Medical and Public Health Consensus Statement on Housing as Treatment and Prevention for HIV/AIDS in Philadelphia

Summary/Abstract:

HIV/AIDS is a growing cause of preventable suffering and death in Philadelphia, as our city’s poor know best. Philadelphia is home to over 20,000 people living with HIV, and the rate of new infections is five times the national average. As health care providers and public health experts working in Philadelphia, we are deeply concerned about our city’s waiting list for housing assistance for homeless and unstably housed people living with HIV. Ample evidence from the scientific literature demonstrates that stable housing is an essential component of HIV prevention and treatment. Housing instability makes it difficult for patients living with HIV to follow treatment protocol, exposes them to potentially fatal opportunistic infections, and contributes to unsafe behaviors—such as needle sharing and unprotected sex—which spread HIV. Providing housing for people with HIV/AIDS is cost-effective public policy; it averts significant public expenditures by decreasing the frequency and duration of hospital admissions and lowering the rate of HIV transmission. Realizing the central role of housing in prevention and treatment of HIV, many other major cities supplement federal funding for housing for people with HIV and AIDS with municipal funds. Philadelphia, however, devotes almost no city funding to this program. Instead, it maintains a two-year-long waiting list that includes scores of individuals and families. In 2009 alone, six Philadelphians with HIV died while on the streets or in the shelter system.

Our recommendations are three-fold. First, we urge the city to recognize housing for people living with HIV and AIDS as an essential public good for public health by ending the waiting list for housing assistance. Second, Philadelphia should expand eligibility for housing assistance so that people living with HIV are able to access stable housing before becoming severely immuno-compromised. Finally, the city should move toward the evidence-based “Housing First” model, in which housing serves as a foundation for recovery from substance abuse or mental illness. These investments and reforms will improve treatment outcomes and avert needless deaths among one of the most vulnerable populations in our city while preventing HIV transmission and decreasing medical costs.

I. The crisis in housing for people with HIV/AIDS in Philadelphia

According to the U.S. Centers for Disease Control, at the end of 2007 over 20,000 Philadelphians were living with a diagnosis of HIV infection.¹ A 1996 survey by Philadelphia’s Office of Housing and Community Development found a lifetime

homelessness rate of 35 percent among people living with HIV. A 2001 analysis of shelter data in Philadelphia found that 10.9 percent of persons with an AIDS diagnosis had a shelter admission within five years of diagnosis.

In Philadelphia, almost all housing assistance for people living with HIV/AIDS is federally funded. The major source of public funding is the Housing Opportunities for Persons with AIDS (HOPWA) program, a program begun by the federal government and designed to house homeless people with HIV/AIDS and to prevent homelessness in households experiencing financial crises as a result of issues arising from the disease. The amount of funding each city receives for its HOPWA program is determined by the number of people living with HIV/AIDS in that city. In FY 2010, Philadelphia received $8.8 million for its HOPWA program, which it used to assist approximately 650 households obtain or retain housing. In addition, Philadelphia receives additional funding from the U.S. Department of Housing and Urban Development (HUD) through a program called Shelter Care Plus to assist in the provision of housing homeless people with disabilities, including people with HIV/AIDS. Today, HOPWA and—to a lesser extent—Shelter Care Plus are the funding sources for housing assistance for low-income people living with HIV/AIDS in Philadelphia.

This funding, however, is not sufficient to meet the housing needs of Philadelphians with AIDS. Philadelphia contributes only a small amount of municipal funds to Shelter Care Plus and none to HOPWA. Because there is not enough funding to support housing for this vulnerable population, 134 individuals and families were on a waiting list for assistance as of September 2010. As many of the people on the waiting list struggle to cope in unstable housing situations, some have not been able to survive. In 2009, at least six Philadelphians with HIV died while on the streets or in the shelter system.

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4 National AIDS Housing Coalition. “FY2010 HOPWA Formula Application.” http://www.nationalaidshousing.org/PDF/FY2010%20HOPWA%20Formula%20Allocation.pdf. HOPWA funding supports the following forms of housing assistance: tenant-based rental assistance (TBRA), which subsidizes the difference between the individual’s expected contribution housing (30% of adjusted income) and the rent for the smallest sized unit possible without creating overcrowding; short-term rent, mortgage, and utility payments (STRMU); and residency in a housing facility (such as a community residence). HOPWA does not cover housing costs if client’s need is a result of other expenses resulting from poor money management. See http://www.hud.gov/offices/cpd/aidshousing/library/2008factsheets/factsheet_ahha08.pdf.

