed by using GIS data from the Honolulu Land and Information Systems (HoLIS), HF records, and survey data to determine neighborhood suitability. Suitability was based on neighborhood desirability to clients, proximity to transportation, and proximity to social services. This analysis allowed us to compare current client residence sites with the most suitable neighborhoods and to predict likelihood that clients will stay housed and participate in services once housed. Please see **Appendix H** for in-depth explanation of analysis.

Appendix E lists the research methods and measurement tools that will be used to answer the proposed research questions. Additionally, Appendix E explains the analytical plan in more detail.

Evaluation Timeline

November 2014 – April 2015: Developed assessment tools and protocols
Obtained Secondary Data (HMIS, VI-SPDAT)
Initiated Surveying of Program Clients (HFAT)

May-June 2015: Established and continued wide-spread surveying of each program participant
Tracked time between initial assessments for program eligibility, identification of available housing, and placement into housing

July – August 2015: Continued surveying of program clients
Continued to track participant progression to housing
Began qualitative interviews for potentially three short case studies of program participants

September-October 2015: Continued surveying of program clients
Continued to track participant progression to housing
Conducted fidelity assessments
Began staff interviews

November-December 2015: Analyzed and reported Year-1 evaluation findings

2016

January-February 2016: Continued surveying of program clients

March-May 2016: Continued surveying of program clients
Conducted PhotoVOICE project and began collaborative analysis of data
Worked with PhotoVOICE group to write section of quarterly progress report

June-July 2016: Continued surveying of program clients
Planned and setup PhotoVOICE exhibit with program staff and clients

August-October 2016: Continued surveying of program clients
Collected data for GIS analysis
Conducted background checks on clients and control group
Attempted case manager/staff interviews
Disseminated findings to researchers and practitioners at 2 conferences

November-December 2016: Continued surveying of program clients
Conducted GIS analysis
Collected field notes for ethnographic study of HF Community Group
Began collecting data for case studies of client subgroups
Analyzed and reported Year-2 evaluation findings

2017 – Future Directions

We will continue to attempt to obtain access to client medical records and Medicaid data and to survey clients monthly.

January-March 2017: Co-author an article with PhotoVOICE group to disseminate findings to academic community
Continue efforts with program to disseminate findings to a wider audience
Identify landlords to interview about their program experience.
Interview Housing Specialists

May-August 2017: Interview case managers on the Leeward Coast
Begin landlord interviews
Begin interviews of client subgroups
Continue Community Group observations
Present progress report

September-December 2017: Continue interviews with clients and landlords
Continue Community Group observations
Conduct background checks on clients and control group
Analyze and report Year-3 findings

III. Program Implementation

Client Information

Years 1 & 2 Client Demographics (2014-2016)

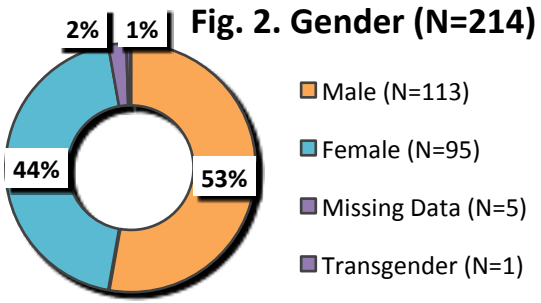
Since December 1, 2014, the HF program has funded housing for a total of 224 clients, resulting in 145 total households. For ten (10) of these clients (10 households), Housing First (HF) funded housing, but Pathways provided services.

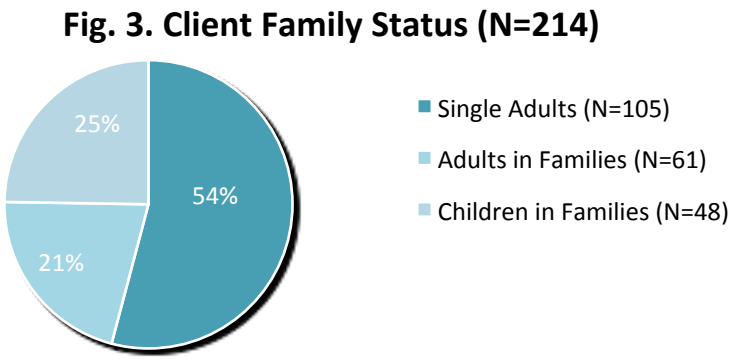
Therefore, **214 clients, comprising 135 households**, have been housed by and received HF services through IHS since December 1, 2014. These clients will be the primary focus of this report.

Total Clients Who Have Received IHS HF Services
Years 1 & 2

214
Clients

135
Households



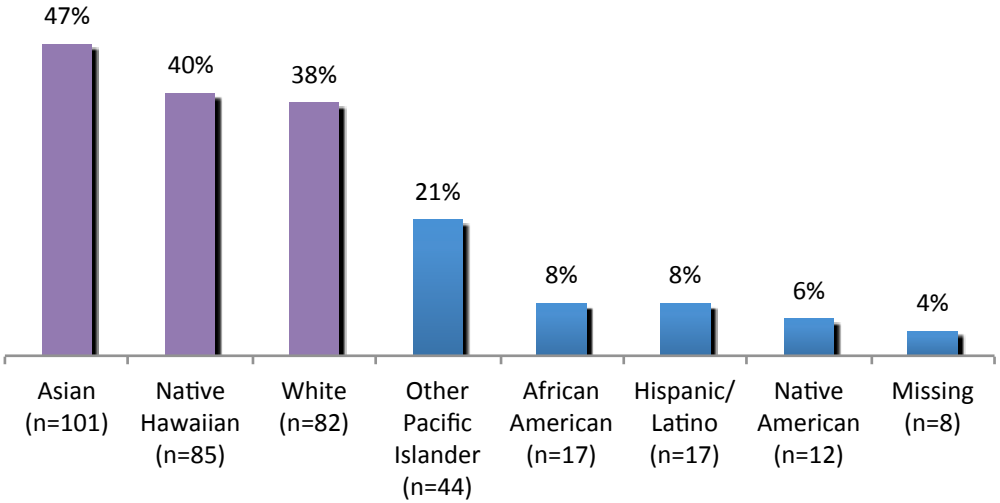


- The majority of clients have been male (53%)
- Client median age at intake: 45 years old*
- Average Household VI-SPDAT score: 11.75**

- The 135 households were comprised of 105 singles & 30 families
- The 30 families included 61 adults and 48 children.
- The majority of housed clients were adult singles (54%).

*N=187; Missing intake data on 29 clients
** N=126; scores for adult "head of household" only; Missing VISPDAT data for 9 clients.

Fig. 4. Client Racial Percentages, 2014-2016 (N=214)



The majority of clients are

- Asian (47%)
- Native Hawaiian (40%)
- White (38%)

Year-2 Client Demographics (2015-2016)

Of the 214 total clients, 50 clients - 30 households – were housed in year 2.

50 Clients

- Racial percentages were similar to the overall client racial percentages. (56% Asian, 48% Native Hawaiian & 40% White).
- Of the 50 clients, 26 were female, and 24 were males.

30 Households

- 18 households were comprised of single adults.
- 12 family households were comprised of 24 adults & 8 children.

Current HF Clients

Of the 224 clients total clients admitted since 2014, 37 have exited.

Thus, 187 clients are housed currently.

10 of the 187 clients are Pathways clients, therefore:

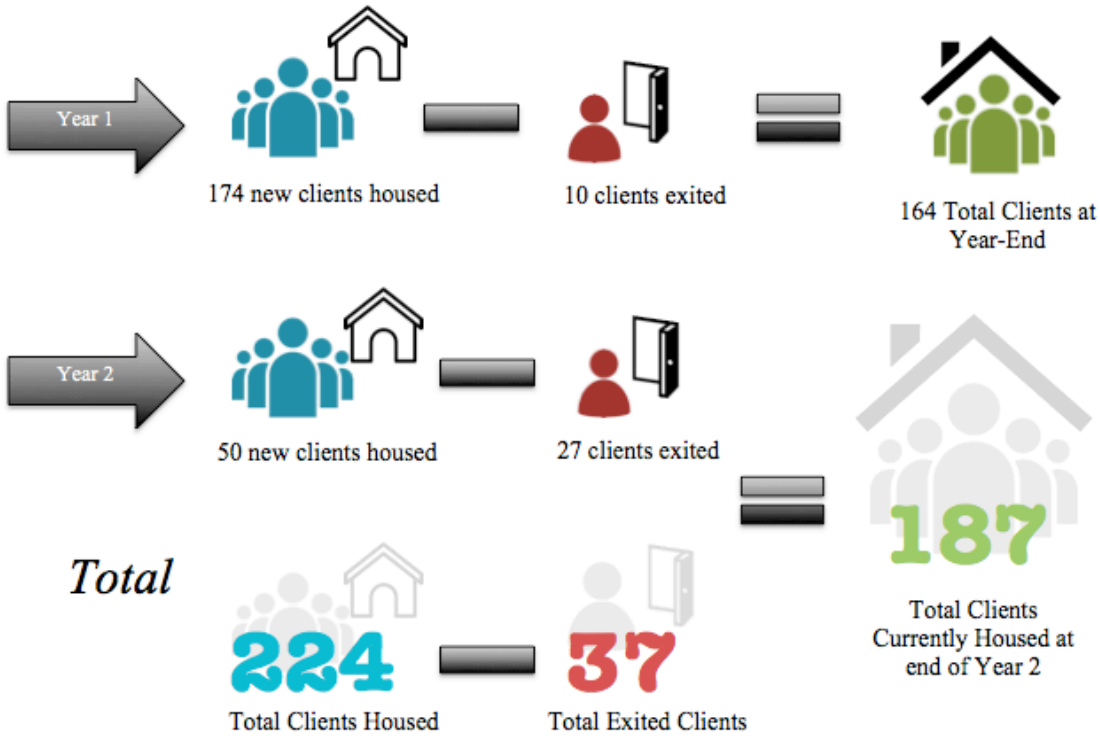


Fig. 5. Program Intakes and Exits, Years 1 & 2

177 Clients are currently housed and receiving Housing First services from IHS. * *These clients will be the focus of the remainder of this section.*

* As of January 26, 2017.

Current HF Clients continued…

Fig. 6. Current Individual Clients

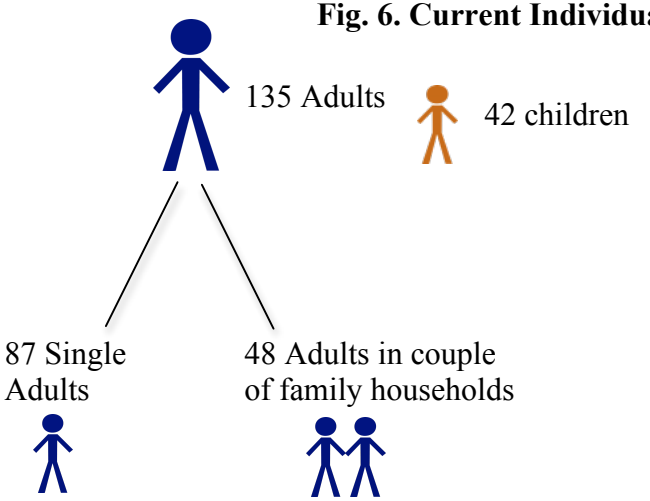
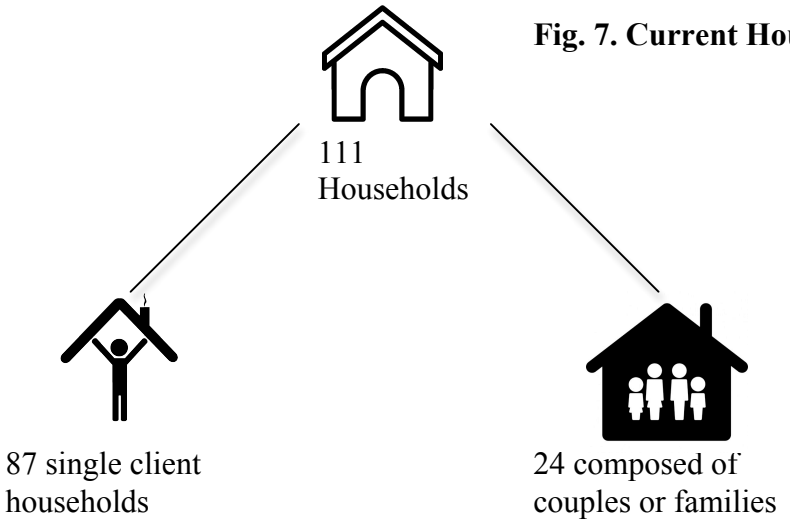


Fig. 7. Current Households



Median Age:

48

Fig. 6. Current Clients' Gender (n-177)

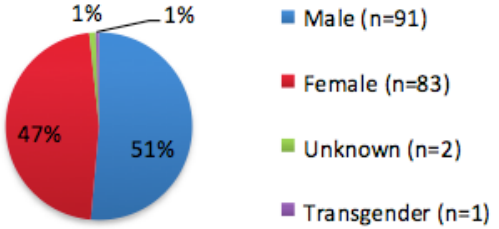
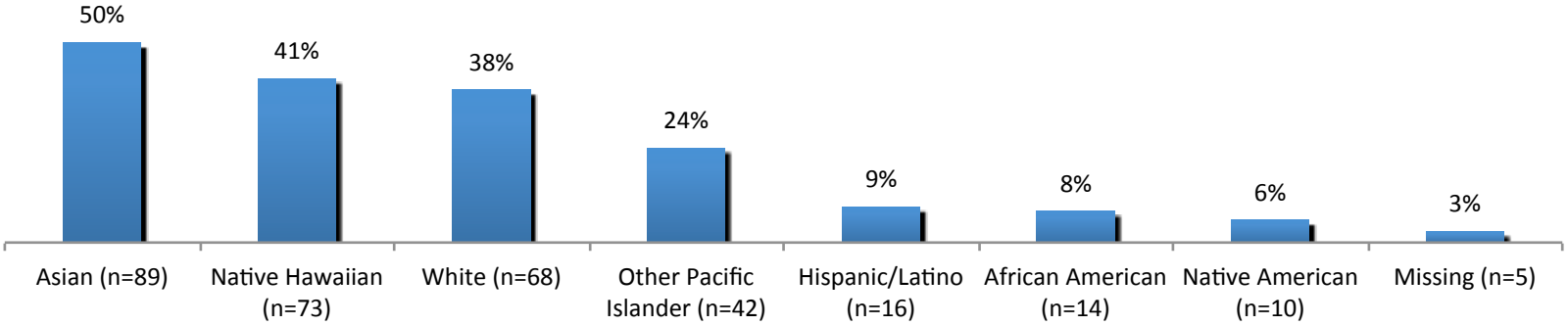
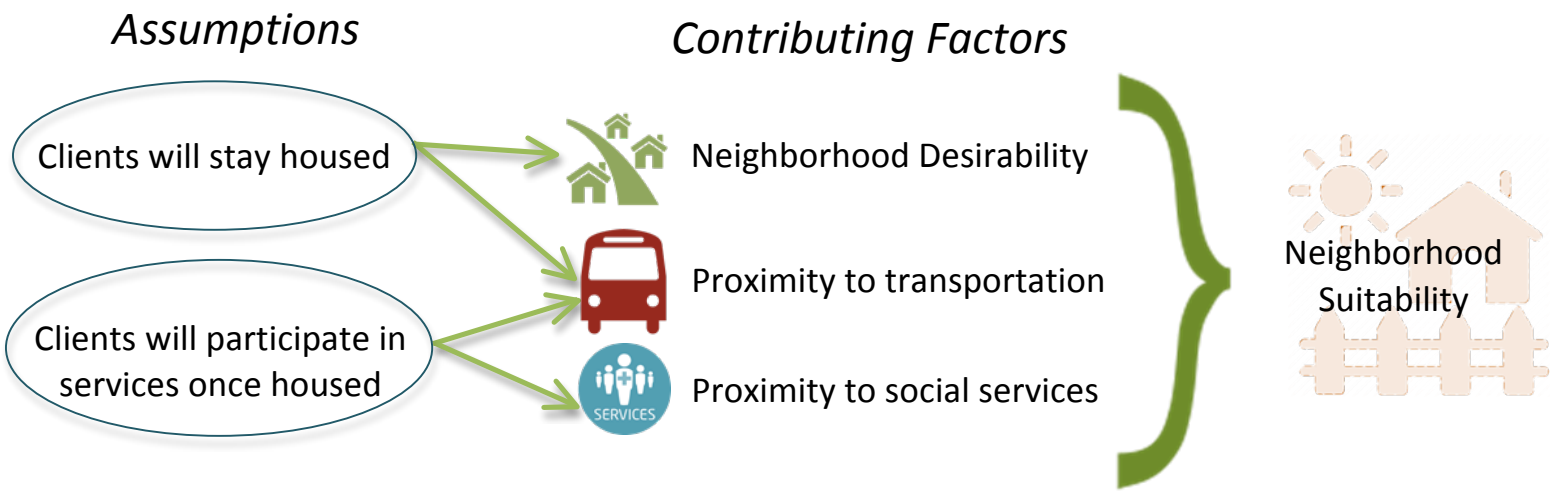


Fig. 9. Racial Percentages (n=177)



Housing Sustainability

The proposed theory of change predicts that once housed, clients will experience decreased stress, increased self-esteem, and increased access to social services, which will lead to improved mental and physical health and ultimately, increased satisfaction with life (Smith & Barile, 2015). However, this trajectory depends on two assumptions: that clients choose to 1) stay housed and 2) actually utilize social services once they are housed. We theorize that clients will be more likely to stay housed if they are satisfied with their neighborhood and if they have easy access to transportation. Given the fact that most HF clients are over the age of 55 and have serious physical and mental illnesses, we also hypothesize that clients will be more willing to participate in social services if those services and/or transportation are easily accessible. Therefore, factors like proximity to transportation and proximity to social services and the degree to which housing choice is achieved can be used to predict neighborhood suitability. The overall neighborhood suitability score will impact whether or not individuals remain housed and participate in social services. Thus, these elements have implications for overall program success (Smith & Barile, 2015; Tsemberis, Gulcur, & Nakae, 2004).



