Trends in Homelessness and Unstable Housing Among Adults with HIV in the CNICS Cohort

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Lyall Glait[1], Bridget Whitney[1], Deana Agil[2], Katerina Christopoulos[3], Heidi Crane[1], Julia Fleming[4], Mari Kitahata[1], Sonia Napravnik[2], April Pettit[5], Julia C Dombrowski[1]
[1]University of Washington, Seattle, WA [2]University of North Carolina at Chapel Hill, Chapel Hill, NC, [3]University of California San Francisco, San Francisco, CA,
[4]Harvard Medical School Fenway Institute, Boston, MA, [5]Vanderbilt University, Nashville, TN

BACKGROUND

- People with HIV (PWH) disproportionately experience homelessness and unstable housing (HUH), which is associated with barriers to care and worse health outcomes
- We aimed to describe how experiences of HUH varied by time and location in the CNICS cohort, a national cohort of PWH in clinical care

METHODS

- Data from medical records and patient-reported outcomes (PROs) surveys collected every ~6 months at clinic visits 2019-2024
- Housing status PRO asks respondents to mark all the places they spent a night in the past month
  - Stable = owns, rents, long-term care
  - Unstable = couch surfing, multiple locations, other
  - Homeless = shelter, car, hotel, outside
- Assessed demographic differences between housing statuses with chi-squared tests
- Compared prevalence of homelessness in 2024 at each clinic to each the county or counties served by the clinic based on the Annual Homelessness Assessment Report and census data

Housing Status	Stable	Unstable	Homeless	Total
Median N of PROs (IQR)	2 (1, 3)	2 (1, 3)	2 (1,3)	2 (1,3)
Median Age (IQR)	54 (42, 62)	48 (37, 58)	51 (41, 59)	54 (41, 62)
Race N (%)				
Asian / PI	266 (3.0)	43 (3.6)	13 (2.3)	322 (3.0)
Black	3569 (40.2)	590 (48.9)	219 (38.8)	4378 (41.1)
White	4496 (50.6)	496 (41.1)	273 (48.4)	5265 (49.4)
Other	440 (5.0)	64 (5.3)	56 (9.9)	560 (5.3)
Gender Identity N (%)				
Cisgender Male	7005 (78.8)	891 (73.9)	439 (77.8)	8335 (78.2)
Cisgender Female	1539 (17.3)	237 (19.7)	69 (12.2)	1845 (17.3)
Transgender, non-binary, or other	200 (2.3)	52 (4.3)	33 (5.8)	285 (2.7)
HIV Risk Factor N (%)				
No IV drug use	8075 (90.9)	1026 (85.1)	470 (83.3)	9571 (89.8)
Any IV drug use	809 (9.1)	180 (14.9)	94 (16.7)	1083 (10.2)
Current ART Use N (%)				
Yes	8544 (96.2)	1109 (92.0)	514 (91.1)	10167 (95.4)
No	265 (3.0)	80 (6.6)	45 (8.0)	390 (3.7)
Viral Suppression N (%)				
Suppressed (VL < 50)	7820 (88.0)	998 (82.8)	425 (75.4)	9243 (86.8)
Detectable (VL ≥ 50)	1050 (11.8)	207 (17.2)	135 (23.9)	1392 (13.1)

Table 1. Demographic differences by housing status based on the most recent PRO. Percents may not sum to 100 due to exclusion of missing data. ART = antiretroviral therapy. PI = Pacific Islander. PRO = patient reported outcome. VL = viral load.

Among people with HIV in clinical care, 5% were homeless and 11% were unstably housed; 20% of people moved between housing status categories over a median of 31 months.

RESULTS

- 25,701 total PROs from 10,654 unique PWH at 8 sites between 2019 and 2024
- On their most recent PRO, 564 (5%) PWH were homeless and 1206 (11%) were unstably housed
- PWH experiencing HUH were more likely to identify as a racial or gender minority and to have injection drug use as an HIV risk factor and were less likely to report current antiretroviral use or to have a suppressed viral load on last report (p <0.01 for all)
- The proportion of PWH at each site experiencing HUH on their last PRO was 8-31%.
- The prevalence of homelessness among PWH was 1.8-52 times higher than county-level population estimates, with a greater difference in areas with a lower prevalence of homelessness.
- A majority of PWH remained in the same housing status over time, but 20% moved between statuses during a median 31 months (IQR 17-44 months), resulting in a stable prevalence of HUH over time

Site	CNICS Homeless Prevalence (per 10k)	AHAR Homeless Prevalence (per 10k)	Prevalence Ratio (CNICS / AHAR)
Fenway Health	134.5	74.4	1.8
Johns Hopkins University	238.8	28.2	8.5
University of Washington	313.3	72.1	4.3
Case Western Reserve University	353.5	13.2	26.8
University of North Carolina Chapel Hill	427.6	9.7	44.2
University of Alabama at Birmingham	475.4	9.1	52.1
University of California San Diego	670.7	32.1	20.9
University of California San Francisco	1589.6	100.6	15.8

Table 2. Prevalence of homelessness in 2024. Data for CNICS is reported as the prevalence at the clinical site. Data from the AHAR is calculated from the population of the county or counties served by the clinic based on the AHAR and census data. AHAR = Annual Homelessness Assessment Report

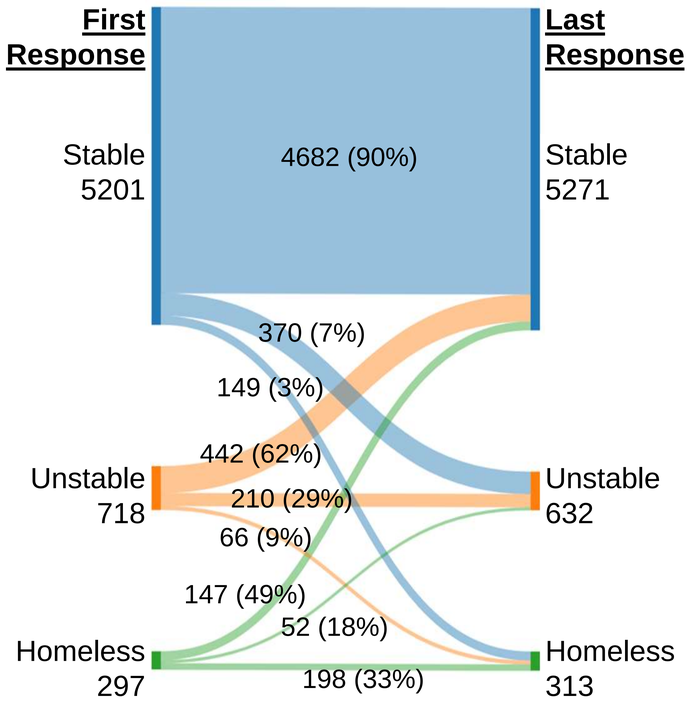


Figure 1. Sankey diagram showing changes in housing status between first and last PRO responses for 6216 PWH with at least 2 PRO responses between 2019 and 2024. Sizes of lines correspond to the proportion of PWH moving between each state. Percents are based on the size of the population starting in each status and may not sum to 100 due to rounding.

CONCLUSIONS

- PWH across the US experience a disproportionately high burden of HUH
- Individual housing status frequently changed, but the prevalence was generally stable over time
- Continued access to housing services could improve outcomes for PWH

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AUTHOR CONTACT

lglait@uw.edu