



# The HIV care continuum for housing program clients and persons living with HIV/AIDS overall, New York City, 2013

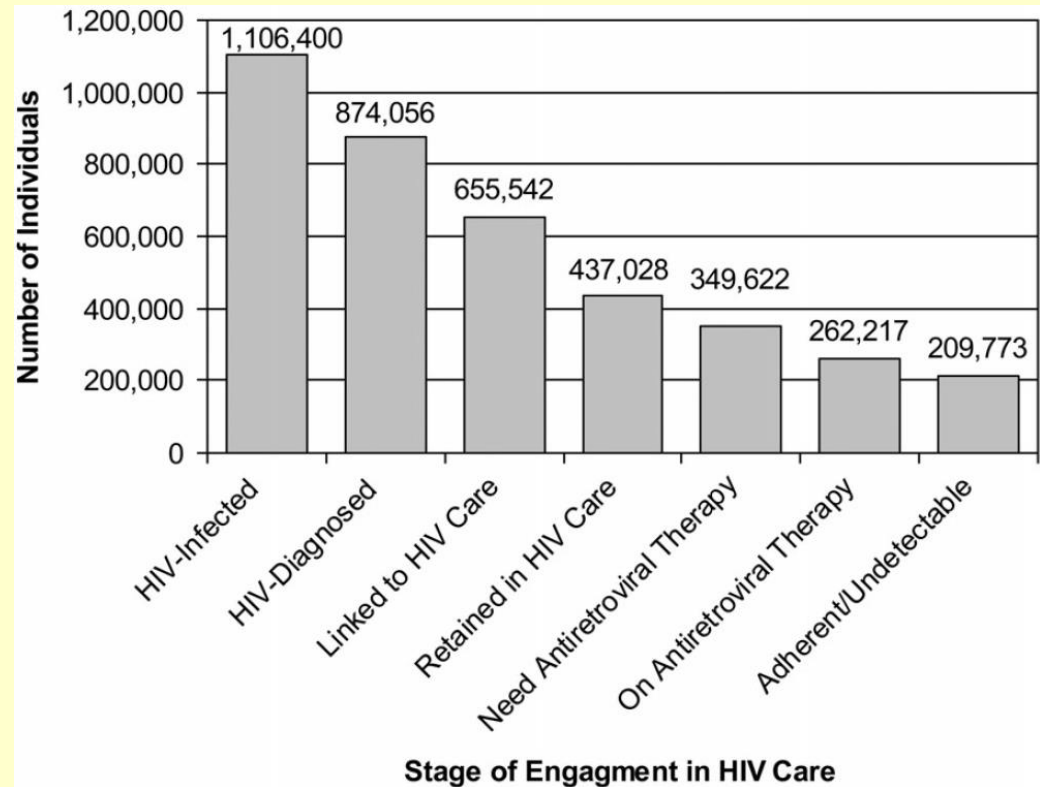
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Abstract 280; Late-Breaker Oral Abstracts Session 2: Large-Scale Programs to Enhance Individual and Public Health Outcomes, Tuesday, June 30, 2015, 10:30AM



# Background: care continuum

- Tool to monitor population-level successes and gaps in HIV-related medical care
- Presented as a continuum from infection to viral suppression



Source: Gardner *CID* 2011



# Background: poverty, housing, and HIV

- Low income associated with worse health outcomes, including mortality
- Unstable housing and homelessness are markers of low income and mediate the relationship between poverty and health
- Unstably housed or homeless persons are an especially vulnerable subgroup of PLWHA



# Background: HIV and homelessness in NYC, by the numbers

- 117,618 persons living with HIV/AIDS (PLWH), 2013
- 2,832 new HIV diagnoses, 2013
- NYC represents 13% of the national HIV prevalence
- 65,229 persons daily accessing homeless shelters, March 2015; higher HIV prevalence than general pop.
- 3,357 street homelessness, 2014
- 2,842 PLWHA cycling through HIV emergency housing, 2013

## Sources:

NYC DOHMH HIV data: <http://www.nyc.gov/html/doh/downloads/pdf/ah/surveillance2013-table-all.pdf>