The following analyses used geographic information systems (GIS) mapping to determine neighborhood suitability for Housing First clients based on neighborhood desirability to clients, proximity to transportation, and proximity to social services. These analyses allowed us to compare current client residence sites with the most suitable neighborhoods. **Findings suggest that Housing First clients live in highly suitable areas; further suggesting increased likelihood of client success in the program.** These findings are discussed in detail below.

Neighborhood Desirability

Data show that the majority of clients live in neighborhoods that are desirable. Desirability was calculated based on survey responses to the question: "Given the choice, in which neighborhood would you like to live?" These surveyed clients (n=75) were individuals vetted for the HF program, the majority of whom had already been recently placed in housing (68%). Clients' addresses (n=94)* were obtained from the program's housing specialists.

The majority of respondents preferred

- Makiki/Lower Punchbowl/Tantalus (12%)
- Waikiki (9%)
- Downtown (7%)
- Ala Moana/Kakaʻako (6%)

The majority of the 95 HF households were located in

- Waikiki (22%),
- McCully-Moiliʻili (21%).
- Makiki (15%), and
- Waianae Coast (6%)

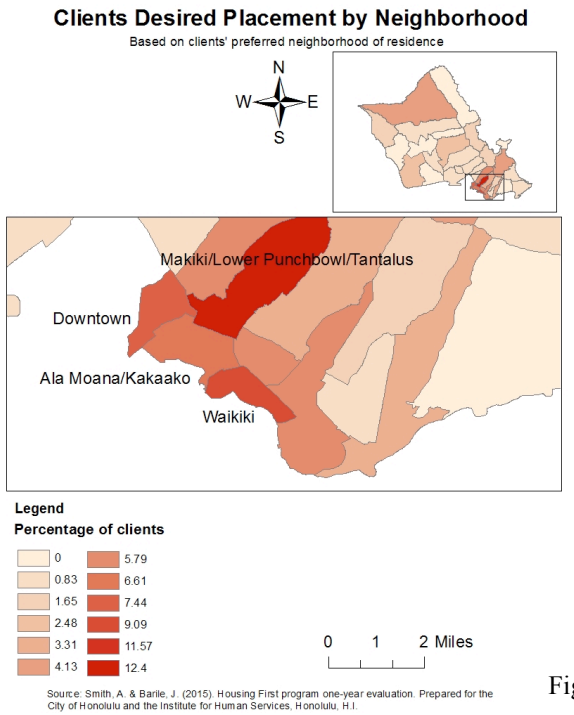


Fig. 10

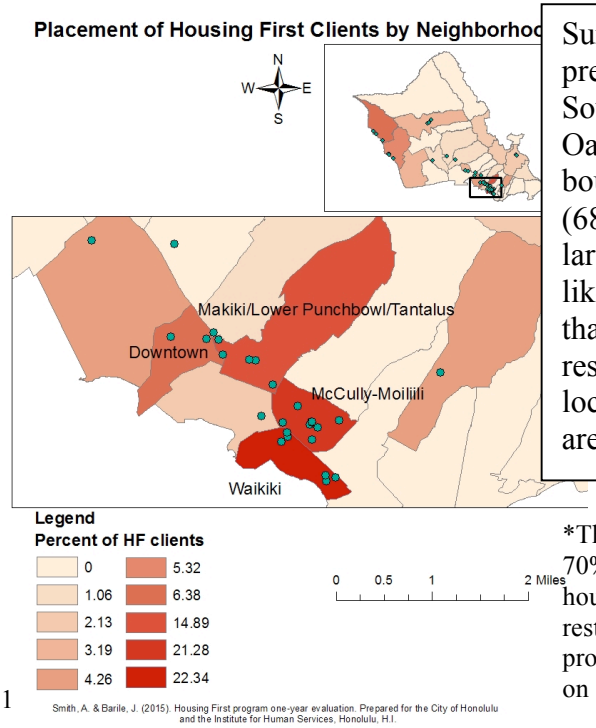


Fig. 11

Surveyed respondents preferred to live in the South Shore region of Oahu within the boundaries of Honolulu (68%). However, this large percentage is likely due to the fact that most survey respondents were located in the Honolulu area (73%).

*These addresses include 70% of the total households (n=135) and are restricted to addresses provided by the program on September 12, 2016.

Access to Medical and Social Services

To determine proximity to social and medical services, we first had to identify social and medical services and their locations on Oahu. We triangulated data from a Google search for social services, nonprofits, and medical facilities with a list of Oahu nonprofits available at the United Way. Then, we coded each site based on the type of services provided. Because of the vast amount of services and medical facilities, we only mapped the most commonly used services as identified by clients in response to the survey question: "In the last month, which of the following services have you used?"

We created a layer with a 0.25-mile buffer around the geocoded addresses of social and medical services most frequently used by clients. The 0.25-mile buffer was chosen based on the extreme physical vulnerability of many of the clients and the fact that very few clients own cars. Below is a map showing the buffer layer overlayed with the geocoded client addresses.

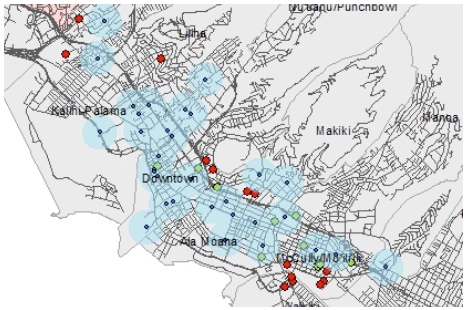


Fig. 12. Housing First Sites Proximity to Social/Medical Services, Honolulu

Social & Medical Services Usage

64% of clients used medical services

53% of clients used food pantries

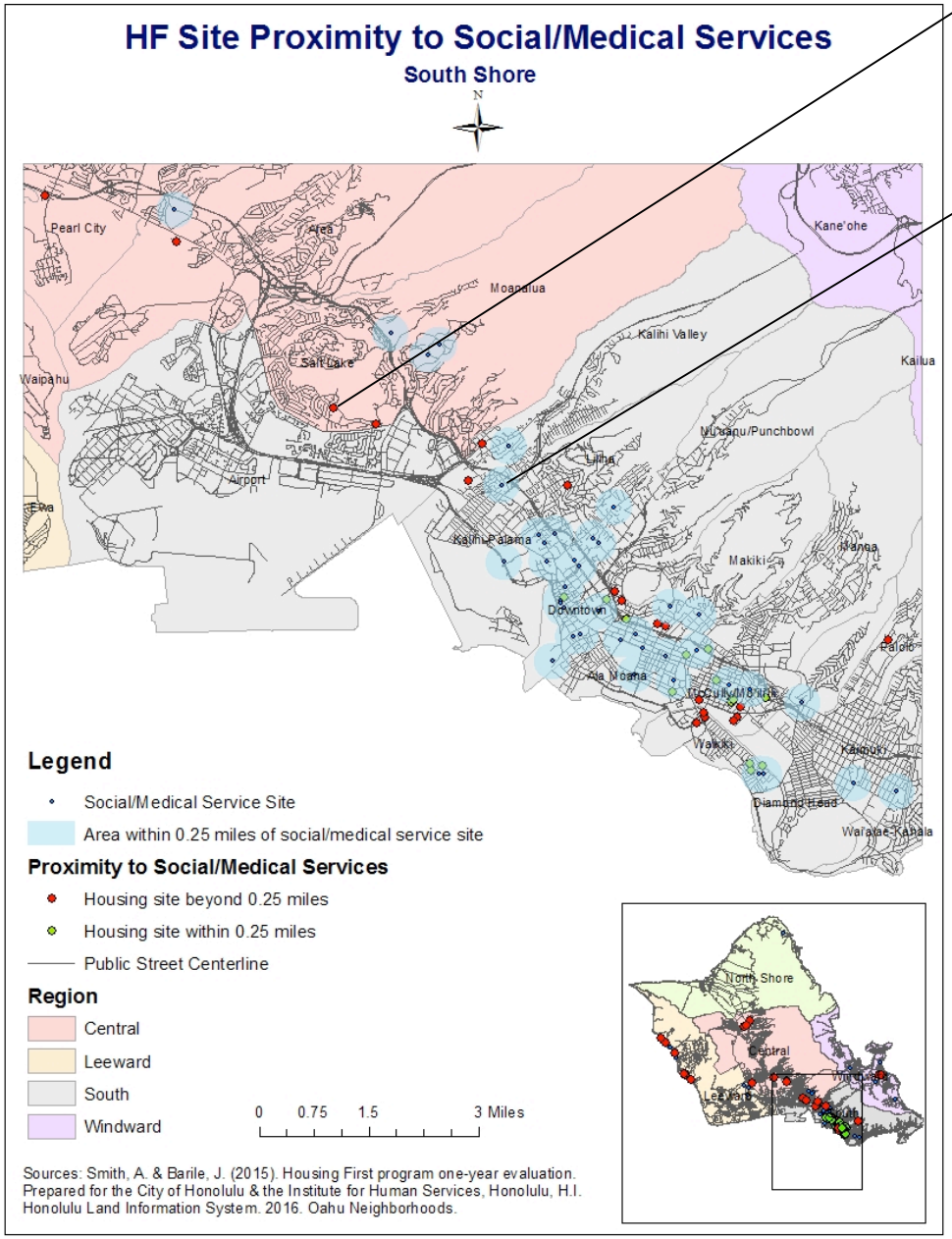
52% of clients used mental health services

35% of clients used clothes closets or thrift stores*

25% still need this service.

**Although other services were used more than clothing/thrift stores, we included this service because it was the service most frequently listed as one that clients still needed (25% still needed). It was also used by a good portion of the clients (35%).*

We recommend that the program continue to assess services used and needed as needs will likely change over time and has clients progress through the program.



36% beyond .25-mile buffer

64% within the .25-mile buffer

- The majority of the 94 HF residences are within 0.25 miles of social and medical services (64%).
- Most of the social and medical services on Oahu are concentrated in the South Shore region, with the highest concentration in the downtown area.
- Other neighborhoods with social/medical services within a reasonable proximity to HF clients include: Ala Moana/Kaka'ako, Makiki, and McCully-Moili'ili.

Fig. 13

Access to Public Transportation

In order to determine proximity to public transportation, we used data from the Honolulu Land and Information System (HoLIS). We created a layer with a 0.25-mile buffer around bus stops, and overlayed the buffer layer with the geocoded client addresses.

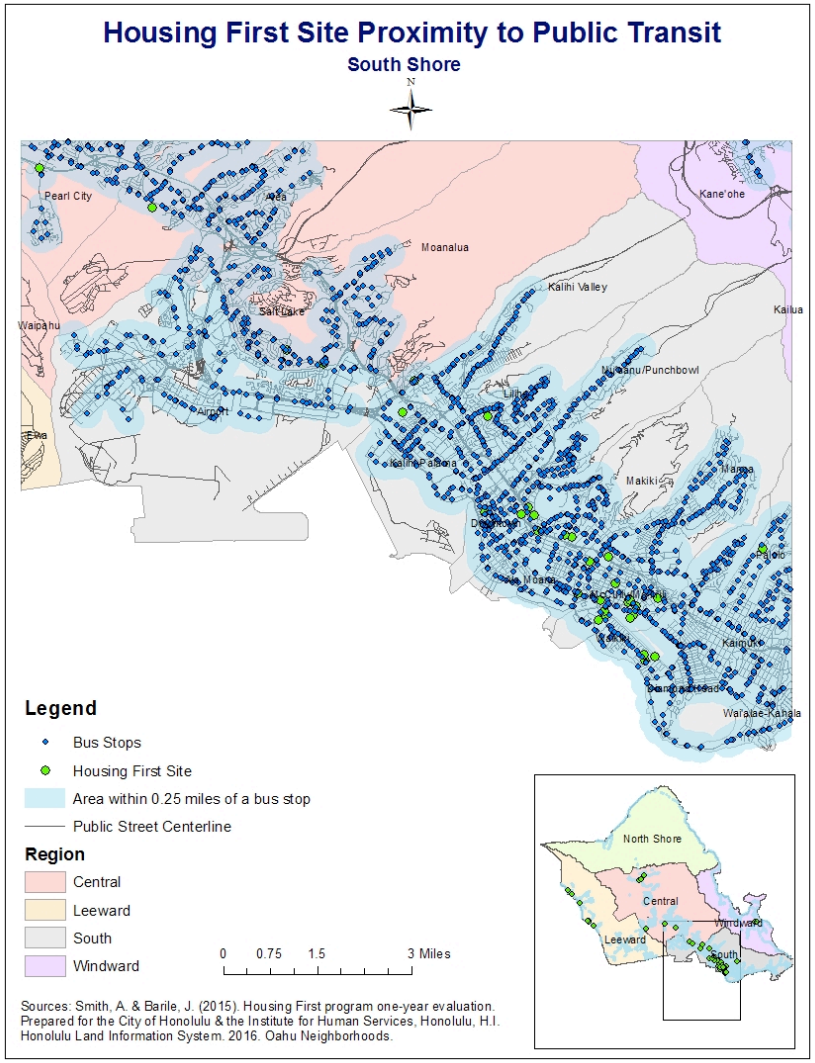


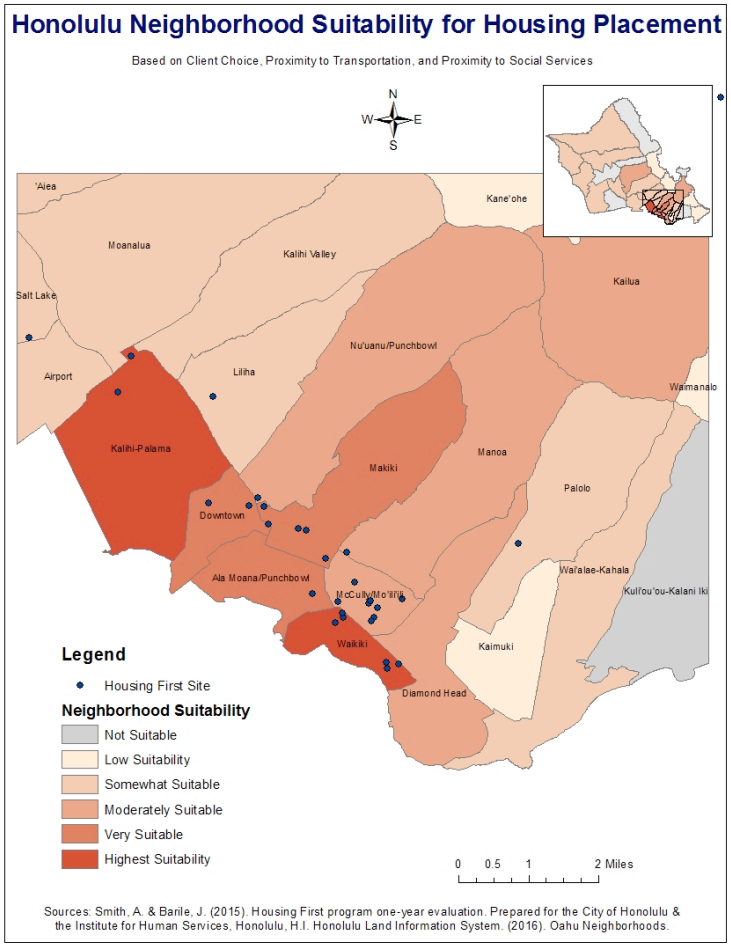
Fig. 14

- All of the 94 HF residences in all five regions of Oahu are located within 0.25 miles of a bus stop.
- The largest network of bus stops on Oahu begins roughly in the center of the South Shore region and extends northwest into the southern area of Central Oahu. On the South Shore, all HF sites are within a 0.25 radius of a bus stop and within a high concentration of bus stops, giving clients in this area greater accessibility to transportation and more options of bus routes/bus stops.
- The exception includes two residences situated in Central Oahu (top left corner of map). These residences are located below the aggregation of bus stops and do not have as many bus stops to the south of their location.

