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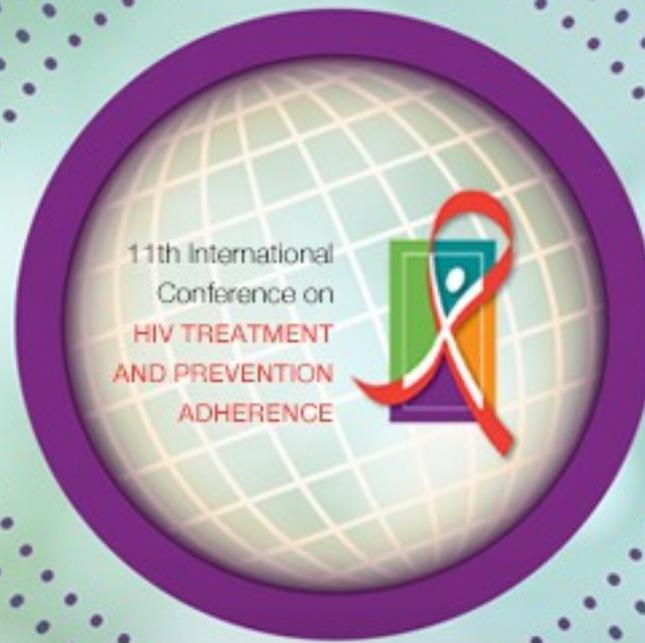
Ending AIDS as a Public Health Threat: The Power of Change

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Stable housing placement and viral suppression after rapid rehousing for homeless persons with HIV: Data for action from the Enhanced Housing Placement Assistance (EHPA) randomized controlled trial in New York City

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Conflict of Interest Disclosure

Ellen Wiewel, DrPH, MHS

Has no real or apparent
conflicts of interest to report.

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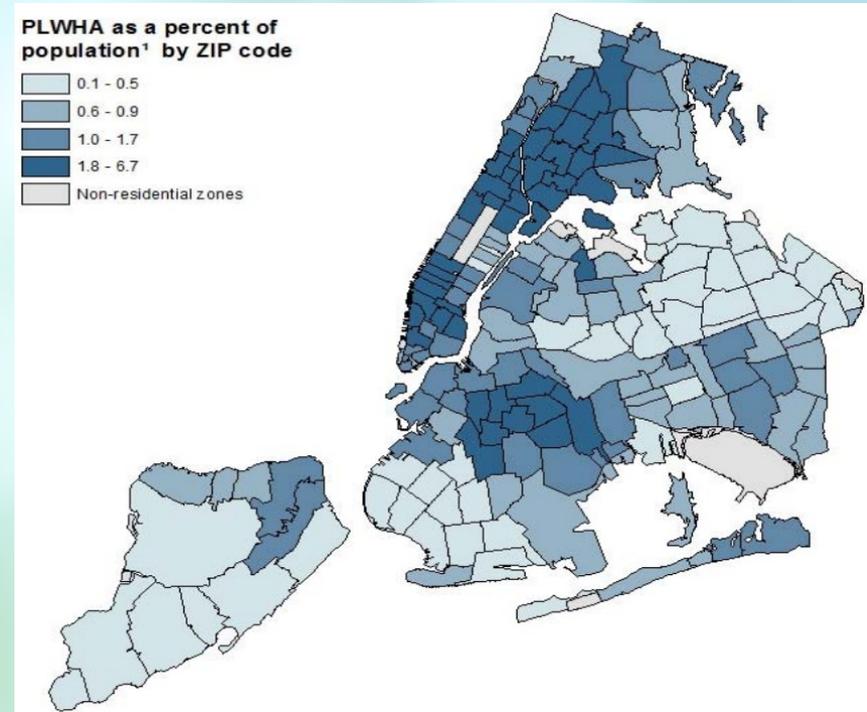


Background



HIV and Homelessness in NYC

- 119,550 persons living with HIV (PLWH), 2014
 - NYC represents 13% of the national HIV prevalence
- 60,670 persons daily accessing homeless shelters, Jan 2015
- 4,937 PLWHA cycling through HIV emergency housing, 2013



Sources:

NYC DOHMH HIV data: <http://www.nyc.gov/html/doh/downloads/pdf/dires/2014-hiv-surveillance-annual-report.pdf>

CDC NYC/US HIV data: <http://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-report-us.pdf>

DHS shelter data: <http://www.coalitionforthehomeless.org/state-homeless-2015/>



Rapid Re-housing

- Helps individuals and families to:
 - Quickly exit homelessness
 - Return to housing in the community
 - Not become homeless again in the near term
- Core components:
 - Housing identification
 - Connection to local-government-offered assistance with move-in and rent payments
 - Case management and services



Enhanced Housing Placement Assistance (EHPA) Program



What is EHPA?

