Community Preventive Services Task Force

Health Equity: Permanent Supportive Housing with Housing First (Housing First Programs)

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Finding and Rationale Statement
Ratified June 2019

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CPSTF Finding and Rationale Statement

Context

Each year in the United States, an estimated 1.4 million people stay in a homeless shelter at least once, and many others who are homeless do not use shelters (U.S. Department of Housing and Urban Development [HUD], 2018). Homelessness is associated with lower income and is more common among racial and ethnic minority populations (HUD, 2018).

Homelessness is associated with multiple health problems, increased mortality, and increased use of health care and other services (Caton et al., 2007). Approximately half (49.2%) of the people experiencing homelessness have a disabling condition, which the Department of Housing and Urban Development defines as having limitations in conducting daily life activities, or in working or living independently, or having a diagnosis of HIV infection (including AIDS; Henry et al., 2018).

In the United States, a common approach to serving people who are experiencing homelessness and have a disabling condition is referred to as "Treatment First," or "continuum of care" (National Academies of Sciences, Engineering, and Medicine, 2018). The underlying premise is that, in the absence of treatment and sobriety, these individuals or families are not capable of maintaining a home, and their health and other conditions might worsen if given housing. Treatment First approaches maintain that clients must take steps, including treatment and sobriety, to become "housing ready" before they are given permanent supportive housing. Often with these programs, maintenance of housing is contingent on sobriety and treatment.

In contrast, permanent supportive housing with Housing First (hereafter, Housing First) proposes that people who are experiencing homelessness and have a disabling condition, are capable of maintaining a home when provided the opportunity along with a range of services (National Academies of Sciences, Engineering, and Medicine, 2018). It is assumed that once people are housed and offered services, their health, social situation, and quality of life will improve.

The systematic review described below evaluated the effectiveness of the Housing First program compared with Treatment First or treatment as usual. Treatment as usual includes services such as healthcare for physical and mental conditions and assistance with securing temporary housing; it may or may not lead to permanent housing. These services are provided by national, state, and local government agencies and non-governmental organizations.

Intervention Definition

Housing First programs provide regular, subsidized, time-unlimited housing to individuals and families experiencing homelessness in which the head of household has a disabling condition, which may include mental health or substance use disorders, difficulties in independent working and living, and HIV infection. Clients are not required to be "housing ready," i.e., substance free or in treatment. Once housed, they are encouraged, but not required, to maintain sobriety to keep their home. Clients may choose among housing alternatives and available services. Most options require meeting HUD housing standards as well as standards of accessibility and reasonable accommodation.

Housing First programs offer clients a range of services to support housing stability, including one or more of the following: help with housing (e.g., assistance getting furniture and training in money management, including rent),

health care, mental health services, treatment for substance use disorder, peer support, occupational therapy, and employment counseling.

Programs may vary in terms of types of housing offered (grouped vs. scattered), meeting requirements (client with caseworker), tailoring to client needs, and monitoring program fidelity.

CPSTF Finding (June 2019)

The Community Preventive Services Task Force (CPSTF) recommends permanent supportive housing with Housing First (hereafter, Housing First programs) based on strong evidence of effectiveness in decreasing homelessness, increasing housing stability, and improving the quality of life for people who are experiencing homelessness and have a disabling condition. For clients living with HIV infection, Housing First programs improve clinical indicators and physical and mental health and reduce mortality. Housing First programs also lead to reduced hospitalization and use of emergency departments for homeless persons with disabling conditions, including HIV infection.

The CPSTF finds the economic benefits exceed the intervention cost for Housing First programs in the United States. Because homelessness is associated with lower income and is more common among racial and ethnic minority populations, Housing First programs are likely to advance health equity.