This analysis does not include proximity to a high concentration of bus routes. Therefore, some residences may be located close to a bus stop, but that bus stop could only have one route that may not be useful for some clients.

Neighborhood Suitability

We conducted a suitability analysis using a pairwise comparison of the three factors of neighborhood suitability: client desirability, proximity to social/medical services, and proximity to transportation. We assigned weights to each factor based on its perceived importance, with proximity to bus stops being the most important, followed by proximity to social services and then, client desirability. (See **Appendix H** for further explanation of rationale and analysis).



- Most of the island's 35 neighborhoods are at least "somewhat suitable"; only six are "not suitable."
- None of the 94 residences are located in any "not suitable" neighborhoods.
- Many neighborhoods included within the South Shore region have the highest level of suitability, are "very suitable," or are "moderately suitable."*
- Waikiki, Kalihi/Palama, Makiki, and Downton are the neighborhoods with the highest levels of suitability.
- Most HF residences are located in neighborhoods that are highly suitable, suggesting that these clients are well-positioned to be successful in the program.

Fig. 15

*Results favoring the South Shore are likely due to the fact that the program recruited more clients from the Honolulu area than from the Leeward Coast and other areas of the state. Additionally, most survey respondents were from the Honolulu area (68%), and these respondents are familiar with and still have social support networks in those areas.

Neighborhood Suitability Conclusions

Results indicate that the HF program has been effective at placing clients in neighborhoods where they actually want to live, suggesting that the program is considering client choice in housing location.

- Most clients preferred to live on the South Shore, and indeed, the majority of residences are located in South Shore neighborhoods. While the most desirable neighborhood to live in is Makiki, most HF residences are situated in Waikiki, which is an adjacent neighborhood and also has the highest level of suitability according to our analysis. Nevertheless, Makiki is still "very suitable" and borders other neighborhoods that are very suitable (Downtown & Ala Moana/Punchbowl).

Because most HF residences are located in neighborhoods with high desirability, we can predict that these HF clients will be more likely to remain housed.

The results also imply that the HF program encourages client participation in social services by placing them in areas that are close to social services, medical services, and public transportation.

- Moving forward, the program might consider providing extra support to those clients who live in housing sites outside the quarter mile buffer zone for social/medical services - particularly, those clients residing in sites near the airport and in the valleys far from transit stations.

- As new clients cycle in and old clients transition out of the program, the program staff might consider placing the highly vulnerable clients in sites within the social services buffer and within areas with highest concentrations of bus stops.

Our findings suggest that these clients will participate in social services once they are housed.

Areas with high client desirability also have high suitability. The neighborhoods most desired by clients include Makiki, Waikiki, Downtown, and Ala Moana. They all were assessed as "very suitable" except Waikiki, which was assessed as having the "highest suitability."

- Because housing options are extremely limited, our assessment may be useful in finding housing for future clients. It suggests that clients might also be successful in neighborhoods that have been assessed as either "very suitable" or "moderately suitable." These neighborhoods include: Mānoa, Makiki, Downtown, and Ala Moana/Punchbowl.

Most HF residences are located in neighborhoods that are highly suitable, suggesting that these clients are well-positioned to be successful in the program.

These highly desirable and suitable neighborhoods are also the neighborhoods with the highest concentrations of clients living in them. Moili'ili, which has the second highest percentage of clients, was the fifth most desired neighborhood and was assessed to be "moderately suitable." Therefore, this analysis suggests that clients live in suitable neighborhoods in which they also want to live.

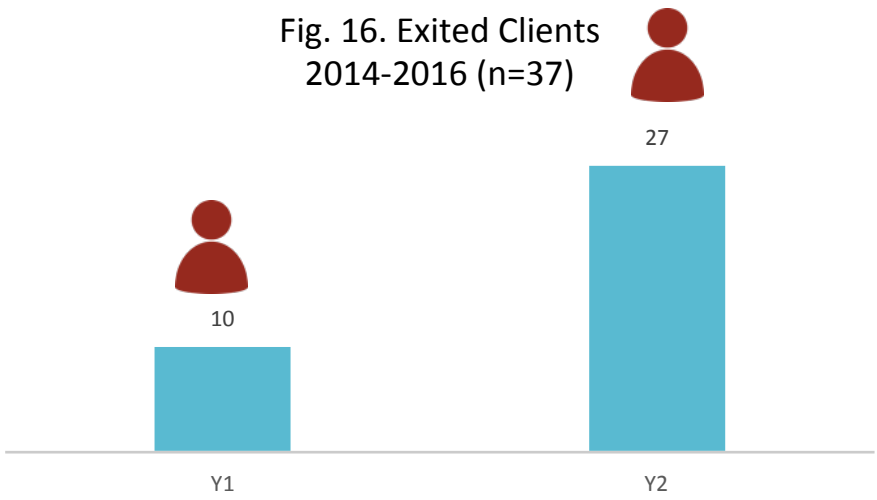
The HF program is effectively placing clients into housing in suitable areas with regards to proximity to social services, food banks, public transportation, healthcare, and areas where most clients want to live.

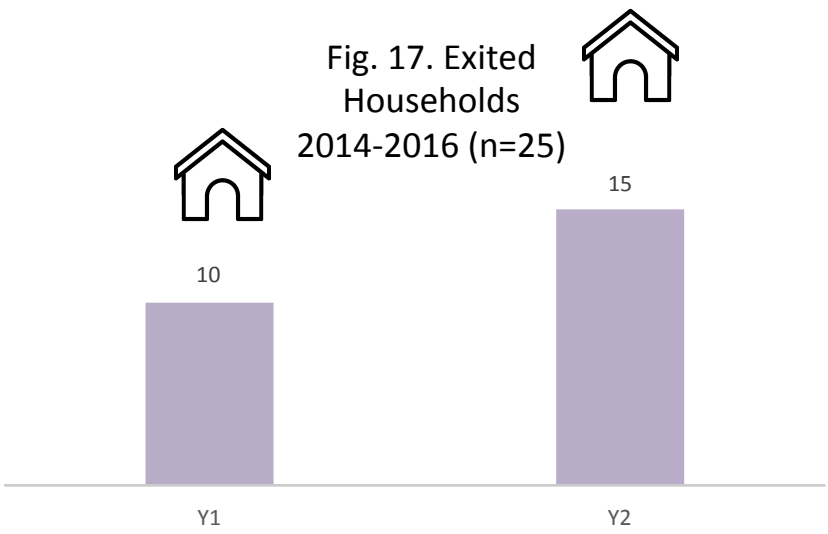
Therefore, based on these findings and our theory of change, the program is likely to result in increased quality of life and satisfaction for its clients.

Program and Housing Retention

Program Retention

- The HF program retention rate was 94% (n=154) for 2015 and 87% (n=177) for 2016.
- Overall, the HF program has retained 82% (n=177) of the 214 clients who have entered the program since December 2014.





- 37 people have exited since 2014
  - 6 kids & 31 adults.
- The racial breakdown of exited clients mirrors the racial proportions of the program, with 38% of exited clients being white, 38% Asian, and 32% Native Hawaiian.
- The 25 exited households include 18 single households & 7 family households.

Housing Retention

Of the 37 people who have exited the program, only 18 are no longer stably housed.

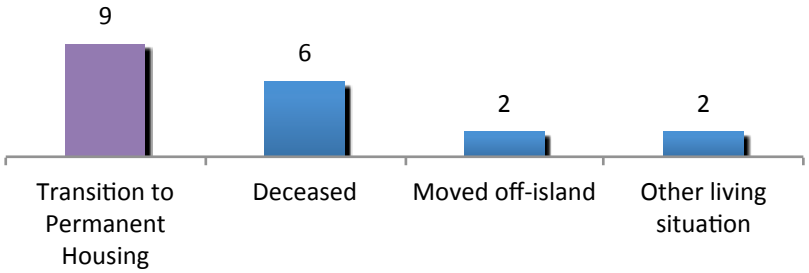
- Five (5) clients were incarcerated; ten (10) were non-compliant with landlords or evicted; Three (3) left voluntarily.

Fig. 18. Exited Clients No Longer Stably Housed (n=18)

The other 19 clients are either deceased, have secured other living situations, or have successfully transitioned to permanent housing.

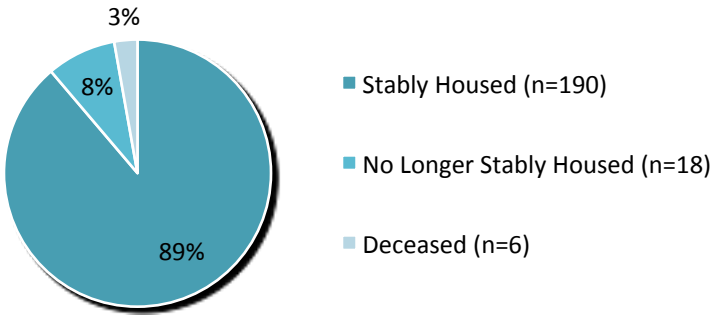
- Six (6) clients are deceased; two (2) were unable to live independently and have transferred to another program; two (2) have moved off island; and nine clients have successfully transitioned into permanent housing (9).

Fig. 19. Exited Clients No Longer on the Street (n=19)

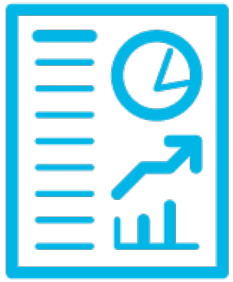


Therefore, the program has an overall housing retention rate of 89% since 2014.

Fig. 20. Client Housing Retention (n=214)



IV. Outcomes



Findings from the PhotoVOICE Project

In January 2016, the evaluation team and program staff collaborated with clients to conduct a PhotoVOICE project in an effort to further understand clients' experiences in the program and to provide them with a mechanism to provide formal feedback to the program. The project was incorporated into an existing program component – the weekly HF Community Group. PhotoVOICE is a research methodology that aims to enable people 1) to identify and record their personal and community strengths and concerns; 2) to engage in critical dialogue about them; 3) and to communicate these strengths and concerns to policy makers (Wang & Burris, 1997). By giving Housing First clients their own camera for three weeks, this project allowed clients to identify issues and aspects of their experiences in the program that were important to them. This method allowed clients to determine what outcomes and issues were relevant to the evaluation. Through weekly group discussions, the clients shared their photographs with each other and discussed similar and dissimilar experiences with the program, with the community, and within themselves. Together the group conducted analysis on the photos and reported on the findings.

Twenty-three (23) participants contributed to the project over a four-week period, with 18 clients taking over 300 photographs. These clients included clients who had been housed from two to thirteen months. Findings generated through group discussions of participants' pictures suggest that while they struggled to maintain a distance between their new lives and their old lives on the streets, program participants experienced improved self-esteem, physical health, and mental health since being housed, confirming the evaluation team's initial findings. Additionally, client discussions and photographs revealed that Housing First clients' shared a great concern for other people who were still on the street and felt an increased sense of responsibility to "give back" to others and the community because of their own positive experiences within the program. The following section discusses the themes produced in more detail, organized by comparison of life before and after HF, ongoing challenges, and important supports.

Life Before and After

One of the most common themes that emerged was the stark differences between life before and life after Housing First. Pictures revealed (and discussions confirmed) that the clients viewed the streets as dangerous, dirty, and hostile in comparison to their homes, which were safe, comfortable, and clean. Group discussions centered primarily on major differences in clients' lives related to privacy, psychological benefits, and opportunities to rest, reconnect with family, and to better oneself.

Increased Privacy

Clients discussed the lack of privacy that categorized life on the streets and remarked on the increased privacy that housing affords. Having a sense of privacy not only increased client's access to sanitary places to sleep, cook, and clean, but also it restored their dignity. As a result, clients took great pride in their homes.

Please Don't Let Anybody Walk in on Me Now
Thomas, 55, housed 7 months

Sadness. Lost hope! Homeless.
Deanna, 57, housed 13 months

"We used to take our showers in there. In the bathroom, you have to use the toilet and try not to sit down. Half the time there's no toilet paper. And it's just disgusting."

Untitled
Nelson, 58, housed 7 months

When presenting this photo to the group, this client explained that this picture represents how grateful he is for having a space to keep clean, remarking that he cleans his bathroom every day.

Opportunity to Reach Full Potential

Perhaps the most significant theme to emerge from this project was that Housing First gave clients the opportunity to make good choices and to reach their full potential. While life on the street was described as "fight of flight" and categorized by constrained choices, life in housing was described as affording the opportunity to live in ways that were more in line with clients' personal and spiritual beliefs and to work on their individual goals. Clients at various stages in their progress had different goals, including attaining medical help for chronic conditions, securing employment, finding volunteer opportunities, getting connected with community groups, and exercising regularly. Additionally, no longer in "fight or flight" mode, clients were able to reconnect with family, live healthier lifestyles, and to be contributing members of their communities.

Just to survive, scavenging through garbage to find food just to have something to eat, no choice at that time... "Whenever I [was] hungry, if I could not shoplift, I go to the nearest garbage can that was just freshly thrown. What I do is if it was chicken or what, we washed it, and then we put flour and then deep fry it. That's how filthy I was before. And I kept on getting sick. But what can I do? ...No more dignity...But now...I have a folder for all my receipts because it gives me back the dignified living. No matter what, now I won't let myself to steal. So, now... I put God as the center focal point of my life and everything follows smoothly no matter the trials."

Lesson Learned Being Homeless
Nelson, 58, housed 7 months

Sailboat on a Mooring Ball
Romy, 51, housed 8 months

A sailboat on a mooring ball (not at a slip or berthed). This represents a safe harbor – after being underway, i.e., out in the ocean where anything can and will happen. People cruising usually use mooring balls (instead of anchors). Once on the mooring ball, one has a feeling of safety – I find myself reprioritizing – using different parts of my mind. When flight and fight is managed, I find myself thinking of stuff and doing stuff that I never had time to prioritize (i.e., reassess) my goals. In my home, I feel safe and have awareness to tact life's crap.

Improved Mental Health

Many clients confirmed that they experienced psychological benefits, indicating increased hope, self-efficacy, and self-esteem. Not only did clients feel better about themselves and their ability to have control over their own lives, but also they felt that they had the agency to enact change in their communities and the capacity to "give back."

How People Look at You When You're Homeless

Water of Life

It's how people treat you when you're homeless. I feel they treat you like trash – garbage. When I got my apartment I felt like a waterfall, like plants growing by the water.

Melanie, 63, housed 10 months

Promise of a New Day

Sunlight through the tree. God created the sun, plants, animals, and us. It makes the farmers work in the hot sun and the trees gives us shade to cool off. He gives us animals for food. Life evolves in a circle of life.

Mona, 35, housed 7 months

Opportunity to Rest & Practice Self-Care

Once housed, clients reported taking a period of time to rest and recover from the recent trauma of homelessness. Although sometimes lonely, this period of rest was important for recovery. After this period, clients began to engage in self-care and spiritual practices. Clients discussed taking part in community groups and activities, such as yoga, tai chi, and AA meetings as part of their self-care.

My dog, Kolohe, pictured on my new bed & in my new apartment. The comforter and pillow "I LOVE SLEEP" was from my former case manager, Mikki. My dog didn't have her harness on or anything. This is COMFORT of living INSIDE! Comfort of being "inside" at last. I was homeless off and on for 15 years.

