

Stable Housing Means Stable HIV Care

July 14, 2014
12:00-1:00pm ET

Questions or difficulties? Email
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INFORMING THE FIELD



Stable Housing, Stable HIV Care: The Unsung Goal of the National HIV/AIDS Strategy

Dr. David Holtgrave in partnership with
Ginny Shubert and the National AIDS Housing
Coalition



INFORMING THE FIELD



Housing is HIV Prevention and Health Care

Housing and Health Outcomes

How strong is the evidence on housing & HIV? *Systematic review of research literature 1996 – 2012**

- 3900 articles, 104 eligible for review: Quantitative study, PLWHs, housing, medical care (access/utilization) and/or health outcome(s)
- 32 papers examined access to HIV medical care and medications and service utilization
- 31 (97%) found worse HIV medical care outcomes among those who were homeless or unstably housed
- 24 (75%) reported statistically significant differences comparing homeless/ unstably housed PLW and those with stable housing

Aidala, et al. (2013). In press.



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HIV and Homelessness

Homelessness & HIV – Strong Relationships

- Rates of HIV infection are as much as 16 times higher among homeless or unstably housed persons than the general population
- Studies consistently show that 40 to 70% of all PLWHA in the U.S. will experience homelessness or housing instability after diagnosis
- CDC data show that poverty (not race) is the strongest predictor of HIV infection among heterosexuals in poor urban centers
- Even in these communities with the highest concentrations of poverty and HIV, recent homelessness doubles the risk of HIV infection



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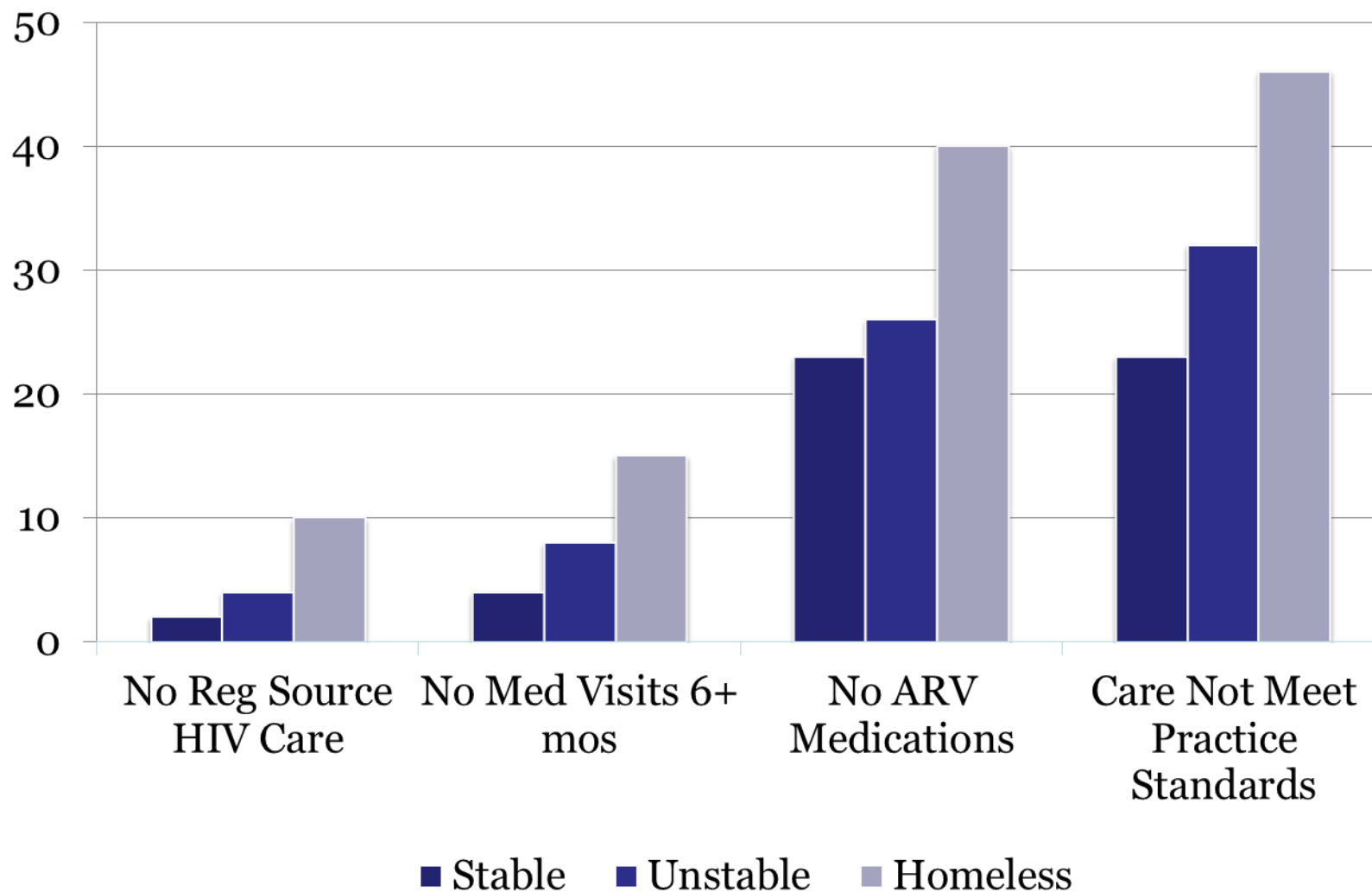
Housing and Health Outcomes

