

World AIDS Day 2017: End the Epidemic

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CME ACCREDITED UPDATES IN MEDICINE ELEARNING SERIES

COURSE NAME:

Medicine RSS eLearning Modules

CME eLEARNING ACTIVITY NAME:

World AIDS Day 2017: End the Epidemic

PROGRAM DESCRIPTION, EDUCATIONAL GOAL AND RATIONALE:

Evidence based guidelines are constantly changing and being updated for several core areas of Internal Medicine throughout the year. It is important for physicians to practice the most up-to-date standard of care in all specialties to promote patient health and well-being. Our series of lectures at the medicine regularly scheduled series promotes continuing education for the practicing internist and highlights important updates in medical practice in these core areas. Physicians in general practice often do not have the time to keep themselves up-to-date with medical advances as they are busy seeing patients in the clinical setting. The Medicine Regularly Scheduled Series gives these physicians the opportunity to learn these advances in an academic setting.

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TARGET AUDIENCE:

Physician Partners and Premium Network
community-based providers

LEARNING OBJECTIVES:

Upon successful completion of this activity, participants should:

Identify current HIV regional epidemiology

Summarize the New York State Plan to End the HIV/AIDS Epidemic in New York by 2020

Recognize health disparities regarding HIV transmission

Identify viral suppression and strategies to address in clinical practice

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FACULTY PRESENTER/AUTHOR:

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Long Island Jewish Medical Center

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ACCREDITATION:

Northwell Health is accredited by the Accreditation Council for Continuing Medical Education to provide Continuing Medical Education for physicians.

CREDIT DESIGNATION:

Northwell Health designates this Continuing Medical Education activity for a maximum of **1 *AMA PRA Category I credits***TM. Physicians should only claim credit commensurate with the extent of their participation in the activity

METHOD OF PHYSICIAN PARTICIPATION:

To receive credit the participants must:

Read/view the entire educational activity.

Input name and credentials to gain CME credit.

Answer at least 80% of the Post-Test questions correctly.

Complete and return Post-Test.

Complete and return Program Evaluation.

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COURSE HOST:

Department of Medicine
Northwell Health

ESTIMATED TIME TO COMPLETE ACTIVITY:

90 minutes

ACKNOWLEDGEMENT OF COMMERCIAL SUPPORT:

An announcement of program support will be made to all attendees at the beginning of each educational activity.

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DISCLOSURE POLICY:

Northwell Health adheres to the ACCME's Standards for Commercial Support. Any individuals in a position to control the content of a CME activity, including faculty, planners, reviewers or others are required to disclose all relevant financial relationships with commercial interests. All relevant conflicts of interest will be resolved prior to the commencement of the activity.

FACULTY DISCLOSURES:

Drs. Thomas McGinn, George Boutis, John Raimo and Sean LaVine have nothing to disclose. Joseph P. McGowan, MD receives honorarium from Gilead, Viiv and Merck for his role on the advisory committee.

RELEASE DATE: 4/16/18

REVIEW DATE: 4/16/18

PROGRAM EXPIRATION: 7/30/18

Objectives

1. Identify current HIV regional epidemiology
2. Identify the New York State Plan to End the HIV/AIDS Epidemic in New York by 2020
3. Recognize health disparities regarding HIV transmission and viral suppression and strategies to identify and address them

Agenda

1. HIV Epidemiology Overview, NYS
2. End the Epidemic (ETE) Initiative
3. Disparities: barriers to ETE

HIV Statistics

USA-

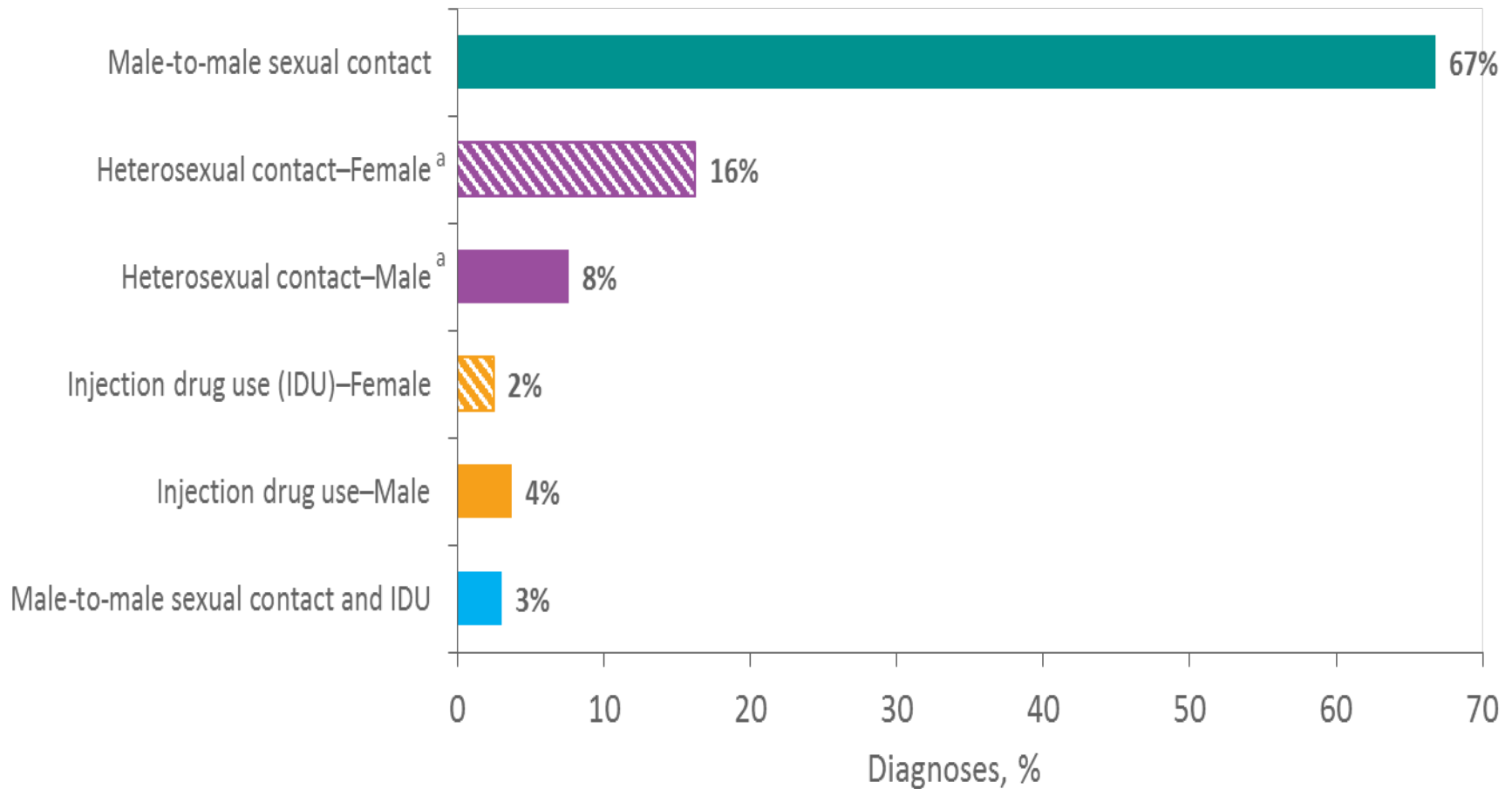
- ~1.2 million infected
- ~40,000 new cases/year

NY State

- 130,753 infected (Living with HIV or AIDS)
- 122,945 in NYC
- 6,530 in Nassau and Suffolk

Diagnoses of HIV Infection among Adults and Adolescents, by Transmission Category, 2015—United States and 6 Dependent Areas

N = 39,920



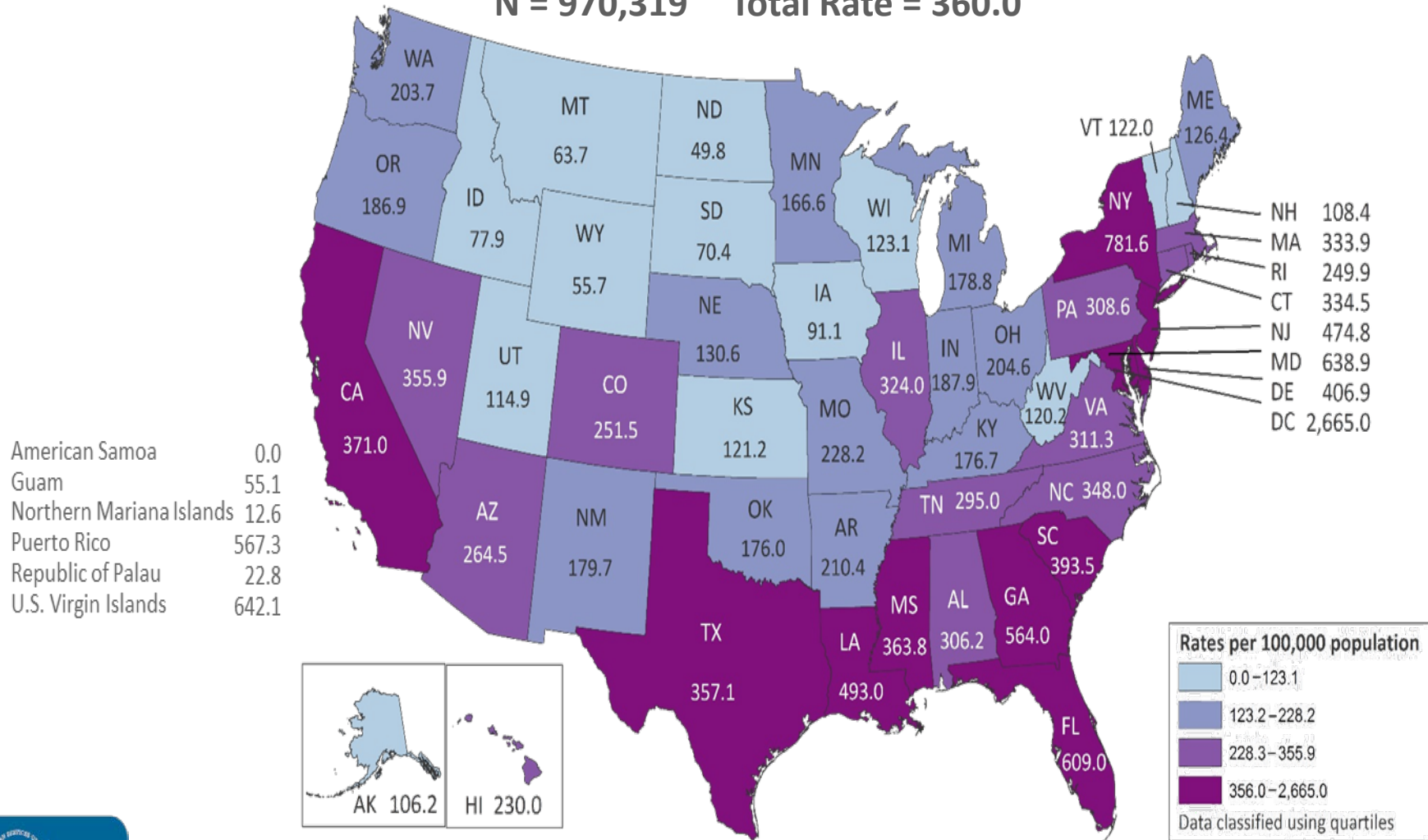
Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. Data for the year 2015 are preliminary and based on 6 months reporting delay. Data have been statistically adjusted to account for missing transmission category. “Other” transmission category not displayed as it comprises less than 1% of cases.

^a Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.



Rates of Adults and Adolescents Living with Diagnosed HIV Infection Year-end 2014—United States and 6 Dependent Areas

N = 970,319 Total Rate = 360.0



Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. Data are based on address of residence as of December 31, 2014 (i.e., most recent known address).



Question

The incidence of new HIV diagnoses in New York State has:

1. Declined over the past 2 years
2. Remain stable for the past decade
3. Has increased among African American Women
4. Has sharply increased due to the opiate epidemic in the past 12 months

Question

The incidence of new HIV diagnoses in New York State has:

- 1. Declined over the past 2 years**
2. Remain stable for the past decade
3. Has increased among African American Women
4. Has sharply increased due to the opiate epidemic in the past 12 months

HIV/AIDS in New York

- Between 2006 and 2015, estimated new HIV infections decreased 43% in New York State.
- <1 per 100,000 births with MTCT of HIV since 2013
- 2,493 new HIV diagnoses in NYC in 2015 – 8.3% decrease from 2014, first year of the epidemic with fewer than 2,500 new cases
- 205 new HIV diagnoses in Nassau/Suffolk in 2015 – 14% decrease from the average of the previous 2 years, highest region outside of NYC
- 38% of PLWH/A in New York State are not virally suppressed (8% are undiagnosed)

How do we “Get Ahead” of the Epidemic?

- Prevention - A, B, Cs
 - **A**bstain, **B**e faithful, **C**ondoms, **C**ircumcision,
- **C**ounseling & testing + Needle Exchange
- Treat our way out- active (TasP)
 - Universal Testing and Linkage to Treatment
 - PEP
 - PrEP
 - U = U
 - Female Controlled Microbicides and Vaginal Gels
- Vaccinate- passive

PEP and PrEP, What's the Difference?

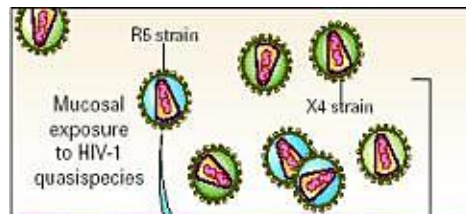
PEP

- **Event Driven**
- Emergency medication started within a few hours of possible exposure to HIV, and continued for 28 days.
- Typically start medication in the ED and then follow-up with Primary Care.\
- Examples of exposures that require PEP:
 - Employee needlestick
 - Sexual assault
 - Unprotected sex

PrEP

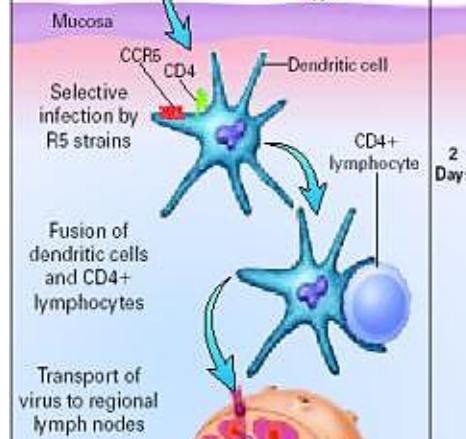
- **Risk Driven**
- Daily medication to prevent HIV infection in people who are HIV negative and may be at ongoing risk. Seen every 3 months for ongoing evaluation while they are taking PrEP.
- Examples of ongoing risk that may require PrEP:
 - Partner is known HIV+
 - Injection drug user
 - Unprotected sex

Day 0



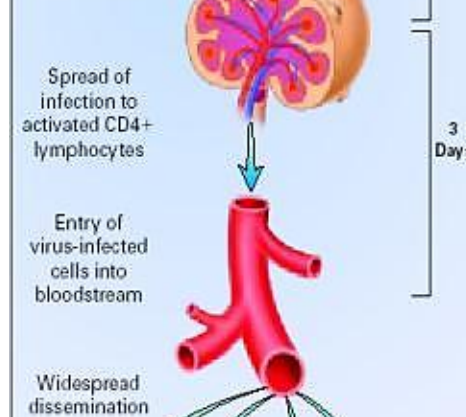
Exposure to HIV at mucosal surface (sex)

Day 0-2



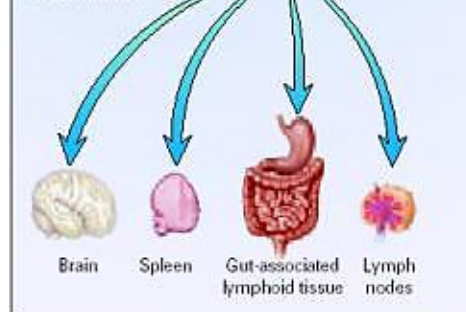
Virus collected by dendritic cells, carried to lymph node