- Pilot rapid re-housing program that immediately assigns participants in treatment arm to a case manager
- Randomized controlled trial of a housing placement program for PLWH residing in the New York City (NYC) HIV emergency shelter system



Comparison of EHPA and Usual Care Characteristics

EHPA

- Immediate connection to case manager
- Direct housing stabilization services provided weekly and then monthly, for up to 1 year
- Services provided on site at client's HIV emergency housing site

Usual Care

- Referral made to community-based organizations
- Housing stabilization services provided as needed, and terminated =3 months post-placement
- Clients are asked to travel to the program's office



Objectives

Determine whether EHPA clients, compared with usual-care clients, are

- More likely to be placed in stable housing
- Placed in stable housing more quickly
- More likely to be engaged in HIV medical care
- More likely to achieve viral suppression



Methods



Trial Recruitment

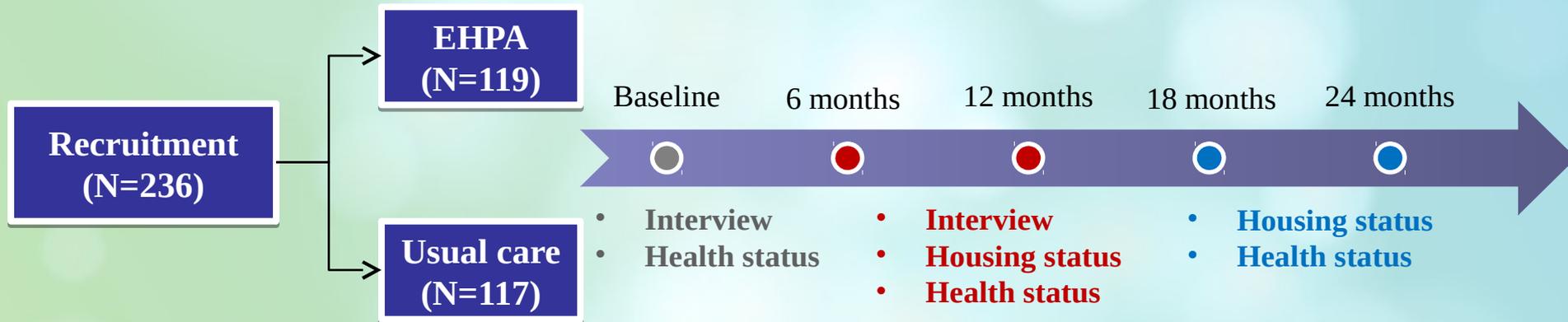
Recruitment process

Recruitment
(N=236)

- Randomized list of NYC emergency SROs
 - Recruiters went **door-to-door** at the housing facilities in sequential order
 - **Returned** to each facility multiple times, varying the day of the week and time of day
 - Obtained informed consent from eligible participants
 - Eligible participants were **randomized** to EHPA arm or Usual Care arm
 - Provided emergency food vouchers as incentive at interviews
- 1,103 unique rooms were approached
 - 605 responses (55% response rate)
 - 236 people were eligible and enrolled



Trial Arms and Activities





Outcome Measurement

- **Stable housing placement¹**

Residing in permanent supportive housing (either congregate or scattered-site) or independent housing during each follow-up period

- **Engagement in HIV medical care²**

≥1 HIV lab result during each follow-up period

- **Viral suppression²**

Latest viral load ≤200 copies/mL during each follow-up period

1. Via matching housing databases - data verified via rental subsidy payments
2. Via matching HIV surveillance registry



Statistical Analysis

- Kaplan-Meier curves and Cox proportional hazards regression model to compare stable housing placement rates between arms.
- Repeated measures logistic regression to analyze differences between arms in improvement in viral suppression from baseline to 6 months after enrollment.



