Ending the HIV Epidemic

TAPin Technical Assistance Provider innovation network

Housing is Healthcare:
Best Practices & Common Challenges in HIV Housing

May 27, 2021
1:00 PM – 2:30 PM

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Who We Are

Technical Assistance Provider innovation network

Strengthen & support implementation of jurisdiction EHE Plans to contribute to achievement of reduction in new reported HIV cases by 75% by 2025

Get TAP-in TA and Training by Contacting TAP-in@caiglobal.org

Ending the HIV Epidemic

TAPin Technical Assistance Provider innovation network

Cooperative Agreement Award # U69HA33964

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Learning Objectives

- Understand the strong evidence base for housing assistance as HIV prevention & care, and the role of housing interventions as a core component of plans to end the HIV epidemic.
- Reflect on common challenges and barriers faced by jurisdictions in planning and implementing effective HIV housing strategies.
- Consider the essential data, community input, and partners required to expand housing opportunities for households living with HIV.
- Walk through some steps/approaches that have been been found to support successful community planning.

Agenda

1. Why housing?
    - Housing is HIV prevention and care: the evidence base
    - The role of housing supports/interventions in plans to end HIV
2. Why are housing needs so hard to meet?
    - Common housing barriers faced by people with HIV
    - Common challenges faced by communities working to plan and implement effective HIV housing strategies
    - Some evidence-based best practices

Agenda

3. Developing a community HIV housing strategy
   - Step 1: Assess unmet housing needs
   - Step 2: Inventory housing resources
   - Step 3: Identify barriers
   - Step 4: Reach agreement on priorities and strategies
4. Case studies from jurisdictions working to increase housing opportunities for low-income people with HIV
   - Washington, D.C.
   - New York City

Poll Question #1

Where does housing fit in your EHE plan?

- My jurisdiction's EHE plan is centered on housing
- Housing is a key component in our local EHE plan
- Housing's important, but not a major focal point for our jurisdictional plan

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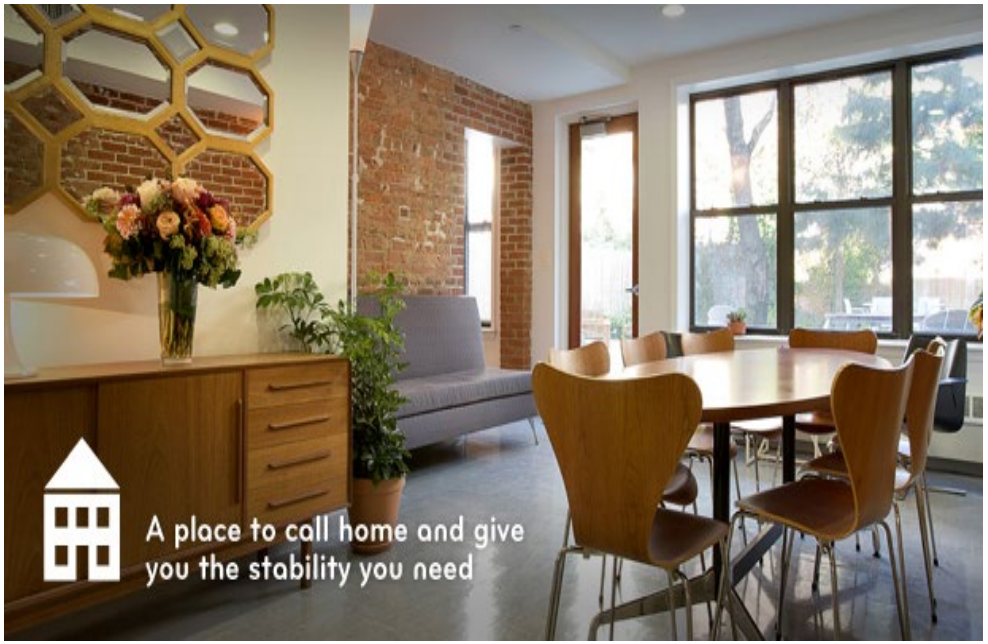
Why Housing?

Housing is HIV prevention & care, and unique as a social determinant of health shaping our daily lives – while also a manifestation of broader, antecedent, structural processes of inequality and marginalization that are fundamental drivers of HIV vulnerability and poor HIV health outcomes.



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Housing Status & HIV Health Outcomes

Literature review identified 152 relevant peer-reviewed papers

Compared to PWH with adequate housing, homelessness and unstable housing status among PWH significantly associated with:

- Delayed entry into HIV care
- Discontinuous care
- Not being on antiretroviral therapy and lower rates of adherence
- Detectable viral load
- HCV, TB and other comorbidities, poor health functioning & lower quality of life
- Higher rates of emergency and inpatient health care utilization
- HIV-related mortality

Housing Status & HIV Health Outcomes

Housing status ***independently associated*** with poor HIV health outcomes, controlling for individual characteristics and behavioral barriers to effective HIV care

For citations, see the References at the end of this presentation.

