

Re-linkage and Retention in Care of HIV-diagnosed Persons presumed to be Out-of-Care Based on New York City Surveillance Data

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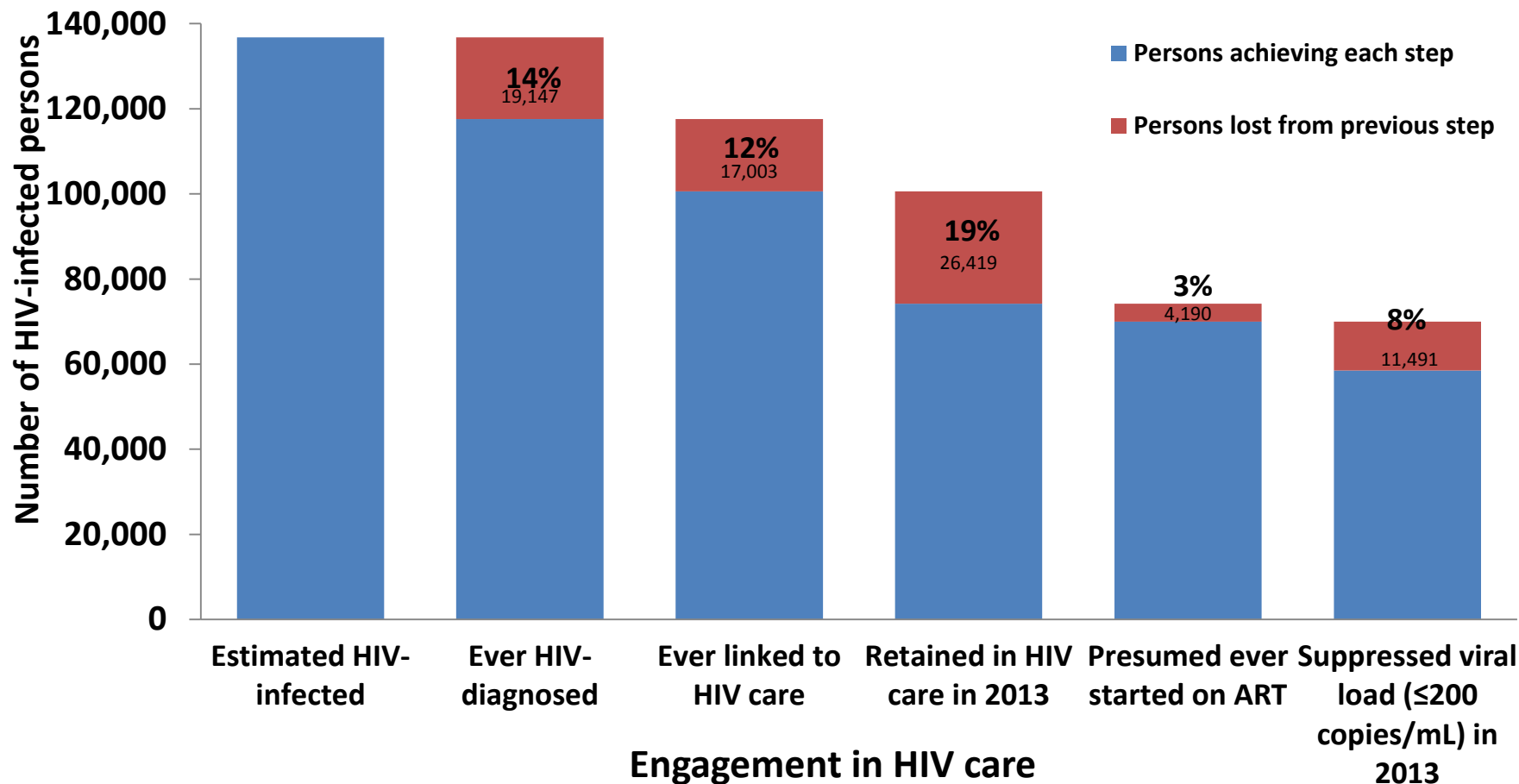
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BACKGROUND

Out-of-Care (OOC) Population

- **HIV-related morbidity and mortality**
- **HIV transmission to uninfected sex or needle-sharing partners**
- **Health department surveillance data key in identifying and re-engaging OOC persons in care**

New York City continuum of care at the end of 2013, showing where we lost the 57% of persons not achieving suppression



The largest group of persons not achieving suppression is those linked to care but not retained in care, who comprise 19% of all infected persons.

As reported to the New York City Department of Health and Mental Hygiene by June 30, 2014.
For definitions of the stages of the continuum of care, see Appendix.