Lack of Stable Housing & Lack of Treatment Success

- Compared to stably housed PLWHA, homeless & marginally housed:
 - More likely to delay entry into care and to remain outside or marginal to HIV medical care
 - Worse mental, physical & overall health
 - More likely to be uninsured, hospitalized & use ER
 - Lower CD4 counts & less likely to have undetectable viral load
 - Fewer ever on ART, and fewer on ART currently
 - Self-reported ART adherence lower
- Housing status found more significant than individual characteristics as a predictor of health care access & outcomes



Housing & Connection to Medical Care: NYC PLWHA (from the CHAIN study)



Housing and Food/Nutrition Needs

	Need Neither	Need Both Housing & FNS	
	OR	OR	AOR ¹
Missed 2+ appts	0.49***	2.16***	2.12***
ER visits	0.69**	1.91***	1.86***
Inpatient stay	0.70**	1.59**	1.35
Care meets guidelines	2.09***	1.47*	0.75
ARV medications	1.45**	0.75	0.71
Undetectable viral load	1.82**	0.68*	0.66*
Good health functioning	1.91***	0.79	0.51**

*p <.05 **p <.01 ***p <.001 n= 834 PLWH interviewed 2002-2012, 2251 observations

¹ Controlling for age, gender, race/ethnicity, education, income, risk group, year of HIV dx, low mental health, current drug use, receipt of mh and AOD services, transportation need, transport services, case management, receipt of housing services, receipt of food/ nutrition services