Housing Status & HIV Prevention

Consistent evidence links housing status and HIV vulnerability

- Significant association between housing instability and sexual and drug use behaviors that increase HIV vulnerability, controlling for demographics, behavioral health, and service use
- Homelessness and unstable housing independently predict HIV and HCV acquisition among people who inject drugs (PWID)
- Among people already disproportionately impacted by HIV (MSM, transgender women), housing status significantly impacts rates of HIV infection

Housing Status & HIV Prevention

- Improved housing status over time reduced HIV risk behaviors by half, while those whose housing status worsened were four times more likely to increase vulnerability through activities such as sex exchange
- Stable housing improves access and adherence to antiretroviral medications, which suppresses viral load and eliminates the risk of sexual transmission

For citations, see the References at the end of this presentation.

Impact of HIV Housing Assistance

Studies (including two RCTs) show that increased housing stability is independently associated with:

- HIV primary care visits, continuous care & care that meets clinical standards
  - Effective ART (viral suppression)
  - Better HIV related health status (as indicated by viral load, CD4 count, lack of co-infection with HCV or TB)
  - Steep reductions in mortality (80% over 5 years in a one large study)

Impact of HIV Housing Assistance

Cost analyses indicate that public investment in housing supports is cost-effective or cost-saving HIV health care

- Prevents ongoing transmission, averting new infections
- Significantly reduces the use by PWH of avoidable emergency and inpatient care

For citations, see the References at the end of this presentation.

Consistent Findings Across Global Settings

Most research conducted in high-income settings, but available studies show consistent findings on the impact of housing status in middle- and low-income countries

Housing Status & HIV Incidence:

- A systematic review of the global literature found that the estimated 100 million persons worldwide who are homeless experience dramatically higher rates of TB, HCV and HIV infection than the general population in their areas
- In Ukraine urban centers 28% of youth who were both homeless and orphaned were HIV-infected

Consistent Findings Across Global Settings

Housing Status & HIV Health Care:

- Among HIV-infected patients in Cote d-Ivoire, poor housing conditions (e.g., no refrigerator; no ventilation in bedroom) were associated with not being on antiretroviral treatment

Housing Status & HIV Health Disparities:

- A survey and HIV testing of over 8,000 South African residents indicated that persons living in informal settlements in urban areas had the highest HIV prevalence rate, almost twice the rate for the group as a whole

Housing Interventions: A Core EHE Component

- ✓ Support engagement & retention in care
- ✓ Stop HIV-related mortality
- ✓ Reduce the risk of ongoing HIV transmission
- ✓ Reduce harm related to active substance use
- ✓ Provide the stability necessary to empower residents to work towards employment & other life goals
- ✓ Lower costs by averting new infections and reducing avoidable health care utilization

Poll Question #2

What are your biggest challenges in moving your EHE housing strategies forward?

- We have not stably housed people with HIV who are members of key populations
- There are barriers keeping people with HIV from accessing affordable housing
- We aren't sure because we have yet to conduct a housing needs assessment

Common Barriers/Challenges to Meeting Housing Needs

Barriers Faced By People With HIV

- Poverty and economic marginalization based on race, ethnicity, gender, sexual orientation, or status as a drug user or sex worker
- Policies that exclude individuals from available housing due to source of income, history of incarceration, credit score, lack of rental history

Common Barriers/Challenges to Meeting Housing Needs

Challenges Encountered By Communities

- Lack of data/information on the needs of PWH outside of Ryan White or other service systems
- Lack of affordable housing in the community
- Limited coordination of HOPWA, Ryan White, and other HIV housing resources

Common Barriers/Challenges to Meeting Housing Needs

Challenges Encountered By Communities

- Inadequacy of and/or inability to leverage mainstream federal, state and local housing subsidies and programs, including supportive housing that serves people with overlapping chronic conditions, and resources available to address homelessness
- Lack of information and guidance on different models of housing support, and lack of consumer information needed to align available housing resources with individual needs and preferences

Evidence-Based Best Practices

- Conduct regular client assessments of housing situation and needs, including recent instability and threats to housing status
- Employ Housing First, low-threshold housing models
  - Without preconditions of treatment acceptance or compliance
  - Harm reduction approach to behavioral health services, with robust services offered but participation not required
  - Residents expected to abide by basic guidelines (e.g., refrain from violence, not engage in illegal behaviors in the neighborhood)
  - Clinical and social stabilization occur faster and are more enduring
- Ensure a pathway from transitional/time-limited assistance to permanent affordable housing

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Developing a Community HIV Housing Strategy

- ✓ **Step 1:** Accurately assess the extent and nature of housing needs among all people HIV living in your community
- ✓ **Step 2:** Inventory all existing low-income and/or supportive housing programs and supports in your community, including HIV-specific and non-HIV specific resources
- ✓ **Step 3:** Identify unmet needs, service gaps, and core objectives to guide planning
- ✓ **Step 4:** Develop housing and services priorities and strategies

Poll Question #3

How frequently have you met with your local housing providers or HOPWA services for co-planning?

