

# HUD-CDC Housing and Health Study Project Description

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## Study Summary

The Housing and Health study is a multi-site, multi-agency research collaboration. The goal of the project is to examine the impact of providing housing for people living with HIV who are homeless or at imminent risk of homelessness on their disease progression and their risks of transmitting HIV. Findings from this project will contribute to knowledge about how to prevent further spread of HIV and improving the health of people living with HIV who are homeless or at imminent risk of homelessness.

This project is a collaboration between federal and local government agencies, universities, and private not-for-profit agencies. The research project is funded by the Centers for Disease Control and Prevention (CDC) and the housing voucher portion is funded by the Department of Housing and Urban Development (HUD). Funding has been awarded for providing housing and related services to HUD grantee agencies and their partners in Baltimore, MD, Chicago, IL, and Los Angeles, CA. In addition, RTI International, in conjunction with Columbia University (New York, NY) and Emory University (Atlanta, GA), has been contracted to lead the research and data collection for the project.

The project will enroll and follow participants for 18 months. Participants will be recruited from the three HUD-funded grantees and their partners (i.e., study sites) in different areas of the country who are providing HOPWA (Housing Opportunities for People With AIDS) housing. Approximately 1000 people living with HIV will be recruited from the housing sites for the study, with one-third of these coming from each of the study sites. Each study site will have two groups: a treatment group and a comparison group. A project-sponsored lottery will determine each participant's group assignment. The treatment group will consist of participants who will receive Housing and Health Study housing vouchers, and the comparison group will consist of participants who receive assistance finding housing according to local standard practice.

There are several study enrollment sessions for participants. After determining eligibility for HOPWA housing, participants will meet with an interviewer to complete a questionnaire that asks about the places where they have lived, health and lifestyle, social services use, problems getting services, HIV risk behaviors such as sex and drug use, and other issues.

Following the questionnaire, participants will take part in the first of two sessions of Health First, a client-centered HIV risk-reduction counseling session. This one-on-one session with a counselor will focus on changing behaviors that put others at risk for HIV infection, and participants at risk for re-infection. They will also develop a risk-reduction plan with the counselor. In the final part of this session, they will be asked to provide a blood sample that will measure HIV progression by testing CD4 and viral load.

The participants will return approximately two weeks later to receive the results of their blood test and to discuss the meaning of the results. They will be provided with information about

medications used to treat HIV and the importance of adhering to medication regimens. They will also review and modify (if necessary) the risk reduction plan developed during the first session.

After these two study enrollment sessions, there will be three follow-up meetings with participants in both groups of the study (at 6, 12, and 18 months after the initial session). These meetings will include a follow-up questionnaire and another blood test to monitor participants' CD4 and viral load. Participants will be provided with monetary incentives to reimburse them for their time and travel for all study sessions.

Everyone enrolled in the study will receive standard services, including appropriate social services and assistance in obtaining housing. Participants in the comparison group will not be denied access to housing and will receive housing as soon as it becomes available through the housing agency's normal and customary provision of housing resources.

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## Expanded Study Description

### Background

Evidence is accumulating that housing may be an important factor that influences human immunodeficiency virus (HIV) sex and drug risk behaviors. A growing number of studies have documented the co-occurrence of homelessness and HIV infection. The prevalence of HIV/AIDS is three to nine times higher among persons who are homeless or unstably housed compared with persons with stable and adequate housing, depending upon the population and geographic area studied.<sup>1-7</sup> Despite this apparent connection, few studies have investigated whether homelessness or unstable housing, compared with stable and adequate housing, is linked with HIV risk behaviors, and whether change in housing status is associated with change in risk behaviors. One study found reductions in rates of sex and drug risk behaviors among individuals with a prior history of homelessness or unstable housing who became stably housed.<sup>8</sup> However, from this study it was not possible to determine that change in housing status always preceded change in risk-taking behaviors.

Among people living with HIV, housing is also associated with receiving and maintaining HIV medical care, access to antiretroviral treatments, and adherence to treatment regimens. Studies have demonstrated that homelessness can be a major barrier to obtaining medical care and to obtaining consistent care.<sup>9-11</sup> Persons who have housing needs and report receiving any type of assistance were almost four times more likely to enter into medical care than those who do not receive assistance.<sup>10, 12</sup> Not surprisingly, housing status has been found to be associated with HIV viral load levels, such that being stably housed predicts low viral load or recent decreases in viral load. Conversely, homelessness or unstable housing predicts higher viral loads.<sup>10, 13</sup>

However, few studies have investigated whether changes in housing status is associated with changes in risk behaviors over time. The existing literature describes the associations between housing status and HIV risk, infection, and treatment, but there is virtually no published research on whether providing housing is an effective HIV prevention intervention. For those who are

living with HIV/AIDS, it is particularly important to understand whether a stable housing situation affects HIV-transmission risk behavior, access to and use of medical services, and treatment adherence.