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Housing and Health Outcomes

Unmet subsistence needs & Poor HIV health

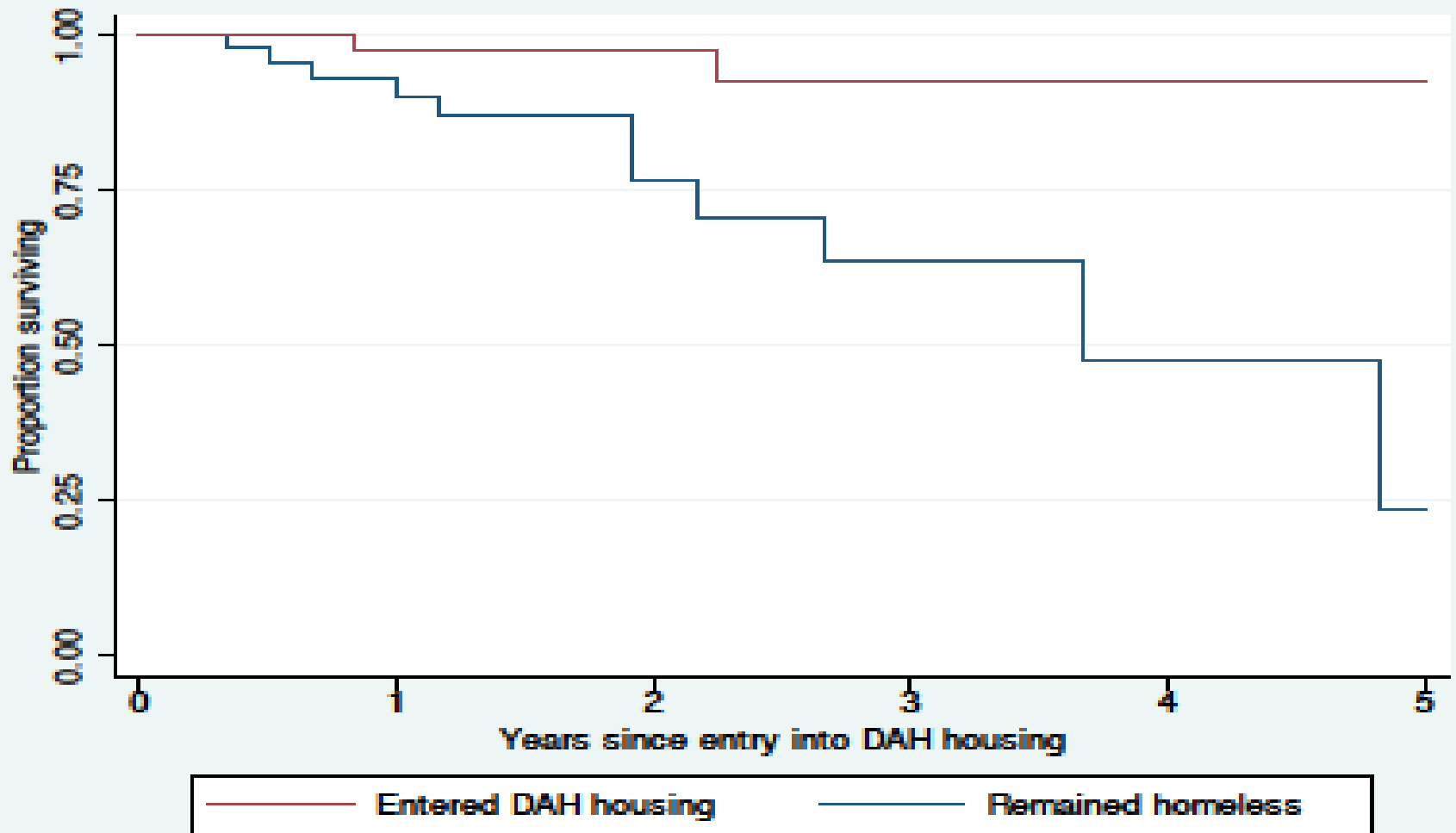
- Among HIV+ homeless and unstably housed men in San Francisco who are aware of their HIV status and clinically eligible for treatment, only 18% were currently on ART.
- Unmet subsistence needs (i.e., food, hygiene, shelter) had the **strongest** effect on overall physical and mental health of homeless men and women – with at least as much effect on overall health as adherence to antiretroviral therapy.
- Conclusion: *“Impoverished persons will not fully benefit from progress in HIV medicine until these barriers are overcome, a situation that is likely to continue fueling the US HIV epidemic.”*

Riley, et al. (2011). *Am J Epidemiol.* 174(5): 515–522.; Riley, et al. (2012). *PLoS ONE* 7(4), at: <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0035207>



Survival of People with AIDS: Housed vs. Homeless

Schwarcz, S. K., Hsu, L. C., Vittinghoff, E., Vu, A., Bamberger, J. D., & Katz, M. H. (2009).
Impact of housing on the survival of persons with AIDS. *BMC Public Health*, 9.
Available at <http://www.biomedcentral.com/content/pdf/1471-2458-9-220.pdf>