- Not at all
- One time in the last 12 months
- A few times in the last 12 months
- Four or more times in the last 12 months

Step 1: Assess HIV Housing Needs

- Gather quantitative and qualitative information on the housing status, stability, and identified housing needs among all PWH in your community
- Identify barriers to safe, affordable housing experienced by PWH, including unique barriers faced by members of priority populations
- Assess the local housing market and the availability of and access to existing affordable housing units

Step 1: Assess HIV Housing Needs

- Gather information on housing programs and supports currently used by PWH, including their scope, size, and duration
- Assess the gaps between estimated total housing needs and currently used HIV housing resources, to evaluate the extent and nature of unmet housing needs

Step 2: Inventory All Existing Housing Resources

- Gather information on the availability, type, and eligibility requirements for all existing housing supports: HIV specific; mainstream subsidies; and supportive housing programs
- Seek information on the extent to which these resources are employed by PHW, and any program requirements or characteristics that could pose barriers to PWH
- Form collaborations or partnerships with other low-income housing systems, with the goal of maximizing all housing resources and improving client selection/placement to best meet needs.

Step 3: Identify Gaps and Set Objectives To Guide Planning

- Evaluate the data and information collected to identify specific gaps in access to needed housing supports and/or in housing stability over time
- Consider the full range of existing housing supports to identify opportunities to better leverage non-HIV-specific resources
- Evaluate models of HIV housing assistance and supports to identify best practices

Step 3: Identify Gaps and Set Objectives To Guide Planning

- Evaluate current client assessment instruments to improve data collection on unmet housing need, including history of housing instability
- Set basic objectives/principles to guide development and implementation of an HIV housing strategy, such as a commitment to interventions that promote long-term stability

Step 4: Develop Priorities and Strategies

- Evaluate available resources and unmet need to inform an HIV housing strategy
- Consider refinements to client needs assessments and to housing placement systems to gather the information needed to better align housing resources to meet client needs, ensuring that available resources are maximized and effective
- Consider strategies that better leverage mainstream low-income housing supports, homeless housing assistance, and supportive housing systems to increase housing opportunities for PWH—from training case managers to centralizing referral systems

Step 4: Develop Priorities and Strategies

- Set basic HIV housing requirements and client protections for proposed strategies, such as habitability and resident eligibility requirements
- Develop strategies to maximize the impact of available resources to meet identified unmet housing needs, increase housing stability, and thereby improve individual and community HIV health outcomes.

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Case Studies

Washington, DC

New York City

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DC Housing Models to End the HIV Epidemic

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Michael Kharfen
HIV/AIDS, Hepatitis, STD, and TB Administration
DC Department of Health

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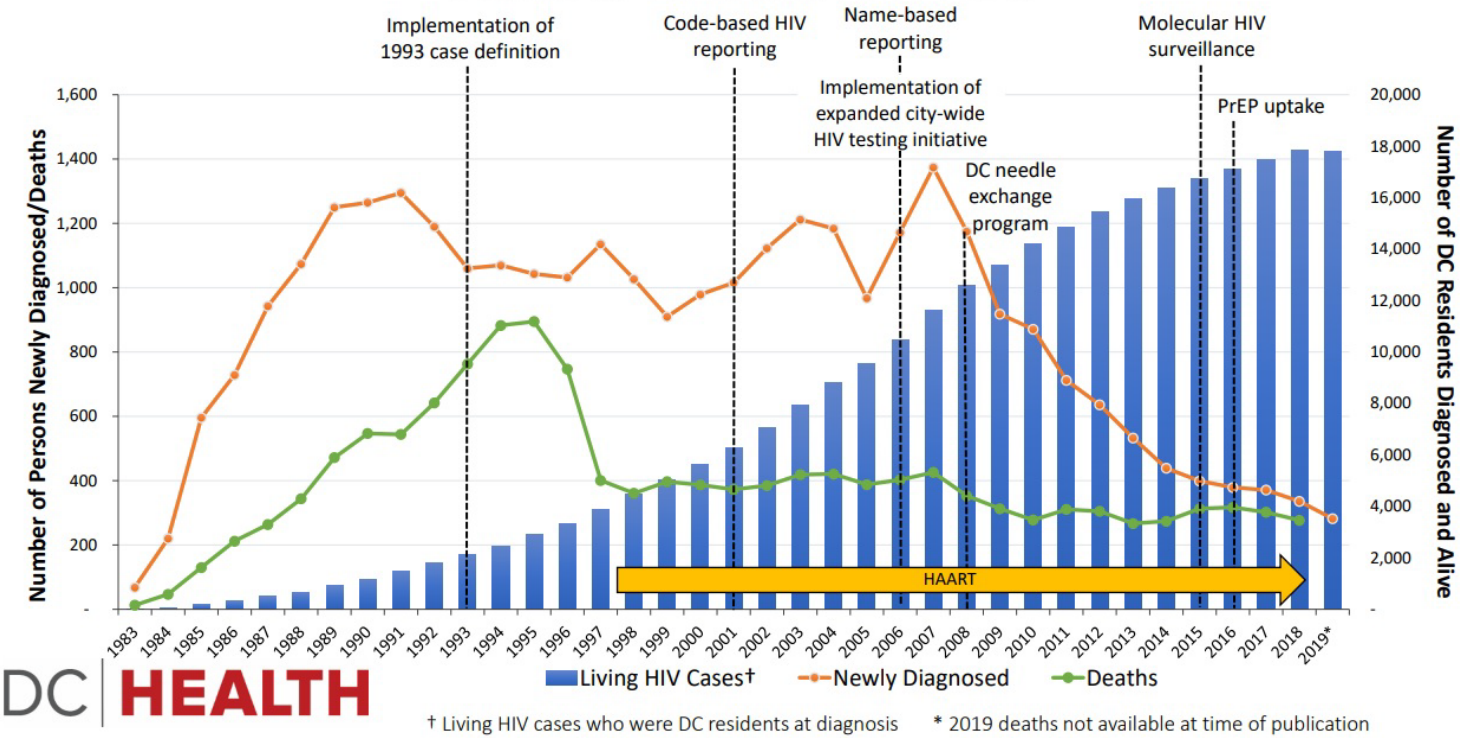
Agenda