Day 4-11



HIV replicates in CD4 cells, released into blood

Day 11 on



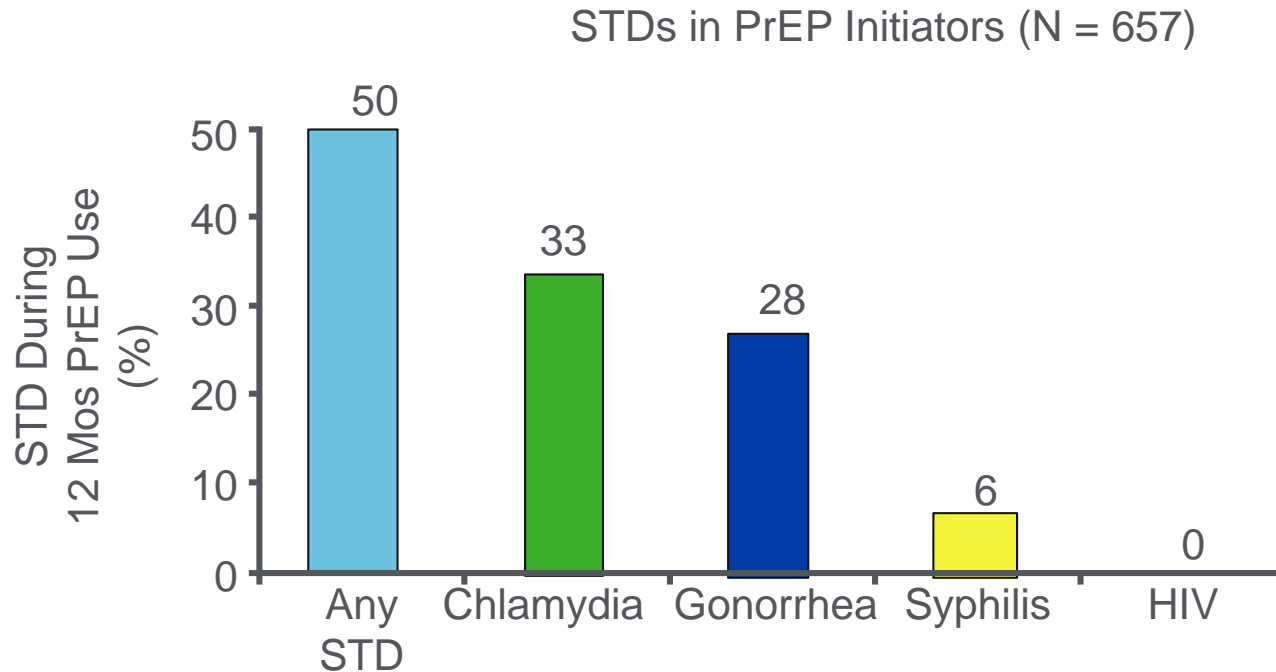
Virus spreads to other organs

The Importance of Adherence with PrEP: It works—if you take it

Study	Medication	Population	Overall Reduction in HIV Incidence (mITT)	TDF detected in blood
Bangkok- TDF	TDF	IDU	49%	70%
Partners PrEP- TDF	TDF	HIV discordant couples	67%	86%
	TDF/FTC	“	75%	90%
TDF2	TDF/FTC	Heterosexual M/W	62%	84%
iPREX	TDF/FTC	MSM	42%	92%
Fem-PrEP	TDF/FTC	Heterosexual Women	NS	NS
VOICE	TDF/FTC & TDF	Heterosexual Women	NS	NS

STDs Will Occur for Persons Using PrEP

Analysis of HIV/STD incidence in PrEP users in large healthcare system (Kaiser Permanente San Francisco) from 2012 to 2015^[1]



- PROUD: similar rates of any STD in 12 mos before starting PrEP (63%) vs during 12 mos of PrEP (57%)^[2]
- Among 220 MSM initiating PrEP at STD clinic in Seattle, WA, from Sept 2014 to June 2016^[3]: Decreased rate of condom use during receptive anal intercourse with HIV+ partners and increased rates of CT and GC diagnosis following PrEP initiation (vs pre-PrEP baseline)

Should STD Screening With PrEP Be More Often Than CDC Suggestion of Every 6 Mos?

Analysis of STD in a PrEP demonstration project at a NY health care center^[1]

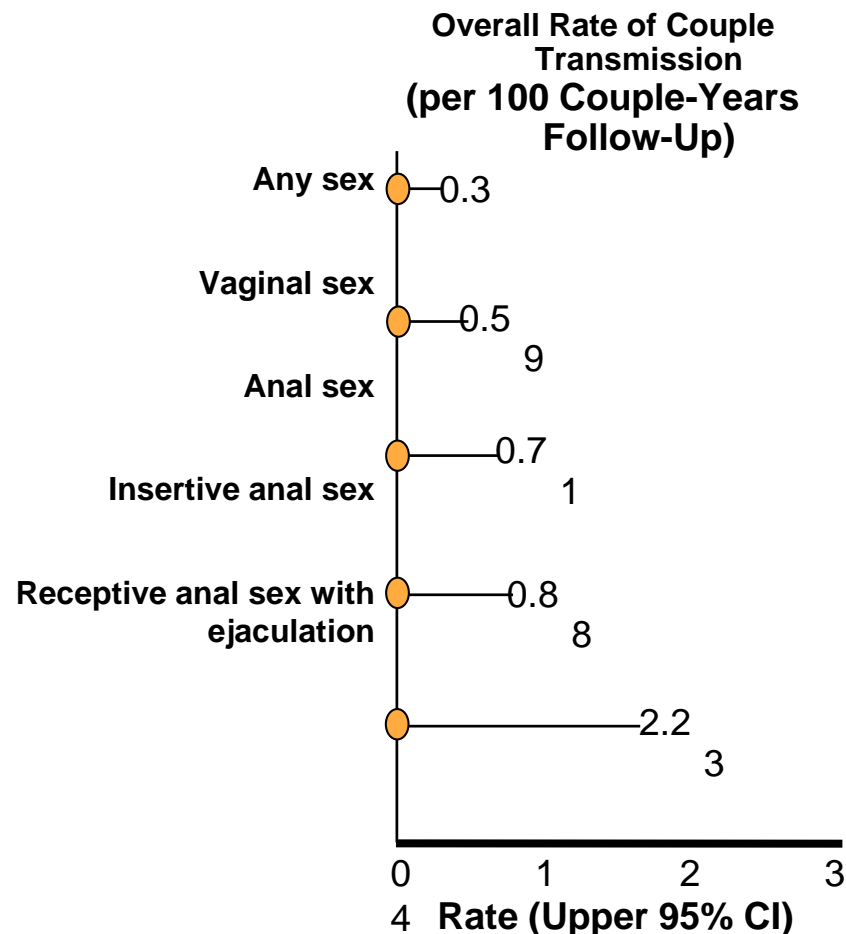
- Pts screened for STDs every 3 mos while receiving PrEP; also visited clinic if experienced symptoms

Time Point	N	STD Diagnosis, n (%)	Diagnosed by Routine Screening, n (% STDs)	Repeat STDs, n (% STDs)
6 mos before PrEP	280	35 (13)	NA	NA
PrEP prescription	280	31 (11)	31 (100)	8 (26)
3-mo follow-up	225	30 (13)	23 (77)	10 (33)
6-mo follow-up	196	41 (21)	34 (83)	20 (48)
9-mo follow-up	169	25 (15)	17 (68)	21 (84)
12-mo follow-up	128	17 (13)	13 (77)	13 (77)

- STDs were common at each time point, **supporting screening every 3 mos in high-risk population**

PARTNER Study: HIV Transmission According to Sexual Behavior Reported by HIV-Negative Partner

- No HIV transmission through condomless sex with a partner on ART and HIV RNA <200 copies/mL, despite a significant number of sex acts
- Median follow-up: 1.3 years
- Upper 95% CI: 0.3 per 100 person-years of follow-up
- Approximately 40,000 condomless sex acts
- Self-reported adherence to ART: 93% to 97%
- Additional follow-up is needed to provide more precise estimates for transmission risk (MSM will be followed through 2018)



Undetectable = Untransmittable

People living with HIV can feel confident that if they have an undetectable viral load and take their medications properly, they **will not pass on HIV** to sexual partners ($U = U$).

"People who take ART daily as prescribed and achieve and maintain an undetectable viral load have effectively no risk of sexually transmitting the virus to an HIV-negative partner."
(CDC, September 2017)

U=U is an unprecedented opportunity to transform the lives of people with HIV and the field:

- Reduces the shame and fear of sexual transmission and opens up possibilities for conceiving children without alternative means of insemination.
- Dismantles HIV stigma on the community, clinical, and personal level.
- Encourages people living with HIV to start and stay on treatment to keep them and their partners healthy.
- Strengthens advocacy for universal access to diagnostics, treatment, and care to save lives and bring us closer to ending the epidemic.

First-Yr Results After Implementation of HIV Test and Treat Rapid Response Program

Pilot program initiated 2016 in Miami TTRR team of **disease interventions specialist, pt navigator, case manager, and HIV provider** tasked with ensuring that for each new HIV diagnosis:

- Pt visits HIV provider within 48 hrs
- **ART prescribed 1-7 days after dx**
- Initial visit includes ART provision and appropriate follow-up

BL laboratory values and confirmatory test results available within 24-48 hrs

*Most pts foreign born (Cuba: 32%; Haiti: 24%; other Hispanic country: 18%). †Prescribed in 91% of pts. ‡20% of pts with CD4+ cell count < 200 cells/mm³.

clinicaloptions.com

Characteristic	Pts Enrolled in First Yr (N = 45)
Male sex, %	73
Black/Haitian/Hispanic/white race, %*	18/22/53/7
Age range, n	
▪ 21-40 yrs	31
▪ 41-60 yrs	13
▪ > 61 yrs	1
Evaluated by HIV provider same day/within 48 hrs of dx, %	48/88
Mean time to starting ART, days	6
▪ Started same day of dx, %	37
▪ Started within 7 days of dx, %	69
Most common ART regimen	EVG/COBI/FTC/TAF [†]
Mean initial VL, log ₁₀ (SD)	4.32 (1.1)
Mean initial CD4+ cell count, ‡ cells/mm ³ (SD)	463 (263)



Governor Andrew Cuomo announcing his new initiative to combat the AIDS epidemic before the 2014 NYC Gay Pride Parade.

Defining the End of AIDS

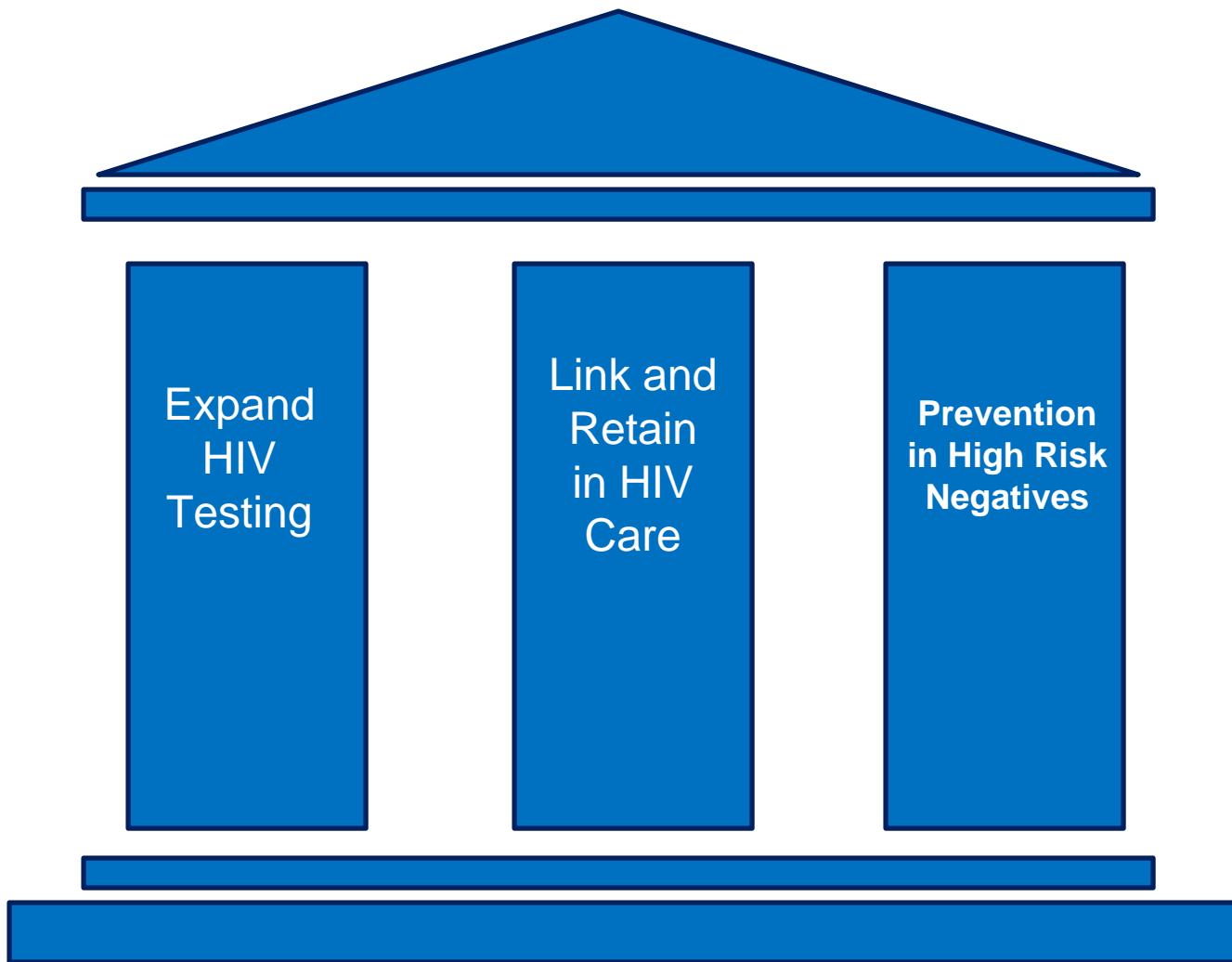
Goal

Reduce from 3,000 to 750 new HIV infections per year by the end of 2020.

Three Point Plan

1. Identify all persons with HIV who remain undiagnosed and link them to health care.
2. Link and retain those with HIV in health care, to treat them with anti-HIV therapy to maximize virus suppression so they remain healthy and prevent further transmission.
3. Provide Pre-Exposure Prophylaxis for persons who engage in high risk behaviors to keep them HIV negative.

Pillars of Strategy to End the Epidemic

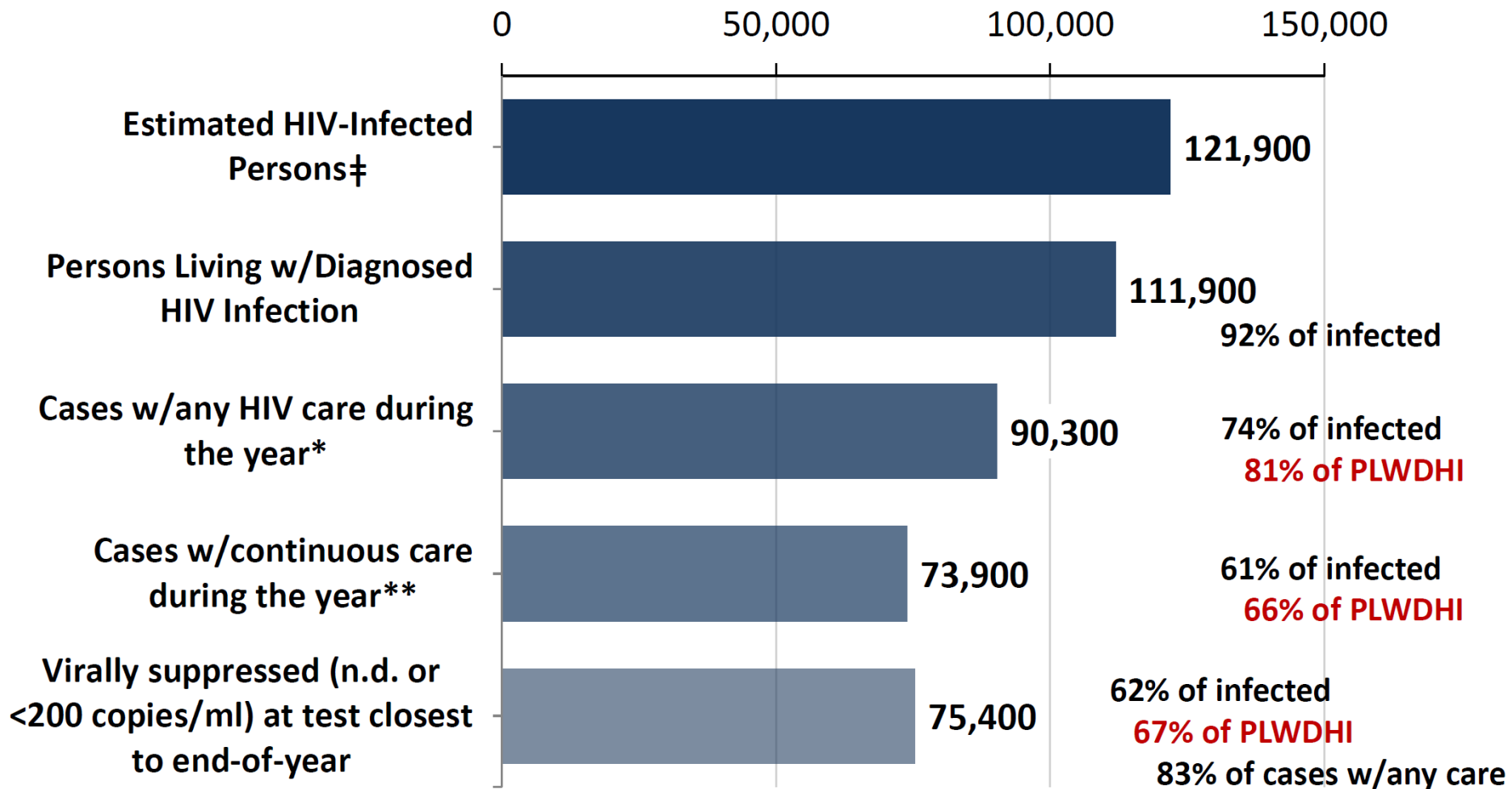


ETE Targets and Progress to Date

Metric	Target	Actual
HIV Incidence	750	2,436
HIV Diagnoses	1515	3,155
Linkage to Care (30d)	90%	73%
Receiving any care	90%	81%
Viral Suppression (all Infected)	85%	67%
Viral Suppression (Received any Care)	95%	83%
HIV Status Aware	98%	92%
Concurrent AIDS Diagnosis	15%	19.4%
Time to AIDS (2 years)	5.1%	6.8%

New York State Cascade of HIV Care, 2015

Persons Residing in NYS† at End of 2015



†Based on most recent address, regardless of where diagnosed. Excludes persons with AIDS with no evidence of care for 5 years and persons with diagnosed HIV (non-AIDS) with no evidence of care for 8 years.