CDC NYC/US HIV data: [http://www.cdc.gov/hiv/pdf/g-l/hiv\\_surveillance\\_report\\_vol\\_25.pdf](http://www.cdc.gov/hiv/pdf/g-l/hiv_surveillance_report_vol_25.pdf)

DHS shelter data: [http://www.nyc.gov/html/dhs/downloads/pdf/dashboard/dhs\\_data\\_dashboard\\_charts\\_FY-2015-Q3.pdf](http://www.nyc.gov/html/dhs/downloads/pdf/dashboard/dhs_data_dashboard_charts_FY-2015-Q3.pdf),

[http://www.nyc.gov/html/dhs/downloads/pdf/homeless\\_adults\\_health.pdf](http://www.nyc.gov/html/dhs/downloads/pdf/homeless_adults_health.pdf)

NYC HOPE street homeless data: <https://a071-hope.nyc.gov/HOPE/statistics.aspx>



# Background: HOPWA

- Federal funding from Housing and Urban Development (HUD) for Housing Opportunities for Persons with AIDS (HOPWA)
- Program types: supportive housing, rental assistance, housing placement assistance, and case management
- NYC DOHMH administers >\$47M in HOPWA funding that serves approximately 35,000 PLWHA per year
- HOPWA eligibility criteria: very low income\*, HIV-positive NYC resident

\*Very low income is defined as annual gross income that does not exceed 50% of median family income for NYC defined by HUD



# Aims

- Measure engagement in care for housing program clients using the HIV care continuum
- Create a care continuum from diagnosis\* to suppression for NYC HOPWA clients and 2013 NYC PLWHA overall
- Calculate the percent reaching each step
- Calculate the percent of persons retained in care who were suppressed, since HOPWA encourages and pays for retention support

\* Began with diagnosed rather than all infected because interested in care-related rather than testing-related phenomena, and all HOPWA clients had been diagnosed, so more comparable between HOPWA and all NYC PLWHA



# Methods

- Matched data on 2013 NYC HOPWA enrollees with the NYC HIV surveillance registry
- Obtained from registry HIV diagnosis dates, and dates and results of HIV-related laboratory tests (CD4 count and HIV viral load [VL], used for multiple steps of continuum)
- Constructed care continuum for HOPWA & PLWHA overall