METHODS

OOC Patient Selection 2008-2012

- **Confirmed HIV-positive in New York City (NYC) surveillance registry**
- **Last HIV viral load (VL) or CD4 T-cell count report was ≥ 9 months**
- **Last known residential address in NYC**

Work Flow

Selection of presumed OOC patients from registry



Outreach to OOC patients

Letters, telephone calls, texting, email, home visits



Not found/alive



Found



Accepted linkage to care



- **Facilitate appointment**
- **Review/provide HIV prevention resources**
- **Offer partner services**



Refused linkage to care



- **Health department contact information**
- **Review/provide HIV prevention resources**

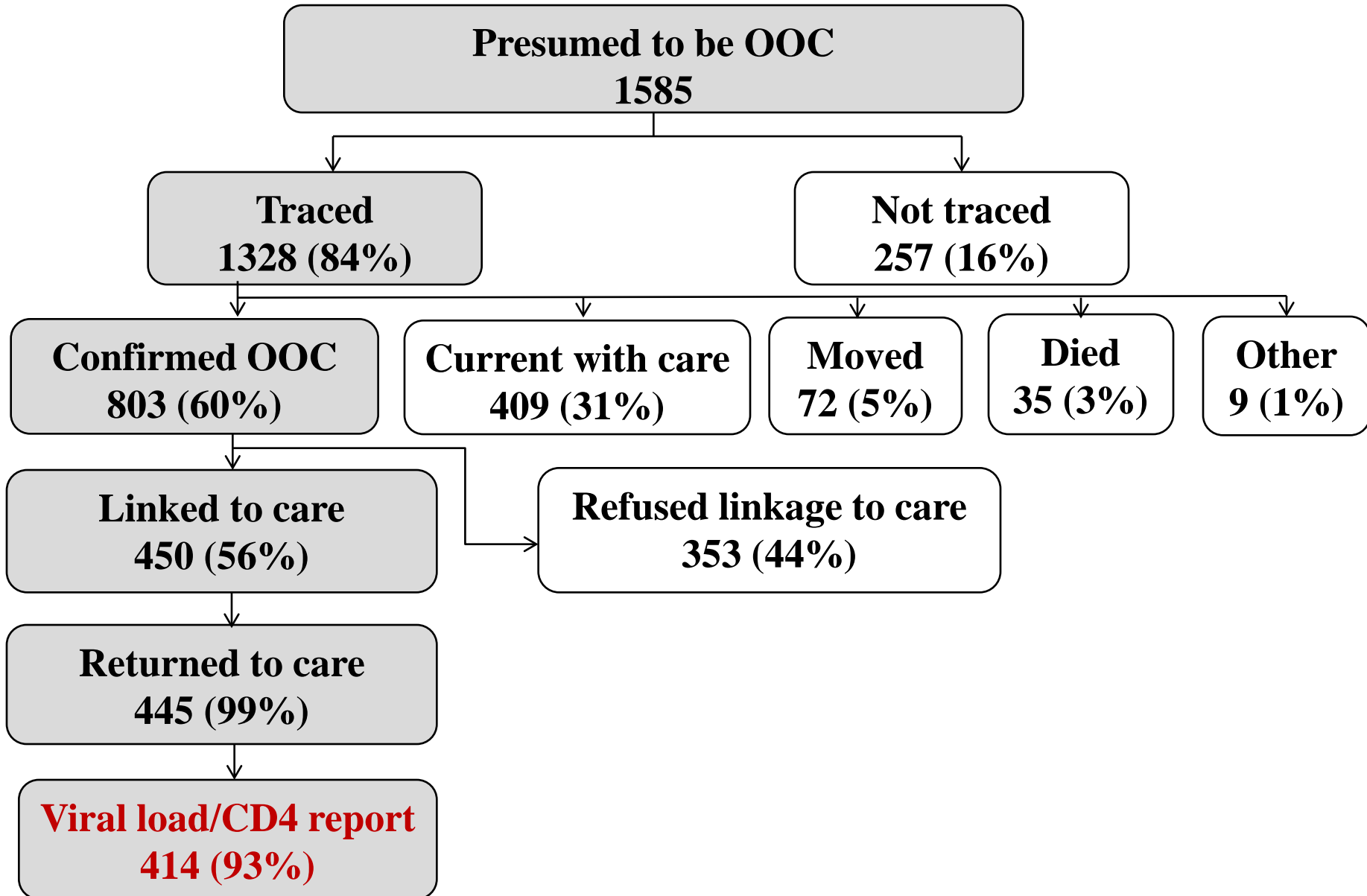
- Assign disposition:**
- **Unable to locate**
 - **Moved out of jurisdiction**
 - **died**

Outcome Measures

- **Retention in care of patients post-returned to care (RTC)**
 - ≥ 1 visit each year post-RTC
- **Continuous care by same patients post-RTC**
 - ≥ 1 visit each year
 - ≥ 2 visits, 90 days apart each year
- **Suppressed VL among patients post-RTC**
 - ≤ 400 VL/mL
 - ≤ 200 VL/mL
- **Factors associated with retention/continuous care or suppressed VL**