Rationale

Basis of Finding

The CPSTF recommendation is based on evidence from a systematic review of 26 studies (in 65 papers, search period through February 2018) that met inclusion criteria. Included studies evaluated intervention effects on one or more of the following outcomes: housing stability, physical health, mental health, substance use, quality of life and community integration,* health care use, and mortality. Data for populations living with and without HIV infection were analyzed separately. All studies had a comparison group; 8 studies had randomized control design. Among the 16 studies reporting follow-up, the median duration was 24 months (interquartile interval: 12 months to 24 months). Table 1 shows results for outcomes assessed.

Table 1: Intervention Effects on Measured Outcomes, Housing First Programs Compared with Treatment First Programs or Treatment as Usual

Outcome	Number of Studies	Results	Favorability
Clients with a disabling condition, not including those living with HIV infection			
Housing Stability	13 studies	Median: 41% (IQI: 16% to 150%)	Favors intervention
Homelessness	5 studies	Median: -88% (IQI: -90% to -59%)	Favors intervention
Physical health	2 studies	-0.2% and 6%	Negligible change
Mental health	4 studies	Median: -2% (Range: -16% to 3%)	Negligible change
Substance use: alcohol	5 studies	Median: -10% (IQI: -47% to 46%)	Small decrease
Illegal drug use	3 studies	Median: 11% (Range: -1% to 62%)	Small increase
Alcohol use and drug use	1 study	-71%	Favors intervention
Quality of Life	4 studies	Median: 5% (Range: 2% to 10%)	Favors intervention
Community integration*	3 studies	Median: 14% (Range: 1% to 227%)	Favors intervention

Outcome	Number of Studies	Results	Favorability
Health Care Use: Emergency Department Use	3 studies	Median: -5% (Range: -65% to 20%)	Favors intervention
Health Care Use: Hospitalization	2 studies	-36% and -7%	Favors intervention
Clients living with HIV infection			
Housing Stability	1 study	63%	Favors intervention
Homelessness	1 study	-38%	Favors intervention
Physical health (viral load or opportunistic infection; SF-36 physical health score)	2 studies with 4 data points	Median: -22% (Range: -32% to -4%)	Favors intervention
Mental health (perceived stress, depression scale score, mental health problems)	1 study with 3 data points	Median: -13% (Range: -22% to -10%)	Favors intervention
Mortality	2 studies	-42% and -32%	Favors intervention
Health Care Use: Emergency Department Use	1 study	-41%	Favors intervention
Health Care Use: Hospitalization	1 study	-36%	Favors intervention

IQI = interquartile interval
Range = (when fewer than 5 studies, the range is reported)
* Community integration: Extent to which an individual resides, participates, and socializes in his/her community, measured, for example, in the Wisconsin Quality of Life Index.

Among populations not living with HIV infection, there was no difference in mental health, physical health, and substance use outcomes between clients in intervention vs. control groups. Analysis of mental health changes in intervention and control groups showed comparable improvement for both. For these outcomes, there is no apparent incremental health benefit associated with Housing First programs. However, for clients both with and without HIV infection, there were substantial reductions in emergency department use and hospitalization associated with Housing First programs.

Applicability and Generalizability Considerations

Intervention Settings

Programs were implemented in urban (24 studies), suburban (1 study), or a mix of urban and suburban (1 study) settings across the United States (23 studies) and Canada (3 studies). Most programs were implemented in large cities (18 studies). None of the included studies were conducted in rural settings. Interventions were effective across settings examined.

Population Characteristics

Many of the programs evaluated in the included studies limited participation to those with a mental health disorder (13 studies) or substance use disorder (11 studies). Some studies limited participation to veterans with identified needs (2 studies), or people who had a diagnosis of HIV infection (3 studies), had difficulties working independently (1 study), or were identified as having a highest level of need (4 studies).

Study participants had a mean age of 42.4 years (20 studies) and 74.0% were male (26 studies). Only one study examined a program targeted to homeless families. At the time of baseline assessment, the median duration of homelessness was 6.4 years. Of the 23 studies conducted in the United States, 20 reported race and ethnicity as follows: black (median 50.0%; 20 studies), white (median 32.4%; 18 studies), Hispanic (median 12.5%; 16 studies), Asian (median 1.4%; 6 studies), and other (median 7.1%; 15 studies).