‡ Estimated unknown 6.7% for NYC and 13% Rest of State

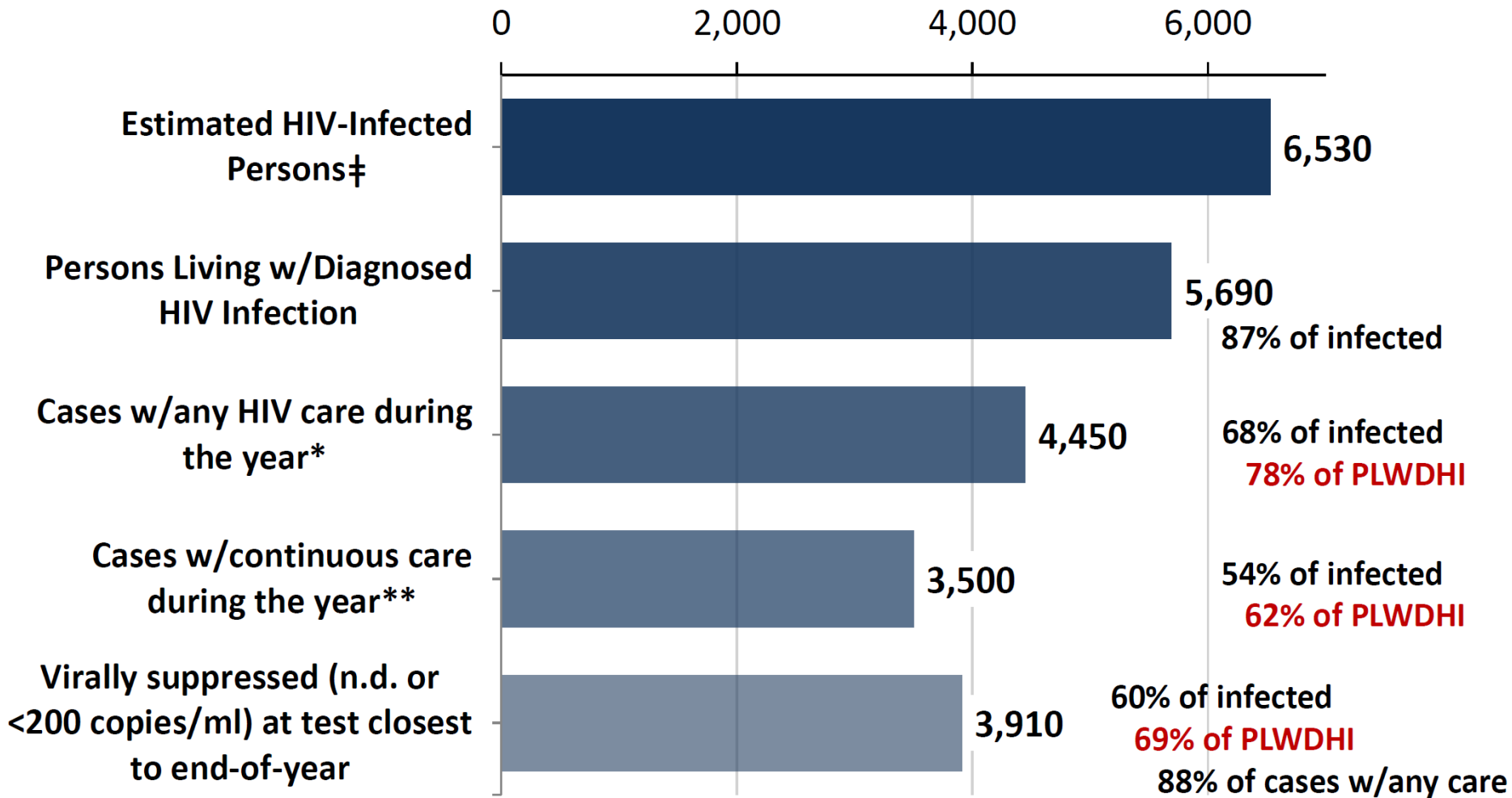
*Any VL, CD4, genotype test during the year; ** At least 2 tests, at least 91 days apart



Department of Health

Cascade of HIV Care: Nassau-Suffolk Ryan White Region

Persons Residing in the Nassau-Suffolk Ryan White Region† at End of 2015 (excludes prisoner cases)



†Based on most recent address, regardless of where diagnosed. Excludes persons with AIDS with no evidence of care for 5 years and persons with diagnosed HIV (non-AIDS) with no evidence of care for 8 years.

‡ 13% were infected and unaware (CDC estimate)

* Any VL, CD4, genotype test during the year; ** At least 2 tests, at least 91 days apart



Department of Health

Pillar 1: Changes to NYS HIV testing law

Latest revision signed by Governor Cuomo in 2016

NYS only requires opt-out consent: Simply notify patient that test will be performed so that they have opportunity to decline. No verbal or written consent is required.

Order test for all patients ages 13 and over. Upper age limit removed. Routine HIV testing must be offered to all patients age 13 and over in any primary care, urgent care, or emergency care settings.

Pillar 1: HIV Testing: Missed Opportunities

- 1 in 2 people with HIV have had the virus at least 3 years before diagnosis.
- About 40% of new HIV infections come from people who don't know they have HIV.
- 7 in 10 people at high risk for HIV who weren't tested last year saw a healthcare provider during that year.



Annual HIV Testing of High Risk Persons



Many people at high risk* for HIV aren't getting tested every year

- 59% of heterosexuals at increased risk for HIV,
- 42% of people who inject drugs
- 29% of gay and bisexual men

were not tested last year for HIV.

*People at high risk for HIV include: 1) sexually active gay and bisexual men, 2) people who inject drugs, and 3) heterosexuals who have sex with someone who is at risk for or has HIV.

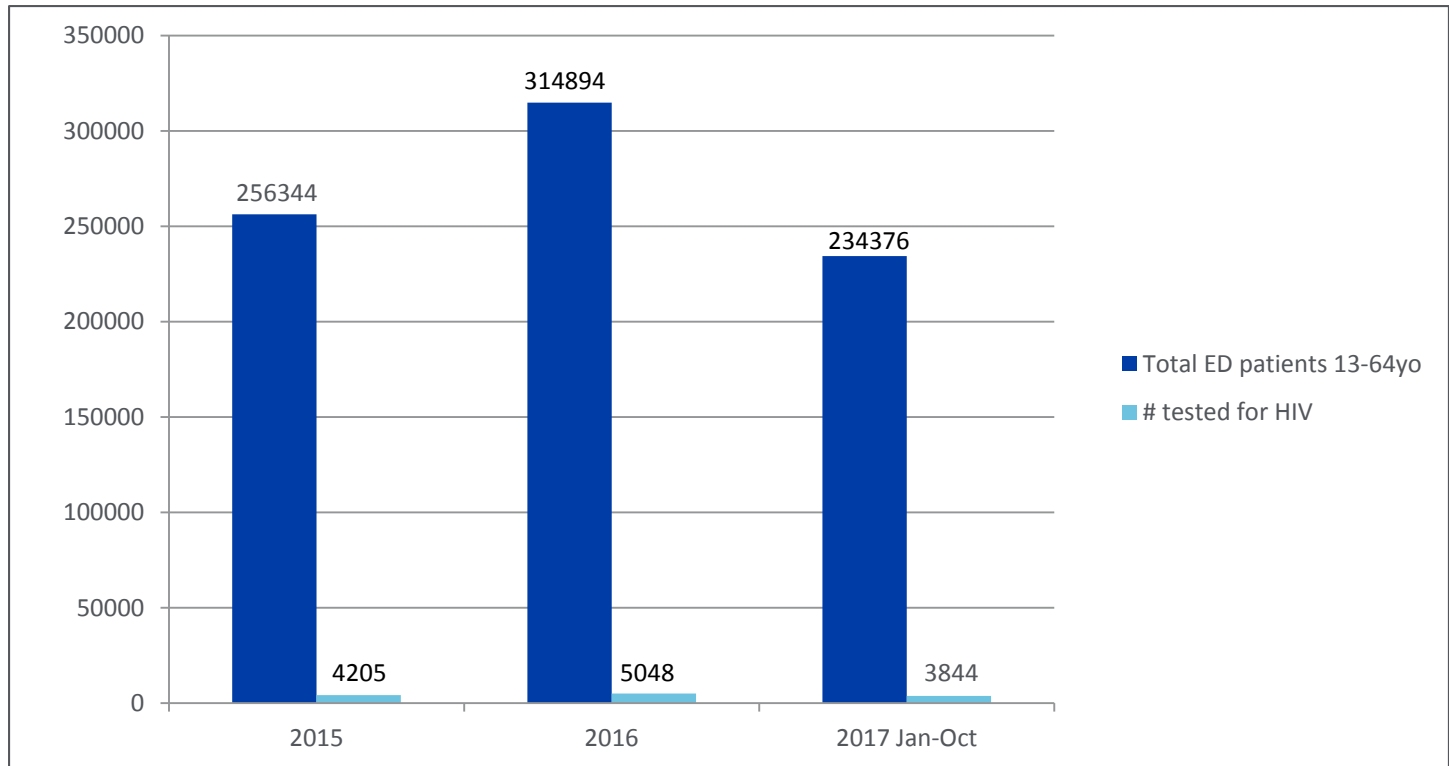
Pillar 1: HIV Testing

- 48% Ever been tested for HIV in New York State
- 39.5% ever tested for HIV on Long Island
- 62% of NYC residents have ever been tested for HIV and 33% were tested within the past 12 months

<http://etedashboardny.org/data/testing/>

2015-2017

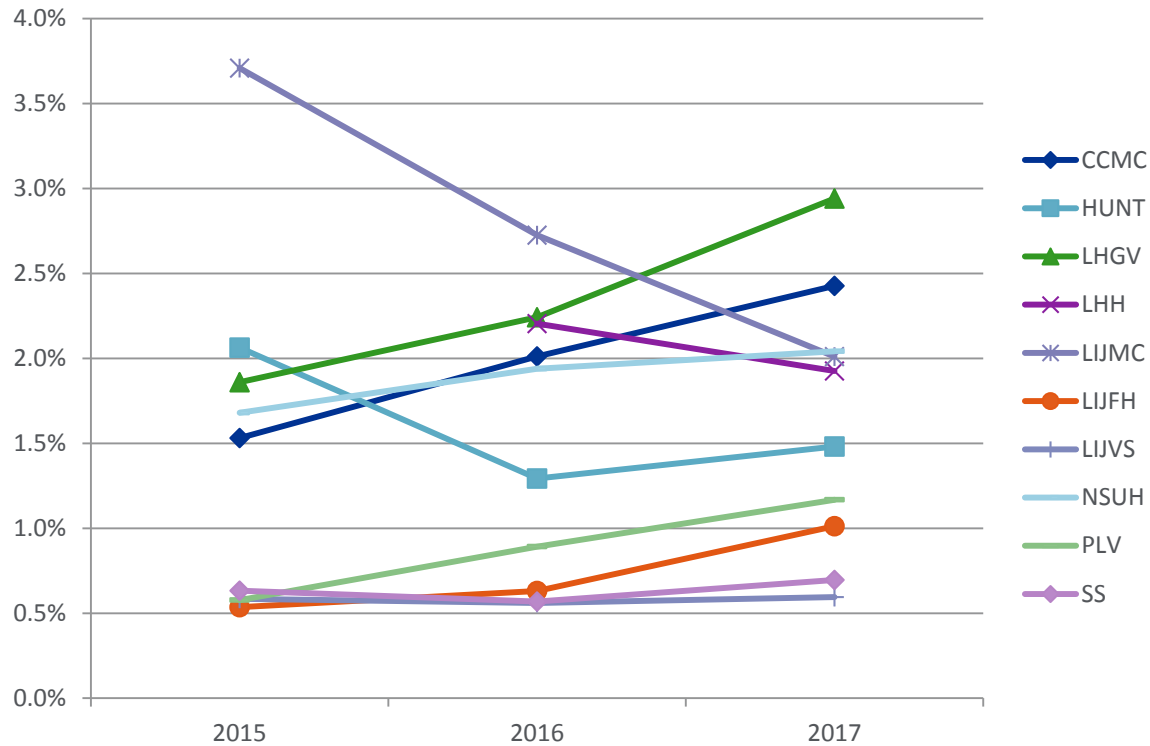
Northwell Health ED HIV Testing



Over the last three years, only 1.6% of all patients ages 13-64yo received HIV testing when seen at Northwell Health EDs.

2015-2017

Northwell Health ED HIV Testing, by hospital



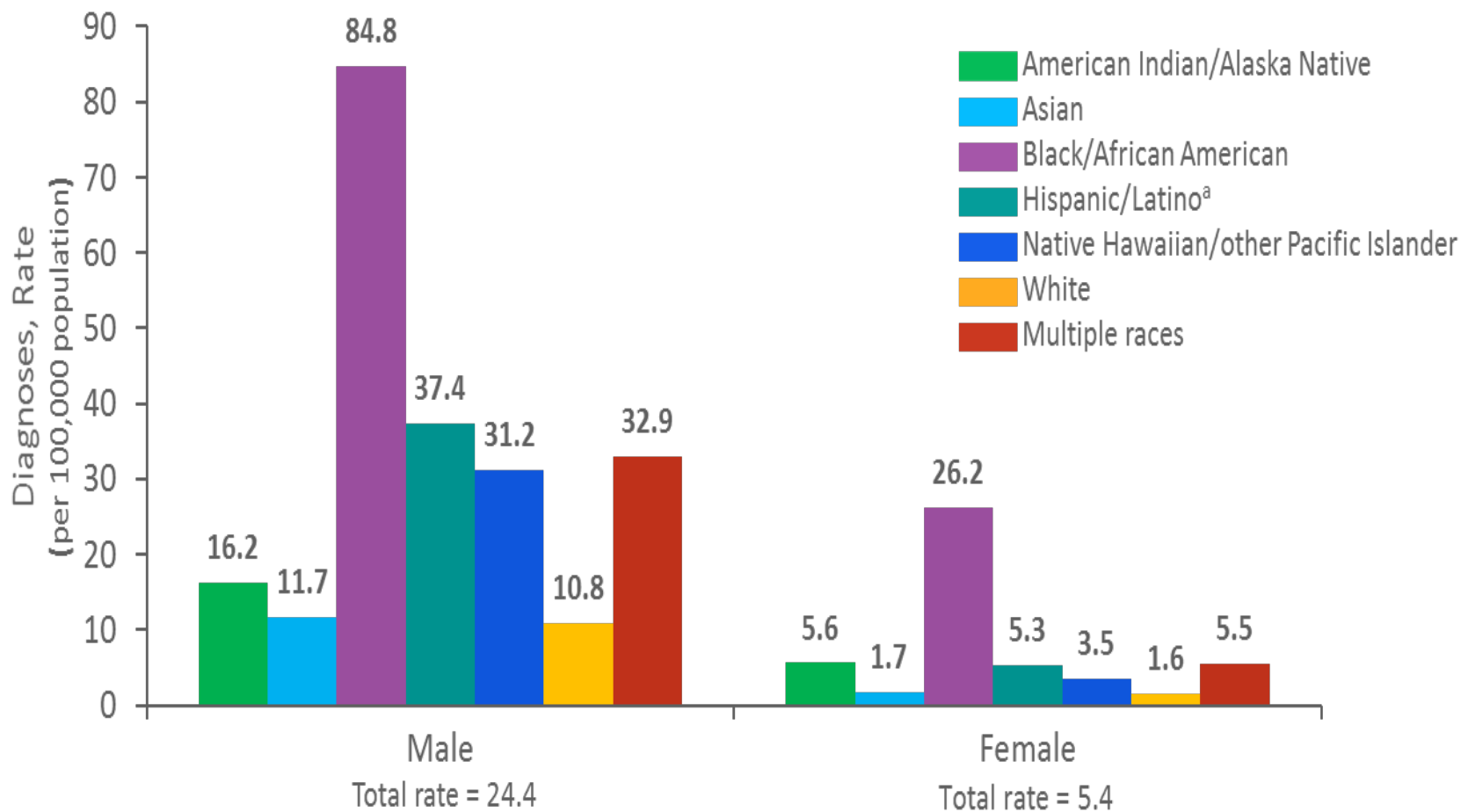
Testing rates for individual EDs range from 0.6% to 2.9% of all patients ages 13-64yo.

