

Background

- Stably housed persons living with HIV (PLWH) are more likely than homeless PLWH to sustain HIV care and treatment
- NY/NY III is a joint New York City and State supportive housing program for populations at risk of homelessness, including PLWH
- Little is known about the effects of supportive housing on HIV medical care and viral suppression among PLWH

Study Aims and Population

- Aim:** Assess the association of a housing program and housing placement on HIV care and suppression among PLWH
- Population:** NYC PLWH enrolled in NY/NY III during 2007-2010 (N = 958)
- Outcomes:** HIV medical care engagement (any VL or CD4) and viral suppression (last VL ≤ 200 copies/mL) in 2nd year after enrollment
- Exposures:** Placement in NY/NY III housing, and quick stable housing (of any kind) post-enrollment

Statistical Methods

- Distribution of population by pre-baseline demographic characteristics, overall and by placement, and Chi-square test of association or median two-sample test comparing unplaced and placed
- Sequence analysis to identify housing patterns in the two years post-enrollment, overall and by NY/NY III placement
- Frequencies and multivariable log-linear Poisson regression of housing stability patterns, and HIV care engagement and viral suppression in 2nd year after enrollment by placement and housing pattern

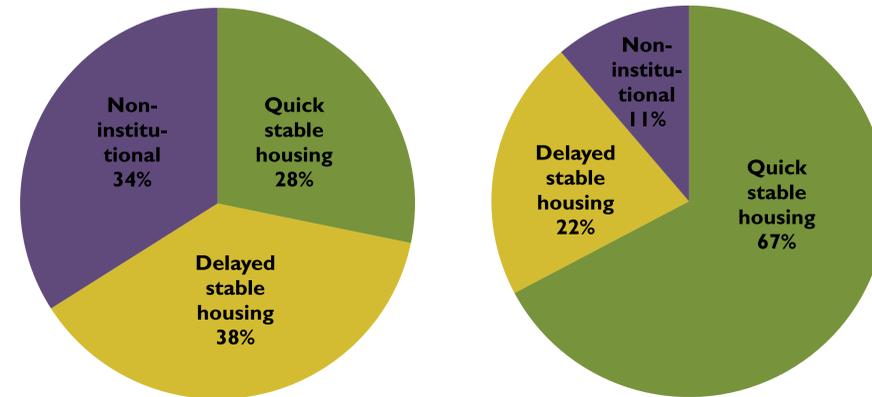
Results

Baseline characteristics

- 958 PLWH enrolled in the program in 2007-2010, of whom 473 (49%) were placed.
- Among both placed and unplaced, about 72% were male, 63% Black and 28% Hispanic, 99% had a history of mental illness, and 94% had a history of substance use, and 34% were virally suppressed.
- Persons ultimately placed were more likely than those ultimately unplaced to have been, before enrollment, living in unstable government-subsidized housing (77% vs. 68%) and engaged in care (96% vs. 92%; both $p < 0.05$).

Figure 1. Housing stability patterns in the 2 years after enrollment, by placement

Unplaced (Comparison Group) Placed (Treatment Group)



- After enrollment, three housing patterns were identified: quick stable housing (47%), delayed stable housing (30%), and non-institutional (23%).
- Post-enrollment housing patterns differed by placement ($p < 0.01$). Placed persons were more likely than unplaced to be stably housed quickly, i.e., within a half-year (67% vs. 28%). This difference persisted after adjustment for baseline characteristics (adjusted odds ratio [AOR] = 2.29, 95% confidence interval [CI] = 1.99-2.63).