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Housing First programs were effective for adult males from diverse racial and ethnic backgrounds. No study focused on females or racial/ethnic minority populations, and no study described results separately by sex, race, or ethnicity. One study found no difference in housing stability benefits for older and younger homeless clients. Women experiencing homelessness are often exposed to additional problems, such as sexual violence, and may thus have differing benefits from Housing First programs. (Burt, et al., 1989; Lewis, et al., 2003)

Intervention Characteristics

Included studies evaluated interventions that offered scattered housing (17 studies), group housing (4 studies), or both (5 studies). One study that stratified by scattered vs. group housing reported similar improvements in housing stability for both types. The same study reported that participants in group housing had slightly better results in terms of community integration. Housing First programs should be applicable for either scattered or grouped housing.

In addition to housing assistance, interventions offered the following services to support housing stability:

- Case management (11 studies)
- Mental health services (15 studies)
- Medical services (14 studies)
- Drug treatment services (14 studies)
- Employment assistance or vocational training (5 studies)
- Other, e.g., money management, food/grocery assistance, facilitation of family relations, recreational opportunities (8 studies)

Most studies provided minimal detail on services offered and did not report whether services were used, making it difficult to draw conclusions about the role of service utilization in outcomes.

Seven studies used the Assertive Community Treatment model, which includes a coordinated team of service providers who offer around-the-clock on-call services and maintain a low participant-to-staff ratio. One study used Intensive Case Management, which employs a case manager to refer clients out for care and is often used with clients who have less severe mental or physical health needs (Tsemberis 2010). Both forms of service delivery were found to be effective.

Data Quality Issues

Study designs included individual randomized control trials (8 studies) and pre-post studies with concurrent comparison groups (18 studies). Common limitations affecting this body of evidence were lack of description of the intervention and

control group services that were available or used, selection bias due to self-selection, and participant loss to follow-up (particularly differential loss to follow-up between intervention and control groups).

Other Benefits and Harms

No additional benefits or harms were noted in included studies. The broader literature has suggested that the Housing First program might lead to clients' decreased motivation to work (Poremski et al., 2016). The same researchers (Poremski et al., 2016) report, however, that in one of the Canadian Housing First programs, 69% of the people living with a disabling condition wanted to work. Other literature suggests that providing housing may give clients a safe environment to continue substance use (Mares et al., 2011); our review of available studies indicates a negligible effect.

Economic Evidence

Evidence from the systematic economic review shows the economic benefits exceed the intervention cost for Housing First programs in the United States. The economic review included 20 studies (search period through November 2019). Seventeen studies were from the U.S. and three were from Canada. All monetary values are reported in 2019 U.S. dollars.

The median sample size was 279 (IQI: 113 to 1,158), based on 26 estimates from 19 studies. The median age for participants was 45.5 years (IQI: 42 to 48; 8 studies), and a median of 30% were women (IQI: 29% to 40%; 13 studies). Among studies that reported race and ethnicity, representation included participants who were White (median of 31%; 8 studies), Black (median of 47%; 10 studies), Hispanic (median of 9%; 8 studies), and American Indian or Alaska Native (14% and 28%; 2 studies).

One study from the United States and another from Canada modeled the economic benefits of Housing First programs. The remaining 18 studies relied on observed changes.

Four of the U.S. studies met the intervention definition but did not provide summary economic estimates with cost-benefit or cost-effectiveness outcomes. Three of these were conducted by the Department of Veterans Affairs and compared Housing First interventions to other homeless programs offered by the Department. One study that modeled a Housing First program for homeless persons with HIV used treatment costs associated with averted infections of seronegative partners to assess intervention benefits. These four studies were not included in the cost-benefit assessment.