- DC HIV Overview
- DC Ends HIV Plan
- Status Neutral Approach
- Current DC Housing Model Programs
- Planned DC Housing Programs

DC HIV Overview

Newly Diagnosed HIV Cases, Deaths, and Living HIV Cases, by Year – District of Columbia, 1983-2019



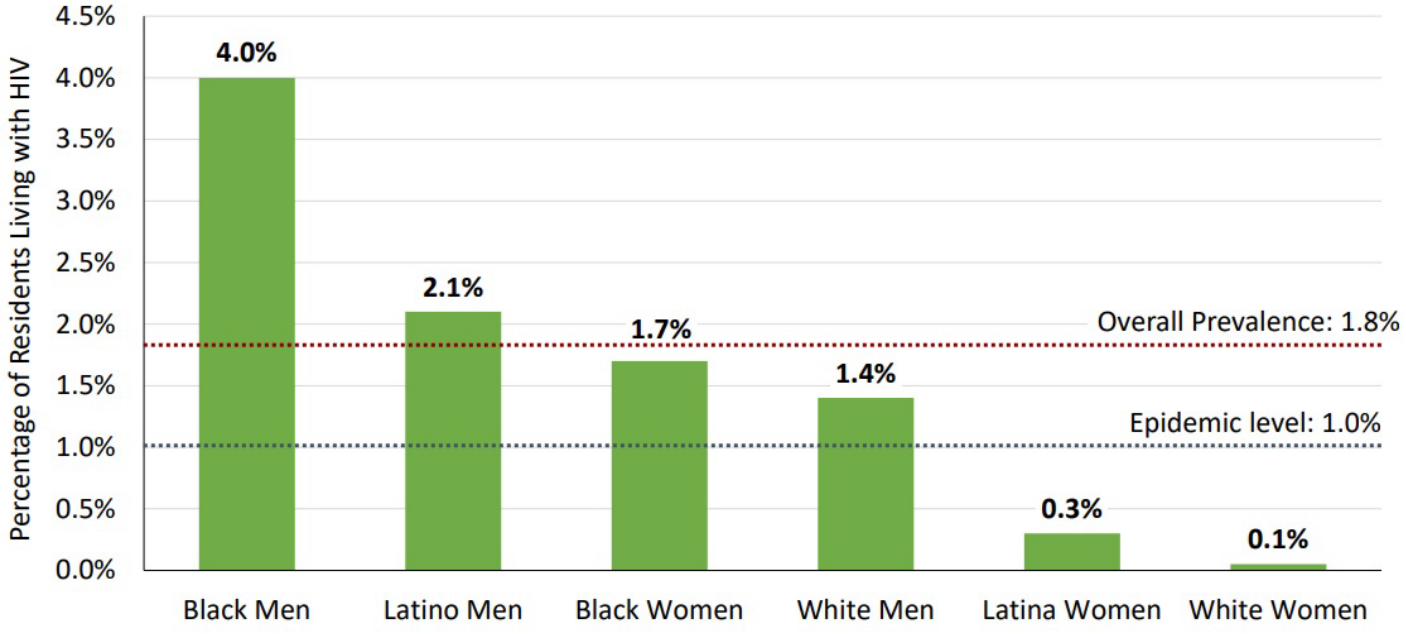
DC | HEALTH

† Living HIV cases who were DC residents at diagnosis * 2019 deaths not available at time of publication

A full description of this chart can be found can be found at the end of this presentation after the References slide under the title: Slide 36 -Newly Diagnosed HIV Cases, Deaths, and Living HIV Cases