RESULTS

Patient Tracing Outcomes: 1/08-12/12

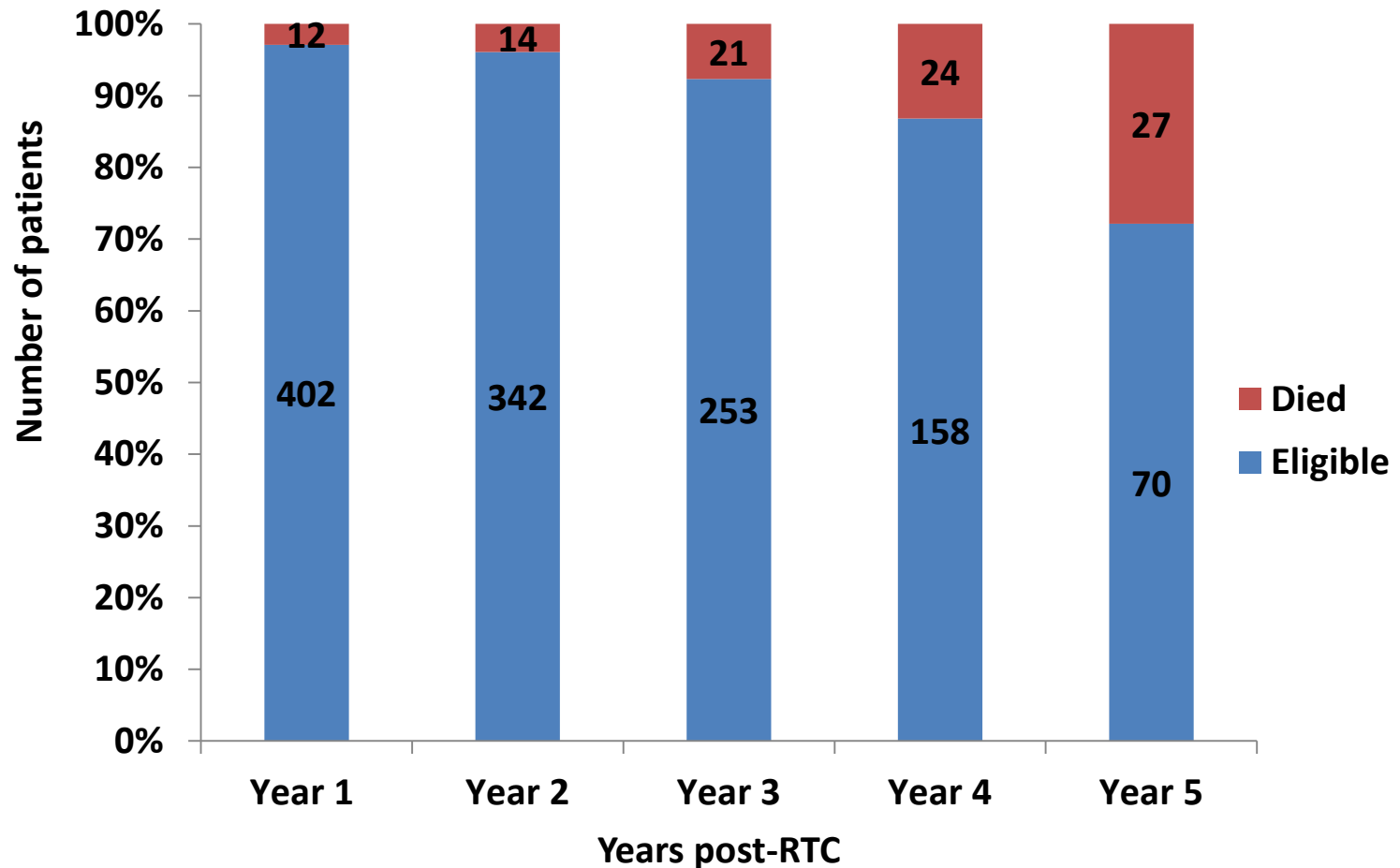


Select Demographics of Patients RTC

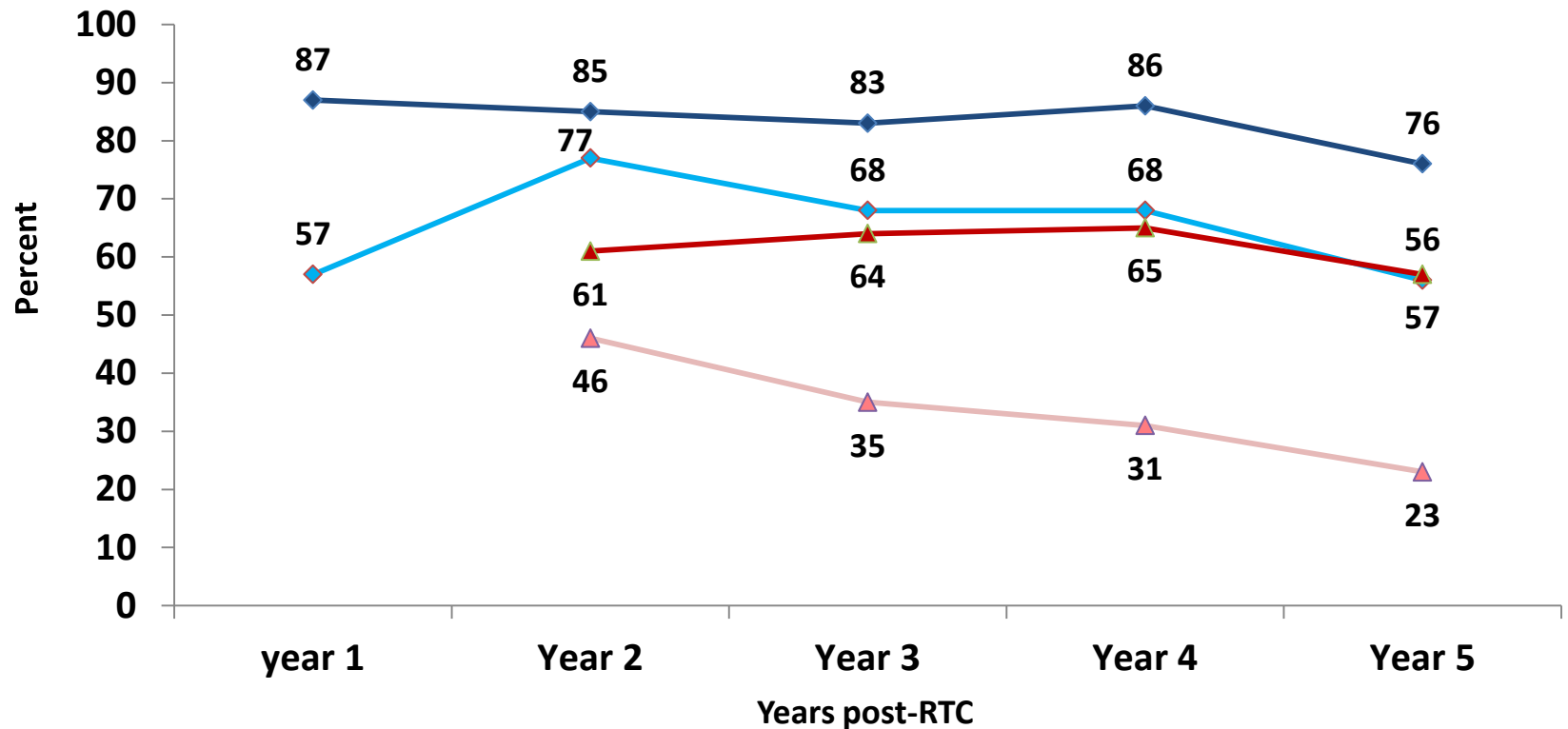
Characteristics	N=414 (%)
Race/ethnicity (missing=4)	
Black, non-Hispanic	263 (64)
Hispanic	126 (31)
Sex	
Male	246 (59)
Female	168 (41)
Age group (years)	
13-40	135 (33)
>40	279 (67)
Time from diagnosis to outreach for linkage to care	
1-5 years	56 (13)
>5 years	358 (87)
U.S. country of birth	294 (71)
Health insured when return to care (missing 67)	330 (80)