To address this gap in the research on housing and health for persons living with HIV, the Centers for Disease Control and Prevention (CDC) and the Department of Housing and Urban Development (HUD) have collaborated to initiate the HUD-CDC Housing and Health Study.

## **The HUD-CDC Housing and Health Study**

The Housing and Health study is a multi-site, multi-agency research collaboration funded by CDC and HUD. Beginning in October, 2002, members of four research entities and HUD have gathered to develop the plan for the Housing and Health Study.

- CDC has taken the lead role in developing the research design and materials.
- Researchers from Emory University in Atlanta, GA, and Columbia University in New York, NY have provided expert consultation to the project.
- RTI International has been involved with developing study materials and is overseeing implementation of the study.
- HUD has provided the financial support necessary to obtain additional housing resources and staff for the grantee agencies. Although HUD is supporting the project and is a collaborative partner in the project, HUD will not be directly engaged in the research.
- In addition, an advisory committee of housing providers has carefully reviewed and provided input into the study plans throughout project development.
- HUD-funded grantees and their partners in three cities around the country are collaborating on this project by screening potential participants, providing services to study participants (e.g., housing referrals, case management), and being actively involved with implementation of the study.

## **Study Goal**

To examine the impact of providing housing for people living with HIV who are homeless or at imminent risk of homelessness on their disease progression and their risks of transmitting HIV.

## **Study Locations**

Through a competitive grant process, the study grantees were selected from those who applied during the Fiscal Year 2003 cycle. The study will be conducted in Baltimore, MD, Chicago, IL, and Los Angeles, CA.

## **Questions addressed by this study**

There are two primary research questions in the Housing and Health Study.

1. Does providing Housing and Health Study vouchers for HOPWA housing affect HIV risk behavior among people who have HIV?
2. Does providing the opportunity for HOPWA housing affect HIV-infected persons' (a) access to medical care for HIV/AIDS; (b) adherence to such care, including compliance with HIV medication therapies; and (c) biologic measures of HIV-related health status?

Other research questions that this study will address include:

1. How does the length of time HIV-infected persons remain in stable housing affect HIV risk behavior?
2. Does the provision of housing affect proximal outcomes (e.g., increased condom use self-efficacy, social norms) associated with a reduction in HIV risk behaviors?
3. Does the provision of housing affect social contact, employment outcomes, quality of life, mental health (e.g., depression)?
4. What is the cost of the intervention?
5. Is the intervention cost-effective relative to: (a) other interventions in other public health areas generally, and (b) other HIV prevention interventions specifically?

## **How the study will be conducted**

### **Participants**

A total of 1000 persons living with HIV will participate in the Housing and Health Study from the three HOPWA-funded grantee agencies. Five hundred (500) participants will be randomly assigned to receive a study housing voucher in addition to the supportive agency services and the HIV counseling intervention. The remaining 500 participants will receive the HIV counseling intervention and standard agency services, which includes access to housing through the agency as it becomes available through other sources.

### **Eligibility**

To participate in the study, persons must meet the criteria for HOPWA eligibility. Those who are eligible for the study must meet **all** the following criteria:

1. HIV seropositive (HIV+)
2. At least 18 years of age
3. English or Spanish speaking
4. Able to provide informed consent
5. Able to complete the assessments and participate in the interviews
6. Categorized as low income as defined by HOPWA
7. Homeless or at imminent/severe risk of homelessness
8. Able to provide information about identity (photo ID, Medicare card, etc.)

## **Study Procedures**

### **Advertising the Study and Recruiting Potential Participants**

The marketing and recruitment phase of the Housing and Health Study is scheduled to begin in April, 2004, and the first participants will be enrolled in May, 2004. Local agency staff will assist in identifying locations to place posters and brochures around the community to inform potential participants about the study. Agency staff will be provided with information about the study and will assist in referring those who are interested to the study. People who are interested will come to a central location or call a toll free number where they will be given more information about the study. Those who are interested will be screened for eligibility by agency staff and referred to the study staff for enrollment.