DC HIV Overview

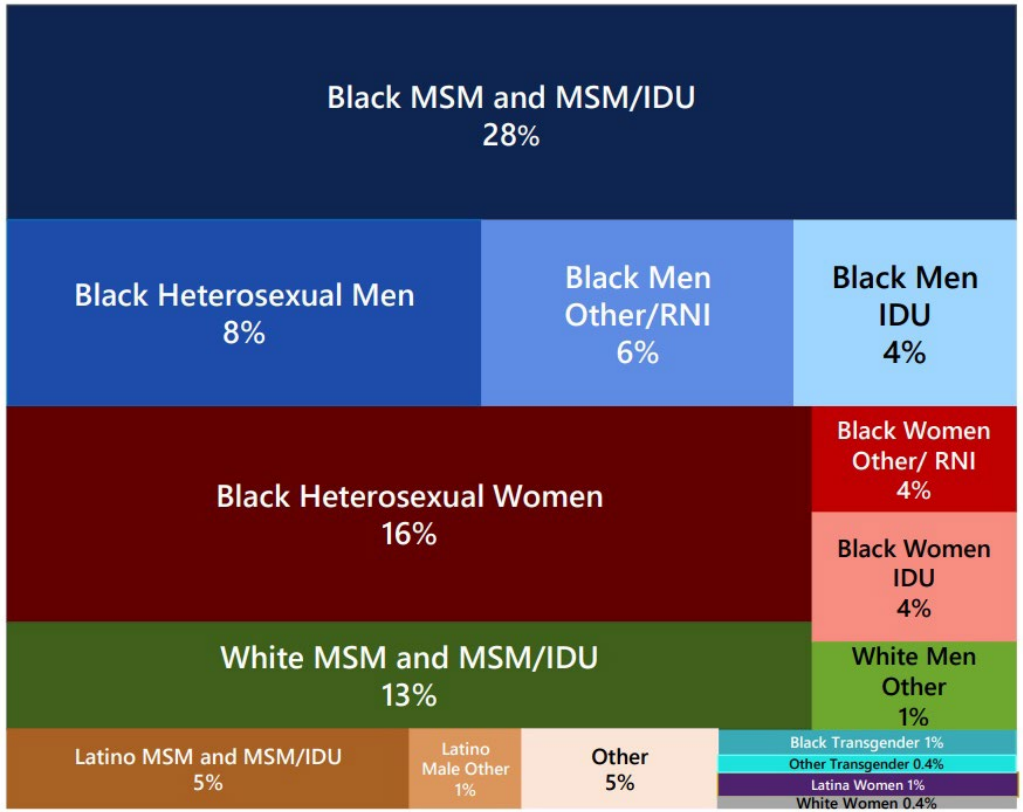
HIV Prevalence by Race/Ethnicity and Gender Identity-District of Columbia, 2019, n=12,408



A full description of this chart can be found can be found at the end of this presentation after the References slide under the title: Slide 37 - HIV Prevalence by Race/Ethnicity and Gender Identity

DC HIV Overview

Percentage of HIV Cases Living in DC, by Race/Ethnicity, Gender Identity and Mode of Transmission – District of Columbia, 2019 (n=12,408)



A full description of this chart can be found can be found at the end of this presentation after the References slide under the title: Slide 38 - Percentage of HIV Cases Living in DC

DC Ends HIV Plan

First plan: 90/90/90/50 Plan (December 2016)

Updated plan: DC Ends HIV (December 2020)

- Community Engagement: >50 sessions, >750 persons
  - Cross-cutting themes: Stress, Connection, Culture, Identity, Structural Issues, Social Determinants (housing)
- Key Strategies
- Goals by 2030
  - <130 new diagnoses per year
  - 95/95/95 HIV continuum
  - >13,000 people on PrEP
- Community Platform
  - DCEndsHIV.org

Status Neutral

Prioritizes the engagement of both people living with HIV and persons with risk behavior for HIV through a status-neutral approach. Focuses on activities that meet the needs of focus populations overall, rather than dividing services into either HIV prevention or HIV care.

Status Neutral

Core Elements

- Integrated services
- Biomedical: Rapid ART, PrEP/PEP
- Individualized whole person wellness
- Trauma informed approach
- Culturally responsive and flexible
- Comprehensive harm and risk reduction
- Non-traditional engagement
- U=U
- Community engagement

Current Housing Models

Housing Independence Through Employment (HITE)
Sustainable Housing Assistance Rental Program (SHARP)
Transitional Opportunity Program (TOP)

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The Housing INDEPENDENCE Through Employment Program (HITE)

DC ENDS HIV

HITE

Program Terms

- Motivated individuals living with HIV
- Not to exceed 24 months
- Employment as pathway to housing stability

Program Components

- Program agreement – Transparency
- Lease in participant name
- 100% rent covered
- Escrow account
  - 30% income
  - All funds to individual
- Housing Stability Plan
- Case management