2015-2017 New HIV Diagnoses, ED patients 13-64yo

	# patients tested	# confirmed new HIV+	% confirmed new HIV+
2015	4205	15	0.4%
2016	5048	34	0.7%
Jan-Oct 2017	3844	34	0.9%
Total	13097	83	0.6%

Disparities

Rates of Diagnoses of HIV Infection among Adults and Adolescents by Sex and Race/Ethnicity, 2015—United States



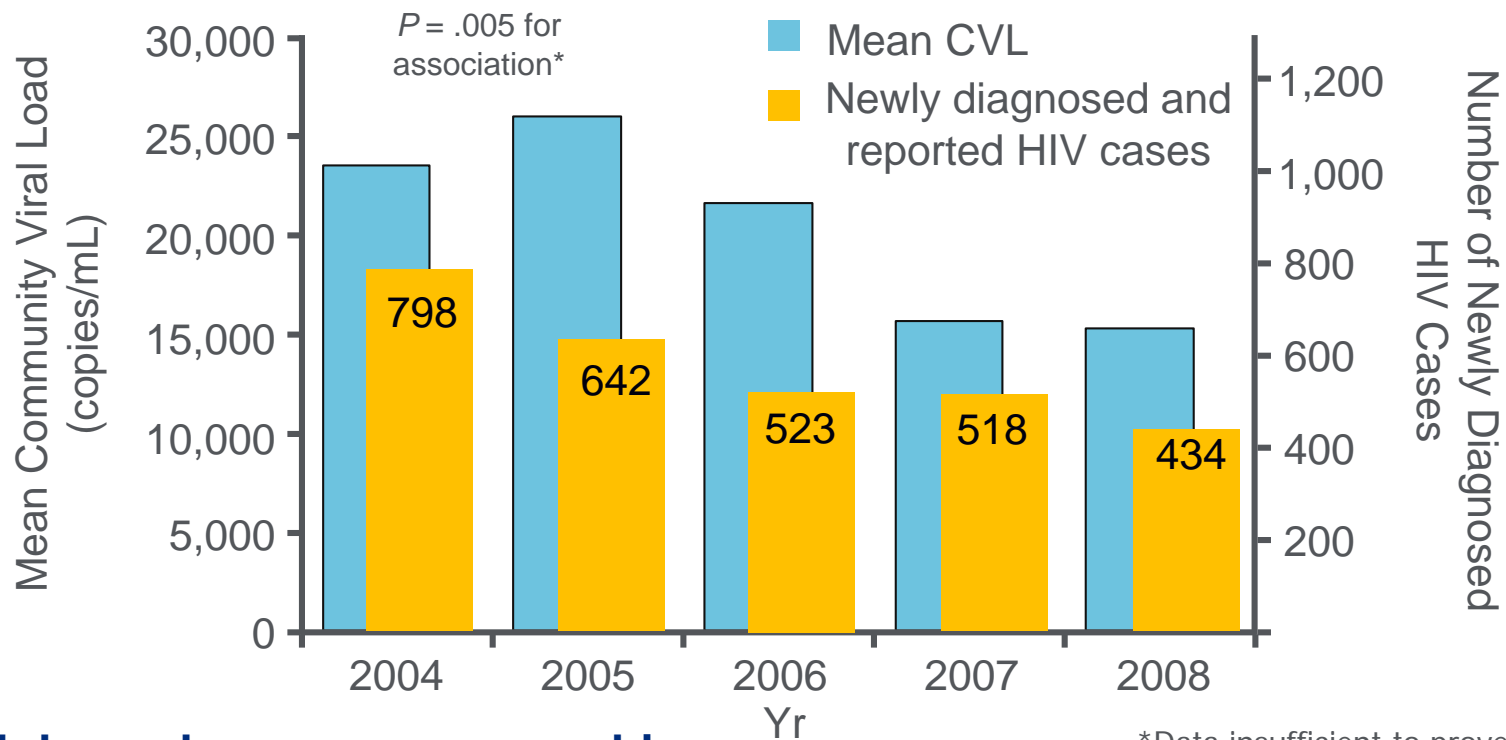
Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. Data for the year 2015 are preliminary and based on 6 months reporting delay.

^a Hispanics/Latinos can be of any race.



Community Viral Load Mirrors Reduced Rate of New HIV Cases in San Francisco

Retrospective analysis of relationship between community viral load (CVL; mean of summed individual HIV-1 RNA results per yr) and new HIV diagnoses



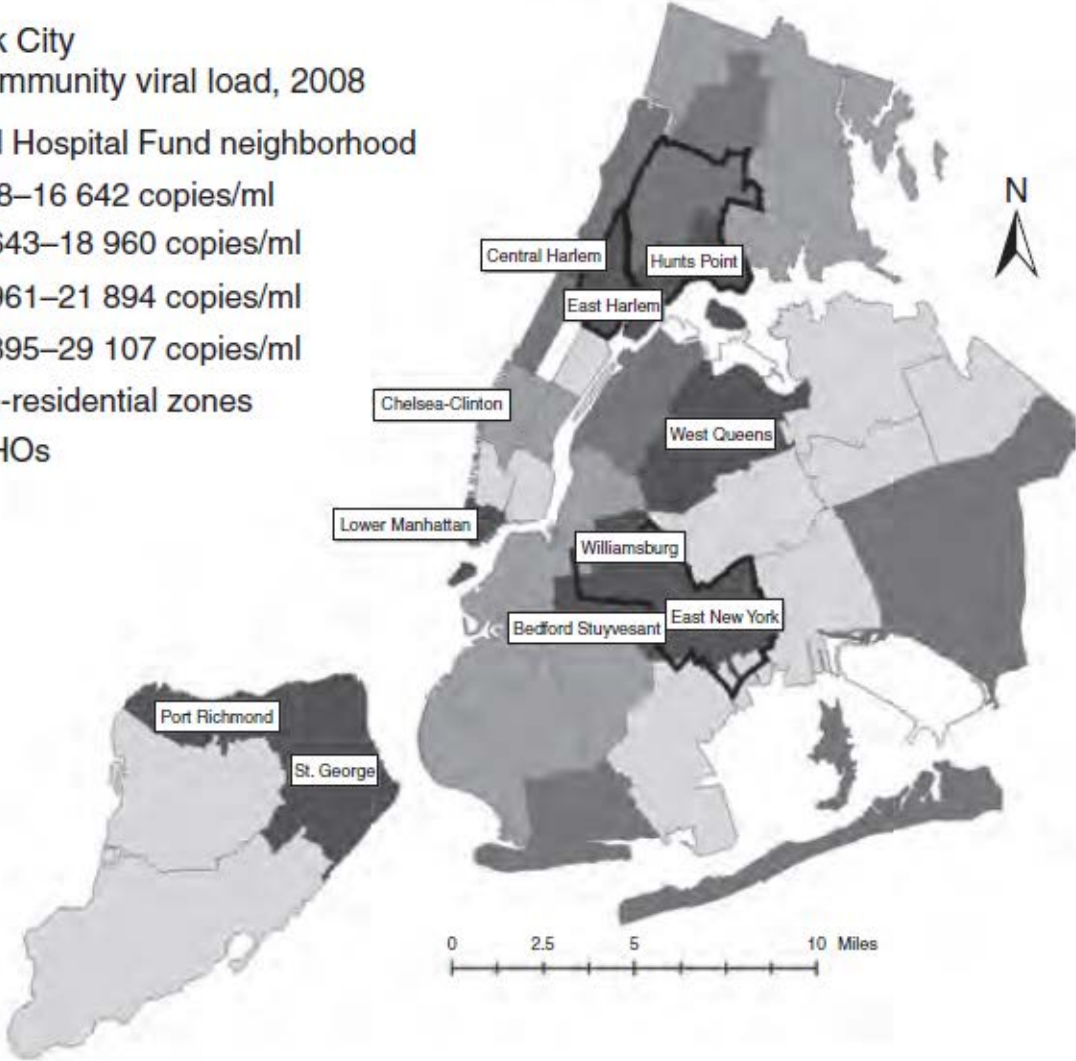
“Risk” depends on your geographic or behavioral Community

*Data insufficient to prove significant association with reduced HIV incidence.

Community Viral Load New York City

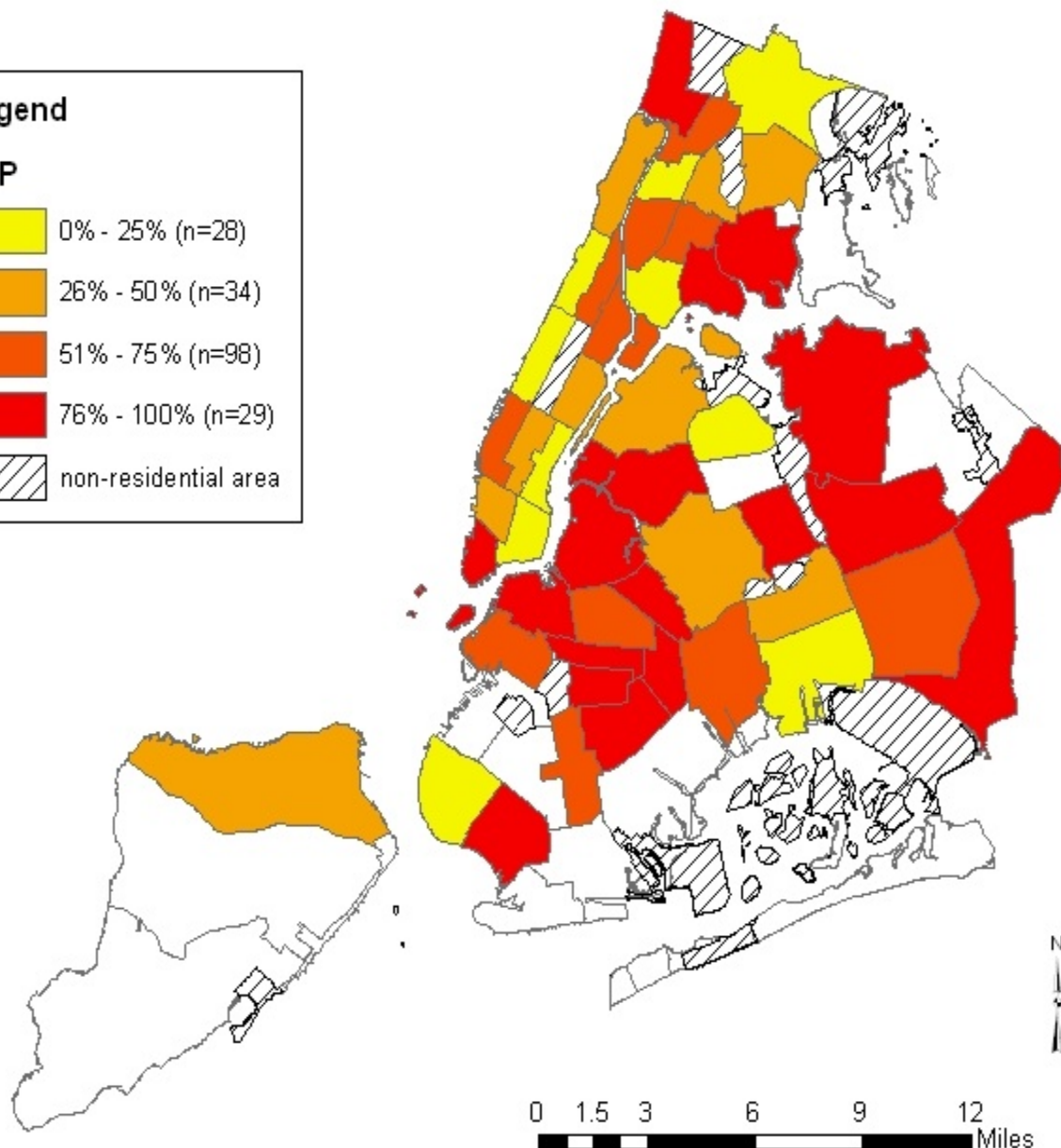
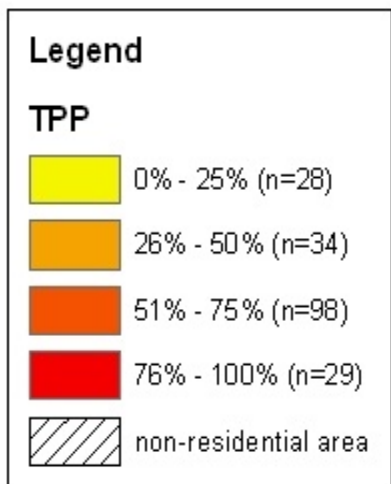
New York City
Mean community viral load, 2008
by United Hospital Fund neighborhood

- 7968–16 642 copies/ml
- 16 643–18 960 copies/ml
- 18 961–21 894 copies/ml
- 21 895–29 107 copies/ml
- Non-residential zones
- DPHOs



Mapping TPP by Community Districts of Most Frequent Sex among MSM

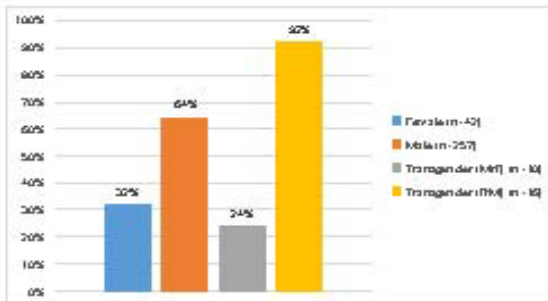
TPP =
Transmission
Potential
Prevalence



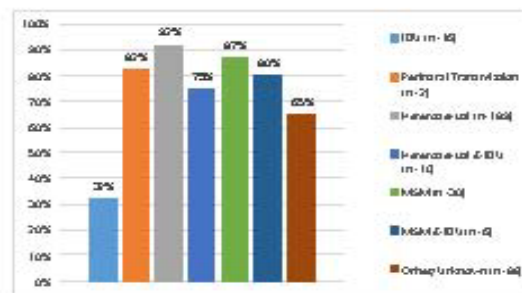
Tieu, et al: CROI
Boston, MA
March 2014
Poster 990

