



### Background

On December 17, 2009, the White House Office of National AIDS Policy (ONAP) convened a consultation on the role of housing in HIV prevention and health care. Over 70 stakeholders considered presentations by issue experts and then worked together on recommendations to inform the development of the National HIV/AIDS Strategy (NHAS).<sup>1</sup> In opening remarks, ONAP Director Jeff Crowley noted that housing had been a central theme of the fourteen community meetings held across the United States to gather input on the National AIDS Strategy, with housing repeatedly cited as a critical unmet need. He charged those present to provide concrete guidance on how housing should be reflected in the NHAS to order to advance its three primary goals: reducing HIV incidence; increasing access to care and optimizing health outcomes; and reducing HIV-related health disparities.

Participants in the December consultation included federal and local government representatives, academic researchers, HIV/AIDS housing and services experts, private philanthropy, and organizations representing the broader low-income housing and health communities. Three issue specific breakout sessions – Housing as HIV Prevention and Care, Bringing Successful Strategies to Scale, and the Role of Housing in Systems of HIV Care – provided the opportunity for in-depth discussion and exchange of ideas from participants representing a range of interests. Draft findings and recommendations were summarized during a report-back period during the meeting, and then were further refined through a series of follow-up conference calls among participants.

Set out below are the key points and recommendations developed by participants.<sup>2</sup>

### Introduction

If the President's National HIV/AIDS Strategy is to succeed, it must include concrete steps to end homelessness and housing instability for people living with HIV and those most at risk for HIV infection. Effectively addressing HIV risk and health care disparities in the United States will require attention to structural determinants—environmental or contextual factors that directly or indirectly affect an individual's ability to avoid exposure to HIV, or for HIV positive individuals the ability to avail of health promoting and risk reducing resources. A strong and consistent evidence base identifies housing status as a key structural factor influencing HIV vulnerability, risk, and health outcomes. Homelessness itself places persons at risk of HIV infection, and among persons already disproportionately impacted by HIV/AIDS (e.g., men who have sex with men, persons of color, homeless youth, IV drug users, and women), lack of stable housing greatly amplifies their vulnerability for HIV infection, poor health outcomes, and early death.

This substantial body of research also demonstrates that receipt of housing assistance has an independent, direct impact on receipt of HIV treatment, health status, and mortality among homeless/unstably-housed people living with HIV/AIDS (PLWHA). Further, housing has a prevention impact by reducing HIV transmission risk. Significantly, the evidence shows that these outcomes can be achieved with public investments in housing that are cost effective or even cost saving for communities as a whole. Housing interventions thus provide a strategic opportunity to address HIV/AIDS health disparities as well as a range of overlapping vulnerabilities (such as extreme poverty, homelessness, incarceration, race, gender, mental health issues,

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<sup>1</sup> The list of participants and their affiliations is attached as an appendix to this document.

<sup>2</sup> James Albino of the Office of National AIDS Policy coordinated the December 17<sup>th</sup> meeting and the process for developing recommendations. The National AIDS Housing Coalition and Ginny Shubert of Shubert Botein Policy Associates assisted with compilation of the recommendations and preparation of this document.



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chronic drug use, trauma, and violence), while reducing overall public expense and/or making better use of limited public resources.

Yet housing is consistently cited as the greatest unmet need of Americans living with HIV. The United States Centers for Disease Control and Prevention (CDC) estimate that there are currently 1.1 million PLWHAs in the United States.<sup>i</sup> Housing experts project that about half of these persons – more than 500,000 households – will need some form of housing assistance during the course of their illness. At current funding levels, the HUD Housing Opportunities for Persons with AIDS (HOPWA) program is able to serve only 56,600 households living with HIV.<sup>ii</sup>

Indeed, it can be conservatively estimated that at more than *140,000 households living with HIV lack stable housing and have a current, unmet need for housing assistance*. The large-scale HIV Cost and Services Utilization Study (HCSUS) found that one third of a nationally representative sample of people in care for HIV infection report a need for housing services and that 39% of this housing need is unmet.<sup>iii</sup> These findings are consistent with more recently reported results from the HIV/AIDS Treatment Adherence, Health Outcomes and Cost Study, which show that 43% of persons triply diagnosed with HIV, substance use, and mental health issues currently lack stable housing.<sup>iv</sup> By applying the HCSUS findings to known total prevalence, we arrive at the following conservative estimate of current unmet need: 1.1 million Americans living with HIV/AIDS (prevalence) x 33% (percentage that report housing need) x 39% (percentage of housing need that remains unmet) = 141,570 households living with HIV in need of immediate housing assistance.<sup>v</sup>