### **Enrollment and Study Sessions**

Once participants are referred to the study staff and enrolled in the study, there will be two baseline sessions completed within 3-4 weeks of enrollment. The second session will occur two weeks after the first session. To ensure that those who are recruited represent a broad cross-section of homeless persons living with HIV in each community, there will be three cycles of enrollment that will occur one month apart.

### **First Session (Baseline Session 1)**

Participants will complete the following four main activities during the first session:

1. Provide informed consent by signing a form after it is read to them by the interviewer. At this point they will officially be enrolled in the study.
2. An interviewer will assist participants with completing a computerized questionnaire that will include the following sections:
  - a. Demographics
  - b. Housing information
  - c. Health and well-being
  - d. Relational and social context
  - e. Sexual behavior
  - f. Alcohol and drug use
  - g. Medical services and medication adherence
3. Participate in the first of two sessions of client-centered HIV risk-reduction counseling (Health First 1). This one-on-one session with a counselor will focus on behaviors that put others at risk for HIV, and themselves at risk for HIV re-infection. They will also discuss a risk-reduction plan with the counselor.
4. Provide a blood sample which will be analyzed to determine the progression of their HIV (using CD4 cell and viral load count).

### **Second Session (Baseline Session 2)**

During the second baseline session, the participant will engage in the following activities:

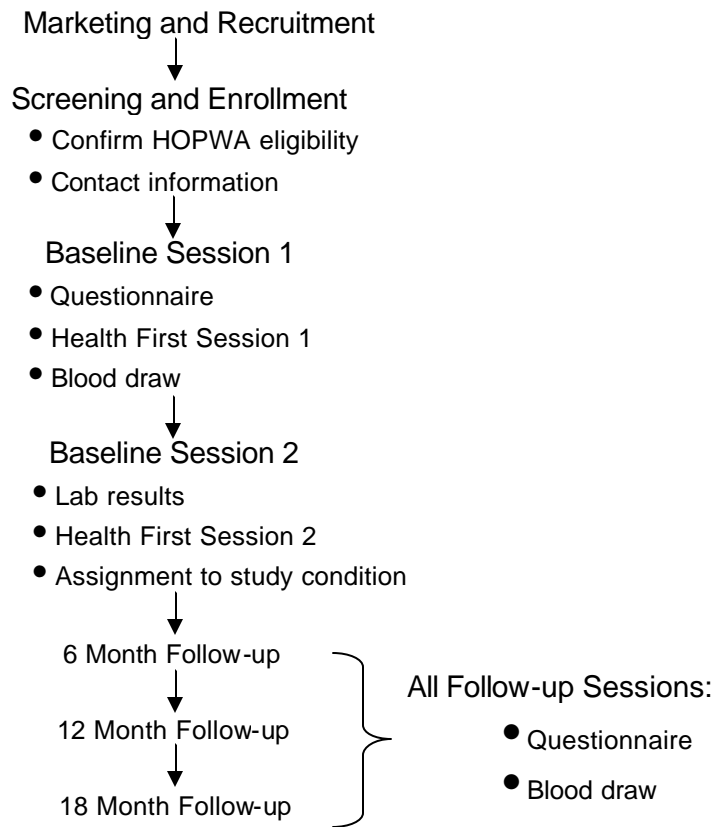
1. Receive their blood test results and have an opportunity to discuss the meaning of the results.
2. Complete the second HIV transmission counseling session (Health First 2). This one-on-one session with a counselor will focus on how HIV medications work and strategies for adhering to treatment. They will also review their risk-reduction plan from the previous session.

3. Find out to which study condition he or she has been assigned.
4. Discuss housing options with a housing advocate/case manager.

Follow-up Sessions

After the baseline sessions, housing service providers will work with each participant to address their housing and other service needs. Follow-up study sessions will occur 6 months, 12 months, and 18 months after the second baseline session. At each follow-up session, the participant will complete a questionnaire and provide another blood sample to monitor their viral load and CD4 cell count. The flowchart of the study phases is shown below.

HUD-CDC Housing and Health Study Flowchart



Participant Protections

Because people living with HIV who are homeless or at imminent risk of losing housing are a highly vulnerable population, the researchers have taken care to ensure that the rights and privacy concerns of participants are addressed throughout the study. Every step has been taken to ensure that the information discussed or revealed during study participation is kept confidential and secure.

No one’s opportunities for housing will be limited by the presence of this study in a community or by participating in this study. All participants in the Housing and Health Study will receive, at

a minimum, standard housing services and an HIV transmission counseling intervention. Housing agency clients who do not participate in the study will continue to be eligible for the same housing services that would be available to them in the absence of the study.