No Harness
Jett, 49, housed 6 months

My BED! My bedroom since Housing First, and I totally appreciate it. It was nasty out on the street. I'm safe where I live now. I have a bed. I'm comfortable, clean. I'm not getting ripped off. Next to that is the bathroom where I can take showers and stuff. I don't have to take spit baths and stuff like that over at the capitol.

Thomas, 55, housed 7 months

This is Not a Posturepedic Moment!

Wow! Safe, Good Night Sleep

Opportunity to Reconnect with Family & Friends

Clients frequently noted that housing afforded them the opportunity to reconnect with family members and friends with whom they had lost touch. Clients noted the joy of hearing from old friends and family and expressed pride in being able to show their relatives how much they had changed. Having a home to where they could invite friends and family also was very important to many clients.

"I was at my daughter's house and she was making me a care package. And she was so happy for me. She didn't have very much in her cupboard, but she had peanut butter and stuff. So, she gave me this [Biscoff] and... She gave me the very best that she had that day...She made me that care package. It was all heart and love."

Nothing but the Best
Mary, 55, housed 2 months

Good Education
John, 66, housed 2 months

In group discussion, clients discussed how the staging and décor in this image showed both a pride in the space as well as the opportunity to share this space with guests, noting the extra place settings.

Continued Challenges

Group analysis also revealed that clients were at various stages of the recovery process and continued to struggle with old challenges as well as new ones. Challenges that clients still face included loss, stigma, and loneliness. Additionally, clients expressed anxiety over “what’s next” (will funding be renewed, etc.), concern for friends still on the street, and the need to balance that concern with the need to distance themselves from their former lives.

Loss

Loss featured frequently in group discussions. The group actually lost a couple of its members throughout the year. However, often, loss was categorized as more figurative. For instance, those clients who came from more affluent backgrounds frequently lamented the loss of their former lives.

Liberation of the Angel…
Jean, Case Manager

"I was on my way to work, and I saw this beautiful, broken creature on the side of the road and I was like "Oh my gosh." Went into work...and that's when I got a phone call from one of the housing specialists that said that Lucie had passed away. And the first thing that came to my mind was the bird. That was the sign, that was God telling me that...she's in a better place. And I miss her. This was my sign from the universe that she was ok and that she was resting in peace."

Boundaries & Concern for Others

Analysis also revealed a constant struggle for clients to maintain healthy boundaries between their new lives in housing and their former lives on the street. Clients often felt a responsibility to help old friends who had helped them in the past. This concern for their friends put clients in situations in which loyalty to friends threatened to pull them back into harmful lifestyles and/or to upset their relationship with landlords. Staff responded to these concerns by focusing Community Group lessons on setting healthy boundaries, and many times during the PhotoVOICE project, group conversation returned to those lessons learned.

Untitled
Deanna, 57, housed 13 months

The photographer explained that she missed her friends who are still homeless as they were her family when she was homeless herself. She still visits them and wants the best for them, but struggles to maintain a healthy distance as she recovers.

This picture depicts one of the clients' former friends who is still homeless. He was vetted for the Housing First program but was unable to complete the paperwork necessary for intake. The client expressed concern for his well-being and others like him. The group discussed how they might "pay it forward" and help people who are still homeless.

Untitled
Jett, 49, housed 6 months

Stigma

Frequently, clients discussed feeling stigmatized by landlords, community members, and public safety officials. Although housing definitely provided a buffer against this stigma, clients continued to struggle with the effects of stigma from their time on the streets. Many clients continued to refer to themselves as "homeless" and at times, echoed common negative public sentiments.

Cops. Well, when I'm homeless, cops treat me different. Kind of like a FRO. When I have a home, cops treat me more like a friend. Same Authority Figure, different outcome. Recently, I was on the North Shore and ran into problems and went to the police. The first thing they asked me is where I lived – when I told them Kaka'ako (Next Step), they caught attitude and detested my character.

Picture of Cop Car
Romy, 51, housed 8 months

Uncertainty

Clients often discussed their concern about their futures and the future of the program. At the time of the PhotoVOICE project, many clients felt that they had finally turned a corner in their recovery and were making significant progress toward their goals. Not knowing how long the program would last (at the time funding had not been renewed) was incredibly distressing for them. Despite the fact that Housing First is labeled "Permanent Supportive Housing," clients expressed that the program was only "permanent" so long as it was funded. This lack of a sense of permanence heightened client anxiety and hindered their progress toward their goals.

Loneliness

Clients often spoke of feeling lonely. Although they were grateful for housing, they felt disconnected from others. Maintaining a distance from former friends and family on the street sometimes meant being alone. Many clients mentioned that having the Housing First Community Group was helpful in reconnecting to the community and in making friends within the program.

Untitled
Deanna, 57, housed 13 months

The photographer explained that she missed her friends who are still experiencing homelessness. She still visits them and wants the best for them.

Important Supports & Strengths

Despite ongoing challenges, HF clients showed that they are extremely resourceful and resilient. They spoke frequently of important supports and sources of strength. Clients looked to family and friends, community group, and staff and case managers for guidance and social support. Additionally, they seemed to draw their strength from each other, encouraging and learning from each other.

Family and Friends

Affording opportunities to reconnect with family proved to be an important aspect of the program because data revealed that family and friends have been essential to many clients' recovery.

City or Country
Mona, 35, housed 7

My grandmother's not living in a nursing home. She's working in the garden for the love of it. "She's my everything... In my mind, she's the most virtuous woman."

This photograph depicts the client helping his granddaughter with her homework. He explained that his grandchildren are his sobriety. Now that he is housed, he is able to maintain sobriety as well as to participate in his grandchildren's lives.

My Sobriety
Ernest, 60, housed 6

Community Group

Data shows that the Housing First Community Group, held weekly at St. Mary's Episcopal of Moili'ili, was an important resource that helped clients navigate their existing concerns and challenges. The group taught valuable life skills and increased social support by fostering friendships among clients at different stages of housing and recovery, including clients who had been housed for just 2 months to those housed for over a year. Additionally, it provided a space for clients to express their grief, celebrate their successes, and make plans for their lives. It also served as a convenient way for case managers to check-in with clients and administer HFATs. Based on evaluation team observations, about 11 clients show up regularly and another 12 show up occasionally. Therefore, the group attendance averages around 15 each week.

Untitled
Thomas, 55, housed 7 months

Shows one of the client's many plants after the "Grow Your Own" classes.

2016 Community Group Topics/Classes:

- Setting Healthy Boundaries
- "Grow Your Own Classes"
- Cooking Classes
- PhotoVOICE
- Legal Aid Consultation
- Spiritual Wellness

This client took a picture of two clients who lived in the same homeless encampment. During the group discussions, these clients (including the photographer) encouraged each other by complementing others on their resourcefulness and strength.

Untitled
Melanie, 63, housed 10 months (not pictured)

These two clients were friends before coming into Housing First and have maintained their friendship throughout the program. Through this friendship and the Community Support Group, the clients explained that they have been able to find support during this pivotal moment in their lives.

Untitled
Jett, 49, housed 6 months

Case Managers & Staff

One of the most meaningful supports included case managers and program staff. Case managers regularly attended community group meetings and participated in the PhotoVOICE project. Clients expressed that they felt that case managers genuinely cared for them and understood their challenges. Even clients who no longer needed as much case manager attention expressed deep respect for case managers. Perhaps most importantly, clients explained that case managers and staff provided "good examples" for them.

Additionally, staff members, like the community liaison/chaplain and housing specialists, were important for success. For a number of the clients, faith was or had been an important part of their lives. Now that they had the opportunity, they were anxious to explore or return to their faiths. Therefore, clients were grateful to have a chaplain to provide spiritual guidance. Having all of these supports in one place once a week seemed to be important for maintaining client emotional and spiritual stability.

The Aaron Ruddick Chair
Donna, 2016

This chair is to remember this man. He's a lovely man to know. Aaron Ruddick, my caseworker, he found my place for me.

Empowerment & Self-Advocacy

One of the outcomes of the project was an increased sense of self-efficacy and desire to engage in advocacy efforts. Not only did clients feel better about themselves and their ability to have control over their own lives, but also they showed that they felt a sense of civic responsibility to help others and to enact change in their communities. Therefore, they decided at the conclusion of the PhotoVOICE project to hold an exhibit of their work at Honolulu Hale. They wanted to use the exhibit as an opportunity to thank the community and to advocate for similar programs to help other people. The program and clients collaborated to use the exhibit to educate the community on homelessness and housing programs.

Thomas speaking at the opening reception at Honolulu Hale, July 9, 2016

"Having a camera, I started to look up and appreciate the beauty around me."

Members of PhotoVOICE group at exhibit at Honolulu Hale

Short-term Goals and Objectives

The following sections examine short-term goals as presented in the Theory of Change model. The evaluation team primarily used HFAT and VI-SPDAT data to measure these short-term goal outcomes. Overall, HF clients showed improvements across all short-term goals.

Housing First Assessment Tool

HF client progress was tracked throughout their participation in the HF program, primarily through the administration of the Housing First Assessment Tool (HFAT). Between the start of the program and December 1st, 2016, 250 HFATs were administered to HF clients and individuals who were participating in other housing programs. Seventy-seven (77) Housing First clients completed a total of 203 assessments.[1] Of those clients that completed the assessment, 50% were male, with an average age of 51 and average VI-SPDAT score of 11.3. For the purposes of this report, we will focus on Housing First clients' progress through the first year of their housing experience. Given the program's rolling admissions, one year's worth of progress, assessed quarterly, represents the greatest data coverage for all time points. THe evaluation team used advanced statistical modeling to obtain stable estimates for changes over time across all time points for these 77 Housing First clients.

VI-SPDAT

The HFAT data was paired with Vulnerability Index & Service Prioritization Decision Assistance Tool (VI-SPDAT) data that was collected during clients' initial screenings for the HF program. We used the VI-SPDAT data to 1) assess whether individuals with higher scores were provided housing opportunities more quickly than those with lower scores and 2) whether these findings could be corroborated by health-related quality of life inventories included on the HFAT. VI-SPDAT data also was used to 3) identify appropriate matched-comparisons (individuals with similar characteristics but not in the Housing First program) and/or 4) identify groups of individuals that report greater success in the HF program.

[1]Assessment data for a comparison sample is currently being collected and account for the other 47 assessments.

Assessment Findings on Short-term Goals

The following section highlights Housing First client outcomes based on the Theory of Change model presented on the right. This model represents the predicted transformation of individuals' social and behavioral health throughout their participation in the Housing First program. After one-year of housing, Housing First Clients experienced improvement on the following short-term goals based on quarterly client assessments: decrease in stress, increase in self-efficacy, decrease in adverse experiences, increase in community support, decrease in substance use, reduction in symptoms of mental illness, and health-related quality of life.

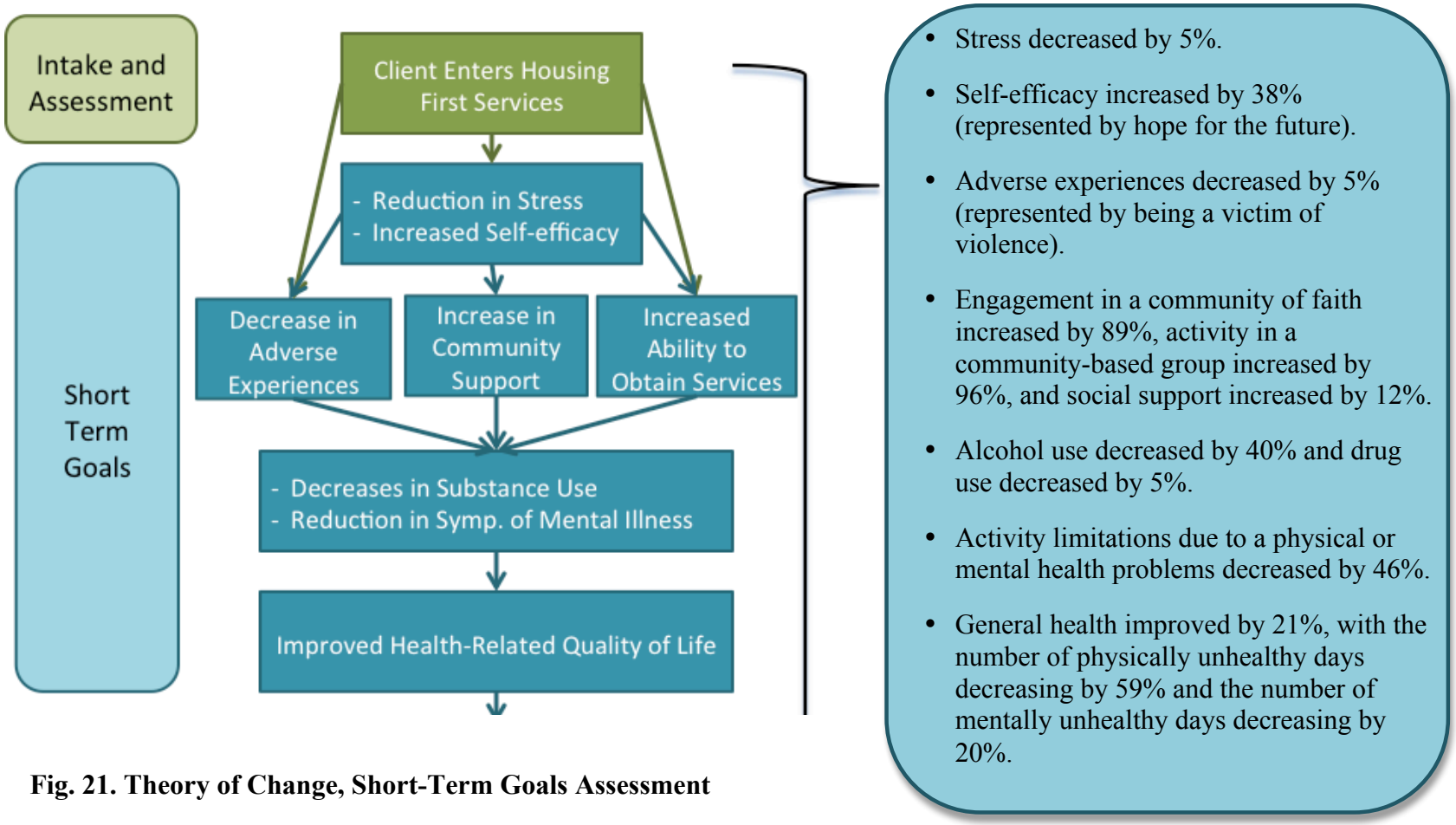


Fig. 21. Theory of Change, Short-Term Goals Assessment

Complete findings from these assessments along with changes across time appear in **Table 1** on the following page.