Likewise, rates of homelessness are high among persons at greatest risk of HIV infection due to substance use, mental illness, intimate partner violence, and other co-occurring vulnerabilities. While it is difficult to estimate total housing need among at-risk persons, at any given time it can be assumed that at least one-half of homeless persons in any community fall into one or more of these highest-risk categories, and research indicates that the condition of homelessness itself places all persons who lack stable housing at increased risk of HIV infection.

In sum, for persons who lack a safe, stable place to live, housing assistance is a proven, cost-effective structural intervention that has a direct, independent, and powerful impact on HIV incidence, health outcomes, and health disparities. The evidence base for housing supports a shift in paradigm – to view housing as a core HIV prevention and health care intervention rather than as an ancillary service – that is critical if we are to achieve President Obama’s stated goals for the National AIDS Strategy:

### **Priority: Reducing HIV incidence**

#### **Key points:**

- There is a growing consensus among HIV/AIDS experts that HIV prevention strategies will not succeed without attention to structural factors that shape or constrain individual behavior, and that housing interventions are among the most promising structural HIV prevention interventions.<sup>vi</sup>
- Homeless or unstably housed persons are two to six times more likely to use hard drugs, share needles, or engage in high-risk sex than stably housed persons with the same sociodemographic, clinical, substance use, mental health, and service use characteristics.<sup>vii</sup>
- Among persons already disproportionately impacted by HIV/AIDS (e.g., men who have sex with men, persons of color, homeless youth, IV drug users, and impoverished women), lack of stable housing has a significant, independent impact on HIV risk behaviors and rates of infection.<sup>viii</sup>



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- Over time, persons who improve their housing status reduce risk behaviors by half, while persons whose housing status worsens are four times as likely to increase risks through activities such as sex exchange.<sup>ix</sup>
- Proven HIV risk reduction interventions – including counseling, needle exchange, and other behavioral interventions – are less effective among persons who are homeless/unstably housed than among their housed counterparts.<sup>x</sup>
- Housing improves access and adherence to antiretroviral medications, which lower viral load and reduce the risk of transmission.<sup>xi</sup>
- Preventing a new HIV infection in the United States saves over \$300,000 in discounted lifetime medical costs and substantially improves life expectancy (as well as quality-adjusted life expectancy).<sup>xii</sup>
- A recent randomized study shows that a housing intervention that prevents just one new transmission per 64 HIV-positive clients is cost-effective as an HIV prevention strategy, and preventing one transmission per 19 clients makes the housing investment cost-saving overall.<sup>xiii</sup>

### Recommendations:

1. Recognize, support, and fund housing as an evidence-based prevention strategy:
  - a. Promote and provide guidance on the role of housing assistance for homeless and unstably housed persons at heightened vulnerability for HIV infection as a “primary” HIV prevention activity to prevent HIV exposure among uninfected persons.
  - b. Promote and provide guidance on the role of housing assistance for individuals living with HIV who lack stable housing as a “secondary” HIV prevention activity to prevent HIV transmission from infected people to their uninfected contacts.
  - c. Allow federal HIV prevention funding provided through the CDC, Substance Abuse and Mental Health Services Administration (SAMHSA), National Institutes of Health (NIH), and other agencies to be used to support housing services, if so prioritized by local community planning groups, as one element of a comprehensive HIV prevention program.
  - d. Review and address existing policies and procedures that facilitate or create barriers to recognizing, supporting, and funding housing as an evidence-based prevention strategy and promote the more efficient use of federal dollars.
2. Set specific prevention goals for reducing HIV incidence through housing interventions, based on mathematical modeling that quantifies the anticipated impact of housing status on HIV transmission:
  - a. Set HIV prevention goals for housing interventions targeted to PLWHA who lack stable housing and to homeless/unstably-housed persons at heightened risk of HIV infection.
  - b. Require jurisdictions seeking federal HIV prevention funding to set community goals for the prevention impact of housing.
3. Evaluate housing as HIV prevention to ensure that overall goals are achieved:
  - a. Require real time evaluation of the prevention impact of housing interventions so that results can be used to inform service delivery.
  - b. Require grantees of federal HIV prevention funding to assess and report the housing status of program participants and the impact of housing status on community prevention goals.
  - c. Promote the development of evaluation metrics that cut across cost centers and take into account the fact that much of the public “savings” attributable to housing investments occur in systems responsible for public health and medical spending.