Pillar 2: Engagement and Retention in Care

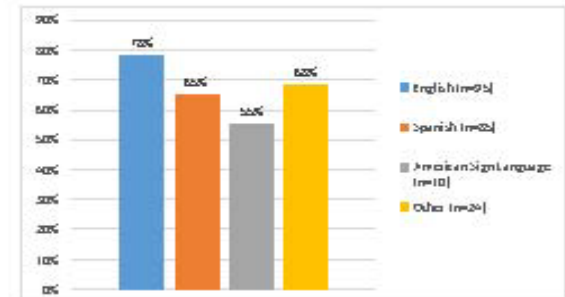
Retention by Gender



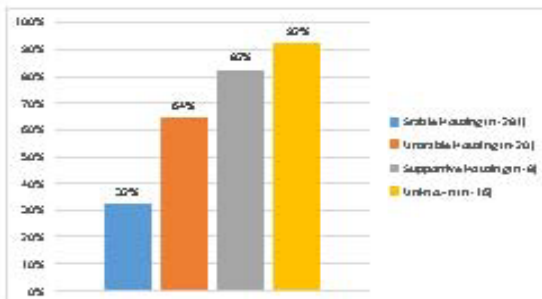
Retention by Risk Factor



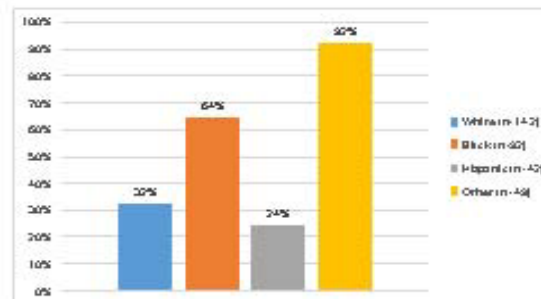
Retention by Language



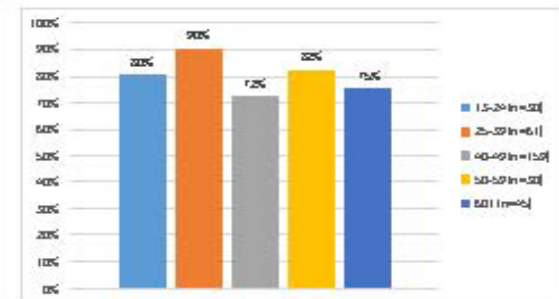
Retention by Housing Status



Retention by Race

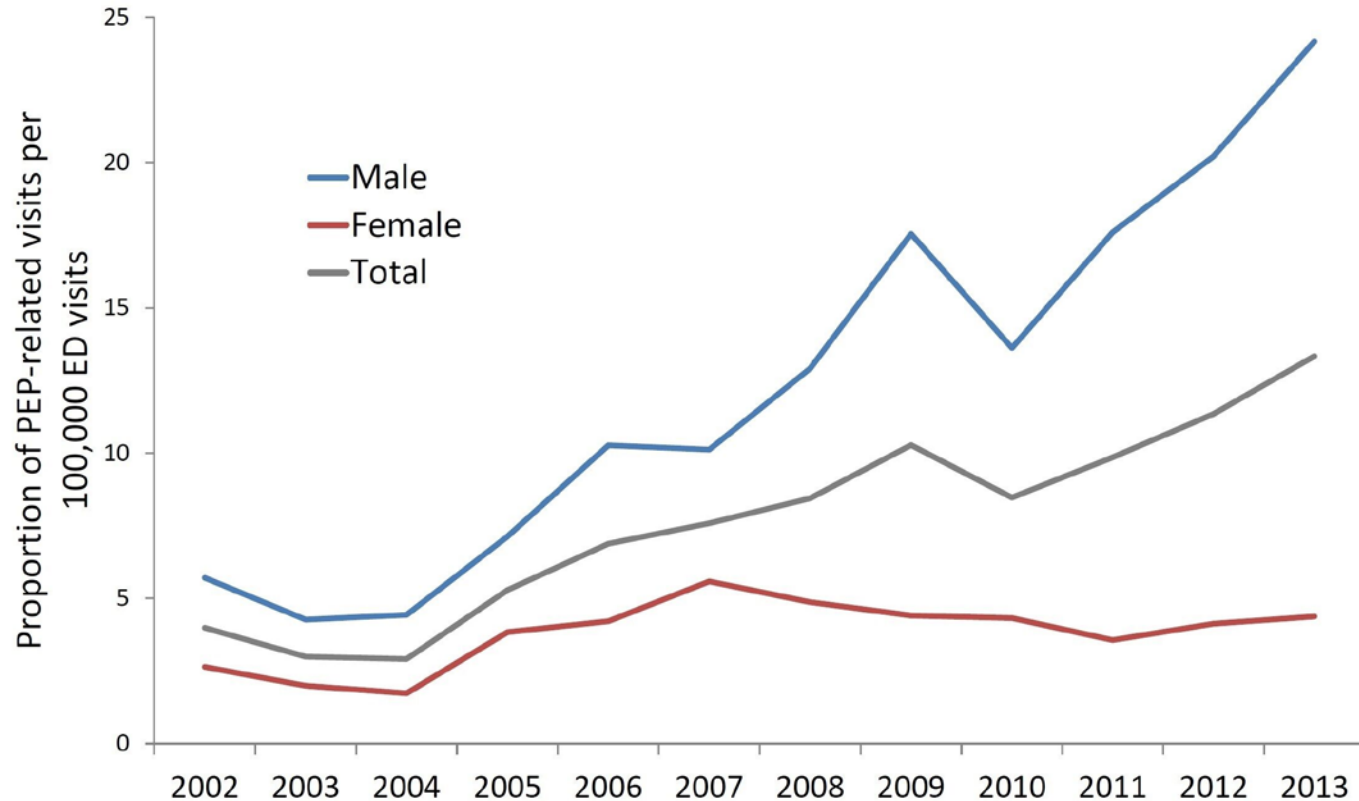


Retention by Age



Pillar 3: Prevention in High Risk Negatives: PEP

Figure 1. Proportion of PEP-related ED visits per 100,000 ED visits, by sex, NYC, 2002 - 2013

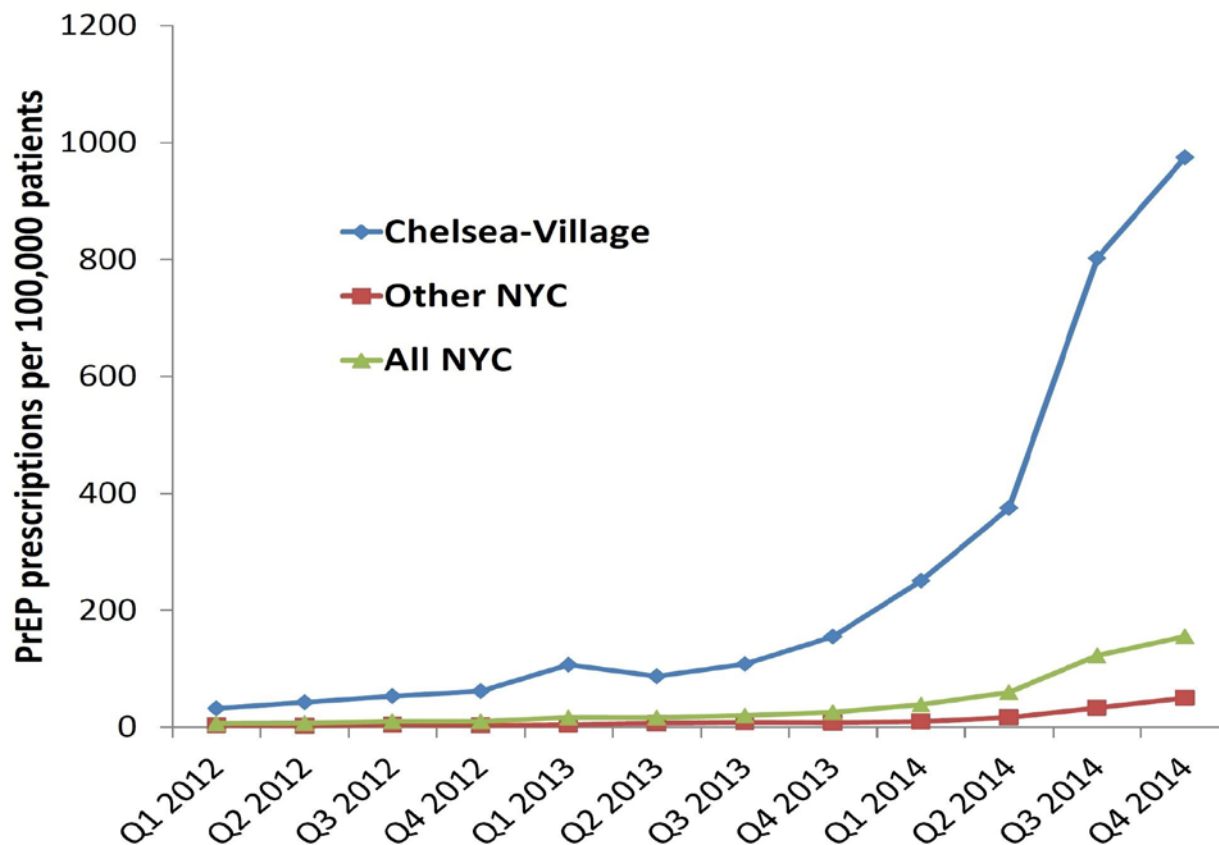


NYC DOHMH: Edelstein ZR, Ngai S, Weiss D, Salcuni PM, Myers JE. Post-Exposure Prophylaxis (PEP) in New York City Emergency Departments, 2002-2013. 2015 IAPAC Conference (Abstract number 110).

Pillar 3: Prevention in High Risk Negatives: PrEP

Figure 1. PrEP prescription rate at 542 ambulatory care practices, by neighborhood, New York City, 2012-2014

5815 Medicaid recipients filled a PrEP prescription in 2016



CART Overview

Over 2100 active patients with HIV/AIDS

238 new patients with HIV initiated care in the past year (12% growth)

NCQA recognized Level 3 HIV Patient Centered Medical Home

Outpatient program located at 400 Community Drive in Nassau

Satellite office at the Dolan Family Health Center in Suffolk

Currently awarded 10 Competitive HIV Service grants

On-site 340B HIV Specialty Pharmacy

HIV Clinical Trials Program

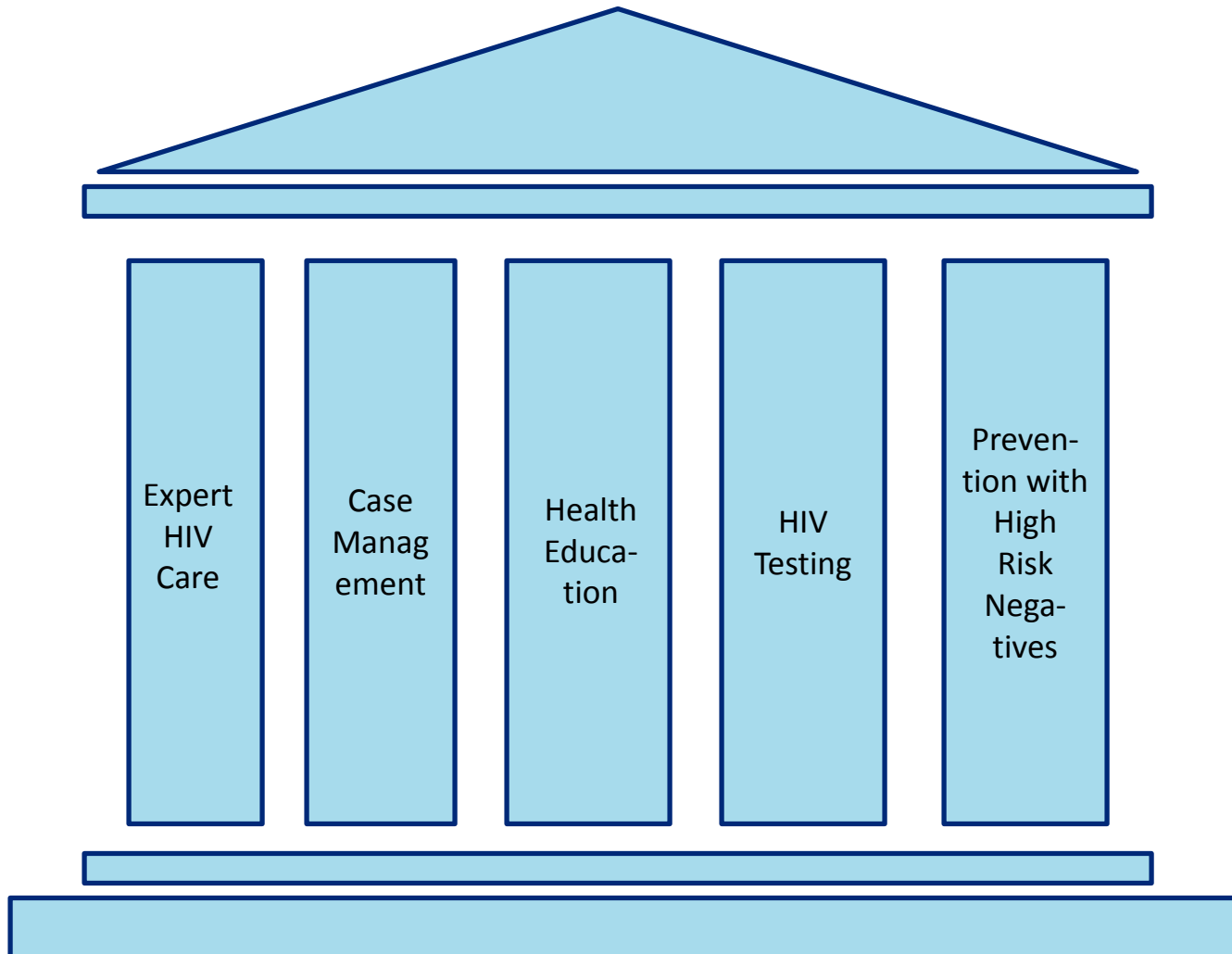
Health Home Downstream Provider

HIV Testing in Emergency Rooms Pilot Project

CDC Community based HIV Prevention Collaborative



Pillars of Care at CART



Co-Located Services

Comprehensive Medical Case Management Model

- Medical Care provider
- RN Case Manager
- Social Work Case Manager

} Patient Care Team

Specialty Pharmacy (Pharm D has Collaborative Practice Agreement with all Clinicians)

Behavioral Health (2 P/T Psychiatrists, 9 SW therapists, SBIRT Behavioral Health Educator)

GYN Services

Nutritionist (Full time Dietician)

Health Education

Health Home

Hepatitis C Co-infection Treatment

Peer Support

Outreach/Retention in Care

Substance use (Buprenorphine prescribers)

Dental in adjoining suite

Legal Aid (Through Nassau Suffolk Law Services)

Client Advisory Board

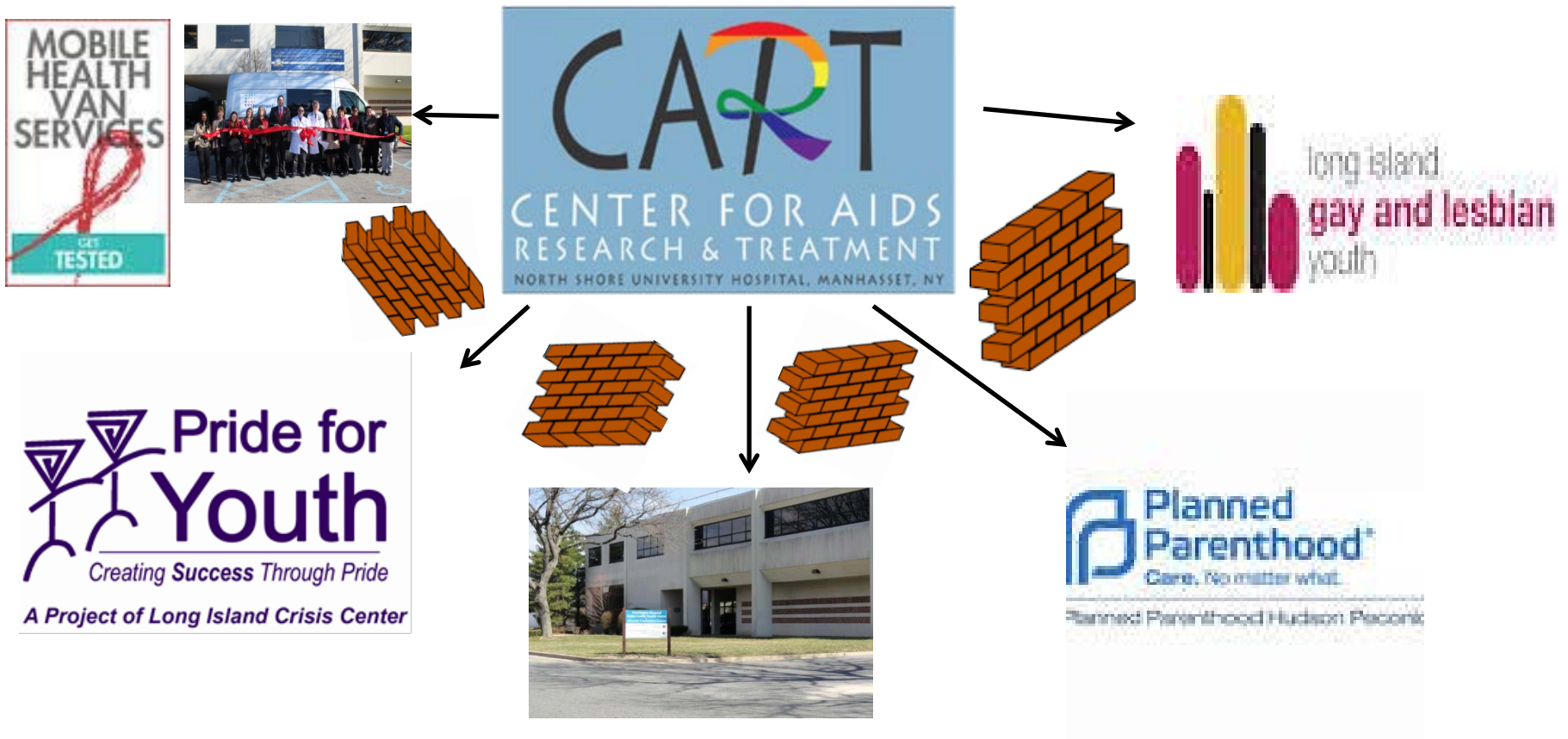
CQI Program

vDOT, Daily Adherence Support



Regional Impact to End the Epidemic

Breaking Down Walls



Dolan Family Health Center

Did you know there
is a *new* way to
**prevent HIV
infection?**

Find out if
**Pre-Exposure
Prophylaxis
(PrEP)**
is right for you.