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The Housing INDEPENDENCE Through Employment Program (HITE)

DC ENDS HIV

HITE (continued)

Program Components

- Financial literacy/management counseling
- Housing counseling
- Transportation assistance
- Participant group meetings
- Resource coordination
  - Employment agencies
  - Mental health providers
  - Small business trainings
  - Mindfulness tools
- Psychosocial assessment
- Correction plans

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HITE (continued)

Outcomes

- Income increases
- Personal capital development – escrows $3,353-$21,807
- Health maintenance
- Life skills/financial literacy development
- Advanced education – undergraduate and graduate degrees

Lessons Learned

- Balancing requirements with independence goal
- Participant assessment/appropriateness
- Timelines

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Sustainable Housing Assistance Rental Program

DC ENDS HIV

SHARP

Program Terms

- Temporary rent subsidy for people living with HIV
- Not to exceed 24 months
- Reduce rent burden, stabilize health, housing stability, household saving

Program Components

- Rent burden: 40%
- Rental assistance: Not to exceed 40%
- Housing Stability Plan
- Case management

Outcomes

- 100% successful program completion

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Transitional Opportunity Program

DC ENDS HIV

TOP

Program Terms

- Homeless or at-risk of homeless people living with HIV
- Not to exceed 18 months
- Achieve housing stability

Program Components

- Scattered site, master lease model furnished apartments
- Case management
- Housing Stability Plan
- 40 hours per week of structured activities

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TOP (continued)

Outcomes

- Increased income
- Improved credit
- Viable housing options

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DC ENDS HIV

Planned Housing Models

PrEP and Housing
Integrated Case Management Care Teams

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PrEP Housing

Background

- Young men who have with sex with men of color highest proportion of new HIV diagnoses
- Housing instability

PrEP Housing

Program Components

- Master lease model
- Initial pilot: 8 participants
- Not to exceed 24 months
- Case management
  - Behavioral health and wellness
  - Employment
  - Education
  - Sexual health

Integrated Care Team

Model

- Joint team case managers cross programs: medical, non-medical, housing
- Meet individual client needs

Proposed Outcomes

Health

- Increased viral suppression
- Medication adherence
- Routine clinical appointments

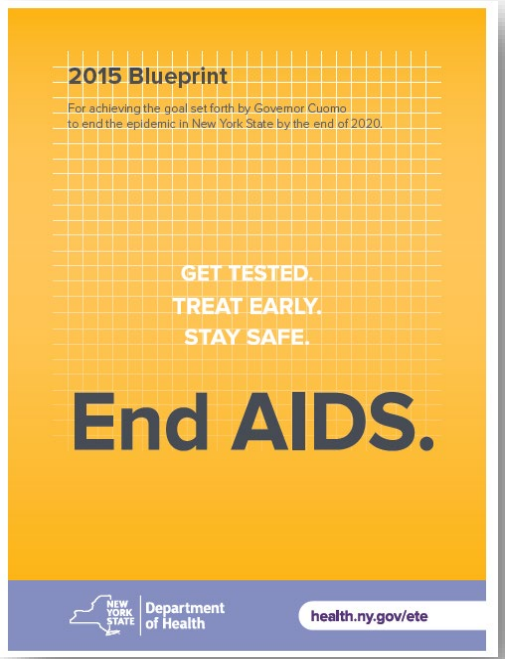
Psychosocial

- Increased emotional and mental wellness
- Harm reduction: substance use
- Housing stability

NYS Ending the Epidemic Housing Recommendations

Strong Evidence Base

- Housing status consistently predicts HIV care access and effectiveness*
- Unstable housing the strongest predictor of NYS HIV health disparities**
- Public spending on housing generates offsetting savings in avoidable healthcare***



NYS ETE Blueprint

- ✓ **Developed** by a Taskforce of 63 experts & community members
- ✓ **30 BP Recommendations** to get the 2020 goal of < 750 new infections statewide
- ✓ **BP8:** Meet non-medical needs to ensure effective HIV care, including stable housing
- ✓ **BP16:** Ensure access to stable housing as an evidence-based HIV health intervention

*Aidala, et al. *AJPH*, 2016: 106(1):e1-e23.
**Feller & Agins. *J Int Assoc Provid AIDS Care*, 2017; 16(1):23-29.
***Basu, et al. *Health Serv Res*, 2012; 47(1 Pt 2):523-43.

NYC's Unique Response to Social Determinants

In 2016, NYC became the 1st jurisdiction to guarantee housing, food & transportation supports for low-income people with HIV

- **1985** – NYC's Human Resources Administration establishes a Division of AIDS Services (now HIV/AIDS Services Administration, or HASA) to provide housing, food & transportation
- **1988** – Litigation to expand HASA eligibility
- **1990** – NYS HIV Emergency Shelter Allowance rental assistance program
- **1996** – Litigation to protect HASA services from budget cuts
- **1997** – HASA services codified in NYC local law
- **2004** – Comprehensive HIV housing needs assessment by NYC Department of Health
- **2014** – ETE implementation of 30% rent cap affordable housing protection
- **2016** –ETE expansion of HASA housing & services to all low-income people with HIV

HOUSING WORKS

Why Housing?