### **Priority: Increasing access to care and optimizing health outcomes**



### Key Points:

- Compared to stably housed PLWHA, homeless PLWHA experience worse overall physical and mental health; are more likely to be hospitalized and use emergency rooms; have lower CD4 counts and higher viral loads; are less likely to receive and adhere to antiretroviral therapy; and are more likely to be co-infected with the hepatitis C virus (HCV) and/or tuberculosis (TB).<sup>xiv</sup>
- Housing status is a stronger predictor of health outcomes than individual characteristics such as gender, race, ethnicity or age, drug and alcohol use, and receipt of social services, indicating that housing itself improves the health of PLWHA.<sup>xv</sup>
- Access to housing enables PLWHA to get into care and stay in care; over time, housing status is among the strongest predictors of timely entry into HIV care, primary care visits, continuous care, and care that meets clinical practice standards.<sup>xvi</sup>
- Receipt of housing assistance has an independent, direct impact on receipt of HIV care, health status, and mortality among homeless/unstably housed PLWHA; housing assistance predicts improved health outcomes among PLWHA regardless of demographics, drug use, health and mental health status, or receipt of other services.<sup>xvii</sup>
- PLWA who are homeless at the time of AIDS diagnosis are significantly more likely to die over a five-year period, after controlling for medical status and other individual characteristics, and obtaining supportive housing in this population is independently associated with an 80% reduction in mortality.<sup>xviii</sup>
- Improved housing status also has a significant impact on mental health status, and is associated with improvements in depression, perceived stress, and other mental health indicators; receipt of housing services also facilitates access to mental health services among PLWHA with serious mental health needs.<sup>xix</sup>
- Emerging evidence shows that outcomes from housing interventions improve with quality housing, and in the case of supportive housing with adequate on-site services, including support with adherence to HIV therapies.<sup>xx</sup>
- Housing assistance is a cost-effective health care intervention, with a cost per quality-adjusted life year (QALY) in the same range as other widely accepted health care interventions, such as renal dialysis.<sup>xxi</sup>
- The unique nature of HIV disease makes housing an especially effective intervention. In particular, HIV disease combines an infectious agent, potentially fatal consequences, rapid spread in vulnerable populations, and the potential for development of drug-resistant strains, while being highly treatable with anti-retroviral therapy that substantially reduces mortality and morbidity.<sup>xxii</sup>
- Among 40 representative Ten Year Plans to End Homelessness recently reviewed by the National AIDS Housing Coalition (NAHC), only two include any strategies to address the overlap of HIV and homelessness, despite the fact that PLWHA and HIV/AIDS service providers in these communities report significant unmet housing needs.<sup>xxiii</sup>

### Recommendations:

4. Acknowledge that housing is HIV health care for PLWHA who lack stable housing:
  - a. Recognize and fully (and additively) fund housing assistance (including related support services) as a core health care activity for all targeted federal programs for the care of PLWHA, including Ryan White.
  - b. Require that individual housing need be assessed and reported by all grantees of targeted HIV funding and that data on housing needs be compiled nationally.
  - c. Require that housing assistance be included as key component of the treatment plan for every person with HIV who is homeless or unstably housed.



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- d. Promote the development of evidence-based housing interventions that are safe, are high quality, include necessary supports, and provide a bridging support for persons who are able to move toward greater independence.
5. Promote local planning to meet the housing needs of PLWHA:
  - a. Require every jurisdiction seeking targeted HIV/AIDS federal dollars to include a detailed housing instability needs assessment and a strategy for addressing that need, including both temporary and permanent housing support.
  - b. Require HUD Continuum of Care planning coalitions to include HIV prevalence and/or risk of HIV analyses in the establishment of need and weighing of priorities.
6. Base federal planning on real housing need among PLWHA with an immediate goal of making 141,570 new units of housing available to PLWHA nationwide by the end of 2012 (during President Obama's first term). At an average annual cost of \$5,142 per unit (the average cost of HOPWA tenant-based rental assistance),<sup>xxiv</sup> meeting this goal will require an additional annual investment of \$728 million.

