

Improvement in HIV Care Indicators among the Homeless in San Francisco

Susan Scheer, Ling C. Hsu, Darpun Sachdev, Oliver Bacon,
Stephanie Cohen, Albert Liu, Jennie Chin, Alison Hughes, Susan Buchbinder
San Francisco Department of Public Health

BACKGROUND

Despite significant declines in new HIV diagnoses and improvements in HIV-related care indicators in San Francisco (SF), health disparities persist particularly among homeless persons living with HIV. City-wide linkage and case management programs seek to improve outcomes across the continuum of HIV care.

OBJECTIVE

To measure improvements in HIV care indicators among the homeless in SF using routinely collected population-based HIV/AIDS surveillance data.

METHODS

- The SFDPH Surveillance case registry was used to measure HIV care outcomes among 1) persons newly diagnosed and reported with HIV and 2) SF HIV cases living with HIV in 2015 who were last known to reside in SF stratified by homeless status.
- Homelessness was defined as a medical chart notation of homeless or living in a homeless shelter.
- Out of care PLWH who were enrolled in SFDPH linkage and navigation services (LINCS) in 2015 were matched back to the HIV surveillance case registry to ascertain HIV care outcomes after completing LINCS services.

OUTCOMES

| | Newly diagnosed HIV cases in 2015 | PLWH in 2015 who were last known to reside in SF | PLWH who enrolled in and completed LINCS |
|---------------------------|---|--|---|
| Linked to Care | CD4 or HIV viral load (VL) result within 1 month of diagnosis | ≥1 CD4 or HIV VL result in 2015 | ≥1 CD4 or HIV VL result within 3 months of enrollment |
| Retained in Care | Subsequent CD4 or HIV VL result 3-9 months after linkage | ≥2 CD4 or HIV VL | Subsequent CD4 or HIV VL result 3-9 months after linkage |
| Virally Suppressed | HIV VL <200 copies/mL within 12 months of diagnosis | Most recent VL test in 2015 <200 copies/mL | Most recent VL test within 12 months of LINCS initiation <200 copies/mL |

RESULTS

Characteristics of homeless persons compared to housed persons newly diagnosed with HIV, 2006-2016, San Francisco

| Total | n=502 | | n=4,072 | |
|------------------------------|------------------------------------|-----|----------------------------------|-----|
| | Homeless HIV Cases N (column %) | | Housed HIV Cases N (column %) | |
| Gender | | | | |
| Male | 380 | 76% | 3710 | 91% |
| Female | 72 | 14% | 268 | 7% |
| Trans Female | 50 | 10% | 94 | 2% |
| Race/Ethnicity | | | | |
| White | 216 | 43% | 1999 | 51% |
| African American | 138 | 27% | 492 | 13% |
| Latino | 97 | 19% | 972 | 25% |
| Asian/Pacific Islander | 13 | 3% | 429 | 11% |
| Transmission Category | | | | |
| MSM | 160 | 32% | 3077 | 76% |
| PWID | 126 | 25% | 176 | 4% |
| MSM-PWID | 167 | 33% | 458 | 11% |
| Heterosexual | 35 | 7% | 243 | 6% |
| Other | 14 | 3% | 118 | 3% |