Evidence-based advocacy required at every step!

NYC HIV Housing Supports & Impact

NYC HIV Housing Assistance March 2021

- HASA – 27,671 households receive HASA housing assistance*
- HOPWA – permanent housing supports for HASA non-eligible
- Ryan White Part A – short-term assistance and transitional housing

Viral suppression linked to HASA housing stability**

Emergency Housing – 13%
60% viral suppression

Transitional Housing – 4%
69% viral suppression

Permanent Supportive Housing – 14%
77% viral suppression

Independent Living – 68%
80% viral suppression

*NYC Human Resources Administration, *HASA Facts*, March 2021.
**NYC Department of Health and Mental Hygiene, Viral suppression (<200 copies/ml) among HASA clients by housing type, February 2018 (excluding 1% in health-related facilities).

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Housing Works HIV Housing Programs

- Low-threshold, harm reduction housing approach
- 400 units for extremely low-income people with HIV
- 160 units in community residences
- Serving PWH who face barriers to care, including:
  - Transgender women
  - LGBTQ youth age 18-24
  - Women leaving incarceration

Housing Plus Care at Housing Works

A healing community with a mission to end homelessness & AIDS

- For many residents, housing necessary but not sufficient
- Housing assistance is linked to health care and supports
- *The Undetectables* viral load suppression program adds $100 quarterly financial incentives to integrated health care and case management*

*For more information, visit https://liveundetectable.org

Housing Plus Care at Housing Works

A healing community with a mission to end homelessness & AIDS

- *Housing Toolkit* to support adherence includes
  - Tracking resident viral load lab reports every 3-6 months
  - Monthly scheduled face-to-face visits
  - Structured conversations about viral load and adherence
  - Additional supports: buddy programs; pill-boxing; DOT
- For the past 4 years, over 90% of housing residents have been virally suppressed

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EHE Jurisdictions & TAP-in TA

Will Murphy, TAP-in/CAI Global

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Jurisdictional EHE Plans and Housing Support

Under Pillar 2 (Treat), 13 EHE Jurisdictions included housing in their workplans

Six jurisdictions fund housing directly through rental subsidies or more comprehensive models

Jurisdictions are also addressing housing needs with a focus on:

- Peer navigators / housing specialists
- Engagement with housing agencies
- Job placement services
- Tailored HIV care plans

What We Can Do for You

- Develop a tailored jurisdictional TA plan
- Provide on demand technical assistance
- Assist in the development of a data dashboard
- Provide access to a pool TA providers
- Link to regional and national resources
- Facilitate peer to peer expert consultation
- Link you to additional training and resources

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Request TA and for emerging needs: TAP-in@caiglobal.org

Questions and Answers

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Conclusion, Next Steps and Evaluation

Email TAP-in to Request TA/Training

TAP-in@caiglobal.org

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Thank You!

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References

Aidala, et al. Housing status, medical care, and health outcomes among people living with HIV/AIDS: A systematic review. *American Journal of Public Health* 2016; 106(1): e1–e23. doi: 10.2105/AJPH.2015.302905

Aidala, et al. Housing status and HIV risk behaviors: Implications for prevention and policy, *AIDS and Behavior* 2005; 9(3): 251-265. DOI: 10.1007/s10461-005-9000-7

Basu, et al. (2012). Comparative Cost Analysis of Housing and Case Management Program for Chronically Ill Homeless Adults Compared to Usual Care. *Health Services Research*, 47(1 Pt 2): 523-543.

Beijer, et al. Prevalence of tuberculosis, hepatitis C virus, and HIV in homeless people: a systematic review and meta-analysis. *The Lancet Infectious Diseases* 2012; 12(11): 859–870. doi: 10.1016/S1473-3099(12)70177-9

Buchanan, et al. The Health Impact of Supportive Housing for HIV-Positive Homeless Patients: A Randomized Controlled Trial. *American Journal of Public Health* 2009; 99:S675-680. doi.org/10.2105/AJPH.2008.137810

Connolly, et al. (2004). Epidemiology of HIV in South Africa—Results of a national, community-based survey. *S Afr Med J* 2004; 94(9): 776-81.

Feller & Agins. Understanding determinants of racial and ethnic disparities in viral load suppression: A data mining approach. *Journal of the International Association of Providers of AIDS Care* 2017;16(1): 23-29. doi:10.1177/2325957416667488

Ghose, et al. "It's my room and my life": Housing's influence on medication adherence for HIV-positive women released from incarceration. *Journal of Health Care for the Poor and Underserved*, Volume 30, Number 1, February 2019, pp. 182-201. doi:10.1353/hpu.2019.0015

Hillis, et al. (2012). HIV seroprevalence among orphaned and homeless youth: No place like home. AIDS 2012: 26(1):105-10. doi: 10.1097/QAD.0b013e32834c4be4

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References

Holtgrave, et al. Cost and threshold analysis of housing as an HIV prevention intervention. *AIDS and Behavior* 2007; 11(6)/Supp 2: S162-S166.