### **Priority: Reducing HIV-related health disparities**

#### **Key points:**

- Both the HIV epidemic and homelessness in the United States are concentrated among persons marginalized by race, gender, abandonment (youth), criminal justice involvement, mental illness, substance use, and violence and abuse; among these persons at highest risk, housing status is increasingly identified as a determinant of health outcomes. For example:
  - The two factors most consistently associated with health disparities in the United States are also those that determine access to stable and secure housing: race and poverty. Several studies have shown that the effects of housing on HIV risk and health outcomes are greater for African Americans than for other race/ethnic groups.<sup>xxv</sup>
  - Studies consistently find strong connections between housing instability, HIV risk, and victimization among indigent women.<sup>xxvi</sup>
  - Rates of reported physical and sexual victimization among homeless and unstably housed PLWHA exceed the rates among the general United States population, HIV positive persons generally, and homeless persons.<sup>xxvii</sup>
  - A large cohort of young IDUs indicates that half experience housing instability in a given year, including 41% who report literal homelessness; homelessness is associated with childhood abuse and out-of-home placement in this population; and HIV risk varies by housing status with homeless IDUs at highest risk.<sup>xxviii</sup>
  - A recent study has shown that almost two in five of all HIV-positive adolescents seen at a NYC clinic have a history of unstable housing, with homelessness associated with household member abuse and neglect.<sup>xxix</sup>
  - Lack of stable housing is a significant barrier to HAART use among persons recently released from incarceration with homelessness strongly associated with lack of HAART use among HIV-positive persons with a history of HAART use.<sup>xxx</sup>
  - An ongoing study of United States veterans living with HIV shows that 44% have experienced homelessness, 11% are currently homeless, and HIV-infected veterans who have experienced homelessness are more likely than those who have not to be hospitalized, adjusting for age, severity of HIV disease, and use of illicit drugs.<sup>xxxi</sup>
- Housing-based structural interventions in particular show the potential to impact positively on health inequalities and to improve the health of disadvantaged groups.<sup>xxxii</sup>
- Housing sustains engagement in cost-effective care and dramatically reduces the use of costly crisis care and other public services – savings that often more than offset the public housing investment.<sup>xxxiii</sup>



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- Current housing resources fall far short of real need in every region of the United States, and the current formula for allocating HOPWA funding further heightens disparities in the southern United States and other under-funded areas.<sup>xxxiv</sup>
- Many PLWHA and persons at highest risk of HIV infection are barred from housing resources due to stigma, categorical eligibility requirements, and/or the very co-occurring issues that make them most vulnerable, such as histories of incarceration, active drug use, and sex trade.<sup>xxxv</sup>
- Low-threshold, harm reduction housing interventions have repeatedly been shown to enable vulnerable persons to establish stability, improve health outcomes, and reduce risk behaviors, especially when coupled with on-site supports.<sup>xxxvi</sup>

### Recommendations:

7. Adopt a fully and adequately funded evidence-based, public health approach that identifies and limits policy and other barriers to housing assistance for persons living with and at heightened risk of HIV:
  - a. Remove eligibility requirements that exclude vulnerable persons from housing assistance (such as the HUD definition of homelessness, which excludes persons leaving institutions, and criteria that deny Veterans Administration housing assistance to veterans with other than honorary discharges from the military).
  - b. Lift public housing exclusions based on status, such as a history of incarceration or active drug use.
  - c. Prohibit restrictions on HIV-targeted housing that are based on stages of disease models, chemical dependency status, or those that require a minimum income threshold. (This prohibition should include restrictions on all targeted HIV/AIDS housing whether or not federal dollars are directly implicated if the jurisdiction is accepting any targeted HIV/AIDS funding.)
  - d. Ensure the availability of assistance with legal barriers to housing access and stability, including barriers related to immigration status.
  - e. Create a compendium of models for providing housing assistance and associated supportive services that have been evaluated and demonstrated to work.
8. Target existing resources to those most vulnerable:
  - a. Make people who are at highest risk of HIV/AIDS and people with HIV/AIDS who are at highest risk for poor outcomes, high public costs, and mortality, a priority in national housing and community development policy and program initiatives. This focus should not be limited to targeted resources (e.g., HOPWA) but also a focus of mainstream resources for housing and community development. People at highest risk should be “screened in” and not screened out of housing opportunities.
  - b. Impose requirements and/or offer incentives for local communities to commit housing resources to evidence-based, low-threshold housing models with few or no housing-readiness requirements and to develop programs that meet the unique needs of underserved groups such as transgendered persons, active drug users, and sex workers.
  - c. Distribute available funding in a manner that is based on real need in each community.
  - d. Employ set-asides or other strategies to increase access for PLWHA to housing resources targeted to address overlapping issues, e.g., homelessness, domestic violence, substance use, re-entry from prison and jail, and homelessness among veterans.
9. Develop coordinated financing and evaluation mechanisms for housing interventions that take into consideration the cross-systems savings realized through improved health outcomes and avoidance of costly crisis care services and employ this approach to support expanded housing resources, such as a federal voucher entitlement for disabled persons living on fixed incomes (SSI, SSDI, veterans’ benefits, etc.). “Silo-busting” federal interagency partnerships, which recognize that spending and savings will occur in different areas, are needed to link housing and services, which requires a paradigm shift.