5 Both of these programs are administered by Philadelphia’s AIDS Activities Coordinating Office (AACO).

6 Philadelphia Homeless Death Summary, 2009. Philadelphia city officials have noted that only one of these six people had applied for housing assistance. But this observation only confirms our case that the waiting list must be eliminated, eligibility and outreach must be expanded, and application procedures must be streamlined so that people with HIV and AIDS are assured access to stable housing.
Even these grim statistics belie a much greater crisis. Many poor Philadelphians living with HIV are unable to even get onto the wait list due to eligibility criteria that force people with compromised immune systems to wait until they are already seriously ill to even join the waiting list. The city’s own AIDS Activities Coordinating Office reports that 8,000 people living with HIV/AIDS in Philadelphia have unmet housing needs.

II. Housing is an essential component of HIV/AIDS treatment

Advances in HIV/AIDS care and treatment, especially the development of highly active anti-retroviral therapy (HAART) in the mid-1990s, have caused a steep drop in death rates from HIV/AIDS across the United States. Today an HIV diagnosis is no longer a death sentence; with proper disease management, people with HIV can live long, meaningful, and productive lives. Yet the most advanced treatment is limited in its ability to improve patient outcomes if patients do not have access to stable housing.

The impact of housing on health outcomes for people living with HIV/AIDS has been a subject of intense study in the peer-reviewed medical and public health literature over the past two decades. Although housing assistance is commonly understood as public welfare rather than a public health intervention, a large body of research confirms that stable housing is a significant and independent predictor of health outcomes for people living with HIV/AIDS. A systematic review of the peer-reviewed medical and public health literature found 29 rigorous studies analyzing the effect of housing status on health outcomes. In all studies examining the effect of housing status on patients’ use of health services, a positive and significant association was found between housing stability and attendance at primary care visits, access to antiretroviral therapy, adherence to this therapy, and

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7 Eligibility to join Philadelphia’s AACO waiting list for housing assistance requires either an active AIDS diagnosis, diagnosis of HIV disability according to the Social Security definition, or a diagnosis of one or more serious opportunistic infections. HOPWA does not require such stringent criteria for program eligibility; it requires only HIV positive status and low income (below 80% of area median income). See http://www.hud.gov/offices/cpd/aidshousing/programs/strnu.pdf
less frequent and shorter use of hospital-based emergency or inpatient services.\textsuperscript{16,17,18}

Recent studies provide additional support for housing as an essential component of HIV/AIDS treatment. A randomized controlled trial in Chicago found people with stable housing experienced measurably better health outcomes independent of a variety of individual characteristics (substance use, mental health, race, sex, education, insurance, prior hospitalizations). Of HIV-positive patients who received immediate supportive housing (treatment arm), 55 percent were alive with an intact immune system (CD4>200 and viral load<100,000) at one year; 34 percent of those who did not receive housing achieved the same level of health. Median log viral load (a measure of health as well as of ability to transmit the virus to others) was 89 percent lower in patients who had received housing.\textsuperscript{19}

There are many reasons why homelessness and unstable housing leads to worse health outcomes for people with HIV/AIDS. In order to maintain good health, people with HIV must adhere to daily antiretroviral therapy, obtain adequate rest and nutrition, and maintain regular contact with health care and social support professionals. People with AIDS are, by definition, immuno-compromised: disruptions in housing stability that force people to live communally (e.g. in shelters) or transiently (e.g. at friends’ apartments) can increase susceptibility to opportunistic infections.\textsuperscript{20} In order to store and take medications, cope with side effects, eat regularly, and stay connected to medical care, patients need the safety of a home, a clean bathroom, running water, a refrigerator, and a telephone to schedule doctors’ appointments.\textsuperscript{21} These basic necessities can make the difference between adherence to therapy and poor health.