Protections have also been put in place to protect the confidentiality of the participants and the information they provide. Data collected will be kept in secure electronic data files with limited access only to authorized personnel at RTI. Hard copy data screening forms will be kept in locked files. Names of study participants will only be used for tracking purposes; no names or other identifying information will be linked with the other data in the files.

Institutional review boards (IRBs) are responsible for ensuring that participants in research studies are appropriately protected. IRBs from each of the four research institutions (CDC, Emory University, Columbia University, and RTI International) have reviewed and approved this study.

Local community advisory boards will be involved throughout the study to ensure that it continues to meet the community's expectations. The advisory boards and agency staff will also help identify the local venues that are appropriate for marketing the study to recruit a broad range of eligible participants.

In addition to these efforts, a pilot test of the study materials and procedures was held in November, 2003. Eighteen formerly homeless persons living with HIV reviewed and provided thorough feedback on all of the major elements of the study, including the questionnaire, the HIV counseling intervention, the blood tests, and the marketing materials. They provided enthusiasm and support for the project, and their input was essential in refining the study materials and procedures.

### **Roles of the research staff, grantee agencies, and local agency staff**

As a part of the study, grantee agencies will participate as collaborative partners. However, the roles of study staff and agency staff will be distinct, and agency staff will not participate directly in the research activities of the project.

**Research staff** will be hired by RTI International and will conduct the study in an office space determined in collaboration with the grantee agencies. The staff hired by RTI will administer the counseling sessions and the questionnaires, make all the arrangements necessary for on-site blood testing, and will lead the activities for maintaining contact with participants throughout the 18 months of the study.

**Grantee agencies** will promote the study and collaborate with the research staff to determine the best ways to advertise the study in their community. Grantee agencies will either provide space where the project will be conducted or will assist the research staff in finding a suitable location.

**Agency staff** will screen potential study participants for HOPWA eligibility and will provide housing referral and support services to study participants. Each agency will receive funds for up

to two additional staff members to meet the enhanced service needs of the additional clients who will be entering local service systems as a result of the study.

Agency staff will be asked to provide documentation of services provided to people participating in the study. Agency staff will be interviewed by telephone during the baseline period and twice more during the study's follow-up period. These interviews will be used to collect information on the types of services provided to agency clients and the materials used (such as office supplies and phone line charges).

Agency staff will also be asked to complete two types of forms during the study. One form will be completed during the baseline period for each study participant, summarizing the service needs of the participant and how those needs were addressed at that point. Another form will be completed at 3-, 6-, 12-, and 18-months following the baseline period to report on the quality and quantity of services that each study participant has received.

## **Benefits of the Study**

The goal of the Housing and Health Study is to examine the impact of providing housing for people living with HIV who are homeless or at imminent risk of being homeless on their disease progression and their risks of transmitting HIV. Findings from this project will contribute to knowledge about how to prevent further spread of HIV and improving the health in this vulnerable group. This project will benefit the housing agency clients, the agencies selected to participate in the study's implementation, and it has the potential to inform future housing policy decisions.

### Benefits to Participants

- All study participants will receive, at a minimum, standard housing services to address their housing needs and an HIV transmission counseling intervention.
- Blood test results for viral load and CD4 counts, important health information in the management of HIV infection, will be available to all who provide testable blood samples.
- All participants will receive financial incentives for their time and travel compensation for attending study-related activities.
- Housing agency clients who do not participate in the study will continue to be eligible for the same housing services that would be available to them in the absence of the study.

### Benefits to Agencies

The agencies involved will also benefit from having this study in their communities.

- The Housing and Health Study will make more resources available to house HIV-positive persons who may have been waiting for a housing opportunity. The study will fund increases in the capacity of housing agencies to serve more clients.
- The study will provide the agencies involved with useful data about their clients' needs and characteristics.
- Agencies participating in the Housing and Health Study have the opportunity to work with federal agencies and researchers on a Special Project of National Significance

(SPNS). This SPNS will result in findings on the effects of housing on the lives of HIV-positive people in their communities.

#### Benefits to Policy Makers and Funding Agencies

It is likely that policy makers and funding agencies will be quite interested in the results of the Housing and Health Study. The study will provide:

- Information on how housing affects risk-related practices and health among persons living with HIV. This information will guide future strategies for HIV prevention.
- Information on the cost and cost-effectiveness of a housing services approach to promoting health and risk-reduction among persons living with HIV. This information will be important for weighing priorities among existing programs.

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