Patients Assessed for Care Status and Suppressed VL Post-RTC

2008-2012



Retention or Continuous Care post-RTC



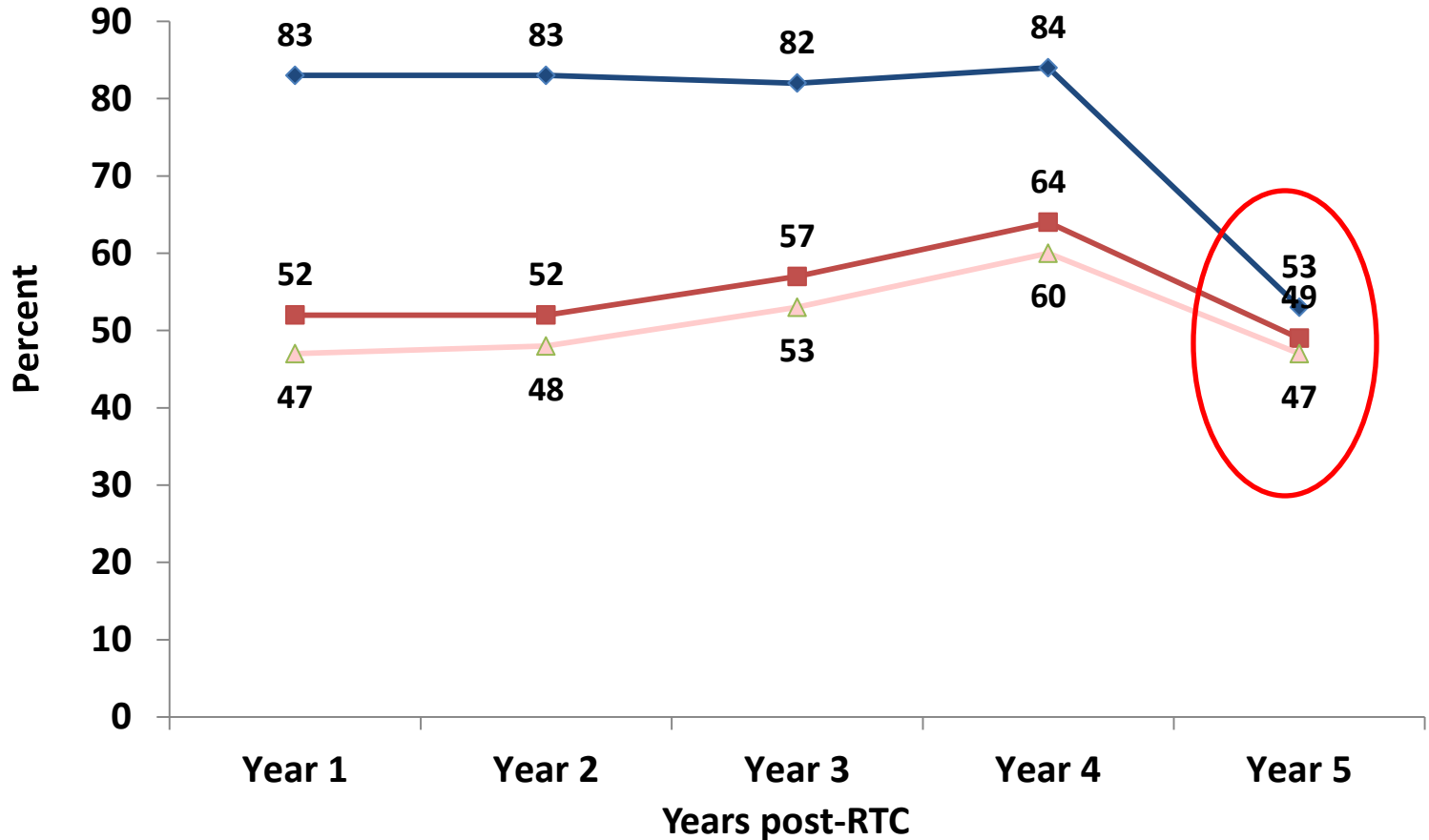
◆ At least 1 visit (CD4/VL) post-RTC visit

◆ At least 1 visit (CD4 or VL) post RTC in each year of follow-up (continuous care)

▲ At least 2 visits (CD4 or VL) post-RTC

▲ At least 2 visits (CD4/VL) post-RTC in each year of follow-up (continuous care)