Table 1. Changes in Short-term Goals

Theory of Change Outcomes	Measures	3 Months	6 months	9 months	12 months	% Change from Placement to 1-year
Changes in Self-efficacy and Stress	Hope for the Future (number of days in the past month, 0-30)	15.25	18.06	18.42	21.08	**38%**
	Stress (1-5)	2.94	3.07	2.76	2.78	**-5%**
Changes in Community and Social Support	Victim of Violence (% Never or Almost Never)	88%	76%	85%	92%	**5%**
	Visited a Community of Faith or Spirituality (0-30)	1.93	2.31	3.72	3.66	**89%**
	Been Active with a Community Group (0-30)	2.11	3.96	4.78	4.13	**96%**
	Social Support (1-5)	2.76	3.09	2.97	3.09	**12%**
Changes in Substance Use and Activity Limitations	Alcohol Use (% Never or Almost Never)	63%	76%	77%	80%	**40%**
	Drug Use (% Never or Almost Never	88%	76%	85%	92%	**5%**
	Activity limitations due to Physical or Mental Health (0-30)	10.98	9.55	8.68	5.95	**-46%**
Changes in Quality of Life	General Health (1-5)	2.53	2.78	2.62	3.07	**21%**
	Physically Unhealthy Days (0-30)	13.36	11.47	13.47	5.50	**-59%**
	Mentally Unhealthy Days (0-30)	18.10	16.58	14.07	14.55	**-20%**

***Note.* All % changes above move in a positive direction (i.e., they suggest improved health and well-being).**

- Housing First clients, on average, improved across all time points. The greatest initial gains occurred in "hope for the future" and in the obtainment of community supports. The greatest long-term gains occurred in general and physical health outcomes.
- A slight increase in stress occurred between month 3 and 6 assessments. It is possible that this increase reflects the clients' need to adapt to a rapidly changing environment.
- Despite this notable progress, the average number of physically unhealthy days across all programs and assessment periods is well above the mean for adults living in Honolulu County (physically unhealthy days = 3.1 days; mentally unhealthy days = 2.9; and activity limitation days = 1.8).[2]

[2] Source: *Hawaii 2015 Behavioral Risk Factor Surveillance System Hawaii 2015 Behavioral Risk Factor Surveillance System*

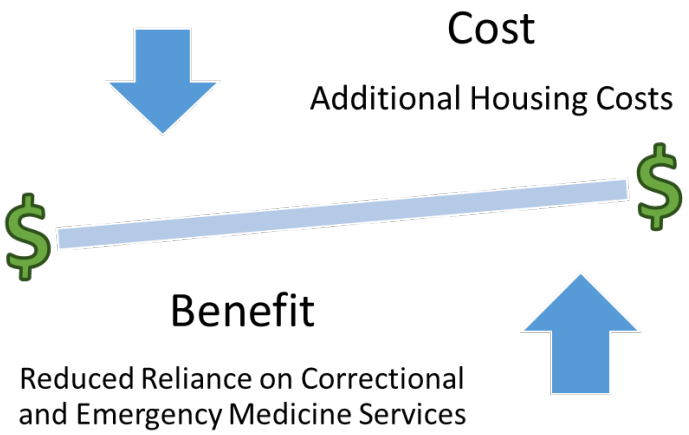
Long-term Goals and Societal Impact

Cost Savings

Cost-benefit analyses determine whether investing in a social service program, such as Housing First, is actually less expensive for taxpayers than "business as usual" or doing nothing. We conducted a cost-benefit analysis by examining whether clients in the Housing First program used fewer publically-funded services, such as emergency medicine or correctional services, after starting the program than similar individuals who did not participate in the program.

In 2009, Larimer et al.[3] found that before receiving Housing First services in Seattle, clients on average, utilized $4,066 worth of services per month. This cost was largely due to their dependency on the medical and criminal justice systems. Results of their study found:

- The average Housing First client, before receiving housing, used $48,792 worth of publically-funded services annually.
- After only 1 year of receiving Housing First services, clients' annual service costs, including the cost of providing Housing First services, dropped to $37,926 annually.
- **These findings suggest that taxpayers may save an estimated $11,496 per year, per person enrolled in a Housing First program.**



In Honolulu, over the course of the first and second year, results show that Housing First clients reported a decreased reliance on medical and criminal justice systems as well as better health and well-being. These results suggest similar cost savings here in Honolulu. The following sections will document this decreased involvement in the judicial and healthcare systems since being housed.

[3] Larimer, M. E., Malone, D. K., Garner, M. D., Atkins, D. C., Burlingham, B., Lonczak, H. S., ... & Marlatt, G. A. (2009). Health care and public service use and costs before and after provision of housing for chronically homeless persons with severe alcohol problems. *JAMA, 13*, 1349-1357.

Arrests and Incarceration

Criminal history data on adult Housing First program clients (n = 129) were accessed via Hawaii's Adult Criminal Information site (eCrim). We also gathered data on a comparison group of 175 adults with similar characteristics who were receiving social services but not Housing First services. The average age in both groups was 50, and the average VI-SPDAT score for the comparison group was slightly lower than for the HF group (9.3 and 11.4, respectively). The following figures present the average number of charges and days incarcerated for individuals in the Housing First program compared to a sample of individuals struggling with homelessness before and after the start of the Housing First program. An analysis of criminal charges before and after obtaining housing revealed:

- HF clients averaged .34 arrests in the year prior to obtaining housing but .16 arrests in the year after obtaining housing, **a 55% DECREASE in the number of arrests in one year while the comparison group had a 36% INCREASE.**
- HF clients were incarcerated an average of 4.96 days in the year prior to obtaining housing but averaged only 1.29 days in the year after obtaining housing, **a 74% DECREASE in the average number of days incarcerated in one year while the comparison group had an 86% INCREASE.**
- These dramatic changes were then verified and maintained by expanding the evaluation period to 2 years (Figures 22 & 23).
- Results across the first two years of the program suggest that **Housing First clients had 61% fewer arrests and were incarcerated less than half as many days as they were prior to obtaining housing.**
- These results were further verified by including a comparison group.
- The comparison group averaged one less day of incarceration than HF clients prior to the start of the Housing First program but this group experienced almost a three-fold increase in the number of days they were incarcerated over 2-year period while the HF group experienced a substantial decrease.

Fig. 22.

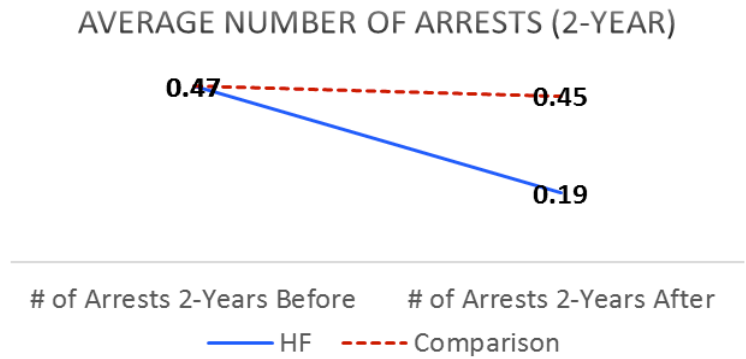


Fig. 23.

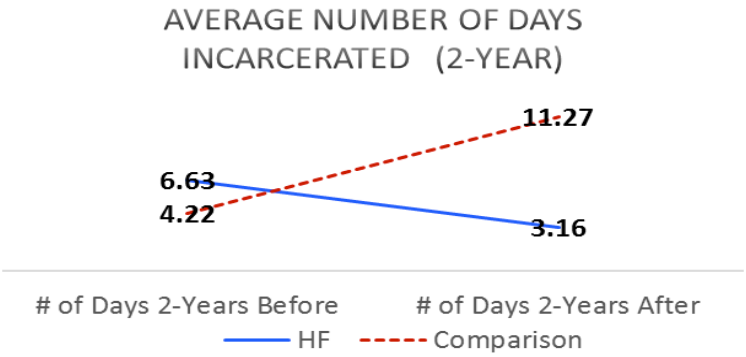
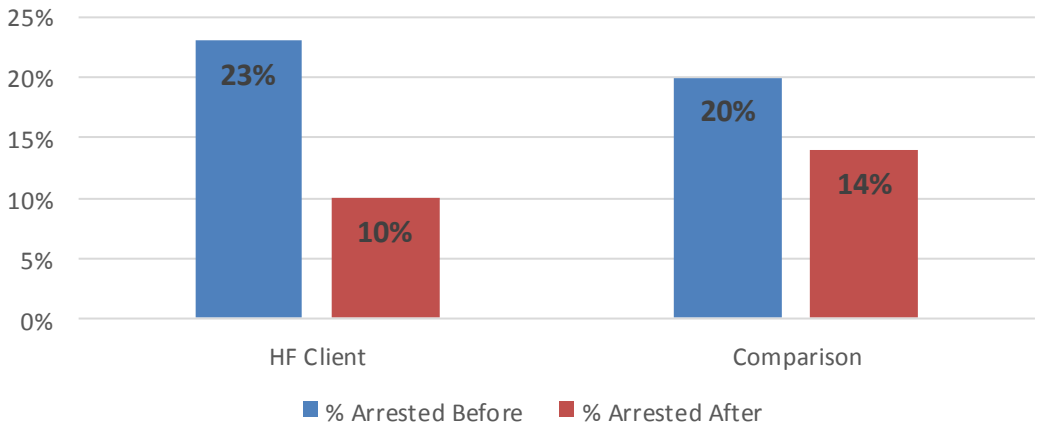


Fig. 24.
Percent of Clients Arrested 2 Years Before and 2 Years After the Start of Housing First



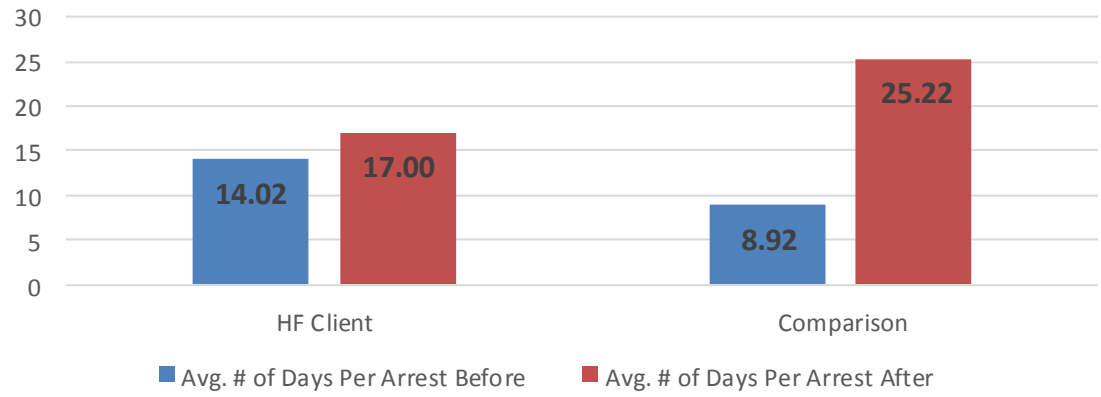
- The figure to the left illustrates that HF clients were much less likely to have any charges after placement. The comparison group also experienced a drop in the likelihood that an individual would be charged with a crime during this same time period but the magnitude of these changes were much smaller.

- The most common offence committed was Petty Theft IV (items or services valued less than $100); 30% of charges for the HF clients and 19% for the comparison group. Overall, petty misdemeanors accounted for 65% of all arrests for both groups.

- The figure to the right suggests that Housing First clients, even when arrested, are likely to receive shorter sentences after being housed, while individuals not in the Housing First program appear to be receiving longer sentences over the same time period.

- In addition to experiencing fewer arrests after being housed Housing First clients were also less likely to be incarcerated and received shorter sentences after placement.

Fig. 25.
Average Number of Days Incarcerated Per Arrest 2 Years Before and 2 Years After the Start of Housing First



On average, it costs roughly $140 per day to house an inmate in the Oahu Community Correctional Center (OCCC) in addition to a large one-time costs associated with each arrest due to law enforcement and judicial burdens.[4] Together, the costs of incarceration at OCCC for one year ($51,000 per person), which is more than double the cost associated with participating in the Housing First program for one year (estimated to be between $20,000 to $30,000 per year).

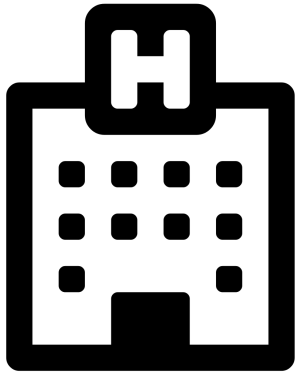
Hospital and ER Use

In addition to costing the criminal justice system, homelessness also costs the medical system. Based on the HFAT assessments, since being housed, HF clients report reductions in their use of emergency rooms and hospital admissions. Based on the 77 HF clients who completed the assessment:

- **The percentage of Housing First clients who had gone to the emergency room decreased by 64%** in the previous 30 days (from 46% to 17%).
- **The percentage of Housing First clients admitted to a hospital decreased by 74%** in the previous 30 days (from 17% to 4%).
- Additionally, decreases in reliance on healthcare service appeared to occur quickly after housing.

Table 2. Percent of HF Clients Reporting Medical Services in the Previous 30 days

	3 Months	6 months	9 months	12 months	**% Change from Placement to 1-year**
Emergency Room	46%	12%	18%	17%	**-64%**
Admitted to a Hospital	17%	4%	6%	4%	**-74%**



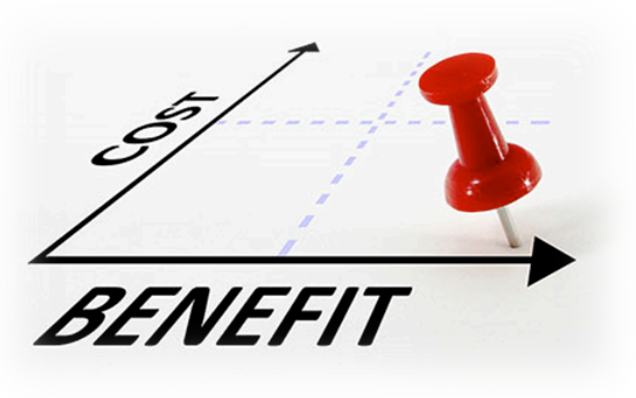
[4] http://khon2.com/2016/06/28/the-cost-to-house-a-prisoner-in-hawaii-may-surprise-you/

The reported changes in emergency room and hospital use after receiving housing via the Housing First program are profound, and they are also consistent with research by The Lewin Group (2008)[5] that found that obtaining permanent housing is associated with a 30% decrease in ER visits in the first year and a 60% decrease in two years. They also found inpatient admissions also dropped by 14% the first year and by 64% the second year. Participants in their sample (across the State of California) averaged $14,267 a person in emergency room visits alone, and $59,865 in inpatient charges, totaling $74,132 in healthcare costs, per person, per year before obtaining housing.

Cost/Benefits Conclusions

In the United States, cost estimates for unsheltered living have repeatedly been estimated to fall between $40,000-$80,000 annually. Established research shows that these costs are primarily due to incarceration and medical care, finding that unsheltered people:

- Show an increased reliance on emergency department services, with an average cost of $1,778[5] per visit but can be as high as $6,662 per visit.[6]
- Have an increased number of hospital admissions, with an average cost of $8,327 per admission.[5]
- Spend four additional days (or 36% longer) in the hospital, per visit compared to low-income but housed adults.[7]
- Are 7.5 to 11.3 times more likely to be incarcerated.[8]



HF clients are less likely to be arrested, are less likely to visit the hospital or emergency room, have improved physical and mental health, and are more connected to community supports, which suggest that HF clients will be less likely to rely on these costly services.

---

[5] The Lewin Group (2008). Summary report of evaluation findings: A dollars and sense strategy to reducing frequent use of hospital services. Oakland, CA: The California Endowment and the California Health Care Foundation.
[6] Hsia, R. Y., & Antwi, Y. A. (2014). Variation in charges for emergency department visits across California. *Annals of emergency medicine*, *64*(2), 120-126.
[7] Salit, S. A., Kuhn, E. M., Hartz, A. J., Vu, J. M., & Mosso, A. L. (1998). Hospitalization costs associated with homelessness in New York City. *New England Journal of Medicine*, *338*(24), 1734-1740.
[8] Greenberg, G. A., & Rosenheck, R. A. (2008). Jail incarceration, homelessness, and mental health: a national study. *Psychiatric services*, *59*(2), 170-177.

Client Profiles

A large portion of the Housing First clients are extremely vulnerable and fall into one of the five high-vulnerability, high-cost categories listed below, reflecting appropriate program match. Each of these categories is associated with significant costs. For example, an individual who is medically vulnerable is likely to have difficulty accessing certain services, like medical care. As a result, the medically vulnerable are more likely to rely on ambulance transport to receive needed medical care. The average ambulance trip in Hawai‘i costs approximately $1,300[9]. Therefore, reducing the number of ambulance trips an individual requires, along with reducing their use of emergency services will likely recoup a large portion of costs associated with providing Housing First services.

Medically Vulnerable	Alcohol Dependence	Illicit Substance Abuse	Mental Illness with Substance Abuse	Correctional History

Another vulnerable group includes individuals that have substance abuse issues. These individuals often experience poor health and are more likely to engage in criminal behavior (e.g., shop lifting, possession of a narcotic, etc.). As demonstrated previously, Housing First clients are much less likely to be arrested or incarcerated after receiving housing. Furthermore, Housing First clients are likely to decrease their substance use during the course of the program. Taken together, this suggests that Housing First clients with substance abuse issues will likely be able to reduce their reliance on publicly-funded services by reducing the need to be admitted to the hospital for substance abuse related issues, be less likely to be arrested for petty crimes (many of which support their addiction), and more likely to need reduced services in the future.