Results



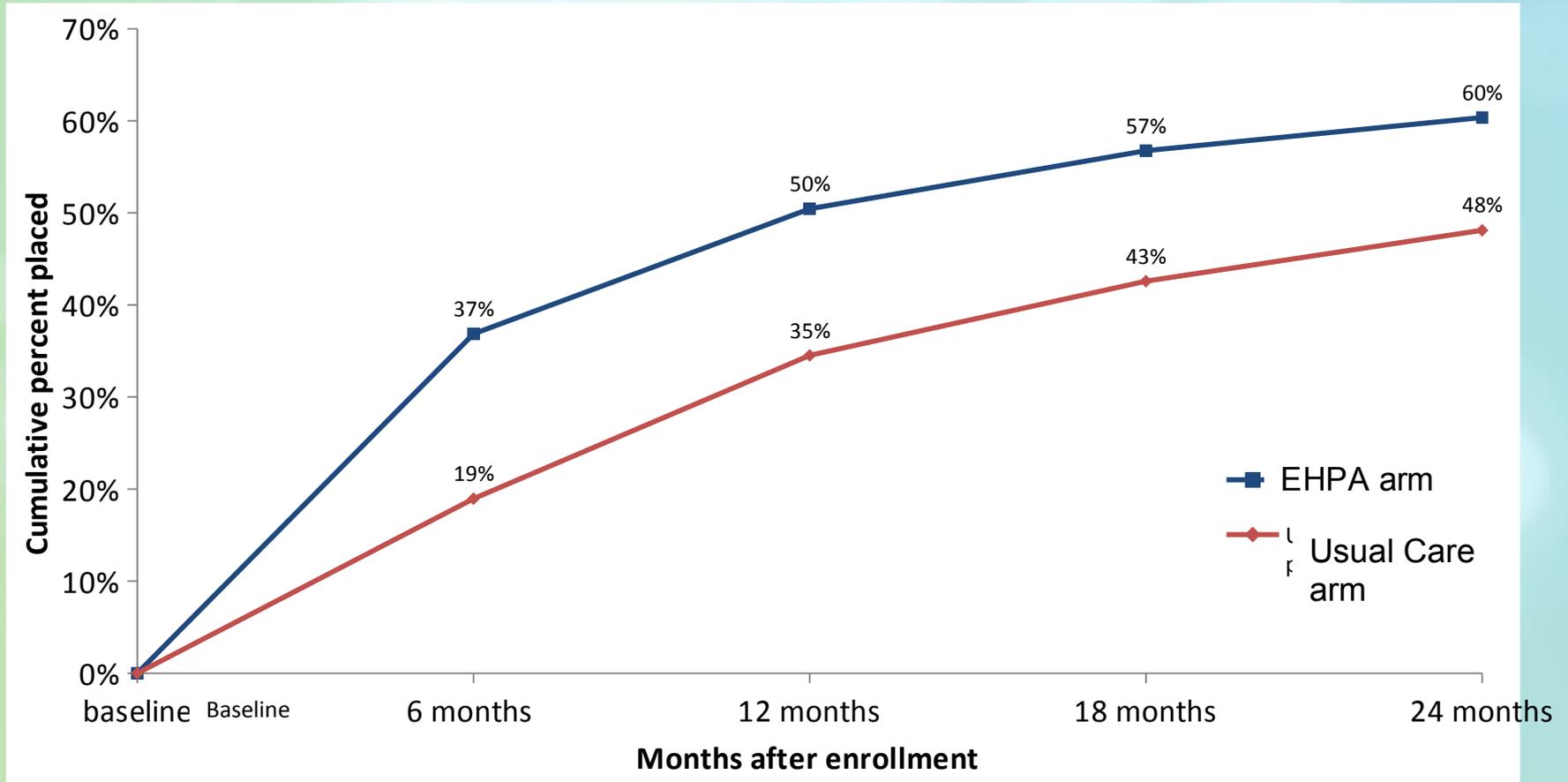
Comparison of Baseline Characteristics Between EHPA and Usual Care Arms

	Overall (N=236)	EHPA (N=119)	Usual Care (N=117)	P-Value
Male	174 (74%)	84 (71%)	90 (77%)	0.39
Black	142 (60%)	72 (61%)	70 (60%)	0.39
Hispanic	78 (33%)	41 (34%)	37 (32%)	
Age (mean)	46	46	46	
Recent incarceration, past 2 years	61 (26%)	39 (33%)	22 (19%)	0.05*
Enrolled in Social Security benefits (SSI or SSD)	114 (48%)	49 (41%)	65 (56%)	0.03*
Currently on ART	192 (82%)	96 (81%)	96 (82%)	0.43
HIV care status, 6 months prior to baseline interview	219 (93%)	109 (92%)	110 (94%)	0.62
Virally suppressed	94 (40%)	33 (28%)	61 (52%)	<0.01*

*Chi-square test, statistically significant at $\alpha=0.05$.