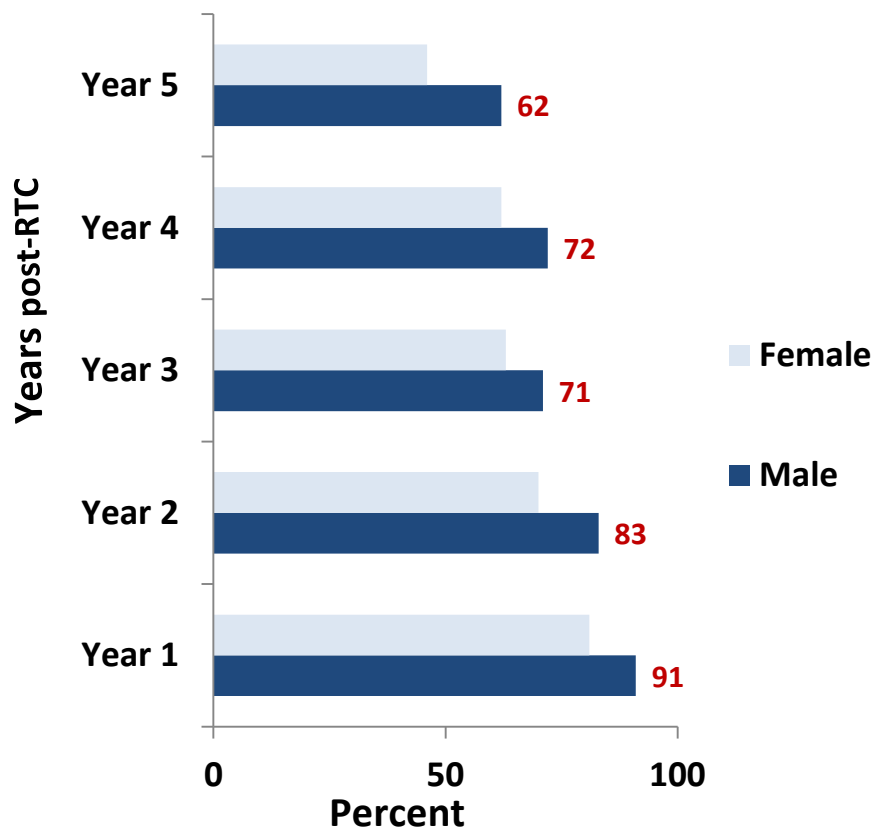
Suppressed VL Post-RTC



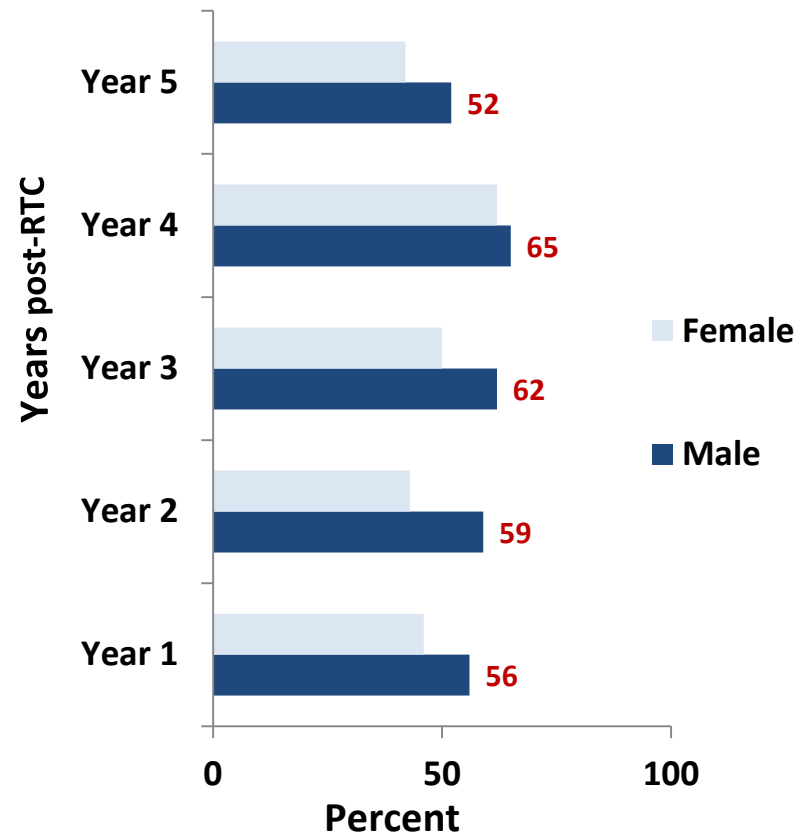
- ◆ Any viral load during the year
- At least 1 viral load ≤400 copies/mL during the year
- ▲ At least 1 viral load ≤200 copies/mL during the year