The IHS Housing First Program specifically targeted individuals who fell into these high-need categories, targeting individuals who are medically vulnerable and experiencing alcohol dependency, methamphetamine dependency, and mental illness with or without substance abuse issues as well as those individuals who have a history of arrests. **By targeting clients that fit these profiles, the IHS Housing First Program is well-positioned to save public funds while improving the health and well-being of individuals experiencing homelessness and who fall into these categories.**

[9] https://health.hawaii.gov/ems/files/2016/12/2017-Amb-Fee-Increase.pdf

V. Recommendations

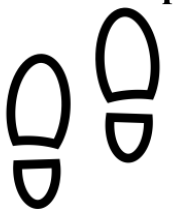
- Continue to offer the weekly HF community group and consider expanding the group, encouraging participation from all Housing First clients. This group has been found to improve connections to the community, foster a supportive environment, decrease loneliness and stress, improve access and communication with program staff, and ultimately reduce the need for supportive services in the future.

- Continue to offer housing voucher and supportive wrap-around services as clients continue to transition to life off the street and into a permanent home, keeping in mind that the first 3 months in housing may be the most stressful and the loneliest for clients. Providing clients with the supports necessary to maintain housing through this potentially turbulent period is critical.

- Quickly attend to and support the physical and mental health needs of clients. Many clients continue to struggle with physical and mental health needs. This is evident by the persistently high number of physically and mentally unhealthy days reported by clients, despite very meaningful gains.

- Consider strategies to give clients a “sense of permanence.” Although a permanent supportive housing program, clients still tend to view the program as a temporary housing program. Funders might help alleviate these anxieties by assuring support.

VI. Next Steps



- Obtain additional medical history data from the Hawaii Department of Human Services and Department of Health. This data is critical to further exploring the impact that the Housing First program has on the local economy.

- Explore whether the Housing First program is working equally well for all clients. For example, are individuals that enter the program with a history of substance abuse issues improving at the same rate as individuals who enter with significant chronic conditions? We will interview clients in different subgroups as well as will interview case managers and clients on the Leeward Coast to understand how the program may be working differently in this distinctive setting.

- Conduct interviews with landlords who have and have not chosen to open their doors to clients with housing vouchers. We hope to understand how landlords can be educated and informed of housing voucher programs so that this program and others can work to increase participation in voucher programs.

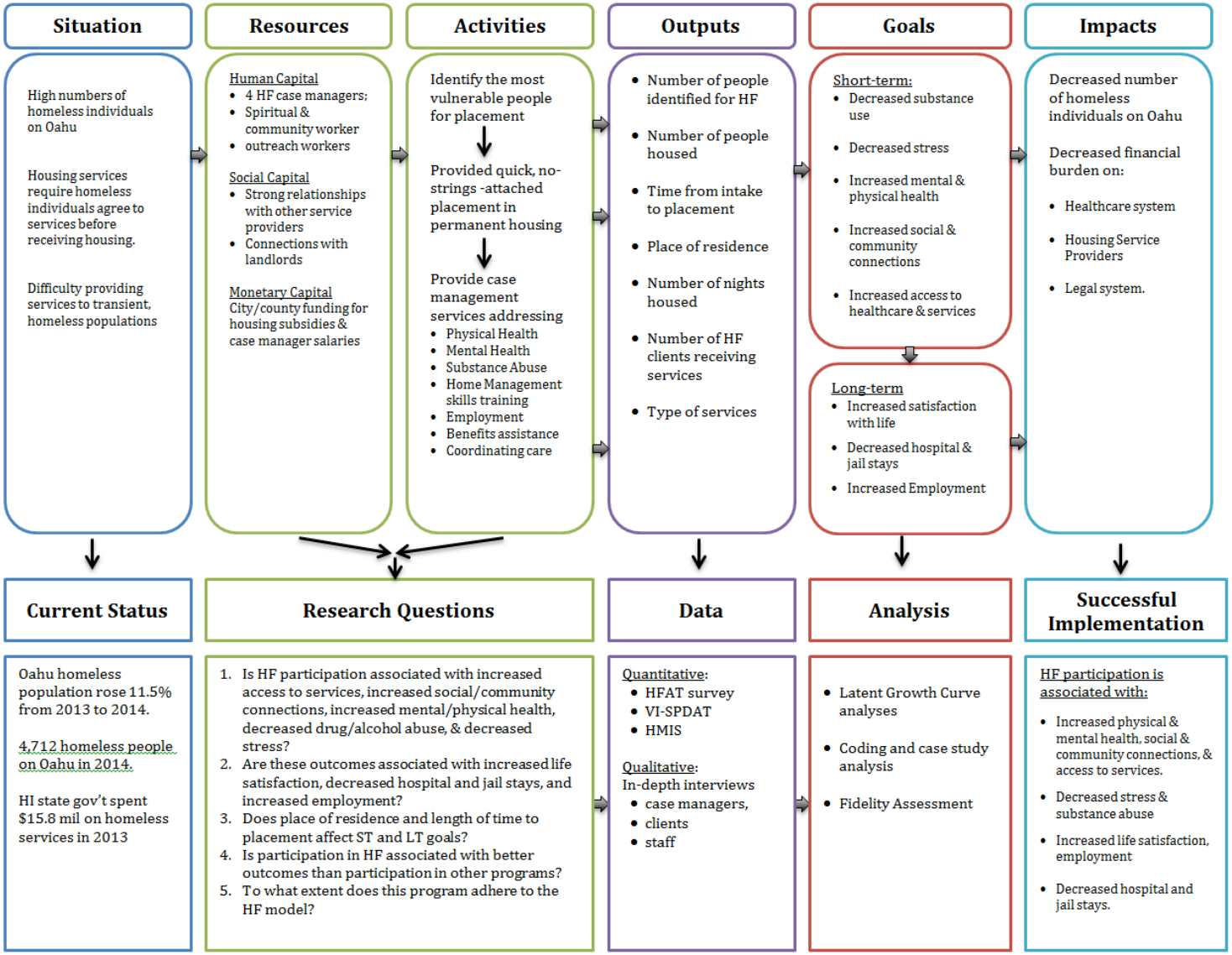
- Continue to evaluate client progress across the Theory of Change model and to document findings over time and compared individuals not in the Housing First program.

- Interview Housing Specialists who are a critical piece in housing placement and retention in an effort to document and disseminate best practices.

VII. Appendices

Appendix A

IHS Housing First Logic Model



Appendix B

Measurement Plan

The following section outlines the ways in which the evaluation team will measure Housing First (HF) outcomes, short-term goals, and long-term goals as indicated in the logic model. The measurement framework below lists the indicators we will use to measure these outcomes as well as shows the data source for each indicator and explains how that data will be collected. The evaluation will rely on three primary data sources: the **Hawaii State Homeless Management Information System** (HMIS), the **Vulnerability Index and Service Prioritization Decision Assistance Tool** (VI-SPDAT) scores, and the **Housing First Assessment Tool** (HFAT). A summary of indicators measured using the HFAT can be found in the Housing First Assessment Tool – Measurement Summary (p.20). Case managers and service providers throughout the state, including IHS HF staff, maintain HMIS individual client data. After gaining access to the system, the evaluation team will be able to search for HF clients in the system. Outreach workers and case managers administer VI-SPDATs from various housing service providers throughout the state. Because VI-SDAT scores are used to vet HF clients into the program, each client should have at least one VI-SPDAT score.

The main data source will be the Housing First Assessment Tool, designed specifically for this HF program. Ideally, HF case managers or IHS outreach workers should administer the HFAT upon initial identification of the client for HF. It is important that we obtain data before housing placement in order to show differences in outcomes before and after the program. The study design requires that individual clients' data are available across multiple points in time. Therefore, Housing First case managers, with the assistance of the evaluation team, should strive to administer the HFAT to clients monthly after the initial assessment at intake. The HFAT not only will be useful in detecting Housing First impact, but also, will be useful to case managers in documenting client progress, identifying emerging client issues, and matching clients with services. The table below provides a summary of HFAT measures and indicates the purposes these measures are meant to serve.

Additionally, the evaluation team plans to conduct **semi-structured interviews** with representatives from different stakeholder groups, including case managers, IHS staff, HF clients, and landlords to supplement the survey data and to provide a context for understanding that data. Interview questions will explore experiences with Housing First – examining what worked, what didn't, and what could work better. Interviews will be transcribed and coded for common themes within groups and across groups. Survey data supplemented by personal experiences will provide a comprehensive view of HF impact.

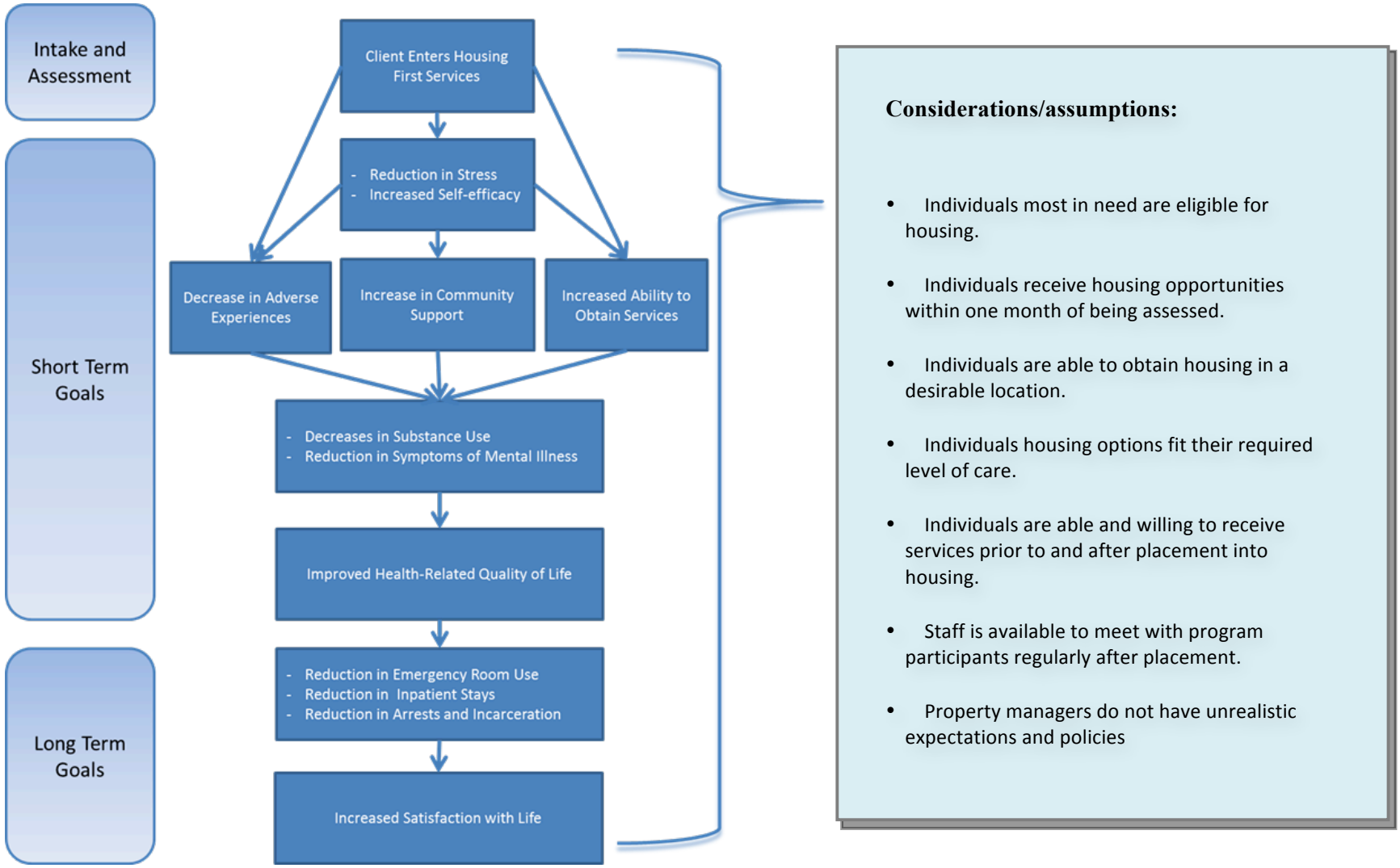
Housing First Assessment Tool – Measurement Summary		
Purpose	**Measure**	**Explanation**
Documenting Client Progress	Social support	Do clients have emotional and physical support available?
	Life satisfaction	Extent to which clients are satisfied with their life
	Self-efficacy/Stress	Clients' confidence in their abilities to control what happens to them.
	Access to healthcare	Do clients have access to routine and specialized healthcare as needed?
	Physical/mental health	Assesses the number of unhealthy days client has experienced in past month
	Frequency of adverse experiences	How often clients have experienced trauma/ anxiety/abuse in past month
	Community support	Frequency of participation in community groups, such as faith-based or sports groups
	Housing Situation	Current housing status (homeless, shelter, transitional, etc.)
Identifying Emerging Issues	Alcohol/drug use	Frequency of alcohol and drug use and clients' feelings toward their use.
	Hospital/Jail time	Frequency of time spent in hospital/jail and type of crime/illness
	Housing preferences	If given a choice, what type of housing would clients prefer and what location?
Matching Clients with Services	Services needed	Clients identify what services they feel like they still need
	Helpful services	Clients identify which services have been most helpful
	Benefits received	Clients identify what government benefits they receive

Housing First Measurement Framework

Outcomes	Indicators	Data Source	Data Collection Method
1. Most vulnerable people identified for HF	• Number of people identified for HF • Identified people's VI-SPDAT scores	• HMIS database • VI-SPDAT	• Extracted from HMIS • Extracted from VI-SPDAT
2. Identified clients are housed	Number of people housed	HMIS database	Extracted from HMIS
3. Identified clients are housed quickly	Number of days from intake to placement	HMIS database	Extracted from HMIS
4. Identified clients placed in permanent housing	Place of residence	HMIS database/ HFAT	Extracted from HMIS or HFAT
5. Placed HF clients fewer # nights on street	Number of nights housed	HMIS database/ HFAT	Extracted from HMIS and/or HFAT
6. Placed HF clients continue to receive services	Number of HF clients receiving services	HFAT	Extracted from HFAT, administered at baseline & monthly thereafter
Short-Term Goals	**Indicators**	**Data Source**	**Data Collection Method**
1. Decreased substance use	• Monthly frequency of drug use • Monthly frequency of alcohol use	HFAT	Administered at baseline & monthly thereafter
2. Decreased Adverse Experiences	Monthly frequency of • Trauma • Anxiety • Abuse	HFAT	Administered at baseline & monthly thereafter
3. Increased mental health	Number of unhealthy days per month	HFAT	Administered at baseline & monthly thereafter
4. Increased physical health	Number of unhealthy days per month	HFAT	Administered at baseline & monthly thereafter
5. Increased social support	• Availability of emotional support • Availability of physical support	HFAT	Administered at baseline & monthly thereafter
6. Increased community connections	Frequency of participation in community groups/activities	HFAT	Administered at baseline & monthly thereafter
7. Increased access to healthcare Routine Specialized	• Does client have health care coverage? • Does client have a PCP? • Does client have access to a nearby specialist? • Is cost an inhibitor? • Length of time b/t routine checkups • Travel distance to PCP	HFAT	Administered at baseline & monthly thereafter

8. Increased use of needed services	• Services used • Services needed • Frequency of meetings with case workers	HFAT	Administered at baseline & monthly thereafter
9. Decreased stress	4 questions assessing impact of personal stress	HFAT	Administered at baseline & monthly thereafter
Long-term Goals	**Indicators**	**Data Source**	**Data Collection Method**
1. Increased life satisfaction	5 questions assessing attitudes toward life	HFAT	Administered at baseline & monthly thereafter
2. Decreased hospital stays	Frequency of days spent in ERs and hospital	HFAT	Extracted from HFAT
3. Decreased jail stays	Frequency of days spent in jail	HFAT	Extracted from HFAT
4. Increased Employment	Employment income indicated	HFAT	Extracted from HFAT

Appendix C
Figure 1. Housing First Theory of Change



Appendix D

Housing First Fidelity Criteria

Watson et al. 2013 Housing First Fidelity Index	
Dimension I: **Human resources-structure & composition**	**Refers to the composition & structure of the staffing.**
1. Diverse Staff	Program staff highly reflects the diversity within the consumer population.
2. Minimum Education Requirements	At least 25% of case managers have a Master's degree or higher.
3. Harm Reduction & Crisis Intervention Knowledge	Program provides or requires ongoing training in harm reduction & crisis intervention for staff
4. Staff Availability	At least one staff member is available to consumers twenty-four hours a day, seven days a week
5. Clinical Staffing	Program has psychiatric staff and mental health professional on staff or contract
Dimension II: **Program boundaries**	Limits placed on whom the program will serve & the responsibilities of key staff members.
6. Population Served	**Program serves only chronically homeless & dually-diagnosed individuals, & it houses current drug users.**
7. Consumer Outreach	There is a designated staff member dedicated to outreach or an outreach department.
8. Case Management Responsibilities	Case management responsibilities are limited to case management.
9. Termination Guidelines	The program only terminates consumers who demonstrate violence, threats of violence, or excessive non-payment of rent.
10. Termination Policy Enforcement	The service termination policy is consistently enforced.
Dimension III: **Flexible policies**	**Policies & rules are written to appropriately serve consumers with greatest need/vulnerability & to allow them maximum choice in terms of substance use & housing.**
11. Flexible Admissions Policy	The program has formal protocol for admitting consumers with the greatest need/vulnerability
12. Flexible Benefit/Income Policy	The possession of or eligibility for income benefits is not a prerequisite for housing.
13. Consumer Choice in Housing Location	The program works with consumers to find desirable housing.
14. Flexible Housing Relocation	The program always attempts to relocate consumers when they are dissatisfied with their current housing placement.
15. Unit Holding & Continuation of Case Management	The program holds housing for hospitalization & incarceration for more than 30 days & program continues to offer case management services while unit is unoccupied.
16. Flexible with Missed Rent Payments	The program is flexible with missed rent payments, but holds the consumer accountable.
17. Flexible Alcohol Use Policy	The program allows alcohol use & housing allows alcohol in units.
18. Flexible Drug Use Policy	The program allows illicit drug use & housing allows illicit drug use in units.
19. Eviction Prevention	The program has a formal policy & protocol to work with consumers to prevent eviction & has a staff member dedicated to eviction prevention.