# Definitions

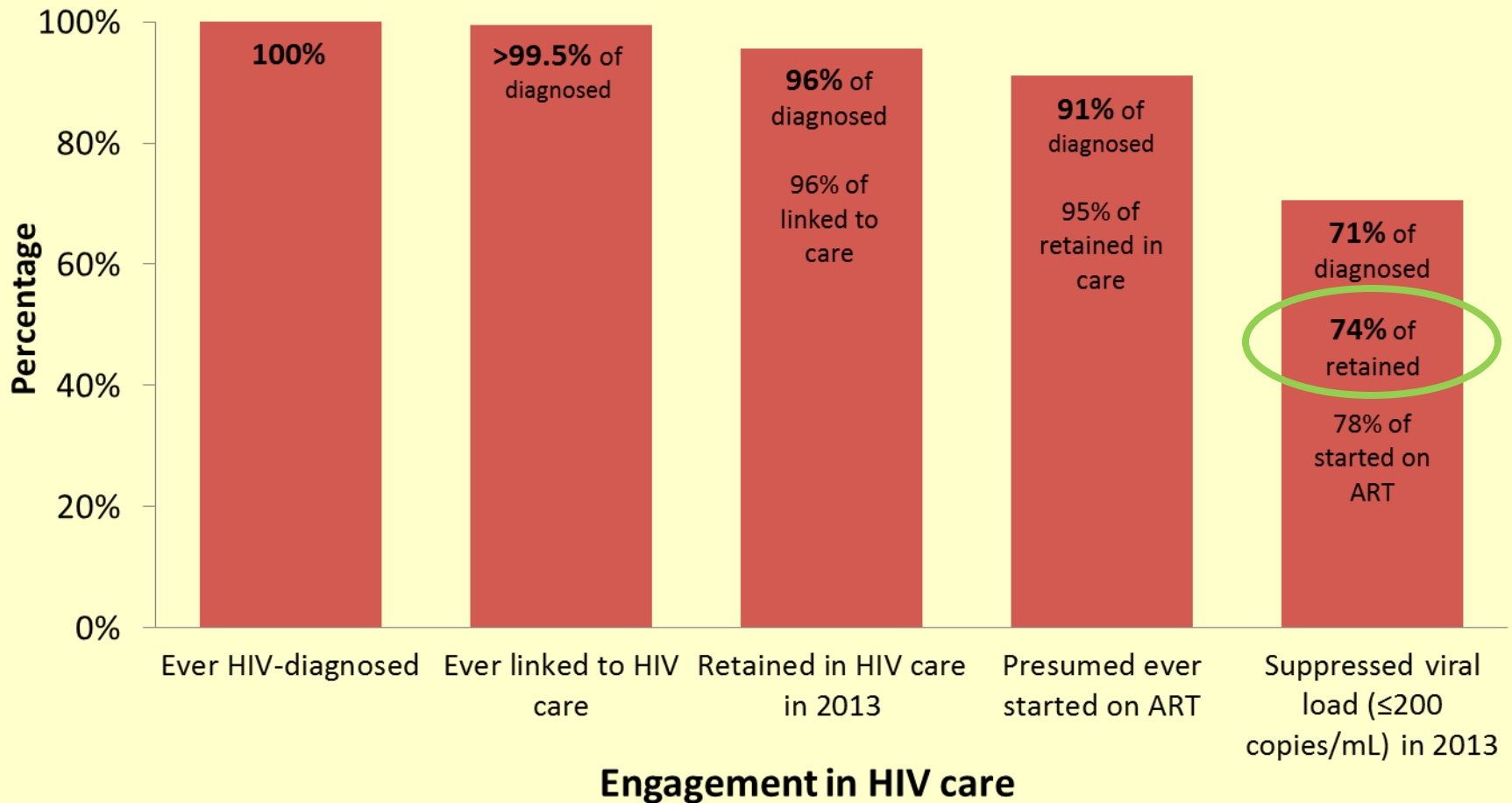
Step of Care Continuum	Definition
Diagnosed	Diagnosed, reported to NYC HIV surveillance registry, and presumed to be living in 2013
Linked to care	Any viral load or CD4 test since 2001, at least 8 days after date of HIV diagnosis
Retained in care in 2013	Any viral load or CD4 test in 2013
Initiated antiretroviral therapy	Viral suppression [ $\leq 200$ copies/mL] at any point since 2001
Achieved viral suppression	Last viral load in 2013 was $\leq 200$ copies/mL