Speak to a health educator today for more information.

1-844-321-PREP (7737)

**North
Shore LIJ**

Division of Infectious Disease

Opportunities/Challenges

- Leverage Expertise and Community Relationships/Collaboration to impact HIV Epidemic Regionally
- Enhance use of Social Media
- Identify Health Care Disparities
- Use **Data** to assess program effectiveness and target areas of resource need



REDCap Initiative

REDCap Initiative

REDCap- a browser-based, metadata-driven electronic data collection software solution and workflow methodology for designing clinical and translational research databases.

Social work case managers provide a Comprehensive Psycho-Social Assessment with a Care Plan every six months to the total patient population.

Assessments contain over 300 questions ranging from demographics and mental health status to substance abuse.

The REDCap initiative, which involved building a user friendly, electronic version of the assessment, took 11 months to complete from conception to implementation.

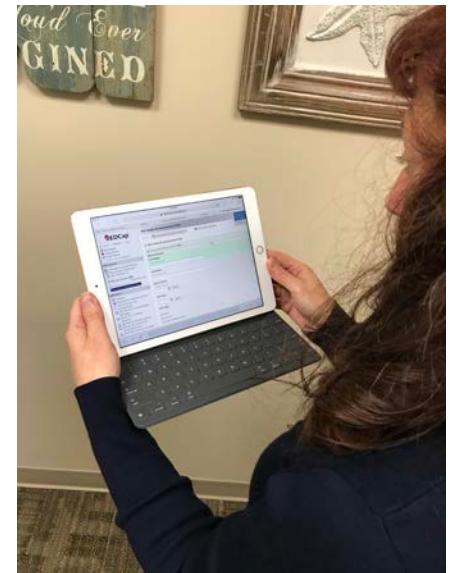
REDCap Initiative

Allows for mining of data from the database in real time

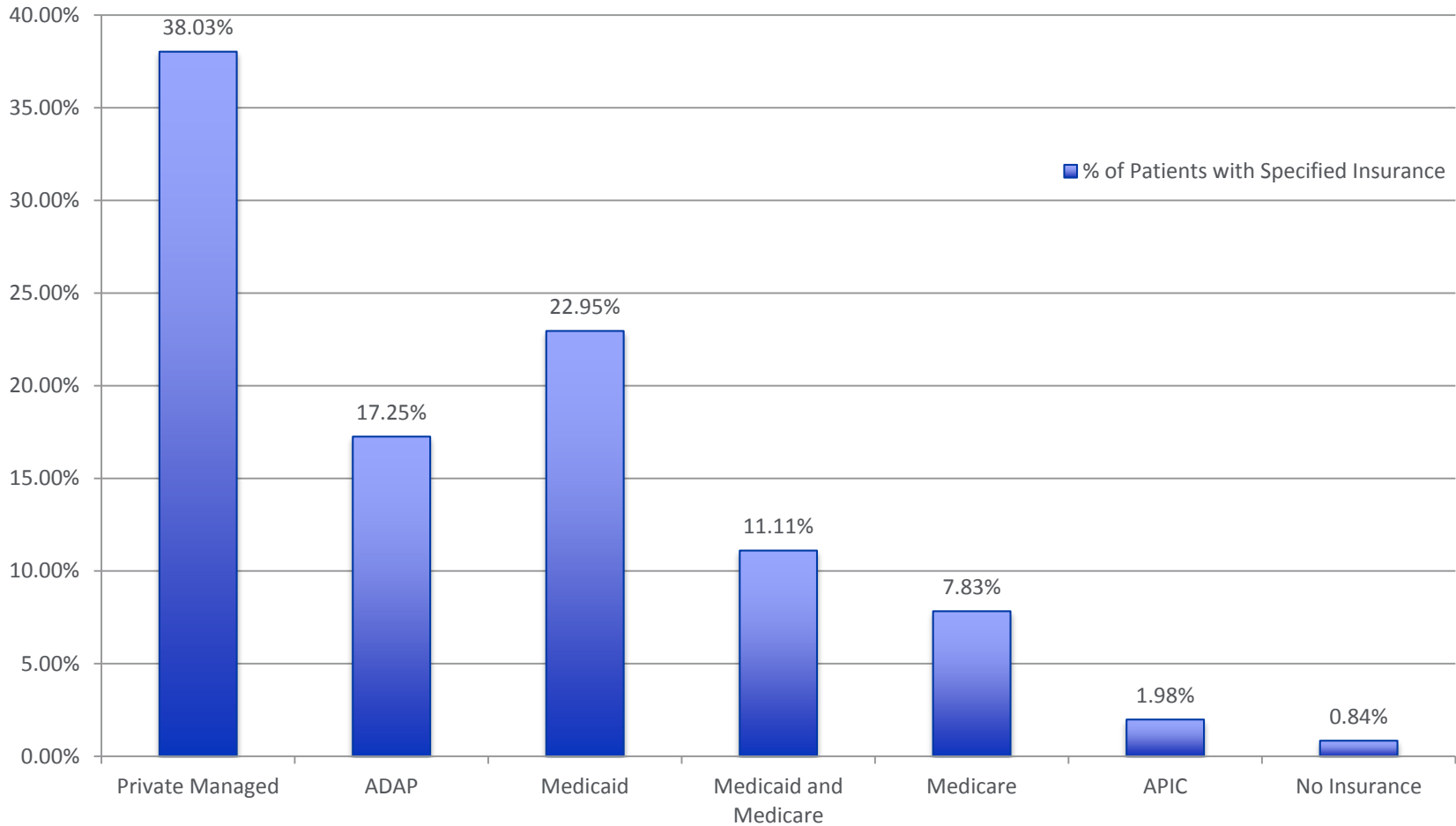
- Create custom reports and extract data to find disparities based on age, mode of transmission, housing status, mental health history, etc.

Assessment is categorized into the following sections:

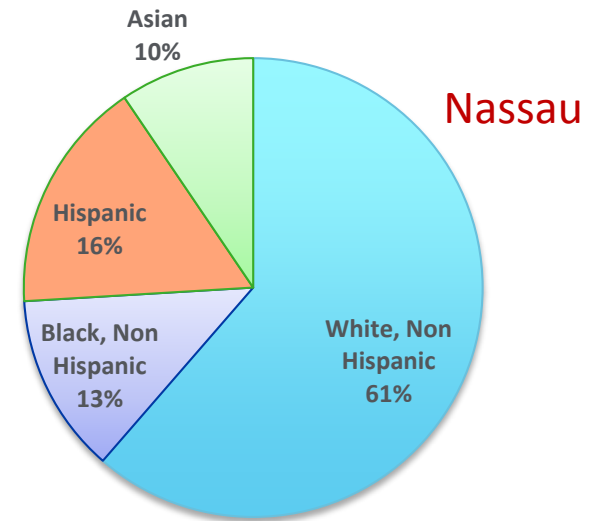
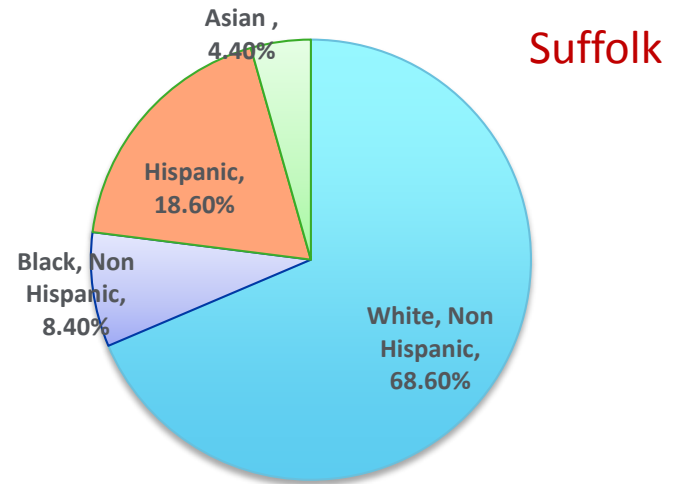
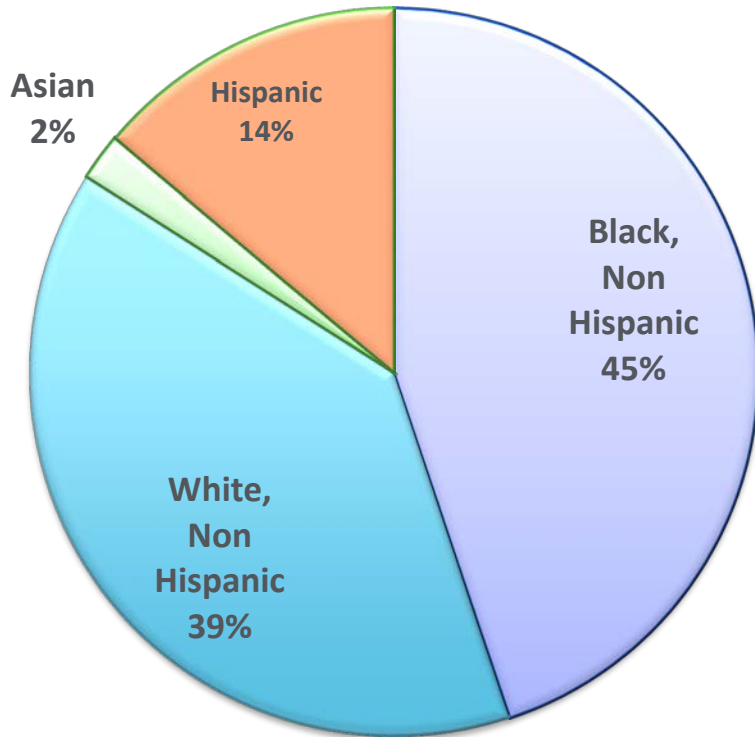
- Demographics
- Financials
- Housing/Transportation/Food
- Case Management Information
- Mental Health Assessment (mood/affect, anxiety screening, PTSD screening, Depression/PHQ-9, Suicide/Homicide screening)
- Substance Use History
- Legal Assessment (Domestic Violence, Child Protective Services, Adult Protective Services, Criminal Activity)
- Treatment Adherence Assessment
- Service Plan & Referrals
- Short term & Long term Goals