\textsuperscript{12} Spire, Duran, Souville et al (2002). Adherence to highly active antiretroviral therapies (HAART) in HIV-infected patients: From a predictive to a dynamic approach. \textit{Social Science and Medicine} 54(10), 1481–1496.
\textsuperscript{20} Culhane, Gollub, Kuhn et al (2001).
Scientific studies also account for gradients of housing instability: “stable” housing is usually defined as renting one’s own appropriately-sized apartment or owning one’s own house; “unstable” housing is often defined as living in a home not adequate to one’s medical needs, living in a friend or relative’s home, living in a hotel or motel, living at risk of losing one’s residence if HIV status is disclosed or if one has to be hospitalized, or a recent history of shelter use; finally, homelessness is usually defined as living in perpetuity in a shelter, a car, or a public place. The health benefits of housing assistance for people with HIV/AIDS accrue not only to those who were homeless and become stably housed, but also to those whose housing situation is improved (e.g. moving from a friend’s apartment into one’s own) as well as to those who are able to maintain a stable housing situation.22

While medical professionals can prescribe powerful therapeutics, this treatment is limited in its ability to improve health outcomes for our patients living with HIV/AIDS unless patients have access to stable housing.

III. Housing is an essential tool in HIV/AIDS prevention

The Centers for Disease Control estimate that approximately 1400 Philadelphians contract HIV each year, giving Philadelphia a rate of infection that is more than five times the national average.23 Transmission of new cases occurs via three main routes: heterosexual contact (55 percent); men who have sex with men (32 percent); and injection drug use (13 percent).24

In addition to being an indispensable component of HIV/AIDS treatment, housing is also a necessary tool in prevention. Research suggests that housing status and stability are significantly associated with HIV-related risk-taking behaviors25,26,27,28,29,30,31 and HIV transmission.32 Numerous studies have found that

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22 Leaver, Bargh, Dunn et al (2007).
homeless or unstably housed populations experience HIV infection rates between 3 and 9 times higher than the stably housed.\textsuperscript{33,34,35,36} A national longitudinal study found that even after correcting for other variables, homeless study participants were more than 3.5 times as likely to have recently used hard drugs (heroin, crack, cocaine) as persons with stable housing. The study also found that improved housing status was linked to a reduction in drug use and unprotected sex.\textsuperscript{37}

This research suggests two main reasons why access to housing is an important predictor of HIV transmission. First, stably housed people are less likely to exchange sex for money, drugs, or a place to sleep.\textsuperscript{38} Second, higher levels of HIV are observed in the blood of unstably housed persons living with HIV compared to those who are stably housed.\textsuperscript{39,40,41} In addition to decreasing the health outcomes for the infected individual, these higher viral loads also increase the risk of transmission during risky sexual or drug injection behaviors.\textsuperscript{42}

This wealth of scientific evidence reveals a necessary, underutilized, and cost-effective intervention in HIV prevention in Philadelphia. Public funds are already used for other effective means to reduce HIV transmission, such as providing prophylactics to HIV-positive pregnant mothers and screening the blood supply for HIV. In a city with a rapidly spreading epidemic, access to housing for people with HIV/AIDS is central to preventing new cases.

\textbf{IV. Why people with HIV/AIDS?}

\textsuperscript{33} Allen, Lehman, Green et al (1994).
\textsuperscript{34} Culhane, Gollub, Kuhn, et al (2001).
\textsuperscript{38} Aidala, Cross, Stall et al (2005).
\textsuperscript{41} Buchanan, Kee, Sadowski et al (2009).
Some members of the public might ask why people with HIV should be of particular concern in housing policy. Indeed, with long waiting lists for Section 8 housing and rising unemployment, access to housing remains a problem throughout Philadelphia.\textsuperscript{43,44} We believe that access to stable housing for \textit{all} should be an urgent priority for the city government. Still, stable housing is particularly important for low-income people with HIV/AIDS as one of the most socially vulnerable populations in our city. A report by the Institute of Medicine affirmed that HIV disease remains unique from other chronic or infectious diseases in that it:

1) Combines an infectious agent, potentially fatal consequences, rapid spread in vulnerable populations, and the potential for development of drug-resistant strain;
2) While being highly treatable with therapy that substantially reduces morbidity and mortality.\textsuperscript{45}

This combination of factors leads the medical and public health community to place particular emphasis on housing for people with HIV, because the potential to save lives and prevent new infections is only realized if treatment is delivered in an effective manner—to stable patients free from the logistical dislocations and psychological stresses of unstable housing.