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Housing, health, and human services sectors need a shared lexicon and cross-system metrics for evaluating outcomes. Federal partnerships can coordinate resources through collaborative Notices of Funding Availability or by changing program rules to remove barriers and allow communities to better leverage resources from existing programs for both housing and services.

10. Increase federal investments in affordable housing to meet real needs; in order to end the AIDS epidemic, we must end homelessness.

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<sup>i</sup> United States Centers for Disease Control and Prevention (2008). HIV Prevalence Estimates – United States, 2006. *MMWR*, 57(39): 1073–1076.

<sup>ii</sup> United States Department of Housing and Urban Development Office of AIDS Housing (2009). *HOPWA Competitive and Formula Grants: National Performance Profile, 2008-2009 Program Year*. Available at: <http://www.hud.gov/offices/cpd/aidshousing/#hopwaprogram>.

<sup>iii</sup> Katz, M.H., Cunningham, W.E., Mor, V., Andersen, R.M., Kellogg, T., Zierler, S., Crystal, S.C., Stein, M.D., Cylar, K., Bozette, S.A., Shapiro, M.F. (2000). Prevalence and predictors of unmet need for supportive services among HIV-infected persons: impact of case management. *Med Care*, 38:58-69.

<sup>iv</sup> Conovera, C.J., Weaver, M., Angc, A., Arnod, P., Flynn, P.M. and Etnerc, S.L., for the HIV/AIDS Treatment Adherence, Health Outcomes and Cost Study (2009). Costs of care for people living with combined HIV/AIDS, chronic mental illness, and substance abuse disorders, *AIDS Care*, 21(12): 1547-1559.

<sup>v</sup> See also: U.S. Department of Housing and Urban Development HUD, Office of AIDS Housing. (2009). *Unmet needs reported by HOPWA grantees as of 10/1/09 (pending verification)*. Available at: <http://www.hud.gov/offices/cpd/aidshousing>. (HOPWA grantee filings show at least 126,600 households living with HIV/AIDS with an unmet housing need.)

<sup>vi</sup> Purcell, D.W. and McCree, D.H. (2009). Recommendations from a research consultation to address intervention strategies for HIV/AIDS prevention focused on African American, *American Journal of Public Health*, 99(11): 1937-1940; Auerbach, J. (2009). Transforming social structures and environments to help in HIV prevention, *Health Affairs*, 28(6): 1655-1665; Gupta, G. R., Parkhurst, J. O., Ogden, J. A., Aggleton, P., & Mahal, A. (2008). Structural approaches to HIV prevention. *Lancet*, 372(9640): 764-775.

<sup>vii</sup> Kidder, D., Wolitski, R., Pals, S., & Campsmith, M. (2008). Housing status and HIV risk behaviors among homeless and housed persons with HIV, *JAIDS Journal of Acquired Immune Deficiency Syndromes*, 49(4), 451; Aidala, A., Cross, J., Stall, R., Harre, D., and Sumartojo, E. (2005). Housing status and HIV risk behaviors: Implications for prevention and policy, *AIDS and Behavior*, 9(3): 251-265; Kipke, M., Weiss, G., Wong, C. (2007). Residential status as risk factor for drug use and HIV risk among young men who have sex with men. *AIDS and Behavior*, 11(6)/Supp 2: S56-S69; Salazar, L., Crosby, R., Holtgrave, D., Head, S., Haddock, B., Todd, J., Shouse, R. (2007). Homelessness and HIV-associated risk behavior among African American men who inject drugs and reside in the urban south of the United States, *AIDS and Behavior* 11(6)/Supp 2: S70-S77.