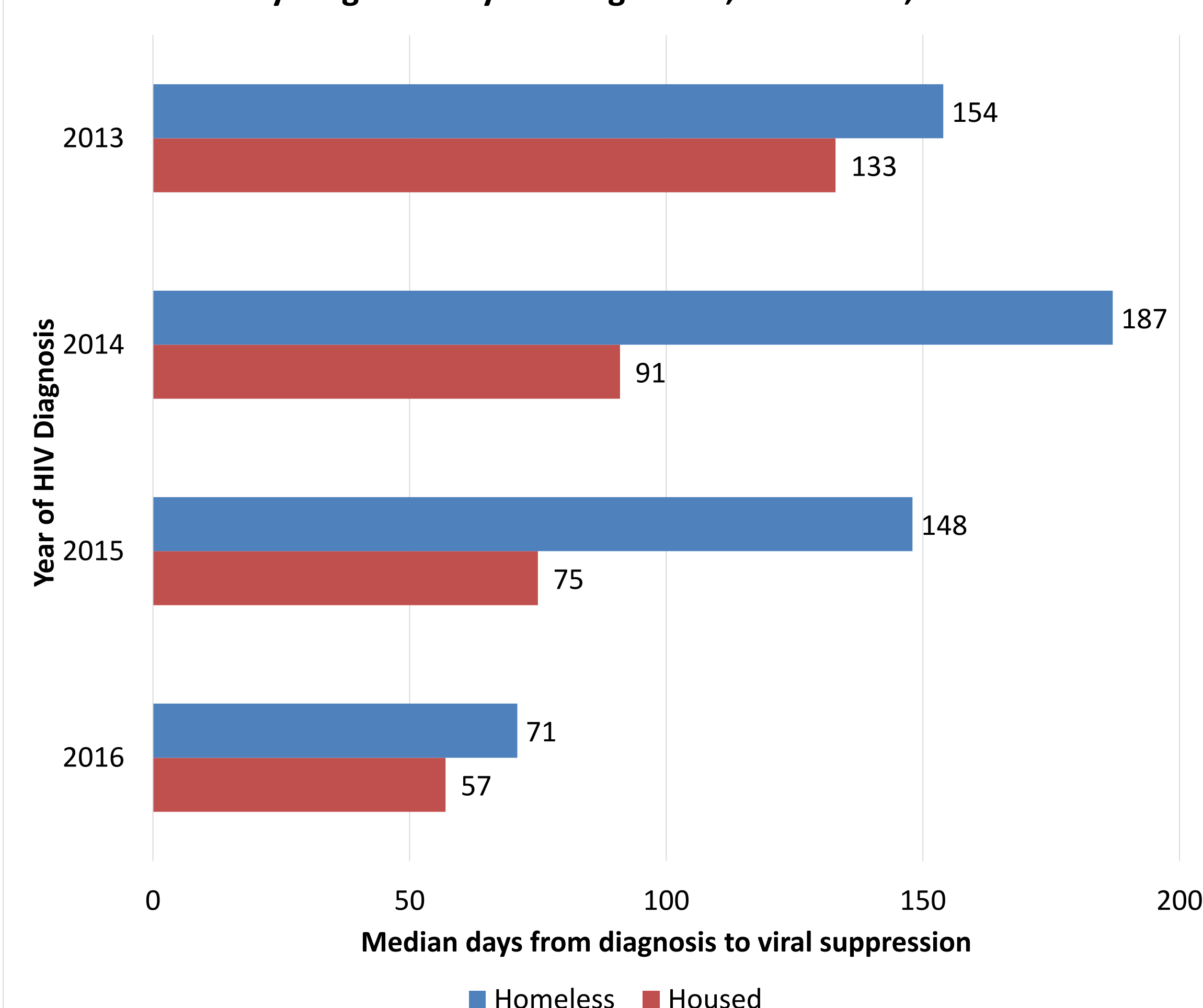
Homeless persons were more likely to be cis women, trans women, African American, or a PWID than were housed persons (all p<.0001)

HIV care indicators

| | | Linked to Care | Retained in Care | Virally Suppressed |
|--|--------|----------------|------------------|--------------------|
| Persons living with HIV 2015 | | | | |
| Total | 12,769 | | | |
| Housed | 12,468 | 81%* | 62%* | 74%* |
| Homeless | 301 | 52%* | 41%* | 31%* |
| Total Newly Diagnosed with HIV 2015 | | | | |
| Total | 296 | | | |
| Housed | 267 | 79% | 67%* | 79%* |
| Homeless | 29 | 66% | 38%* | 59%* |

*p<0.05 for housed versus homeless.

Time from HIV diagnosis to viral suppression among persons newly diagnosed by housing status, 2013-2016, San Francisco



Median days from diagnosis to viral suppression has significantly decreased over time for both the homeless and housed populations (p<.0001).

HIV care indicators among persons who accepted and completed LINCS services in 2015

| | | Linked to Care | Retained in Care | Virally Suppressed |
|-----------------|-----|----------------|------------------|--------------------|
| Total | 106 | | | |
| Housed | 76 | 89% | 62% | 64% |
| Homeless | 30 | 90% | 70% | 77% |

*No statistically significant differences were found for housed versus homeless.

CONCLUSIONS

- Homeless accounted for 10% of newly diagnosed cases in 2015.
- Newly diagnosed homeless persons more likely to be cis-women, trans women, African American, and PWID.
- Homeless persons had lower linkage to care and viral suppression.
- Time from diagnosis to viral suppression has improved for the homeless.
- City-wide rapid linkage to care and intensive case management programs are beginning to show progress in decreasing disparities among homeless PLWH.

LIMITATIONS

- CD4 and viral load test results used as proxy for HIV care.
- Surveillance data does not include information on time from acquisition of HIV to diagnosis or PLWH who have not been tested for HIV.
- Out migration was not fully accounted for.
- Surveillance uses a conservative definition of homelessness and may underestimate people with unstable housing.

STRENGTHS

- Large sample with comprehensive data, matched with local, state and national laboratory, HIV, and death registries.
- SF has implemented robust city-wide rapid treatment and linkage to care programs.

ABBREVIATIONS: SF—San Francisco; VL—viral load; n—number; MSM—men who have sex with men; PWID—person who injects drugs; MSM-PWID—men who have sex with men and inject drugs; SFDPH—San Francisco Department of Public Health; PLWH—people living with HIV; LINCS—Linkage Integration Navigation Comprehensive Services.

Corresponding author: Susan Scheer, PhD
susan.scheer@sfdph.org