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Housing Interventions Work

Housing Assistance Creates Stability & Improves Health

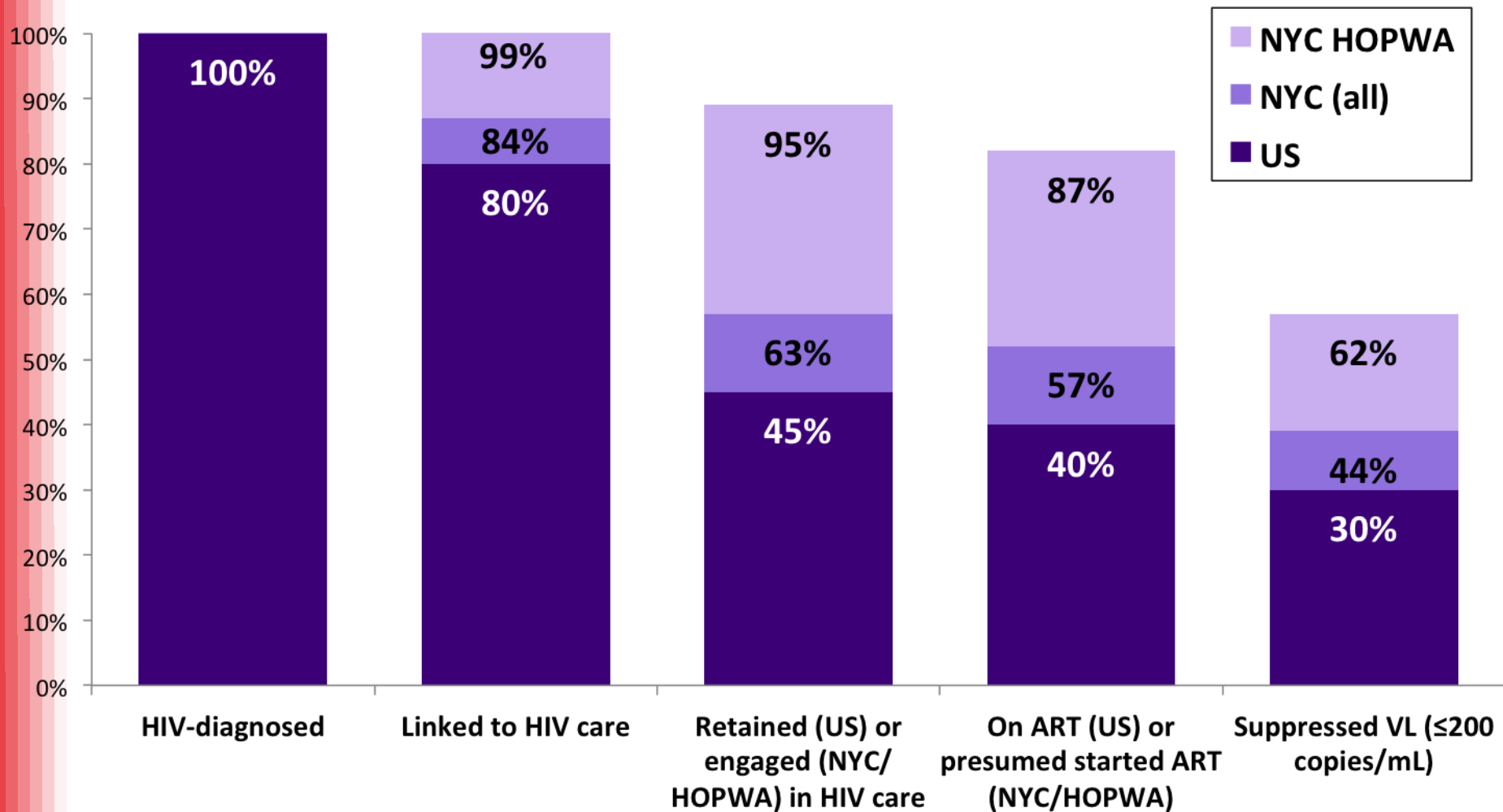
- The Housing & Health (H&H) Study, a 3-city randomized controlled trial (RTC) examining the impact of HOPWA vouchers:
 - 84% of voucher recipients remained stably housed at 18 months
 - Increased housing resulted in a 35% reduction in ER visits and 57% reduction in hospitalizations
- H&H participants who remained homeless:
 - 2.5 times more likely to use an ER
 - 2.8 times more likely to have a detectable viral load
 - More likely to report unprotected sex and perceived stress
- The Chicago Housing for Health Program (CHHP) study, a RTC examining supportive housing for chronically ill persons leaving the hospital:
 - PLWHA who received a housing placement were twice as likely at 12 months to have an undetectable viral load as those who did not receive housing



Interpreting the Care Cascade

- Each bar represents a step in the HIV care continuum
- PLWH have to be in one step to make it to the next
- PLWH can “fall off” at any step
- There are important differences in NYC HOPWA, overall NYC, and US cascades
 - NYC HOPWA cascade includes PLWH residing in NYC and accessing HOPWA services
 - Overall NYC cascade may contain some PLWH no longer living in NYC in 2011, due to unascertained moves or deaths
 - US (CDC) cascade employs 3 national databases; data sources and definitions differ from NYC’s

US vs. NYC vs. NYC HOPWA



NYC HOPWA clients have higher engagement in each stage of HIV care, compared to NYC and US.