<sup>viii</sup> See, e.g.: Marshall, B., Kerr, T., Shoveller, J., Patterson, T., Buxton, J., & Wood, E. (2009). Homelessness and unstable housing associated with an increased risk of HIV and STI transmission among street-involved youth. *Health and Place*, 15(3): 753-760; Wenzel, S., Tucker, J., Elliot, M., Hambarsoomians, K. (2007). Sexual risk among impoverished women: Understanding the role of housing status. *AIDS & Behavior*, 11(6)/ Supp 2: S9-S20; Wolitski, R., Kidder, D. & Fenton, F. (2007). HIV, homelessness, and public health: Critical Issues and a call for increased action. *AIDS & Behavior*, 11(6)/Supp 2: S167-S171; Marshall, B., Wood, E., Li, K. and Kerr, T. (2007). Elevated syringe borrowing among men who have sex with men: A prospective study, *JAIDS*, 46(2): 248-252.

<sup>ix</sup> Aidala, et al., 2005.

<sup>x</sup> Des Jarlais, D., Braine, N., Friedmann, P. (2007). Unstable housing as a factor for increased injection risk behavior at US syringe exchange programs, *AIDS and Behavior*, 11(6) Supp 2: S78-S84; Elifson, K., Sterk, C., Theall, K. (2007). Safe living: The impact of unstable housing conditions on HIV risk reduction among female drug users, *AIDS and Behavior* 11(6) Supp 2: S45-S55.

<sup>xi</sup> Wolitski, et al., 2007; Holtgrave, D. and Curran, J. (2006). What works, and what remains to be done, in HIV prevention in the United States, *Annual Review of Public Health*, 27: 261-275.