Low-income people with HIV/AIDS are particularly susceptible to homelessness. Financial independence is especially difficult for low-income people living with an HIV diagnosis; many lack the skills or education to obtain jobs with incomes necessary to meet basic living costs. Even people with skills and employment histories often have difficulty maintaining employment because of frequent illness and side effects of therapy.\textsuperscript{46} High levels of housing instability—and all of the medical and public health consequences it entails for people with HIV/AIDS—are thus inevitable unless public funds are set aside to help this socially vulnerable group secure housing.

\textbf{V. Housing for people with HIV/AIDS in other major US metropolitan areas}

In recent years, federal funding for the HOPWA program has remained essentially flat even as more jurisdictions reach the threshold of HIV/AIDS incidence to qualify for program formula grants. In fiscal year 2004, HOPWA received federal funding of

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\item\textsuperscript{43} Personal communication with Kate Kozniewski, former Action AIDS case manager.
\end{itemize}
$295 million. The program received the same amount five years later, in FY 2009; thus, funding did not even keep pace with inflation.47,48 This total fell far short of the estimated $3.6 billion needed to meet actual need in the 124 jurisdictions eligible for funding in FY 2008.49

While Philadelphia has responded to this funding shortfall with waiting lists, other major cities have invested in housing for people living with HIV/AIDS as a public good for public health. New York City adds city funds to federal dollars in order to guarantee access to non-shelter housing for homeless and unstably housed people living with AIDS and other HIV-related illnesses. Between 1990 and 2003, the number of HIV/AIDS-specific housing units grew from less than 4,000 to nearly 29,000 units. Currently, about 23% of New Yorkers living with HIV/AIDS receive some sort of public housing assistance. In a recent report, researchers found that this investment has had remarkable success in keeping people connected to medical care and providing a stable environment for treatment. Of the 2,000 participants surveyed, 95% reported having a relationship with a primary care provider while 75% were receiving HAART.50 Other cities, including Chicago,51 San Francisco,52 and Seattle53 have also committed city dollars specifically for HIV/AIDS housing. Despite the growing need and demonstrated benefits, Philadelphia has yet to follow suit.

VI. Ensuring stable housing for people with HIV/AIDS is cost-effective

Experiences in other metropolitan areas demonstrate that housing assistance for vulnerable populations—and especially for people with HIV/AIDS—is a cost-effective use of public funds. One compelling and comprehensive study demonstrating this fact was produced by the University of Pennsylvania’s Center for Mental Health Policy and Services Research. In this study, 4700 mentally ill

47 Shubert and Bernstine (2007).
53 Wright and Flaherty (2003).
homeless residents of New York City were tracked over a two-year period after being provided with supportive housing. The study concluded that the city saved $16,282 per person as a result of providing housing. These savings were realized through a significant reduction in health service utilization, shelter use, hospitalizations, and incarcerations among the participants in the study. On balance, these savings covered 95% of the total cost of the housing program.54

A number of cost-offset analyses demonstrate the fiscal benefits of providing supportive housing for people with chronic healthcare needs.55,56,57,58 Moreover, supportive housing specifically for people with HIV/AIDS should provide even greater savings than programs for non-communicable illnesses because HIV/AIDS housing helps prevent the spread of a serious infectious agent.59 On average, each new case of HIV leads to over $303,000 in lifetime medical expenses.60 Given the demonstrated benefits of housing in reducing risky behaviors and HIV transmission, an investment in housing averts significant private suffering and public expenditure in the future.

VII. Our prescriptions: end the waiting list and expand eligibility

The benefits of HIV/AIDS housing, both to those currently living with the disease and to society at large, are clear. The large and growing numbers of individuals and families affected by HIV and AIDS in our city face disproportionate risks of housing instability and homelessness. In order to address these needs, save lives, and prevent new infections, low-income people living with HIV—and especially those with AIDS—should receive housing assistance adequate to ensure access to stable housing. This can be accomplished through the following steps:

59 Shubert and Bernstine (2007).
1) **End the housing waiting list for people with HIV/AIDS**

The federal HOPWA program already provides assistance to hundreds of households in Philadelphia, but its funding remains insufficient to meet our city’s needs. In the absence of additional federal funds Philadelphia should follow the example of other major metropolitan areas and commit city funds to meet the shortfall.