Retention in Care and Suppressed VL Post-RTC, by Gender, 2008-2012

Continuous care

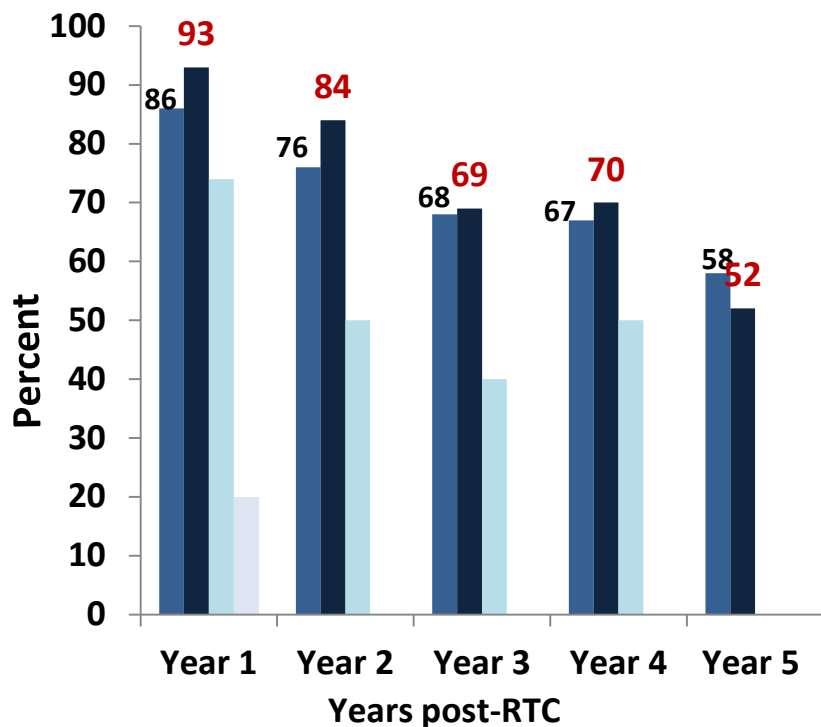


Suppressed VL at ≤ 400 copies/mL



Retention in Care and Suppressed VL Post-RTC, by Race/ethnicity, 2008-2012

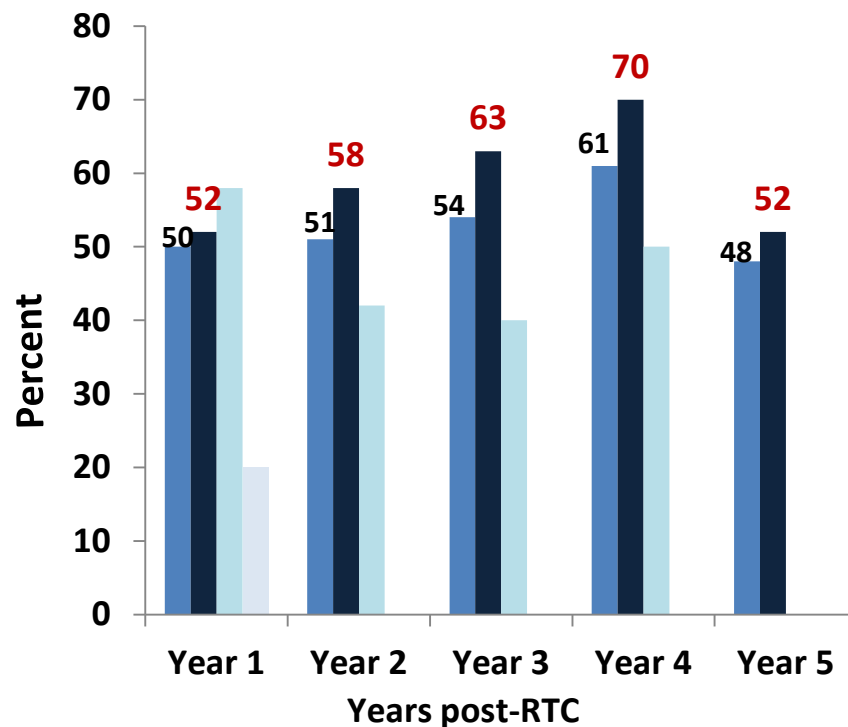
Continuous care



Race/ethnicity

- Black, non-Hispanic
- Hispanic
- White

Suppressed VL at ≤ 400 copies/ML

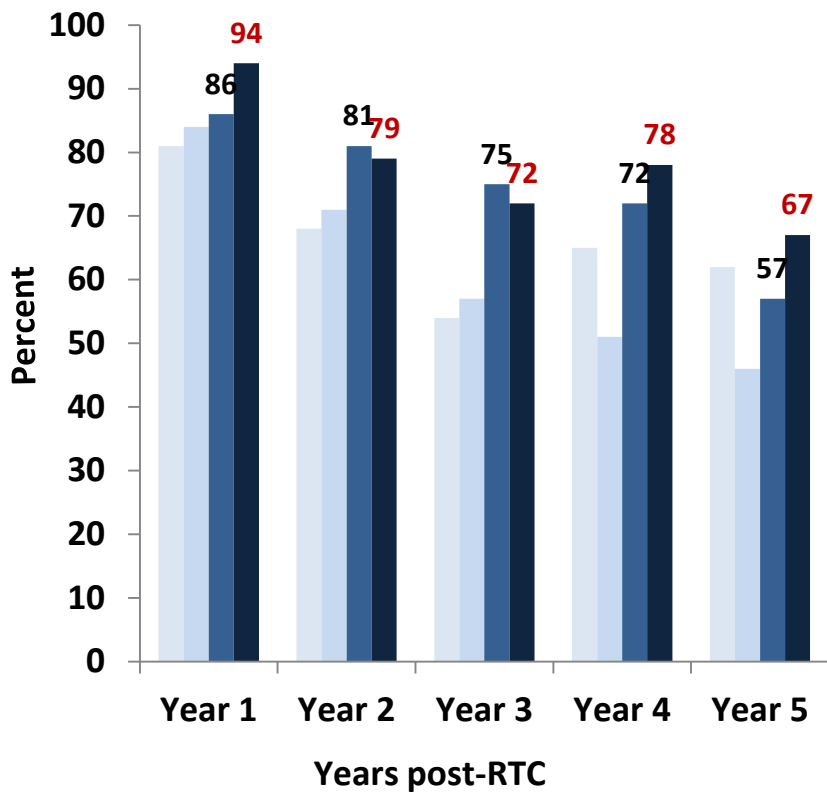


Race/ethnicity

- Black, non-Hispanic
- Hispanic
- White

Retention in Care and Suppressed VL Post-RTC, by Age Group, 2008-2012

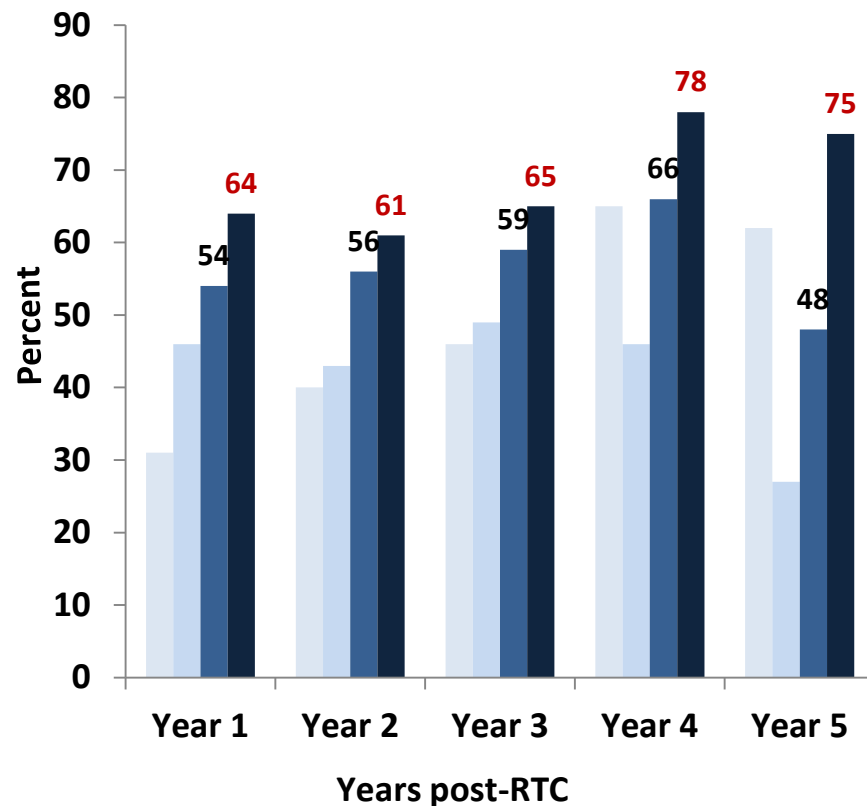
Continuous care post-RTC



Age groups:

■ 14-29 years ■ 30-39 years ■ 40-49 years ■ ≥50 years

Suppressed VL at ≤400 copies/mL



Age groups:

■ 14-29 years ■ 30-39 years ■ 40-49 years ■ ≥50 years

DISCUSSION

Limitations

- **Care status and lab reports obtained only from NYC surveillance registry**
- **Persons may have moved or died in other jurisdictions**

Conclusions

- **OOB patients were receptive to public health effort to re-engage in care**
- **Many patients were sustained in care and achieved suppressed viral load post-RTC**
- **Male sex, age ≥ 40 years, and Hispanic race were associated with care retention or suppressed VL**
- **Public health and community provider efforts to engage and retain patients in care are warranted**

Thank you!

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Appendix