Jalil, et al. HIV testing and the care continuum among transgender women: population estimates from Rio de Janeiro, Brazil. *J Int AIDS Soc*. 2017;20(1):21873. doi:10.7448/IAS.20.1.21873

Kidder, et al. Health status, health care use, medication use, and medication adherence in homeless and housed people living with HIV/AIDS, *American Journal of Public Health* 2007; 97(12): 2238-2245. doi:10.1007/s10461-007-9274-z

Kipke, et al. Residential status as risk factor for drug use and HIV risk among young men who have sex with men. AIDS and Behavior 2007; 11(6)/Supp 2: S56-S69. doi: 10.1007/s10461-006-9204-5

Msellati P, Juillet-Amari A, Prudhomme J, Akribi HA, Coulibaly-Traore D, Souville M, Moatti JP; Côte d'Ivoire HIV Drug Access Initiative Socio-Behavioural Evaluation Group (2003). Socio-economic and health characteristics of HIV-infected patients seeking care in relation to access to the Drug Access Initiative and to antiretroviral treatment in Côte d'Ivoire. AIDS, 17 (Suppl 3): S63-8.

Sadowski, et al. Effect of a housing and case management program on emergency department visits and hospitalizations among chronically ill homeless adults: A randomized trial, Journal of the American Medical Association 2009; 301(17): 1771-8. doi: 10.1001/jama.2009.561

Wolitski, et al. HIV, homelessness, and public health: Critical Issues and a call for increased action. *AIDS & Behavior* 2007; 11(6)/Supp 2: S167-S171. doi:10.1007/s10461-007-9277-9

Wolitski, et al. 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 2010; 14(3), 493-503. doi: 10.1007/s10461-009-9643-x

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Charts, Graphs, and Table Descriptions

Slide 36 -Newly Diagnosed HIV Cases, Deaths, and Living HIV Cases

Combination bar chart and line graph.

- X (horizontal) axis – each year 1983-2019. 2019 has an asterisk referring to text below the chart – 2019 deaths not available at time of publication
- Y (vertical) axis on the left labeled Number of Persons Newly Diagnosed/Deaths from 0 to 1600 in 200 increments
- Y (vertical) axis on the right labeled Number of DC Residents Diagnosed and Alive from 0 to 20,000 in 2000 increments
- The column chart indicates Living HIV Cases with an asterisk referring to text below the chart – Living HIV cases who were DC residents at diagnosis
- Text at various years notes important events:
- 1993 - Implementation of 1993 case definition
- 2001 – Code-based HIV reporting
- 2006 – Name-based reporting and Implementation of expanded city-wide HIV testing initiative
- 2008 – DC needle exchange program
- 2015 – Molecular HIV surveillance
- 2016 – PrEP uptake
- An arrow extends from 1998 through 2019 labeled HAART
- A graph line labeled Deaths increases from 1983 to the highest point of about 900 circa 1995 when the line drops and evens out in 1998 to about 400 and reduces further to about 300 from 2009 to 2018
- A second graph line labeled Newly Diagnosed increases to about 1300 in 1991, decreases to 900 in 1999 before increasing to the highest point of about 1400 circa 2007 when the line continues to decrease each year to about 250 in 2019
- The column chart of Living HIV Cases increases to about 18,000 in 2018-19.

Slide 37 – HIV Prevalence by Race/Ethnicity and Gender Identity

Bar chart with title, HIV Prevalence by Race/Ethnicity and Gender Identity – District of Columbia, 2019, n=12,408

- X (horizontal) axis – Black Men: 4.0%, Latino Men: 2.1%, Black Women: 1.7%, White Men: 1.4%, Latina Women: 0.3%, White Women: 0.1%
- Y (vertical) axis labeled Percentage of Residents Living with HIV from 0% to 4.5% in 0.5% increments
- A single horizontal line across the chart labeled Overall Prevalence: 1.8%
- A second single horizontal line across the chart labeled Epidemic level: 1.0%

Slide 38 – Percentage of HIV Cases Living in DC

Rectangles in a box representing percentages for each of the following groups:

- Black MSM and MSM/IDU - 28%
- Black Heterosexual Men - 8%
- Black Men Other/RNI - 6%
- Black Men IDU - 4%
- Black Heterosexual Women - 16%
- Black Women Other/RNI - 4%
- Black Women IDU - 4%
- White MSM and MSM/IDU - 13%
- White Men Other - 1%
- Latino MSM and MSM/IDU - 5%
- Latino Male Other - 1%
- Other - 5%
- Black Transgender - 1%
- Other Transgender - 0.4%
- Latina Women - 1%
- White Women - 0.4%