2) **Expand eligibility for housing assistance**

The benefits of housing as a medical and public health intervention cannot be fully realized if people living with HIV can only access housing assistance once their diseases are already well advanced. In order to prevent new cases of HIV and protect the health of those already living with the virus, public policy should aim to keep immune systems as intact—and levels of HIV in the blood as low—as possible.

Low-income people living with HIV should be assured of stable housing at least as soon as they begin antiretroviral therapy. As explained earlier, these demanding regimens prove much more effective in stably housed individuals. The U.S. Department of Health and Human Services currently recommends commencement of antiretroviral therapy for the following reasons: HIV-associated nephropathy, hepatitis B virus coinfection, pregnancy, a history of an AIDS-defining illness, or in patients with CD4 counts below 500. Yet eligibility requirements for HIV/AIDS housing in Philadelphia are more restrictive; in order to even join the waiting list, a patient must either have an active diagnosis of AIDS (HIV infection with a CD4 count of less than 200 or an AIDS-defining illness) or people who meet the Social Security definition of HIV disability (two opportunistic infections plus life-disrupting hospitalization, illness, or the side-effects of treatment). The city should expand eligibility to at least include all low-income individuals recommended to commence antiretroviral therapy, and provide funds sufficient to ensure that they have adequate housing.

3) **Adopt the “Housing First” model of housing assistance**

The city should move toward “Housing First” models for people living with HIV who also have substance abuse problems. The “Housing First” approach ensures stable housing for homeless individuals regardless of the personal

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61 AIDS-defining illnesses are opportunistic infections that indicate depressed immune response. They include: candidiasis of the bronchi, trachea, or lungs; invasive cervical cancer; HIV-related encephalopathy; Kaposi’s sarcoma; histoplasmosis; tuberculosis; wasting; lymphoma; recurrent pneumonia; pneumocystis, carinii pneumonia.

challenges they face, with the expectation that housing enables the process of recovery. A randomized trial in New York comparing Housing First with a traditional “linear” model—in which individuals are required to enter or successfully complete recovery programs before receiving any assistance—found that housing retention was better in Housing First, while there was no difference in substance use between the two groups.63 This study and others64,65 led both the U.S. Conference of Mayors66 and the U.S. Interagency Council on Homelessness67 to endorse Housing First.

Philadelphia’s AIDS Activities Coordinating Office requires that in order to secure a spot on the waiting list, individuals must either be sober for six months or enrolled in a recovery program. The consequence of relapse is the loss of one’s spot on the waiting list. Individuals who are in jail for more than 90 days also lose their spots on the waiting list. These policies are detrimental not only to the prevention and treatment of HIV/AIDS (because they leave people unstably housed), but to ongoing efforts to reduce recidivism.68

These three steps are modest for a city with an HIV/AIDS crisis as serious as ours. Yet a large body of evidence from the peer-reviewed literature indicates that these initiatives would save lives and prevent new infections. Some may worry about the cost of such a program. Beyond the savings outlined above, housing for people with HIV and AIDS also averts other significant and incompletely captured social costs. It is difficult to quantify in dollars the impact of a lost mother on an orphaned child, or the productivity drain on an impoverished community of yet another young man or woman needlessly infected with a preventable disease. As health care providers and public health professionals, we are obliged to stand with our patients and protect the health of the public. In fulfilling these duties, we urge the city government to take the budgetary and programmatic steps necessary to ensure that low-income Philadelphians living with HIV and AIDS have immediate access to stable housing.69

64 Rosenheck, Kasprow, Frisman et al. Cost-Effectiveness of Supported Housing for Homeless Persons with Mental Illness. Archives of General Psychiatry 60, 940–951. 
69 Special thanks to ACT UP Philadelphia and the HIV Prevention Justice Alliances for references to data used in this consensus statement.