All the included studies reported intervention cost. The components considered to be drivers of intervention cost were the following: subsidies for rent, assistance in locating housing and maintaining landlord relations, and support for healthcare. Additional optional components were housing services such as furnishings and move-in costs and support services such as employment counseling, assistance with integration into the community, and life skills training.

Twelve studies reported estimates included in the cost-benefit evidence; nine from the United States and three from Canada. Studies reported economic benefits associated with the following: averted healthcare (12 studies), averted emergency housing (5 studies), averted judicial and police services (12 studies), averted welfare and disability transfers (4 studies), and increased employment income (1 study). With the exception of increased employment income, all of these were considered drivers of economic benefit.

The economic review team assessed the quality of estimates based on the inclusion of drivers and the appropriateness of methods used to compute them. Of the 23 intervention cost estimates, the majority were of good quality (18 estimates), and the remaining were of fair quality (5 estimates). The most frequent limitations were small sample size

and valuation based on sources external to the study. Of the 25 economic benefit estimates, 12 were good quality, and the remaining were of fair quality. The most frequent limitations were inappropriate comparison group and valuation based on sources external to the study.

Intervention Cost

- The median cost per person per year for U.S. studies was $17,069 (IQI: $5,525 to $29,105), based on 17 estimates from 12 studies.
- The median cost per person per year for all studies was $16,873 (IQI: $12,192 to $23,199), based on 23 estimates from 15 studies.

Economic Benefit

Economic benefit due to intervention is the sum of savings from healthcare, emergency housing, judicial services, welfare and disability costs, and benefits from increased employment.

- The median economic benefit per person per year for U.S. studies was $17,016 (IQI: $5,607 to $30,721), based on 19 estimates from 13 studies. The economic benefit estimates were mixed; 16 estimates were cost-saving, and 3 estimates were cost-increasing.
- The median economic benefit per person per year for all studies was $17,750 (IQI: $5,301 to $26,907), based on 25 estimates from 16 studies.

Benefit to Cost Ratio

- The median benefit to cost ratio for U.S. studies was 1.44 (IQI: 0.92 to 2.45), based on 14 estimates from 9 studies.
    - The median benefit to cost ratio for good quality estimates from the U.S. studies was 1.29 (IQI: 0.99 to 1.76), based on 9 estimates from 6 studies.
- The median benefit to cost ratio was 1.06 for all studies (IQI: 0.87 to 1.84), based on 20 estimates from 12 studies

Considerations for Implementation

When implementing a Housing First program, the following issues should be considered. These are drawn from studies included in the existing evidence review, the broader literature, and expert opinion.

- Resistance from community institutions to providing programs for people who are not “housing ready” (Tsemberis, 2003).
- Resistance from landlords. Unless there are regulations preventing this type of discrimination, landlords may reject rental applications from program participants (Nelson et al., 2014).
- Collaboration among agencies and coordination of services. People experiencing homelessness and living with disabling conditions commonly have multiple and diverse needs. Housing First programs can benefit from collaboration among agencies and coordination of services (U.S. Interagency Council on Homelessness, 2016).
- Funding. At this time, there is no coordinated, single source of funding for Housing First programs (National Academy Report, 2018).

Evidence Gaps

Several areas were identified as having limited information. Additional research would help answer questions and strengthen findings in these areas.

- How effective is the Housing First program for the following population groups?
  - Families
  - Youth
  - Women and LGBTQ
  - Rural communities
- Which types of services do programs offer? Which ones do clients use and with what frequency? How does program effectiveness vary services available or used?
- What is the long-term impact of the Housing First program on health outcomes?
- What is the cost-effectiveness of Housing First programs?
- What is the cost-benefit when interventions are implemented for youth or families, or in smaller urban or rural areas?

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Disclaimer

The findings and conclusions on this page are those of the Community Preventive Services Task Force and do not necessarily represent those of CDC. Task Force evidence-based recommendations are not mandates for compliance or spending. Instead, they provide information and options for decision makers and stakeholders to consider when determining which programs, services, and policies best meet the needs, preferences, available resources, and constraints of their constituents.

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