Patient Insurance



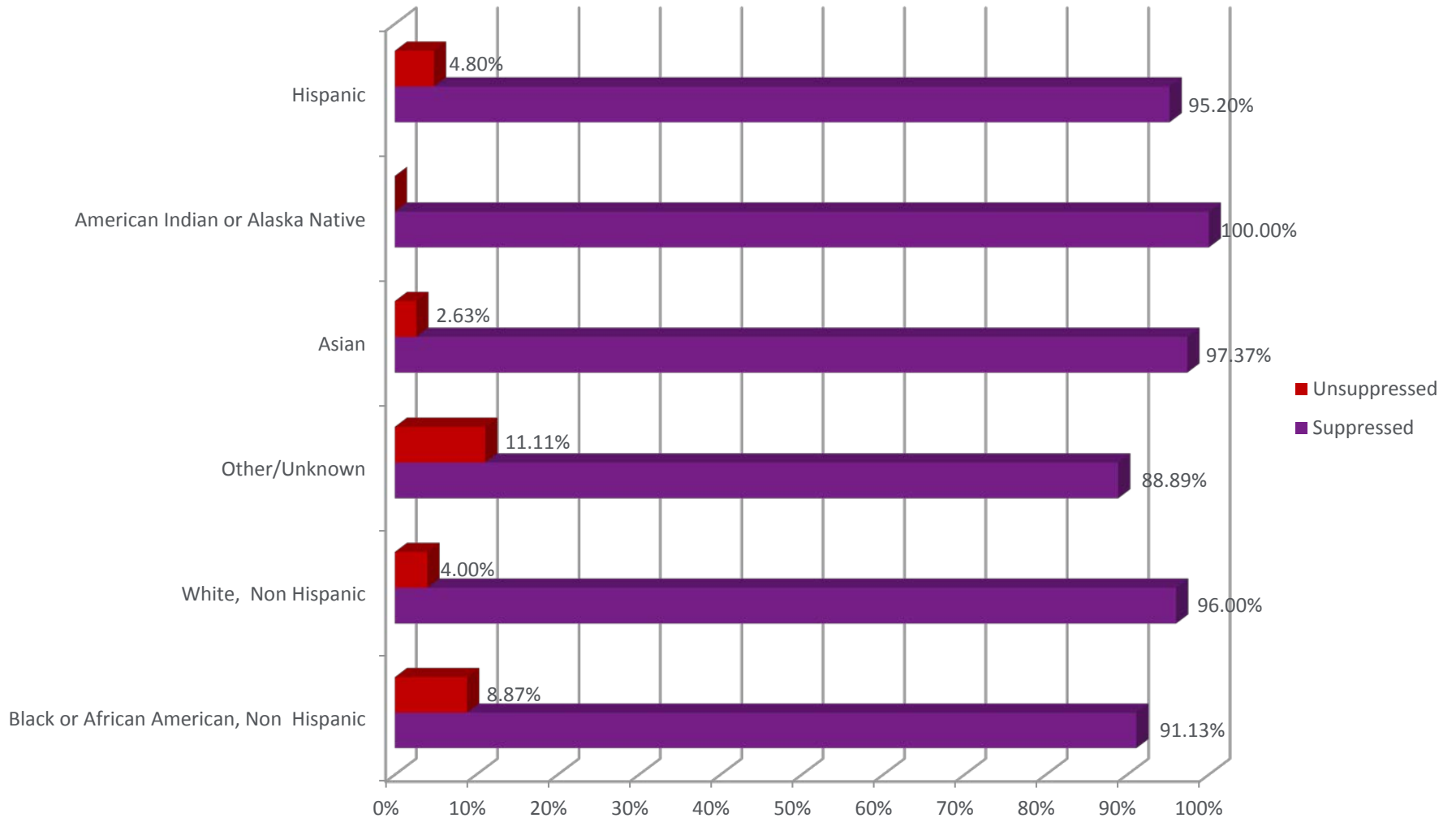
CART Patient Demographics



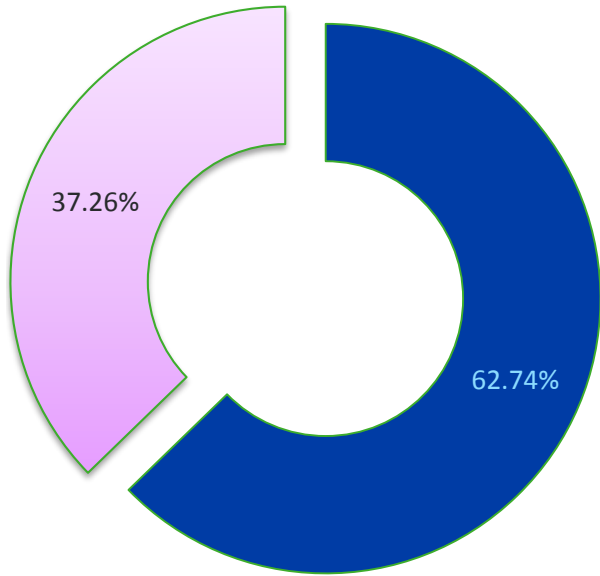
REDCap Data & Disparities in Care



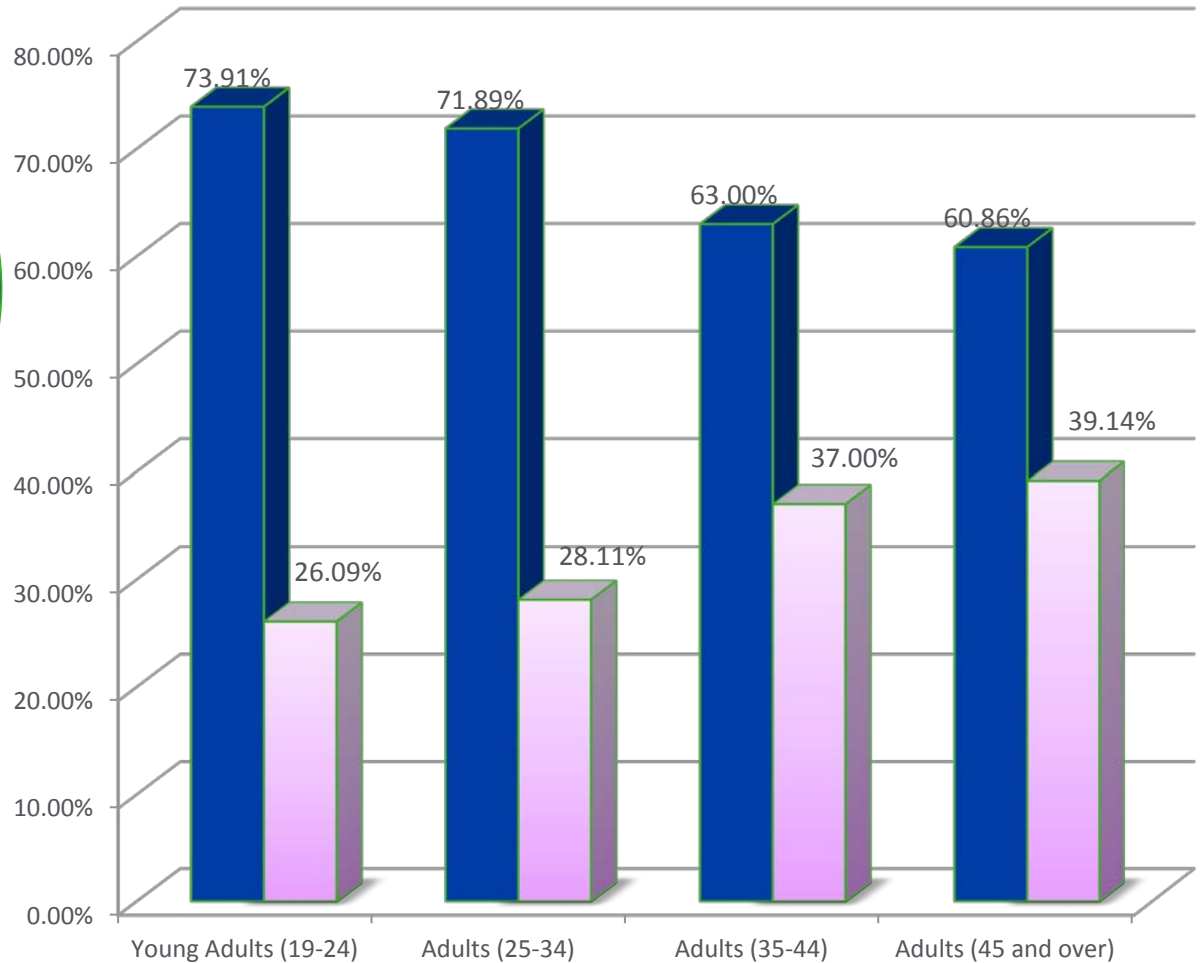
Race & Viral Load Suppression



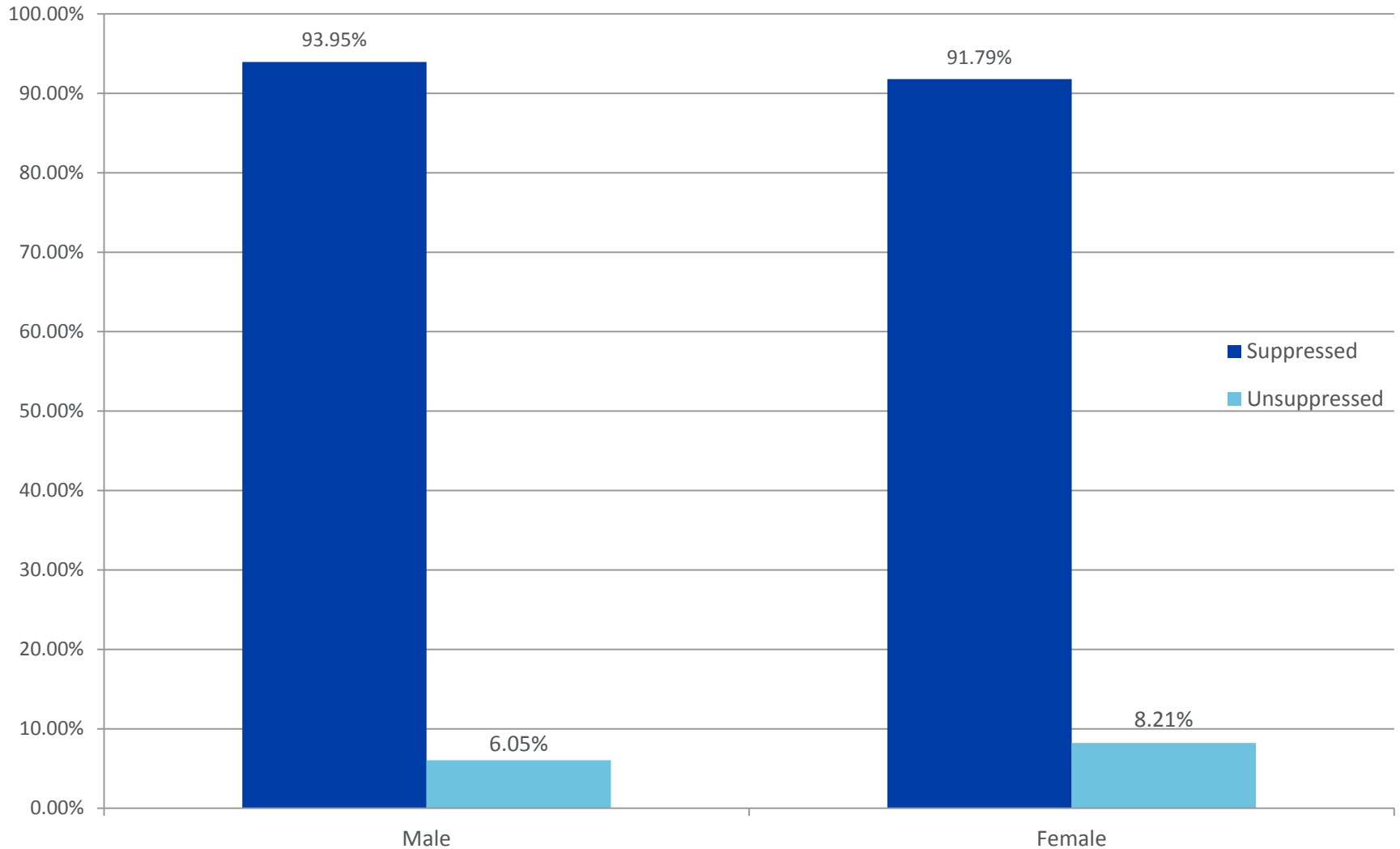
CART Patient Demographics



■ Male ■ Female

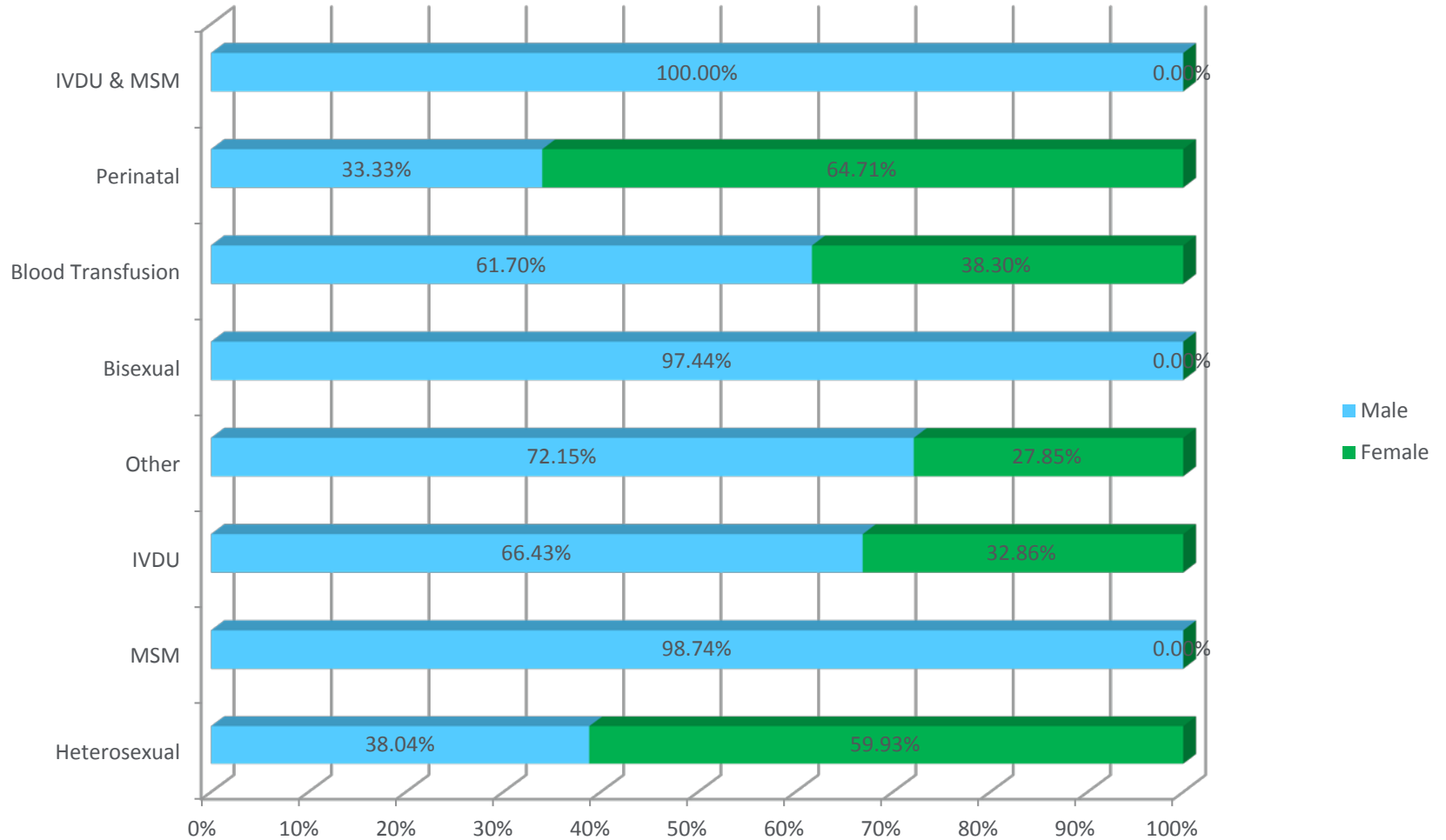


Gender & Viral Load Suppression

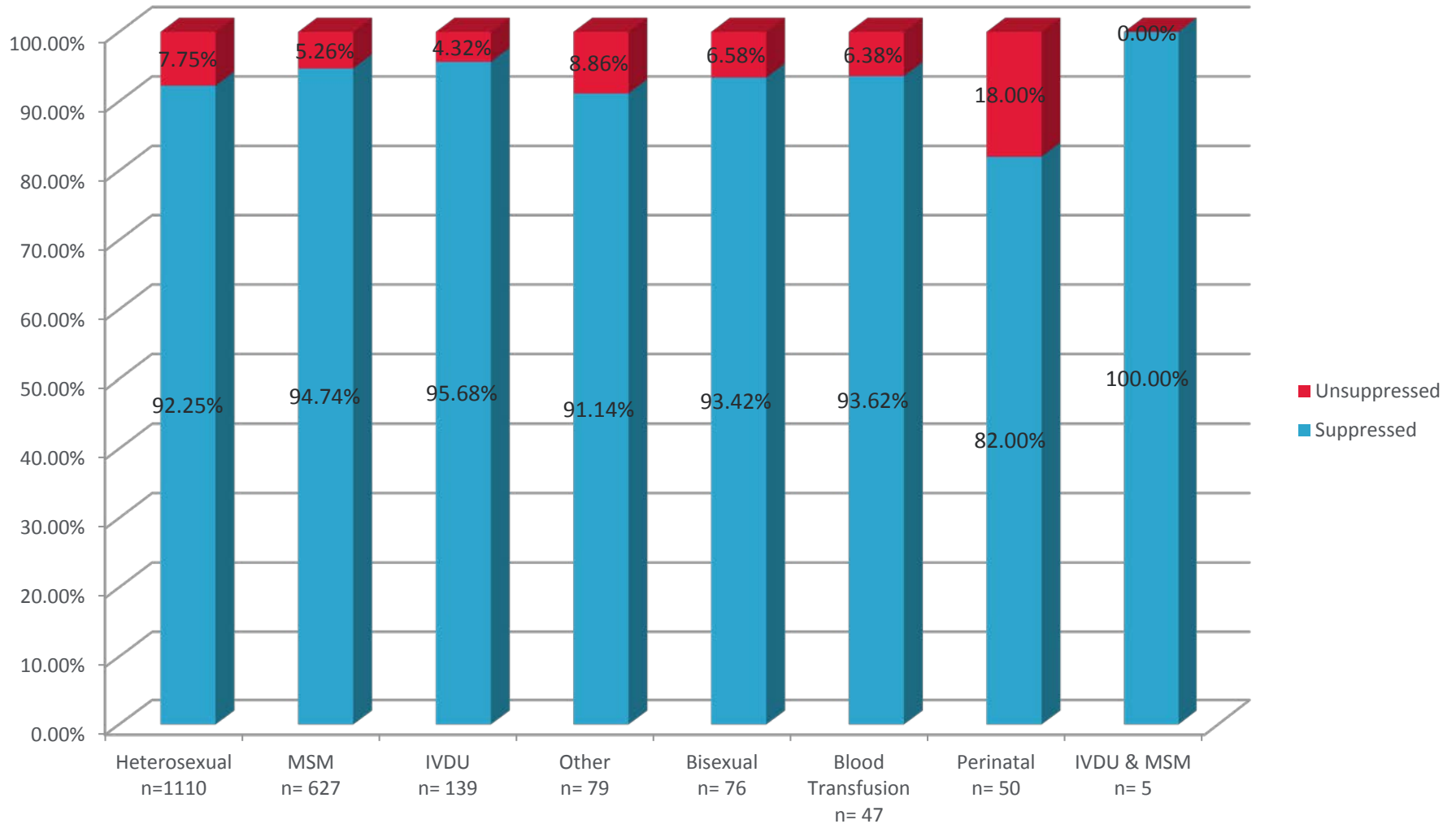


Proportion of Suppressed/Unsuppressed patients by gender

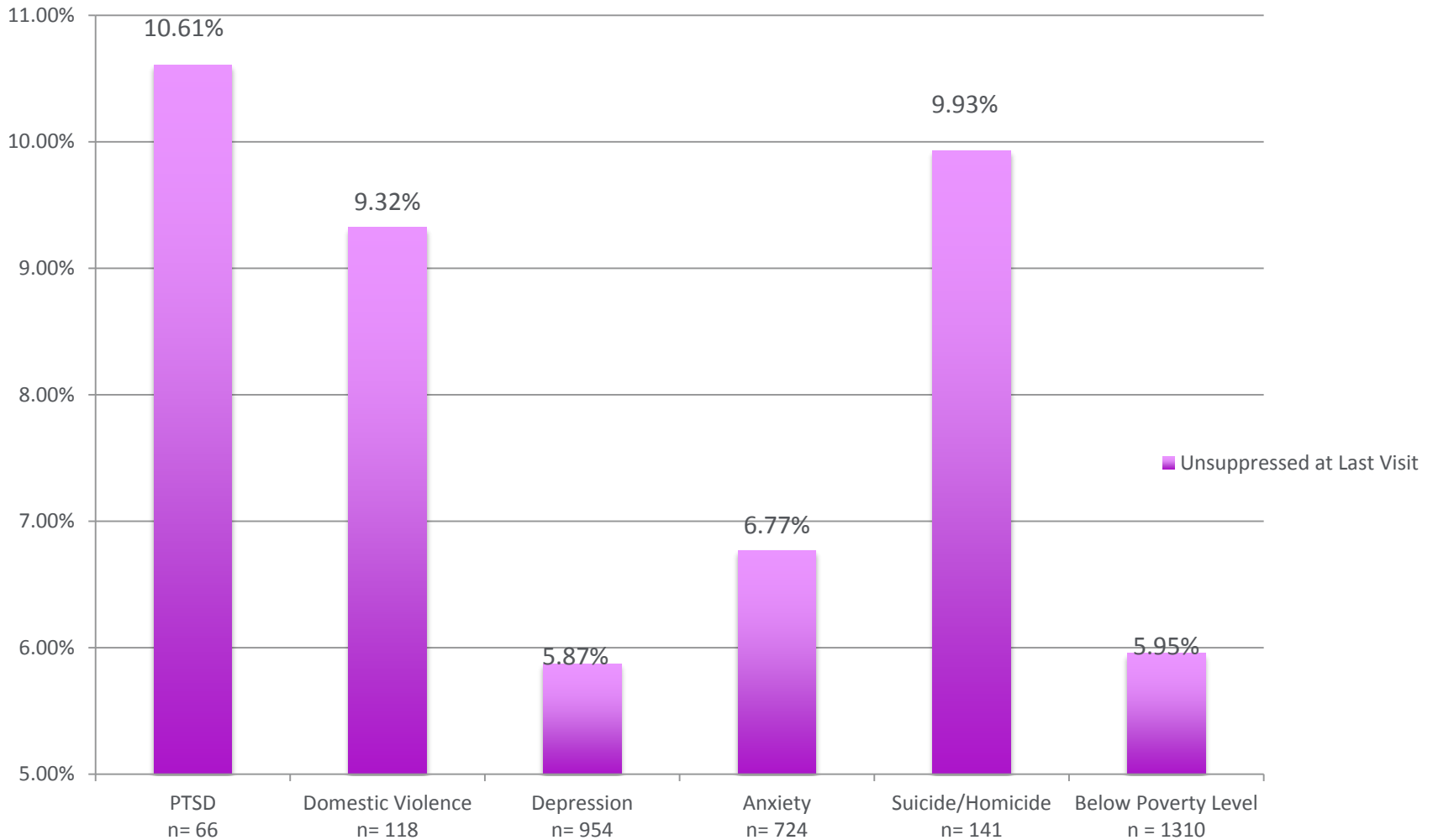
Mode of Transmission and Gender



Viral Load Suppression & Risk Factor