Technical notes and definitions

- “Estimated HIV-infected”: equal to the number of persons diagnosed with and presumed living with HIV in NYC at the end of 2013 (PLWHA), divided by the estimated proportion of all HIV-infected persons in NYC who have been diagnosed. CDC and a recent local emergency room serosurvey estimated this proportion to be 86%. Sources:
 - Bradley H, Hall HI, Wolitski RJ, *et. al.* Vital Signs: HIV Diagnosis, Care, and Treatment Among Persons Living with HIV - United States, 2011. *MMWR Morb Mortal Wkly Rep.* 2014 Nov 28;63(47):1113-7.
 - Eavey JJ, Torian LV, Jablonsky A, *et. al.* Undiagnosed HIV Infection in a New York City Emergency Room: Results of a Blinded Serosurvey, December 2009-January 2010. 19th International AIDS Conference, 2012, Washington, DC. Abstract# TUPE282.
- “HIV diagnosed”: PLWHA as of 12/31/2013, per surveillance case reporting.
- “Ever linked to HIV care”: Any viral load (VL) or CD4 count drawn in the years 2001-2013 and received after HIV diagnosis following a 7-day lag, and reported to DOHMH HIV surveillance.
- “Retained in HIV care in 2013”: VL or CD4 count or CD4 percent drawn in 2013, and reported to DOHMH HIV surveillance.
- “Presumed ever started on ART”: Suppressed VL (≤ 200 copies/mL) reported to DOHMH HIV surveillance at any point from 2001-2013.
- “Suppressed viral load in 2013”: Most recent VL drawn in 2013 and reported to NYC DOHMH HIV surveillance was ≤ 200 copies/mL.