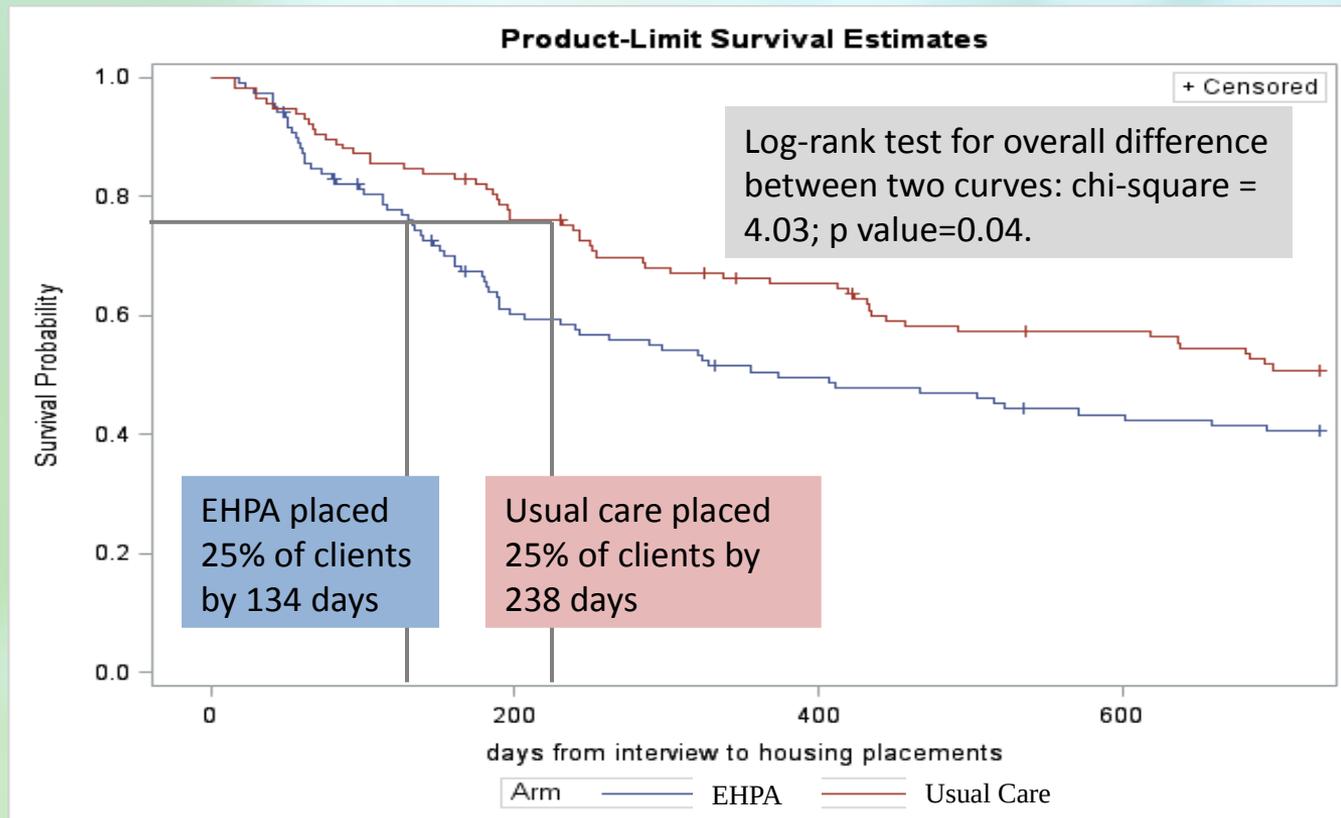
Percentage Placed in Stable Housing after Enrollment, by Arm



At each point after enrollment, a higher proportion of EHPA-arm than usual-care clients were placed in stable housing (Chi-square $p < 0.05$) 18