NOTE: Different cascade methods/definitions used for US compared to overall NYC and NYC HOPWA.

Sources: Centers for Disease Control and Prevention. CDC Fact Sheet: HIV in the United States: The Stages of Care. July 2012; New York City HIV/AIDS Surveillance

Slide Sets. New York: New York City Department of Health and Mental Hygiene, 2011. Updated February 2013.

Program/Policy Implications

- Inform policy-makers on successful HIV care and treatment outcomes among HIV housing clients
 - Importance of housing services (e.g., HOPWA, Ryan White)
- Highlight the usefulness of surveillance data for program evaluation of housing services
- Identify best practices – successful program models – to replicate and disseminate within HIV community
- Make recommendations on policy and program design that strengthen the link between housing services and HIV care cascade success

Housing Status & Viral Suppression

Evidence from San Francisco

- SF Department of Public Health used surveillance data to examine engagement in care for all persons newly diagnosed with HIV in SF during 2009 & 2010 (n= 862)
- 2 factors predicted failure to connect to HIV care within 6 months of diagnosis:
 - Lack of health insurance
 - Homelessness
- 4 factors independently predicted failed viral suppression at 12 months:
 - Homelessness
 - Unknown housing status
 - Youth (under 30 years old)
 - Less than 3 medical visits since diagnosis
- Conclusion: Socioeconomic resources and age, not race or gender, are associated with disparities in engagement in HIV care in San Francisco.

From: Muthulingam et al. (2013). Disparities in Engagement in Care and Viral Suppression among Persons with HIV. *JAIDS*, 63: 112—119.



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Housing Interventions Work

But Can We Afford It?

YES! – Improved Outcomes at Reduced Public Cost



- A strong evidence base (including the H&H and CHHP studies) shows that supportive housing not only improves HIV health outcomes but also sharply reduces avoidable emergency and inpatient health services, criminal justice involvement, and other crises that are costly for both individuals and communities
- CHHP found that chronically homeless PLWHA housed through the study used \$9,809 LESS in publicly funded medical and crisis care than PLWHA who received only “usual care,” and non-chronically homeless PLWHA “cost” the public \$6,620 less to care for
- The public cost “savings” generated by housing supports can fully offset the cost of housing for PLWHA – even before taking into account that each new HIV infection prevented through increased housing stability saves >\$400,000 in medical costs



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Housing Interventions Work

Evaluating the “Cost Utility” of Housing as Health Care

- H&H results have made it possible for the first time to evaluate the “cost-utility” of housing as an HIV risk reduction & treatment intervention - measured as the “cost per quality adjusted life year (QALY) saved”
- “Cost per QALY” is the measure used by health economists to compare the “value for money” of health care interventions - to ensure that health care dollars are being spent wisely, on treatments that work
- The cost-utility of the H&H housing is a function of the cost of services provided, transmissions averted, medical costs saved, and life years saved
- H&H findings confirm that housing is a cost effective health care intervention for PLWHA, with a cost per QALY (\$35,000 - \$65,000) in the same range as such widely accepted health care interventions as renal dialysis (\$50,000 per QALY)



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Housing Interventions Work

Dramatic Cost Savings from Housing Interventions (presentation posted on www.hivhousingsummit.org - “Summit VI” tab)

- Study of study of PLWHA enrolled in housing with the San Francisco Dept of Public Health “Direct Access to Housing Program”
 - Low-threshold permanent supportive housing
 - Looked at public healthcare utilization (hosp, ER, inpatient, SNF) 2 years before vs. 2 years after housing
- Housing stability dramatically reduced health care costs
 - “High users” (>\$50,000/year in healthcare costs) = 13% of the group but 73% of total healthcare costs
 - Median healthcare costs for high users was \$100K/year per person prior to housing - \$1,819 after
 - Cost savings among high users generated savings that offset costs for the full group housed
- Conclusion: Housing investments (provided locally or by HUD) created savings in mainstream healthcare costs that produced net public savings
 - Average health savings of \$15,000 per housed person
 - Found no significant difference in housing stability between high users and others