20. Consumer Input into Program	The program has formal & informal mechanisms for receiving & implementing consumer input.
Dimension IV: **Nature of social services**	**The structure, policies, & practices related to social services offered by the program. (There is some overlap with Dimension IV; however, this dimension refers specifically to social services).**
21. Low-demand Service Approach	Consumers are not required to engage in any services except for case management in order to receive/continue receiving housing.
22. Harm reduction approach to service provision	Program uses a harm reduction approach & staff has a strong conceptual understanding.
23. Regular in-person Case Management Meetings	Consumers meet with their case managers 2-3 times a month on average, but program has a policy that more frequent meetings occur in the first 1-6 months after admissions.
24. Small Case Loads	Case managers have 10 or fewer consumers on their caseload.
25. Ongoing Consumer Education	Consumers receive ongoing education in Housing First and harm reduction policies & practices.
Dimension V: **Nature of housing & housing services**	**The structure of housing & housing services offered by the program and/or private landlords.**
26. Structure of Housing	Housing is scattered-site in buildings operated by private landlords.
27. Fast Placement into Permanent Housing	The program places consumers into housing in one week or less.
28. Temporary Housing Placement	Temporary housing placement does not last more than one month.
29. Consumer is Lease Holder for Housing Unit	100% of consumers are the leaseholders of their unit.

Appendix E

Housing First Analytical Plan

Research Questions

The following research questions – as stated in the Logic Model – address four main areas of concern: Housing First attainment of goals (RQ 1-2), potential factors that may affect the attainment of desired outcomes (RQ 3), comparison of HF to clients receiving other services (RQ 4), and fidelity to national HF program model (RQ 5):

RQ 1. Is HF participation associated with attaining short-term (ST) goals?

- Decreased substance use
- Decreased stress
- Increased mental & physical health
- Increased social & community connections
- Increased access to healthcare & services

RQ 2. Is HF participation associated with attaining long-term (LT) goals?

- Increased life satisfaction
- Decreased hospital & jail stays
- Increased Employment

RQ 3. Does place of residence and length of time to placement affect attainment of ST and LT goals?

RQ 4. Is participation in HF associated with better attainment of LT and ST goals than participation in other programs?

RQ 5. To what extent does IHS-HF adhere to HF model?

Participants

Research participants include IHS clients who are participating in Housing First (treatment group) and IHS clients who are participating in other housing services (comparison group). Additionally, IHS staff and HF case managers will be involved in the fidelity checklist and qualitative interviews.

Measures
The evaluation team proposes the following measures to answer the above research questions:

- Vulnerability Index-Service Prioritization and Decision Assistance Tool (VI-SPDAT). The VI-SPDAT consists of two tools:
  - Vulnerability Index: Measures medical vulnerability of homeless
  - Service Prioritization Decision Assistance Tool: Used to assist case managers and outreach workers with client intake and resource allocation by measuring homeless clients' acuity.

- Housing First Assessment Tool (HFAT): Developed by Jack Barile to assess IHS's HF effectiveness at achieving ST and LT goals.

- Watson et al., 2013 Housing First Fidelity Index (HFFI): Gives checklist of nationally agreed-upon criteria for HF models.

- HF Qualitative Interview Instrument (HFQII): Semi-structured interview guide to assess adherence to program model and to supplement quantitative data by providing context.

These measures are described in more detail in the measurement section of this proposal.

Procedures
Each HF client will be administered the HFAT once a month, beginning at baseline (intake). HF case managers, IHS outreach workers, and members of the evaluation team will work together to administer the instrument. Additionally, IHS outreach workers and case managers will administer the HFAT once a month (beginning at intake) to a comparison group of IHS clients who are participating in alternative housing services.

VI-SPDAT scores should be available for each HF client and comparison group client since all O'ahu housing service providers use the instrument to assess vulnerability before providing services. Members of the research team will obtain VI-SPDAT scores from PHOCUSED, the organization who scores the instruments. Additionally, IHS should provide any relevant VI-SPDAT scores to the research team.

Evaluation team research will enter VI-SPDAT and HFAT data into Qualtrics, a university-supported data management and collection program. Each HF client will be given an ID number comprised of initials from the following: Agency, Gender, Interviewer Initials, Month Day of FIRST interview, Client First/Last Initials. Additionally, HFATs will be matched with VI-SPDATs so that each participant should have a VI-SPDAT and at least 4 HFAT scores. The evaluation team will pick up IHS-collected HFATs once a week and will provide IHS with the coversheets of any evaluation team-collected HFATs from that week.

The evaluation team will administer the Fidelity Index to case managers, IHS staff, and HF clients at 6-month intervals. This data will also be entered into Qualtrics for analysis.

Data obtained from IHS and HF clients will be kept under double-lock – in a locked file cabinet in a locked lab. Besides the original paper HFAT and VI-SPDATs, all data will use ID numbers with no names in order to protect clients' confidentiality.

Analysis Strategy

The evaluation team will test the above research questions primarily by conducting a *latent growth analysis*.[10] This method will allow us to determine how Housing First clients change over time after intake. Four or more time points of HFAT measurement can show changes in ST and LT goals, such as days housed, ER use, number of healthy days, life satisfaction, stress, etc. Obtaining multiple HFAT scores over time can give a more complete picture of the ways in which being housed affects these variables over time. Latent growth analysis will be particularly useful in answering Research Questions 1, 2, and 4.

Research Question 4 involves the use of a comparison groups' HFAT scores. Having a comparison groups' scores will allow us to tell if changes in ST and LT goals are different for HF clients than for clients receiving other types of housing services. For example, we anticipate that HF clients will experience a reduction in ER visits after being housed and that ER visits will continue to decline the longer clients are housed. Comparison group data will allow us to see if ER visits have reduced more for HF clients than for other housing clients. See Graph 1 below for a hypothetical example.

Path analysis can be used to test the effect that certain variables, like place housed and time to placement, may have on ST and LT goals. For instance, we may find that HF participation is associated with decreased stress; however, HF participation may be associated with increased stress if there is a large amount of time between intake and placement.

To further understand the context of HF and to uncover topics not covered in HFAT and HFFI, members of the evaluation team will conduct interviews with primary stakeholders. The interviews will then be transcribed and coded for common themes within and across groups (HF case managers, HF clients, IHS staff).

To analyze the adherence of the program to national HF, the evaluation team will examine the HFFI to check agreement across groups on items and frequencies. This will be completed by determining the level of adherence to each of the 5-10 program HF characteristics defined by Watson et al., 2013.

---

[10] For more information on latent growth analysis, see Duncan and Duncan (2009), available at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2888524/

In August 2016, the evaluation team began conducting geographic information systems (GIS) mapping to assess some of the assumptions of the Theory of Change model (e.g., Are clients likely to stay housed once they are housed?; Are they likely to participate in services once they are housed; What are the factors that contribute to these likelihoods?). Using GIS data from the Honolulu Land and Information Systems (HoLIS), HF records, and survey data we will determine neighborhood suitability based on neighborhood desirability to clients, proximity to transportation, and proximity to social services. This analysis will allow us to compare current client residence sites with the most suitable neighborhoods and to predict likelihood that clients will stay housed and participate in services.

Analysis Methods by Research Question

Research Q	Method	Measure	Participants
1. Is HF participation associated with attaining ST goals?	• Latent Growth Analysis	• HFAT	• HF clients
2. Is HF participation associated with attaining LT goals?	• Latent Growth Analysis	• HFAT	• HF clients
3. Does place of residence & length of time to placement affect attainment of ST & LT goals?	• Path Analysis testing for moderation (Regression) • GIS mapping/analysis	• HFAT • HMIS	• HF clients
4. Is participation in HF associated with better attainment of LT & ST goals than participation in other programs?	• Latent Growth Analysis using a comparison group	• HFAT	• HF clients • Non-HF clients
5. To what extent does IHS-HF adhere to HF model?	• Frequencies (Checklist) • Qualitative data coding (Interviews)	• HFFI • HFQII	• IHS staff • HF case managers • HF clients

Appendix F
Interview Instrument
Institute for Human Services Housing First Service Providers

Participant Code #: _____ **Interviewer: _____**
Place: _____ **Time: _____**

I. Role in Housing First
Thank you for agreeing to participate in this study. I want to start by talking about your role in the Housing First project.

1. Please describe how you became involved with Housing First?

2. What are your primary responsibilities with regard to Housing First?

II. Challenges
We are also interested in some of the barriers to HF implementation and suggestions you may have to improve the program.

1. Please describe some of the challenges you faced as a HF service provider.
   PROBE: With regard to finding housing for the client? With regard to …

2. What was the **biggest** challenge you encountered?

3. How did you overcome or respond to these challenges?

III. Successes
We want to document the major successes of the Housing First program…

1. Please describe some of the successes you've had with your clients?

2. Please describe your greatest success story so far. (Prompts: How long did the client wait for housing? What goals has the client accomplished? What aspects of your role have been the most beneficial?)

IV. Program Fidelity

One of the goals of this study is to understand the ways in which the program was implemented. The following questions address Housing First implementation here on Oahu.

1. What is the typical amount of time from intake to housing placement?

2. Please describe any changes to the program that had to be made once the program began?

3. What makes the housing first program unique or different from how you have done case management with clients in the past?

4. What aspects of the housing first program are similar to how you have done case management with clients in the past?

V. Demographics

Age: _____
Gender: _____
Race/ethnicity: _____
Years working with homeless population: _____
Years in Hawaii: _____

Appendix G
Interview Instrument
Institute for Human Services Housing First Service Clients

Participant Code #: _____ **Interviewer: _____**
Place: _____ **Time: _____**

I. Background
Thank you for agreeing to participate in this study. I want to start by talking about your experience with homelessness and how you came to be involved with Housing First.

1. Please describe a typical day in your life since you became homeless. (Prompts: Where do you sleep? Where do you go during the daytime? What activities do you do?)

2. What events led to your becoming homeless?

II. Housing First Experience
One of the goals of this study is to understand the ways in which the program works here on Oahu and the quality of your experience with the program.

5. How long have you participated in the Housing First program? Have you been placed into housing? How long did it take for you to be placed into housing once you were identified for the program?

6. Please describe your experiences with your case manager. (Prompts: How often do you meet? How long are your meetings? Does the case manager address questions or concerns you have?)

7. Please describe your overall satisfaction with the case management you have received.

8. What do you like most about the Housing First program?

9. What do you like least about the Housing First program?

III. Challenges

4. Please describe any challenges you have faced since participating in the housing first program. (Prompts: Issues with case management? Issues with your landlord? Transportation? Housing? Other concerns?)

5. What was the **biggest** challenge you encountered?

6. How did you respond to these challenges?

IV. Successes

1. Please describe any successes you have had since participating in the Housing First program. (Prompts: Goals met with case management? Transportation? Housing? Other successes?)
2. What was is the greatest success you have had so far?

3. How did you respond to this success?

V. Experiences

1. We are interested in finding out how things have changed for you since being enrolled in the Housing First Program. Since starting in the program:
    a. Has the number of people that you can count on when you need them changed?
    b. Are you able to do things that you were not able to do before?
    c. Are you involved in any social groups?
    d. Has your health or well-being changed?

V. Demographics

Age: _____
Gender: _____
Race/Ethnicity: _____
Number of years homeless: _____
Number of times homeless:_____
Years in Hawaii: _____

Appendix H
Suitability Analysis Methods

We conducted a suitability analysis using a pairwise comparison of the three factors of neighborhood suitability: client desirability, proximity to social/medical services, and proximity to transportation (RQ4). We assigned weights (Table 1) to each factor based on its perceived importance, with proximity to bus stops being the most important, followed by proximity to social services and then, client desirability. We decided that proximity to bus stops was 3 times more important than client desirability because even if the neighborhood is desirable, if the clients cannot find transportation to doctors' appointments and case management appointments, then they will not be successful in the program. For similar reasons, we weighted proximity to social services 2 times more important than client desirability. Bus stops were weighted as 2 times more important than proximity to social services because if clients had access to transportation they could still easily travel to social services located beyond 0.25 miles. After assigning weights, we calculated eigenvector values (Table 2). Next, we calculated values for social/medical services and bus stops that reflected distances equal or less than 0.25 miles (SSValue and BSValue, respectively). Then, we unioned the bus stop buffer and the social services buffer shapefiles with the neighborhood boards and street base layers. In the attribute table, we added & calculated a "CompValue" field using the formula: ([SSValue] * .2410) + ([BSValue] * .5488) + ([Percent] * .2101) with "Percent" being the percent of clients desiring to live in that neighborhood. Using the summarize tool, we calculated the average SSValue, BSValue, Percent, and CompValue for each neighborhood, and created a map that shows a gradient based on the average CompValue for each neighborhood (suitability).

	Des	**SS**	**BS**
Des	1/1	1/1	1/3
SS	1/1	1/1	1/2
BS	3/1	2/1	1/1

Table 1. Pairwise Weights

	Des	**SS**	**BS**	***Eigenvector***
Des	1/5	1/4	0.33/1.83	***0.2101***
SS	1/5	1/4	0.5/1.83	***0.241066667***
BS	3/5	2/4	1/1.83	***0.5488***

Table 2. Eigenvector Values
**Des=Desirability; SS=Social Services; BS=Bus stops*

Appendix I
2015 Fidelity Assessment

The following section compares this Housing First program to Housing First fidelity criteria (Watson et al., 2013) relating to program staff composition, boundaries, policies, and nature of social and housing services. First, we list how this program has met, not met, or exceeded fidelity criteria. Then, we delineate necessary adaptations, including intentional adaptations and adaptations resulting from program barriers. Finally, we present barriers to program implementation and fidelity to the model.