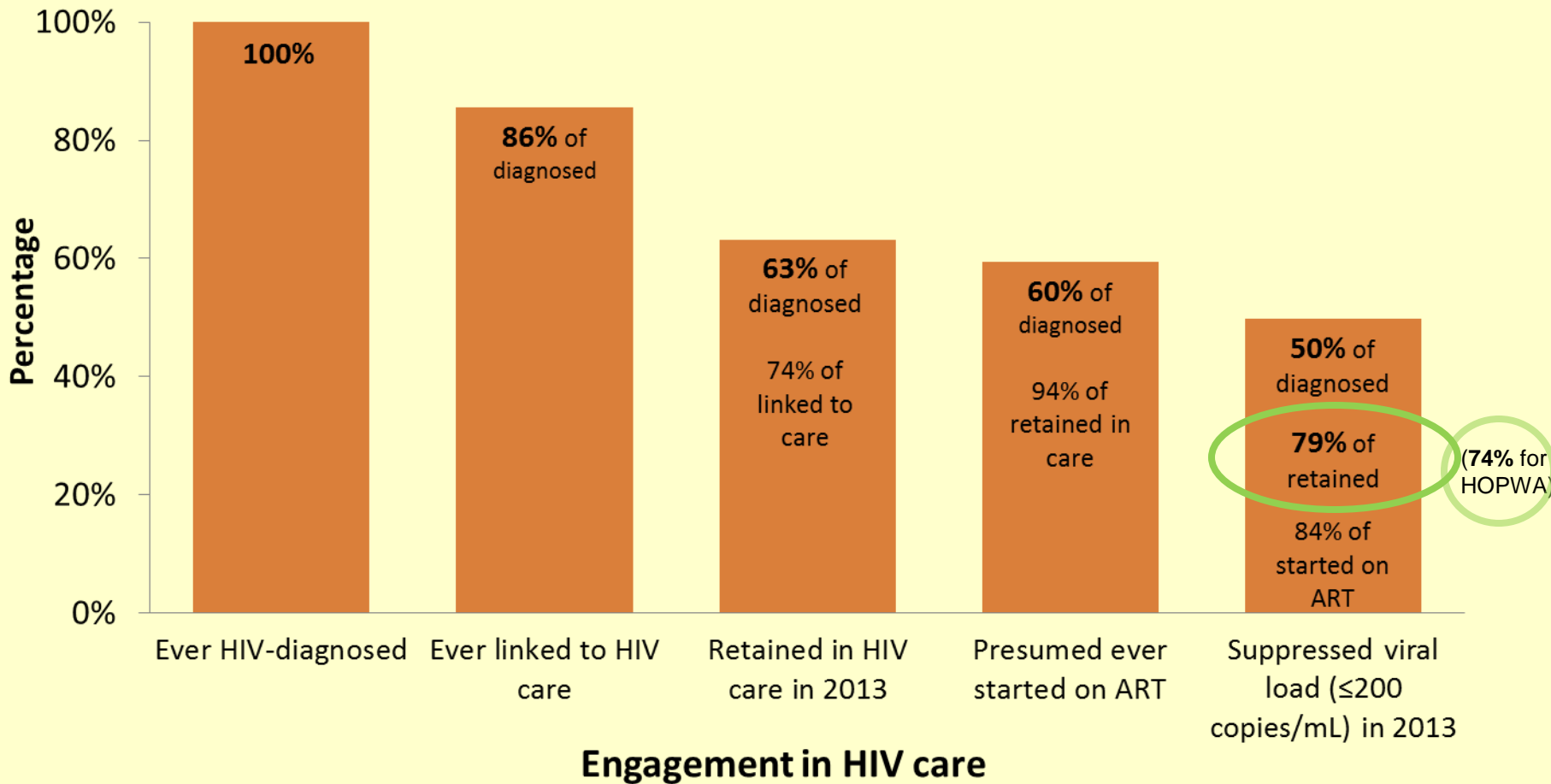
# Results: NYC HOPWA care continuum

## (35,168 HOPWA enrollees in NYC in 2013)





# Results: NYC PLWHA care continuum (117,618 PLWHA in NYC in 2013)





# Discussion

- Rates of viral suppression were higher among HOPWA clients than PLWHA overall
- Rates became similar when limited to the subsets of persons retained in care
- HOPWA clients have high retention but do no better at suppression
- Consistent with recent comparison of NYC HOPWA vs. non-HOPWA care outcomes using propensity score matching\*



# Limitations

- Doesn't illuminate *how* people remained retained in care or achieved VS
- No exploration of dosage, and no causality proven between housing and outcomes
- Engagement in care measured by proxy of laboratory tests
- HOPWA clients and PLWHA overall are not equivalent or mutually exclusive groups



# Future Research Directions

- Assess individual and population care engagement trends over time
- Consider alternative measures and comparison groups, e.g., limit to retained in care; non-HOPWA comparison group
- Subgroup analyses, e.g., demographics, specific housing service models
- Assess additional indicators as proxy of health, not solely HIV clinical indicators



# Acknowledgements

- Coauthors Laura M. McAllister-Hollod, MPH, formerly of NYC DOHMH, and Jesse Thomas of RDE Systems, LLC
- Other colleagues in the Housing Services Unit and HIV Epidemiology and Field Services Program, NYC DOHMH
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- HUD and CDC (funders)

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# Extra Slides





# Results: HOPWA vs. NYC PLWHA care continuum