Kaplan-Meier Curves of Time to Stable Housing Placement

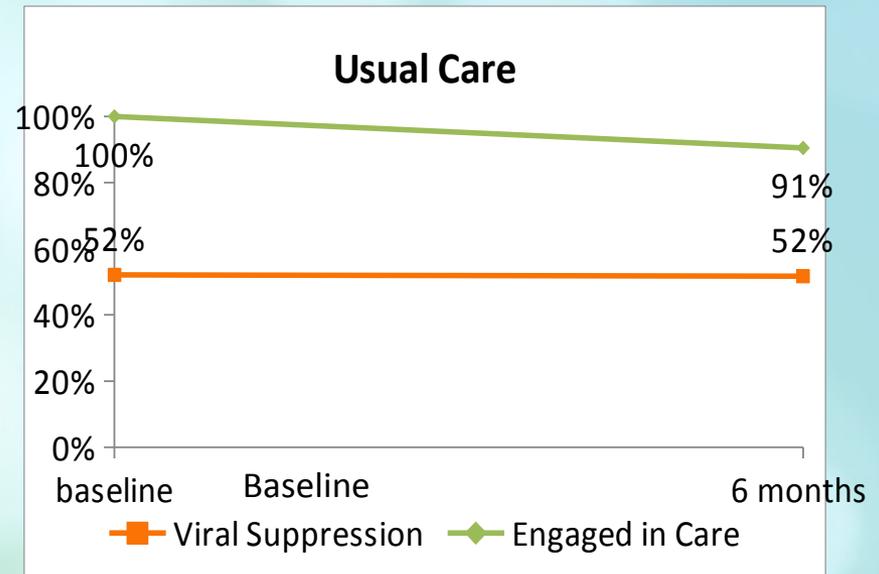
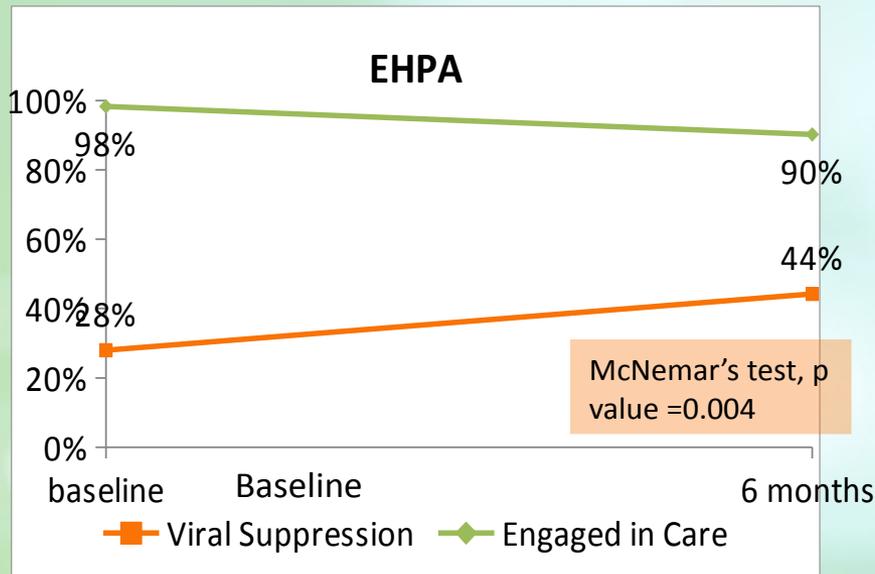


EHPA arm vs. usual-care arm had 50% increased rate of housing placement.
Adjusted* hazards ratio [95% CI] = 1.5 [1.02-2.18]

*Adjusted by age, race, SSI/SSD enrollment, history of incarceration category, and baseline viral suppression.



Engagement in Care and Viral Suppression at Baseline and 6 Months, by Arm



EHPA arm vs. usual-care arm:

- Lower rate of viral suppression
- Better improvement (16% vs. 0% increase) at 6 months
- Twice as likely to improve viral load suppression
 - Odds Ratio[95% CI] = 1.96 [1.06-3.63]
 - Adjusted* Odds Ratio [95% CI] = 2.05 [1.03-4.10]



Discussion



Conclusions

- EHPA resulted in better housing and suppression outcomes than did usual care
 - More housing placement
 - Quicker housing placement
 - Greater increases in short-term viral suppression



Limitations

- Unequal rates of viral suppression at baseline in the 2 arms
- Retention in stable housing not considered
- Cannot distinguish routine vs. acute medical care



Implications

- Main impact of rapid re-housing may be through immediate stabilization of subpopulations requiring better environment for medication adherence, self-care, etc.
- Short-term case management may be key to achieving immediate stabilization
- Possible to quickly reduce viral loads in a high-risk population



Next Steps

- Address issues that impact the ability of case managers to place certain homeless clients
- Compare stable housing retention between two arms
- Analyze reasons for no improvement in viral suppression beyond 6 months post-enrollment



COMPAS



- Real Time Assessments
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- Medical Information
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- HMIS
- Housing Placements
- HIV Medications
- Rental Assistance
- Intake Assessment
- Re-Assessments

5,382,244,304
Data Points

eHARS Matching



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- EHPA program participants
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