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- <sup>xii</sup> Schackman, B., Gebo, K., Walensky, R., Losina, E., Muccio, T., Sax, P., Weinstein, M., Seage, G. 3rd, Moore, R., Freedberg, K. (2006). The lifetime cost of current human immunodeficiency virus care in the United States, *Medical Care*, 44(11): 990-7.
- <sup>xiii</sup> Holtgrave, D., Briddell, K., Little, E., Bendixen, A., Hooper, M., Kidder, D., Wolitski, R., Harre, D., Royal, S., Aidala, A. (2007). Cost and threshold analysis of housing as an HIV prevention intervention. *AIDS and Behavior*, 11(Supplement 2): S162-S166.
- <sup>xiv</sup> Kidder, D., Wolitski, R., Campsmith, M., Nakamura, G. (2007). Health status, health care use, medication use, and medication adherence in homeless and housed people living with HIV/AIDS, *American Journal of Public Health* 97(12): 2238-2245.
- <sup>xv</sup> Id.
- <sup>xvi</sup> Aidala, A., Lee, G., Abramson, D., Messeri, P. & Siegler, A. (2007). Housing need, housing assistance, and connection to medical care, *AIDS & Behavior*, 11(6)/Supp 2: S101-S115; Aidala A, Needham-Waddell, Sotheran J. (2005). Delayers, Drop-outs, the Unconnected, and "Unmet Need." Community Health Advisory & Information Network Report 2005-3, Mailman School of Public Health, Columbia University: [http://www.nyhiv.org/pdfs/2005dd2/NAC\\_DD2\\_Aidala\\_Delayers.pdf](http://www.nyhiv.org/pdfs/2005dd2/NAC_DD2_Aidala_Delayers.pdf); Messeri, P., Abramson, D., Aidala, A., Lee, F. and Lee, G. (2002). The impact of ancillary HIV services on engagement in medical care in New York City. *AIDS Care*, 14(Supp1), S15-S30.
- <sup>xvii</sup> Buchanan, D.R. MD, Kee, R. MD, MPH, Sadowski, L.S. MD, MPH, and Garcia, D. MPH (2009). The Health Impact of Supportive Housing for HIV-Positive Homeless Patients: A Randomized Controlled Trial, *American Journal of Public Health*, 99:6; Aidala, et al., 2007; Leaver, C.A., Bargh, G., Dunn, J.R., & Hwang, S.W. (2007). The effects of housing status on health-related outcomes in people living with HIV: A systematic review of the literature, *AIDS & Behavior*, 11(6)/Supp 2: S85-S100.
- <sup>xviii</sup> Schwarcz, S.K., Hsu, L.C., Vittinghoff, E., Vu, A., Bamberger, J.D. and Katz, M.H. (2009). Impact of housing on the survival of people with AIDS, *BMC Public Health*, 9: 220. Full text available electronically at: <http://www.biomedcentral.com/1471-2458/9/220>.
- <sup>xix</sup> Wolitski, R.J., Kidder, D.P., Pals, S.L., Royal, S., Aidala, A., Stall, R., Holtgrave, D.R., Harre, D., Courtenay-Quirk, C., for the Housing and Health Study Team (2009). Randomized trial of the effects of housing assistance on the health and risk behaviors of homeless and unstably housed people living with HIV, *AIDS & Behavior*, E-published ahead of print December 1, 2009.
- <sup>xx</sup> Wilkins, C. and Bamberger, J.D. (2009). *The role of housing in systems of HIV care*. Presentation by Carol Wilkins of the Corporation for Supportive Housing and Joshua D. Bamberger of the San Francisco Department of Public Health, at the Office of National AIDS Policy HIV and Housing Meeting, December 17, 2009.
- <sup>xxi</sup> Holtgrave, D.R. (2009). *Housing as HIV prevention and care*. Presentation by David R. Holtgrave, Johns Hopkins Bloomberg School of Public Health, at the Office of National AIDS Policy HIV and Housing Meeting, December 17, 2009.
- <sup>xxii</sup> Institute of Medicine (IOM) Committee on the Public Financing and Delivery of HIV Care (2004). *Public financing and delivery of HIV/AIDS care: Securing the legacy of Ryan White*. Washington, D.C.: National Academy of Sciences Press.
- <sup>xxiii</sup> Communication with Nancy Bernstine, National AIDS Housing Coalition, [www.nationalaidshousing.org](http://www.nationalaidshousing.org).
- <sup>xxiv</sup> Vos, D. (2009). *HOPWA Results: Stable Housing Outcomes and Improved Access to Care*. Presentation by David Vos, Director, HUD Office of HIV/AIDS Housing at the US Conference on AIDS, San Francisco, CA, October 2009. See also: HUD Office of AIDS Housing (2009). *HOPWA Competitive and Formula Grants: National Performance Profile, 2008-2009 Program Year*. Available at: <http://www.hud.gov/offices/cpd/aidshousing/#hopwaprogram>
- <sup>xxv</sup> Aidala A, Lee G, Moon Howard J, Caban M, Abramson A, Messeri P. HIV-positive men sexually active with women: Sexual behaviors and sexual risks. *Journal of Urban Health* 2006, 83(4): 637-655.
- <sup>xxvi</sup> See, e.g.: Sevelius, J.M., Reznick, O.G., Hart, S.L., Schwarcz, S. (2009). Informing interventions: the importance of contextual factors in the prediction of sexual risk behaviors among transgender women, *AIDS Educ Prev.*, 21(2): 113-27; Wenzel, S.L., Tucker, J.S., Elliot, M.N., Hambarsoomians, K. (2007). Sexual risk among impoverished women: Understanding the role of housing status, *AIDS & Behavior*, 11(6) (Supplement 2): S9-S20; Elifson, KW, Sterk, CE, Theall, KP (2007). Safe Living: The Impact of Unstable Housing Conditions on HIV Risk Reduction Among Female Drug Users. *AIDS and Behavior*, 11:S45-S55; Riley, E.D., Gandhi, M., Hare, C.B., Cohen, J., & Hwang, S.W. (2007). Poverty, unstable housing, and HIV infection among women living in the United States, *Current HIV/AIDS Reports*, 4:181-186; Wenzel, S.L., Tucker, J.S., Elliott, M.N. et al. (2004). Prevalence and co-occurrence of violence, substance use and disorder, and HIV risk behavior: a comparison of sheltered and low-income housed women in Los Angeles County, *Preventive Medicine*, 39, 617-624.