Housing is HIV Prevention and Health Care

Summary of Key Findings on Housing & HIV

- Homelessness and unstable housing are linked to greater HIV risk, inadequate care, poor health outcomes & early death
- Studies also show strong & consistent correlations between improved housing status and...
 - Reduction in HIV/AIDS risk behaviors
 - Access to medical care
 - Improved health outcomes
 - Savings in taxpayer dollars
- Research shows that that housing is both effective *and* cost saving as a healthcare intervention for homeless/unstably housed persons living with HIV & other chronic conditions



Yet Housing Remains the Greatest Unmet Service Need of PLWHA

- HUD reported in 2011 that over 145,000 U.S. households living with HIV (about 12%) have an immediate unmet need for housing assistance
- 42% of U.S. veterans living with HIV have experienced homelessness and 11% are currently homeless (compared to <1% for all veterans)
- Among persons triply diagnosed with HIV, substance use, and mental health issues, a large multistate study found that 43% currently lack stable housing
- In NYC:
 - 1,800 PLHA in SROs and 10,000 disabled PLHA severely rent burdened
 - No HIV-specific housing for HIV+ asymptomatic, leaving an estimated 3,100 PWH homeless or unstably housed, including 900 in shelters



Evidence-Based Action:

New scientific, policy and service-delivery developments have created the opportunity to set more ambitious goals for the HIV response

We have the tools to end the AIDS epidemic

But biometrical, behavioral and structural interventions must be used together...



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Evidence-Based Action: National Strategic Planning

- The U.S. National AIDS Strategy, released July 2010:
 - Recognizes that housing is healthcare for PLWHA
 - Calls for increased HIV housing resources
 - “Federal agencies should consider additional efforts to support housing assistance and other services that enable people living with HIV to obtain and adhere to HIV treatment.”
 - BUT – to date no new resources to meet the NHAS housing targets



http://portal.hud.gov/hudportal/HUD?src=/open/innovation_ideas_in_action/HOPWA_forum



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Evidence-Based Action: National Strategic Planning

- Opening Doors: Federal Strategic Plan to Prevent and End Homelessness, released June 2010:
 - Recognizes housing as an evidence-based HIV prevention and health care intervention for homeless/unstably housed persons
 - “Housing assistance coupled with health care has been shown to decrease overall public expense and make better use of limited public resources”
 - BUT – to date no new resources to house homeless PLWHA

www.nationalaidshousing.org



<http://homeless.samhsa.gov/ResourceFiles/HRC%20Article%20Images/opening-doors.jpg>



We need more ambitious 2020 NHAS goals!

- Increasing access to care and improving health outcomes:
 - At least 85% of newly diagnosed HIV+ linked to clinical care within 3 months of diagnosis;
 - At least 85% of all diagnosed persons living with HIV retained in care;
 - At least 81% of clients receiving HIV care achieve and maintain viral suppression; and
 - At least 90% of ALL persons living with HIV in need of stable housing services receive and retain such services (2010 goals related to Ryan White clients only)
- Measurement:
 - First four goals in this section can be measured by existing CDC and HRSA systems.
 - For the housing goal, propose a broad measurement strategy reflecting more persons living with HIV (such as an expansion of CDC's Medical Monitoring Project)

From: Holtgrave, D.R. (2013). Development of Year 2020 Goals for the National HIV/AIDS Strategy for the United States. *AIDS & Behavior*, Epub ahead of print, August 2013.



HOPWA Funding

FY2012 Funding	FY2013 Funding (Post-Sequestration)	FY14 NAHC Request	FY14 President's Budget Request
\$332 Million	\$316 Million	\$365 Million	\$332 Million

What's Next?

Housing is HIV Prevention and Health Care

Tools for Policy & Practice:

www.hivhousingsummit.org

www.nationalaidshousing.org/policytoolkit.htm

I. Searchable bibliography of peer-reviewed journal articles related to HIV/AIDS and housing.

This database of over 300 recent articles can be searched by key word and filtered by Topic, Population and/or Region. Search results can be ordered by title, first author and year of publication. Details for each article include: abstract, full citation and web links to the full text for articles available open source.

II. Reports & Fact Sheets on housing and health

Prepared by NAHC, governmental and non-governmental organizations

III. Presentations & Data

Including findings and presentations from Summit Series meetings



For more information visit
www.nationalaidshousing.org and
www.hivhousingsummit.org