Figure 2. HIV care engagement in the 2nd year after enrollment, by placement and housing stability pattern

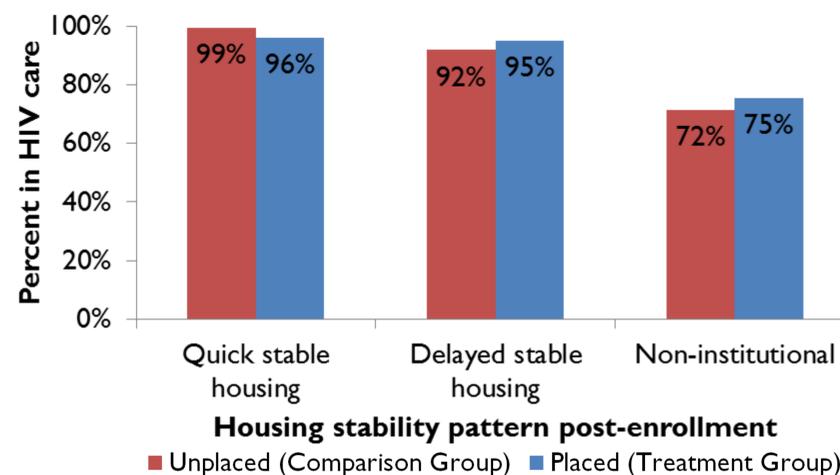


Figure 3. HIV viral suppression in the 2nd year after enrollment, by placement and housing stability pattern

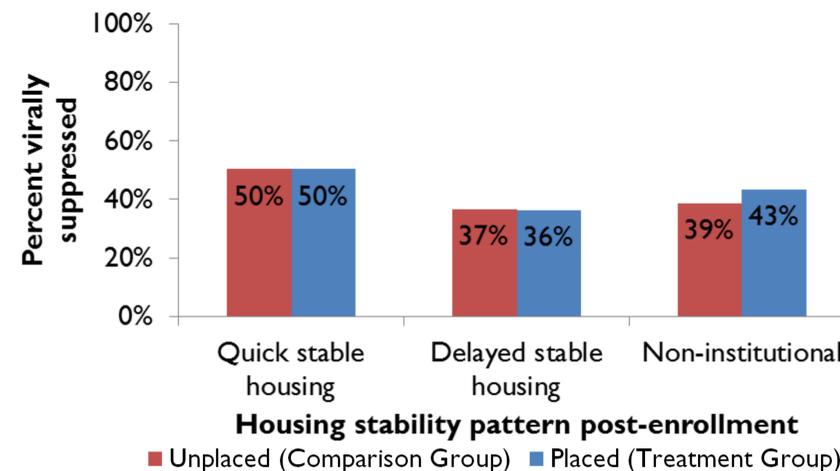


Table 1. Regression results of HIV care and viral suppression, by housing pattern and placement

	Medical care in the second year after enrollment		HIV viral suppression in the second year after enrollment	
	OR (95% CI)	AOR (95% CI)*	OR (95% CI)	AOR (95% CI)*
Unplaced, not quick stable housing	1.0 (ref)	1.0 (ref)	1.0 (ref)	1.0 (ref)
Unplaced, quick stable housing	1.21 (1.15-1.27)	1.19 (1.13-1.25)	1.34 (1.08-1.66)	1.27 (1.04-1.57)
Placed, quick stable housing	1.17 (1.11-1.23)	1.15 (1.09-1.21)	1.34 (1.12-1.59)	1.23 (1.04-1.45)
Placed, not quick stable housing	1.08 (1.00-1.16)	1.05 (0.98-1.13)	1.03 (0.81-1.31)	1.01 (0.80-1.03)

Whether placed or unplaced by this particular supportive housing program, persons achieving quick stable housing were more likely to be engaged in HIV care and virally suppressed in the 2nd year after enrollment, compared with unplaced persons not achieving quick stable housing.

* Adjusted for sex, age (as in STI paper), race (black, Hispanic, all other), any substance use in past 6 months, and pre-baseline (only) care status (for analysis of medical care) or suppression status (for analysis of suppression).

Strengths and Limitations

- Used multiple matched administrative databases
- Placement in NY/NY III is not randomized

Conclusions

- PLWH at risk of homelessness who were placed in a supportive housing program were more likely than those unplaced to have quick stable housing.
- Quick stable housing was associated with greater engagement in care and higher rates of viral suppression.
- Additional medication adherence support may be beneficial for this population.