Staff Structure and Composition

Model Criteria		**Program Implementation**		
		Fidelity to Model	**Adaptations**	**Barriers**
Diverse Staff	*Staff highly reflects the diversity within the consumer population*	• The program staff is diverse in age, ethnicity and gender		
Education Requirements	*At least 25% of case managers have a Master's degree or higher.*	• 2 of 5 case managers have a Master's degree or are enrolled in a Master's program		
Harm Reduction/Crisis Intervention Knowledge	*Provides or requires ongoing staff training in harm reduction & crisis intervention.*	• Staff & case managers trained in these approaches • Met once a week to strategize mitigating potential crises		• Staff turnover & collaborating with staff from other agencies made *ongoing* training difficult
Staff Availability	*At least one staff member is available to clients 24 hours a day, 7 days a week.*	• Case managers & clients reported that case managers/staff were available at all hours		
Clinical Staffing	*Has psychiatric staff & mental health professional on staff or contract.*	• One licensed clinical social worker. • One licensed substance abuse counselor • Psychiatrist hired mid-year		

Housing First staff consisted of 5 case managers, 3 housing specialists, a chaplain and community liaison, a program coordinator, a psychiatrist, and a data specialist. The program staff is highly diverse in age, ethnicity and gender. Staff ages range from 29 to 67 years of age and consist of 5 males and 7 females. Staff members' ethnicities include: Japanese (1), Korean (1), Chinese/Caucasian (2), Samoan (1), Portuguese/Caucasian (1), Caucasian (3), and Native Hawaiian (3). All staff was trained in harm reduction and crisis intervention; however, case manager turnover and collaboration with other agencies inhibited formal ongoing training. The program exceeded education and clinical staffing criteria, and clients reported that program staff was always available if needed:

> *"I worked with [IHS staff member], and she's wonderful. And I speak to her probably, four times a month. And she's been enormously supportive of me, enormously supportive. And she's extended herself and then some. And she was the one who helped launched me into the volunteer positions, you know. And she, she's been an enormous emotional support. And she's made herself available to me. You know what, I could probably call her up at 5 o'clock in the morning or 2 o'clock in the morning, you know. That's how she is. She's wonderful, and so had been all the IHS staff. All of them."*
> *– Housing First client on staff availability*

Program Boundaries

Model Criteria		**Program Implementation**		
		Fidelity to Model	**Adaptations**	**Barriers**
Population Served	*Serves only chronically homeless & dually diagnosed individuals & houses current drug users*	• Relied on VI-SPDAT scores to determine vulnerability & risk • All 105 households had at least one person with a VI-SPDAT score of 10 or higher[11] • Housed drug & alcohol users • Data show that clients were highly vulnerable: with multiple physical, mental, & substance abuse issues		

Consumer Outreach	*There is a designated staff member dedicated to outreach or an outreach department*	• Formal outreach was a coordinated effort with Phocused & partner agencies (housing navigators):
		  ○ Housing navigators administered VI-SPDATs to potential clients
		  ○ Phocused referred clients with scores of 10 or higher to IHS
		  ○ IHS outreach workers & case managers find & intake referred clients
			• IHS also administered VI-SPDATS internally	• Relying on 3rd parties to outreach and assess client eligibility led to case managers having difficulty finding clients and differing perceptions of risk/vulnerability
				• Limitations in VI-SPDAT scoring led to the need for additional assessments, slowing intake

Case Management	*Case management responsibilities limited to case management*	• Program's more collaborative approach meant that case managers' responsibilities were not limited to case management	• Initially, case managers served as outreach workers; later transitioned into case management • Case managers worked closely with housing specialists, & sometimes these roles overlapped	• Case managers & staff noted that transitioning from outreach to case management was difficult • Case managers were confused about case management

[11] We were unable to obtain scores for 2 households.

			• Staff noted that coordination with housing specialists was beneficial	responsibilities
Termination Guidelines	*Only terminates clients who demonstrate violence, threats of violence, or excessive nonpayment of rent*	• The program only terminated clients who demonstrated violence or threats of violence or who left voluntarily (n=3)	• Terminated 2 clients who were incarcerated because staff anticipated long-term sentencing for serious offenses	
Termination Policy Enforcement	*Termination policy is consistently enforced*	• Policy was consistently enforced		

The program had a formal policy for identifying high-need clients. "Housing Navigators" from multiple agencies administered VI-SPDATs to potential clients. Phocused scored these VI-SPDATs and referred clients with a score of 10 or higher to IHS. Most of the referred clients did not have a "housing navigator", making it difficult for Housing First case managers to locate clients with whom they did not have a previous relationship. Additionally, when Housing First staff members met with referred clients, they noted that VI-SPDAT scores did not always accurately reflect clients' current states. These difficulties slowed client intake and led to staff having to re-administer VI-SPDATs.

Unlike other Housing First models, this model included intense coordination between housing specialists and case managers, which sometimes led to overlap in roles. However, both staff and case managers reported that this coordination was helpful and necessary:

> *"I think most of the models are very specific of the housing roles versus the case manager roles. Over here, it kind of overlaps a little bit more. […]. We are all willing to play different roles. Sometimes we do play the housing specialist role. Sometimes the housing specialist plays the case manager role. We also know who is appropriate for the lead at the time, because sometimes the housing person will have to make a decision and we, as the case manager will let the client know, "okay, this is the housing specialist's decision, they're going to make it." And you know, our role is to facilitate and help them, and vice versa. Sometimes we have to make a decision, and housing specialist just back us."*
> *– Housing First case manager*

Case managers also functioned in the role of outreach workers initially before transitioning into case management:

> *"What I think we really did was we co-opted into a case management program. And outreach work is very different from case management work. There are many similarities, your sense of mission is equal, the population is the same population, but the duties and roles of the case manager with linking and brokering, kind of temporary of in the moment vibe into the work they do with the clients with exceptions probably, but – so [we] really had to take outreach workers and turn them into case managers."*
> *– Housing First staff member*

Some case managers noted that this transition was difficult:

> *"I think it [difference between outreach and case management] needs to be really clear. I believe even with outreach workers, but to assume that the outreach worker can become a case manager – it's two separate levels of care."*
> *– Housing First case manager*

> *"As the case manager for City Housing First… we have, we have a list of stuff. […] And I'm really bad at… the data part. I mean I wasn't really trained so […]. I been trying to, like I'll use the first hour of the day at the office, and then from 9 to like 3 with clients and then maybe till 4 do the notes. And I'm trying to make that a routine. I've not been ever trained to do this."*
> *– Housing First case manager*

Flexible Policies

Model Criteria		**Program Implementation**		
		Fidelity to Model	**Adaptations**	**Barriers**
Flexible Admissions Policy	*Has a formal protocol for admitting most vulnerable clients.*	• Phocused referred the most vulnerable clients to HF • HF outreach workers & case managers attempted to locate and then intake these referred clients. • Once completing intake, clients placed on housing list	• Most vulnerable clients were moved up on the housing list even if they did not have all necessary documents	• Invalid VI-SPDAT scores and difficulty finding referred clients significantly slowed the intake & housing placement process
Flexible Benefit/Income Policy	*Possession of or eligibility for income benefits is not a housing prerequisite.*	• Clients were not required to be "housing ready" • Clients were not required to possess or be eligible for income/benefits		
Consumer Choice in Housing Location	*The program works with clients to find desirable housing.*	• Considered clients' wishes regarding housing location & type	• Not always able to accommodate all of clients' wishes because of significant barriers • Gave clients 3 opportunities to decline housing option before moving client to bottom of housing list	• Barriers, such as landlord stigma, pets, handicap accessibility, landlord clauses barring alcohol/drugs, & limited affordable housing availability, made it difficult to accommodate all client requests & house clients quickly
Flexible Housing Relocation	*Always attempts to relocate clients when they are dissatisfied with their current housing placement.*	• Quickly rehoused evicted clients/clients who were having difficulty with landlords • Worked to rehouse clients with "reasonable concerns".		
Unit Holding & Case Management	*Holds housing for hospitalization & incarceration for more*	• Continued to offer case management services while units were unoccupied due to		• Difficult to coordinate with criminal justice and medical systems - case managers do

Continuation	*than 30 days & program continues to offer case management services while unit is unoccupied.*	clients' short-term hospitalizations, evictions, etc.		not always know when clients are hospitalized or incarcerated.
Flexible with Missed Rent	*Is flexible with missed rent payments but holds the client accountable.*	• Housing specialists handled rent payments & work with clients to anticipate payment issues • Did not exit any clients due to nonpayment of rent		
Flexible Alcohol/Drug Use	*Allows illicit drug/alcohol use & housing allows illicit drug/alcohol use in units.*	• Allowed drug & alcohol use	• Some landlords did not allow drug & alcohol use	• Landlord restrictions led to conflict between tenants & landlords and inhibited program fidelity
Eviction Prevention	*Has a formal policy & protocol to work with clients to prevent eviction & has a staff member dedicated to eviction prevention.*	• The program had a formal policy and protocol to work with clients to prevent eviction • Recently partnered with the University of Hawaii at Mānoa to offer classes on being good tenants & money management	• While no particular staff member was dedicated to eviction prevention, case managers, staff, & housing specialists worked together to prevent eviction by anticipating problems, strategizing solutions, & working as liaisons between clients & landlords	
Consumer Input	*Has formal & informal mechanisms for receiving & implementing client input.*	• The program had *informal* mechanisms for receiving client input, particularly through case manager meetings and support groups	• No *formal* mechanisms for client feedback. • For the next funding period, will conduct a photo project designed to receive and implement client feedback	

Despite significant barriers, the program housed highly vulnerable clients with no income or income benefits, offering eviction prevention and reasonable client choice of housing. Because of limited affordable housing stock and landlord stipulations regarding pets and alcohol/drugs, providing client choice and housing clients quickly became difficult. Therefore, the program offered clients a maximum of three units before placing them at them at the bottom of the housing list until more units came available.

> *During the process of looking for housing, there's a lot of contact between the housing specialist and the client because they need to go see the place. We let them see the place. We let them say yes or no to the place if they like it. There's a few of them that we'd deny them the place, but majority of them will take whatever comes." – Housing First housing specialist*

The program maintained flexible policies regarding alcohol and drug use, missed rent payments, and housing relocation. Again, landlord clauses restricting alcohol/drugs contradicted HF's flexible policies and led to conflict between landlords and tenants.

> *Yea, but drugs, all the landlords don't allow it. They don't allow any illegal activities at all in their unit or even on their property. Yea, but with this program, because we allow it, we had to express to the whole team that because we allow it, doesn't mean the landlord allows it. So we had to understand that. And we have to for them to stay in housing. We have to keep telling our clients that – "handle your business outside. Don't do it on the property, don't do it on the unit." But at the same time, as a housing specialist and a case manager, we try to work on those issues with them – we need to try to minimize their use. – Housing First housing specialist*

Housing First housing specialists were essential in mitigating these conflicts and avoiding eviction.

> *"For me, because we converse for a long time, they open up so much units for us. So then we have that relationship with them because we deal with them all the time. They realize the kind of clients that are coming in. We even have landlords that will come and have lunch with us downstairs. So, yeah, we build that relationship with them. But there's just a few landlords that we just, we kinda know what client to put into certain landlords. Yea. We have landlords that is willing to be patient. Willing to work with this client. Then we know we can put our hard client into that unit only because we know that it's going to take some time to transition." – Housing First housing specialist*

The program has met or exceeded criteria regarding rent payment and relocation. No clients have been exited due to rent nonpayment, and clients with reasonable concerns (e.g., conflicts with landlords) have been rehoused. In order to elicit more client input on these processes, the program is working with the evaluation team to develop a client input policy that will include a photo response project and a survey with clients.

Nature of Social Services

Model Criteria		**Program Implementation**		
		Fidelity to Model	**Adaptations**	**Barriers**
Low-demand Service Approach	*Clients not required to engage in any services except for case management in order to receive/continue receiving housing*	• Did not require clients to engage in any service besides case management		
Harm Reduction Approach	*Uses a harm reduction approach & staff has a strong conceptual understanding*	• Staff & case managers engaged in and had a strong understanding of the harm reduction approach		
Small Caseloads	*Case managers have 10 or fewer clients on their caseloads*	• Case managers had well above the 10 cases maximum	• Case managers have on average 19 households (31 individuals) on their caseloads	• Not enough case managers for the number of clients • Stably housed clients not transferred to external case managers, resulting in high caseloads • Care coordination difficult to determine which clients may have external case managers • Large caseloads led to severe anxiety and burnout among case managers
Regular In-Person Case Management Meetings	*Clients meet with case managers 2-3 times a month on average, but program has policy that more frequent meetings occur in the first 1-6 months*	• Case managers & clients indicate that they did not meet 2-3 times a month	• Case managers prioritized clients they perceived to be more "high need" • "Higher functioning" clients not seen as often • Used a multiple case management team	• Large caseloads contributed to difficulty in seeing all clients regularly • "High need" clients took up the majority of time

			approach so that a member of the team tries to see clients weekly	
Ongoing Consumer Education	*Clients receive ongoing education in Housing First and harm reduction policies & practices.*	• Education occurred informally and individually. • Program considering including an educational component during intake for the next funding year.	• The program offered support groups that encouraged clients to take steps in skill-building and community connection.	• Some evidence suggests that clients were not aware of the service aspect of the program. • Difficult to provide formal education to clients when the program cannot require clients to attend education classes.

As the model stipulates, the program did not require clients to participate in any services besides case management and allowed clients to set their own goals for the program:

> *"Housing First is client-based, client-driven goals. So, whatever they think is most important."*
> *- Housing First case manager*

> *"We don't require, too, much. We don't require anything actually. As long as you follow the case manager and follow your lease, those are kind of the only rules." - Housing First case manager*

Case managers were trained and had conceptual knowledge of harm reduction approaches. Part of their approach was utilizing a multiple case management team to help reduce harm and prevent impending crises. Therefore, some member of the team was supposed to meet with clients regularly, particularly in the beginning.

> *"And when they get housed, we try to see them one or two times a day – a week. After that if they're still not needy – they're not a client that needs so much attention – then we do just once a month and the case manager goes there once a week." – Housing First housing specialist*

However, case managers were unable to meet with clients weekly, mostly because of high caseloads.

> *"I feel like I'm failing miserably in seeing everybody once a week plus keeping up with all of the other stuff that you gotta keep up with. […] I just don't think it's realistic to have the caseload we have and*

> *then have to do the amount of home visits we have to do. That's just not gonna happen. […] I feel like that – it's a lovely idea, and you know what? If I had 12 clients, I might be able to do that. You know? But we're talking like 27…30…whatever. I don't even know how many." - Housing First case manager*

Though clients receive an informal introduction on the program, its policies, and its approach, *ongoing* education can be difficult because of high caseloads and the fact that the program cannot require clients to participate in education. However, the program does offer support groups and classes that clients can opt to attend. Evidence suggests that higher-functioning clients are well informed of the program, even working with the case manager as a team; while other higher need clients may need additional education:

> *"However, a lot of these people don't understand that this is a program. Most local people here are used to Section 8. Section 8 is you get a subsidy, and that's your place. You get reevaluated a year from now. As long as you pay your rent, there's no problems; there's no issues. This one is much more invasive. However, these patients – clients – haven't gotten that message. And even though it's read to them when they're signing their papers, they're totally at a loss." – Housing First case manager*

Nature of Housing and Housing Services

Model Criteria		**Program Implementation**		
		Fidelity to Model	**Adaptations**	**Barriers**
Scattered-site Housing	*Housing is scattered-site in buildings operated by private landlords.*	• Program strove to meet scattered-site criteria. • Housing is operated by private landlords		• Obstacles related to other program criteria (e.g., landlord clauses barring illicit drug/alcohol use; finding desirable housing for clients) and limited affordable housing made scattered-site a challenge
Fast Placement into Permanent Housing	*The program places clients into housing in one week or less.*	• Time from intake to placement ranged from 0 to 219 days • Median time from intake to placement was 35 days	• The program identified units ahead of time so that they were ready when clients were identified	• Difficulty finding dislocated clients • Clients' loss of identification documents • Competition from other programs • Landlord stigma or opposition to the program • Finding units for disabled clients • Finding units appropriate for larger families • Balancing clients' desires with these obstacles
Temporary Housing Placement	*Temporary housing placement does not last more than one month.*	• Temporary housing was not used frequently in this program		.
Consumer is Leaseholder	*100% of consumers are the leaseholders of their units.*	• All clients are leaseholders of their units		

The program faced significant barriers to housing clients quickly in scattered-site housing, including landlord stigma and/or restrictions, limited affordable housing stock, and balancing clients' needs and desires with these obstacles. For example, some clients

needed handicap assessable units, pet-friendly units, and/or units large enough for their families. Additionally, competition from other housing programs limited the available housing stock.

> *And as great as some landlords are, that are willing to help these individuals, I don't think they are willing to take that kind of liability. That is always the issue. It is always easy to house these guys in poor neighborhoods, because that is just how it is. That kind of goes against the scattered site theory because, yea, it is still scattered site in a sense.*
> *– Housing First case manager*

> *"Our biggest challenge was finding housing for these clients because a lot of the landlords, they don't want to deal with this population, yea? And it's understandable because they don't want to have to deal with the complaints, and any illegal things that happens in their unit. But part of our job is vouching for them, letting the landlords know that trying to convince them to coming on our side. That was one of the biggest challenges." – Housing First housing specialist*

Despite these barriers, the program was able to house most clients in about a month, with 100% of clients being the leaseholders of their units.