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- <sup>xxvii</sup> Henny, K.D., Kidder, D.P., Stall, R., & Wolitski, R.J. (2007). Physical and sexual abuse among homeless and unstably housed adults living with HIV: Prevalence and associated risks, *AIDS and Behavior*, 11(6): 842-853.
- <sup>xxviii</sup> Kipke, M.D., Weiss, G., Wong, C.F. (2007). Residential status as risk factor for drug use and HIV risk among young men who have sex with men, *AIDS and Behavior* 11(Supplement 2): S56-S69. See also: Marshall, B., Kerr, T., Shoveller, J., Patterson, T., Buxton, J., & Wood, E. (2009). Homelessness and unstable housing associated with an increased risk of HIV and STI transmission among street-involved youth. *Health and Place*, 15(3): 753-760.
- <sup>xxix</sup> Eastwood, E.A., Birnbaum, J.M. (2007). Physical and sexual abuse and unstable housing among adolescents with HIV. *AIDS and Behavior* 11(Supplement 2): S116-S127.
- <sup>xxx</sup> Clements-Nolle, K., Marx, R., Pendo, M., Loughran, E., Estes, M., & Katz, M. (2008). Highly active antiretroviral therapy use and HIV transmission risk behaviors among individuals who are HIV infected and were recently released from jail. *American Journal of Public Health*, 98(4): 661-666.
- <sup>xxxi</sup> Ghose, T. (2009). *Recent findings from the Veterans Aging Cohort Study (VACS)*, Presentation by Toorjo Ghose, University of Pennsylvania School of Social Policy & Practice, at the North American Housing and HIV/AIDS Research Summit, Washington, DC.; Gordon, A.J., McGinnis, K.A., Conigliaro, J., Rodriguez-Barradas, M.C., Rabenack, L., & Justice, A.C., VACS-3 Project Team. (2007). Associations between alcohol use and homelessness with healthcare utilization among human immunodeficiency virus-infected veterans, *Medical Care*, 44(8)/ Supp 2: S37-43.
- <sup>xxxii</sup> Purcell and McCree, 2009; Bamba, C., Gibson, M., Sowden, A., Wright, K., Whitehead, M., Petticrew, M. (in press). Tackling the wider social determinants of health and health inequalities: evidence from systematic reviews, *Journal of Epidemiology and Community Health*, in press.
- <sup>xxxiii</sup> Sadowski, L., Kee, R., VanderWeele, T., & Buchanan, D. (2009). Effect of a housing and case management program on emergency department visits and hospitalizations among chronically ill homeless adults: A randomized trial, *JAMA-Journal of the American Medical Association*, 301(17), 1771; AIDS Foundation of Chicago (AFC) (2009). *Studies on Supportive Housing Yield Promising Results for Health of Homeless*. Fact sheet prepared by the AIDS Foundation of Chicago, September 2009. [www.aidschicago.org](http://www.aidschicago.org); Larimer, M., Malone, D., Garner, M., Atkins, D., Burlingham, B., Lonczak, H., et al. (2009). Health care and public service use and costs before and after provision of housing for chronically homeless persons with severe alcohol problems. *JAMA-Journal of the American Medical Association*, 301(13), 1349; Gilmer, T. P., Manning, W. G., & Ettner, S. L. (2009). A cost analysis of San Diego County's REACH program for homeless persons, *Psychiatric Services*, 60(4), 445-450.
- <sup>xxxiv</sup> National AIDS Housing Coalition (NAHC) (2008). *Housing Opportunities for People with AIDS: 2009 Need*. Washington, DC: National AIDS Housing Coalition ([www.nationalaidshousing.org](http://www.nationalaidshousing.org)).
- <sup>xxxv</sup> Bernstine, N. and Duane, T. (2009). *Bringing successful strategies to scale*. Presentation by Nancy Bernstine, National AIDS Housing Coalition, and New York State Senator Tom Duane, at the Office of National AIDS Policy HIV and Housing Meeting, December 17, 2009. See also: Lazzarini, Z., and Klitzman, R. (2002). HIV and the law: Integrating law, policy, and social epidemiology. *Journal of Law, Medicine & Ethics*, 30(4), 533-547.
- <sup>xxxvi</sup> See, e.g.: Sadowski, et al., 2009; Wolitski, et al., 2009; Larimer, et al., 2009; Gilmer, et al., 2009.

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DECEMBER 17, 2009

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