Virally Unsuppressed at Last Visit

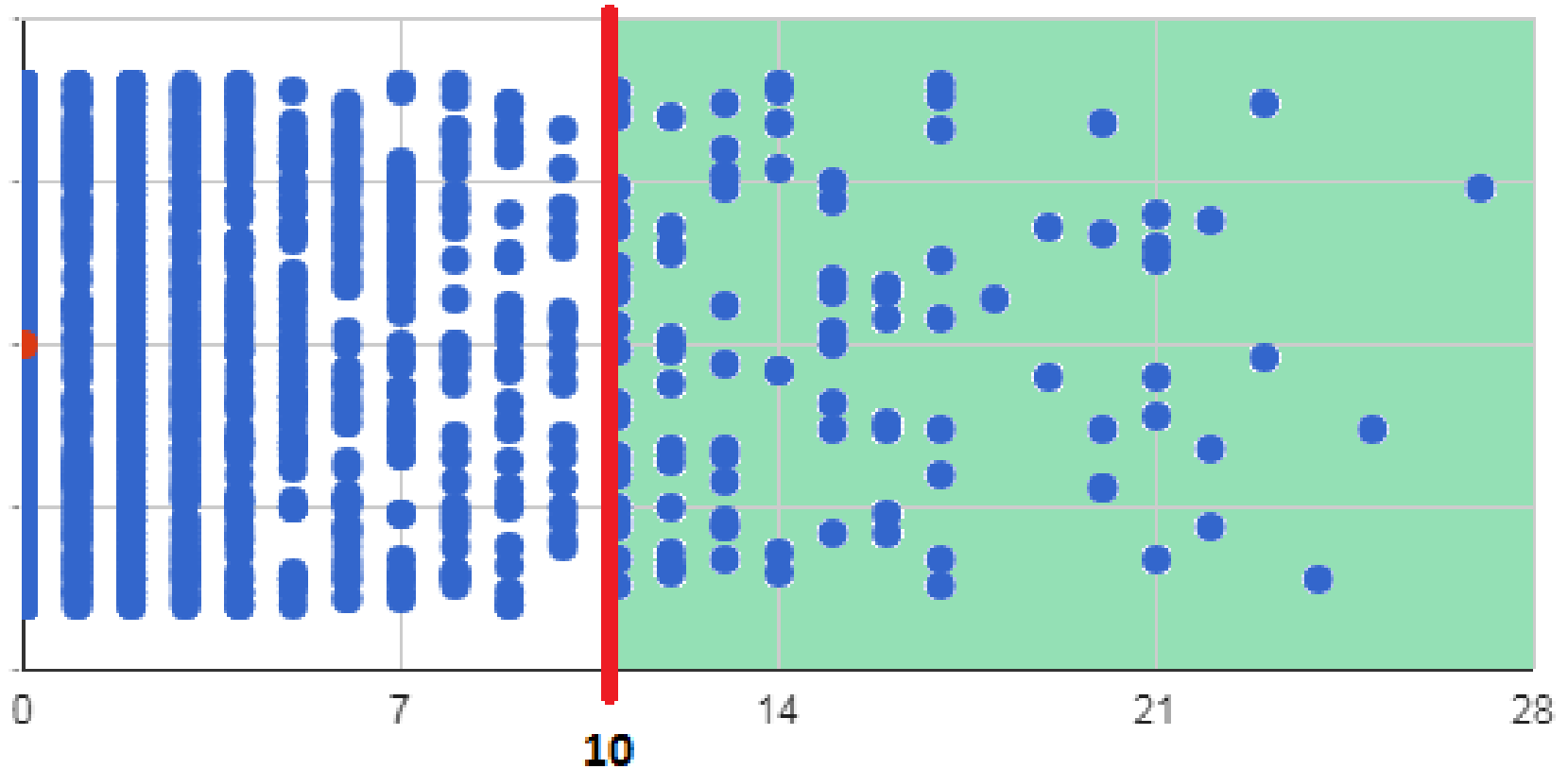


Percentage of patients with current or past history of each subgroup that had a VL >200 at their last visit.

PHQ-9 Screen

Lowest values: 0, 0, 0, 0, 0

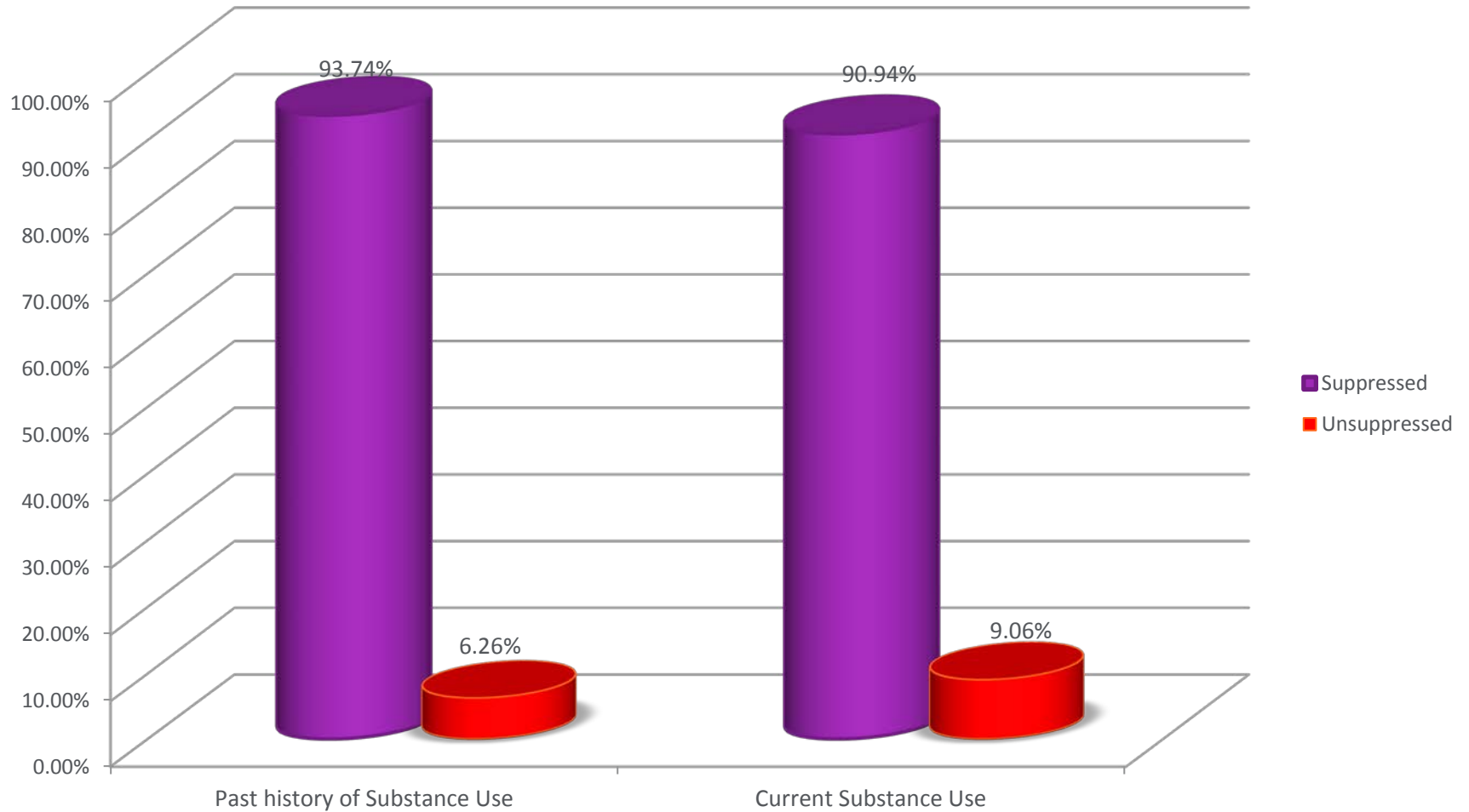
Highest values: 23, 23, 24, 25, 27



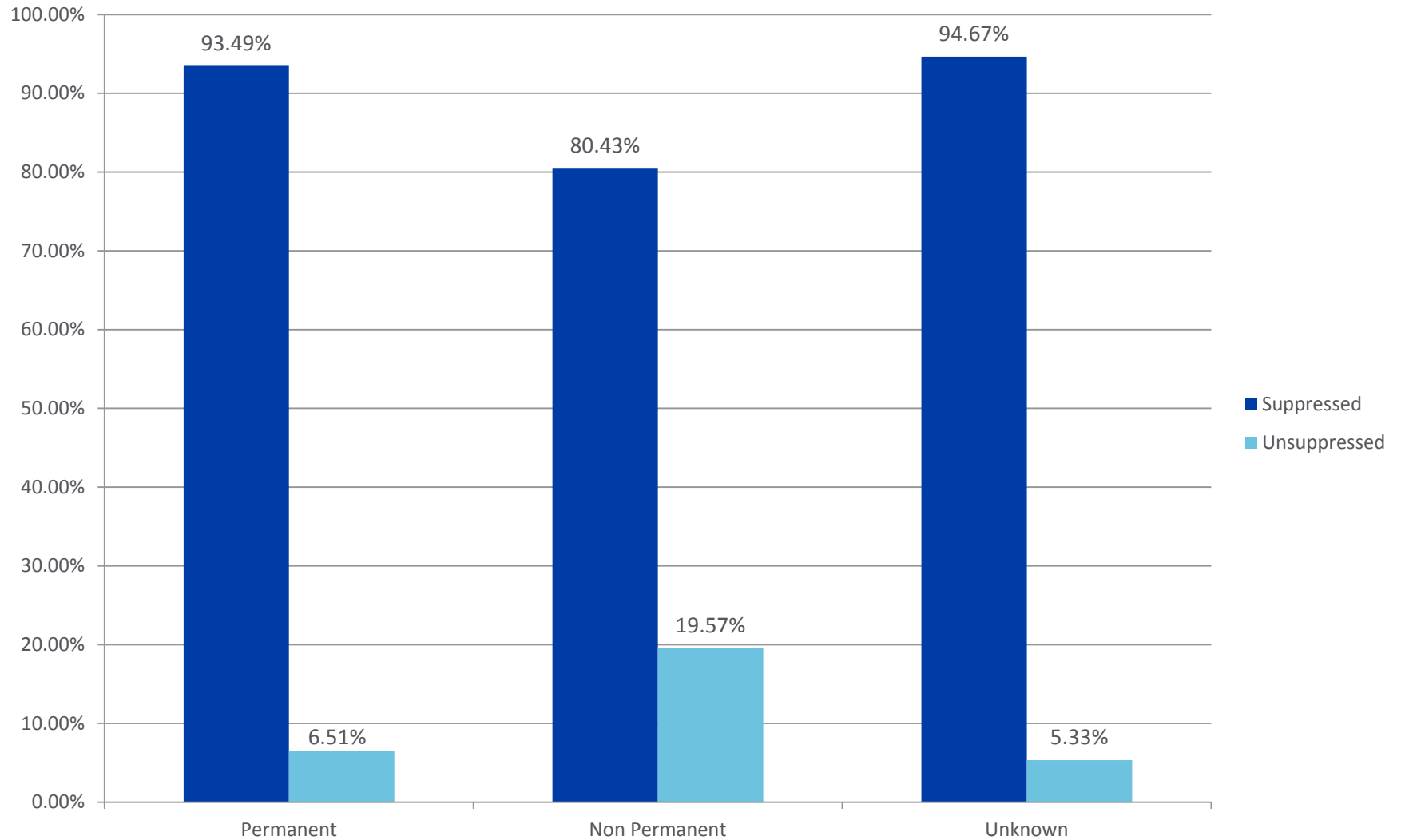
16.9 % of Patients with a PHQ-9 Score ≥ 10 have a VL >200

6.3 % of Patients with a PHQ-9 Score <10 have a VL >200

Substance Use and Viral Load Suppression

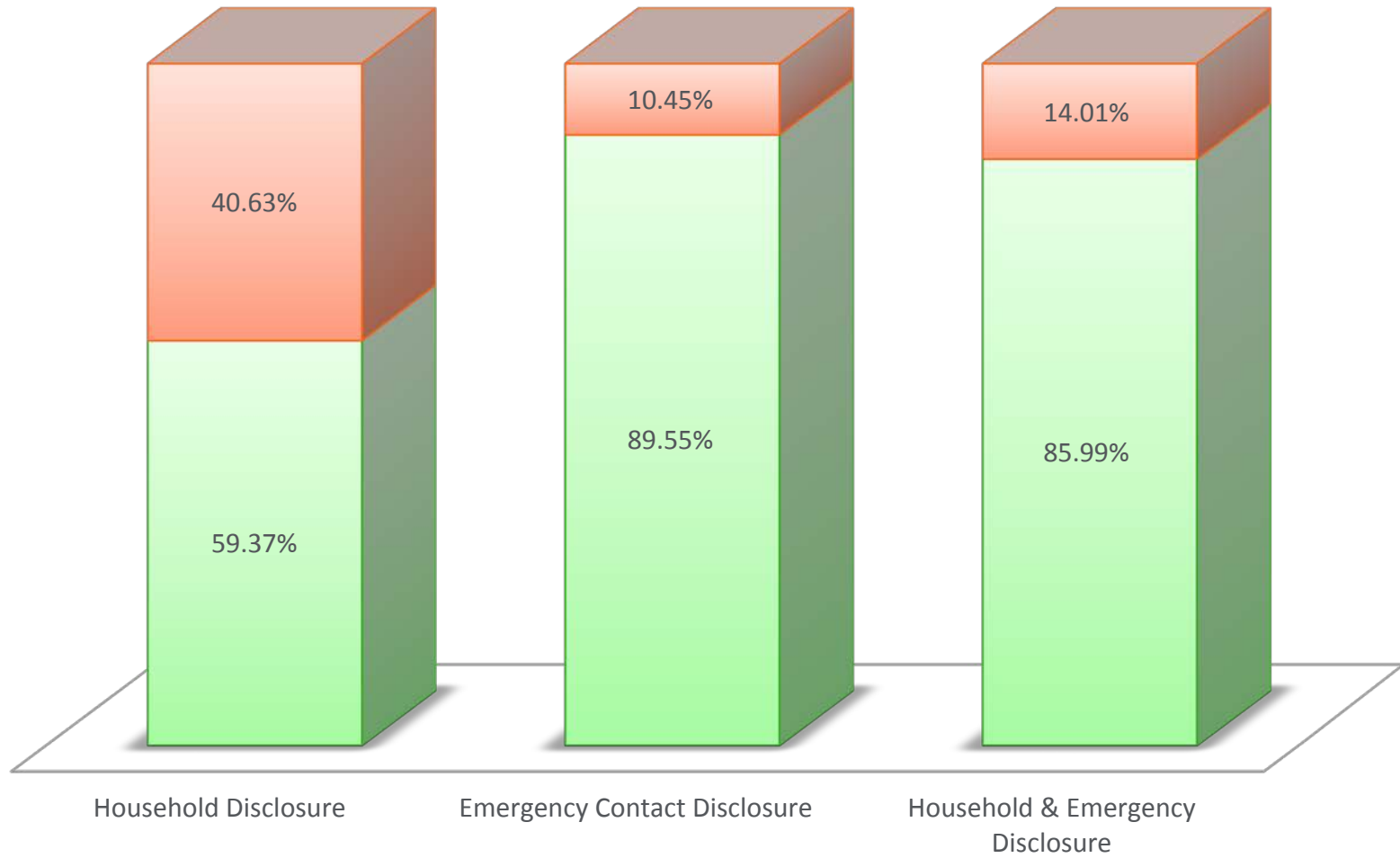


Viral Load Suppression and Housing

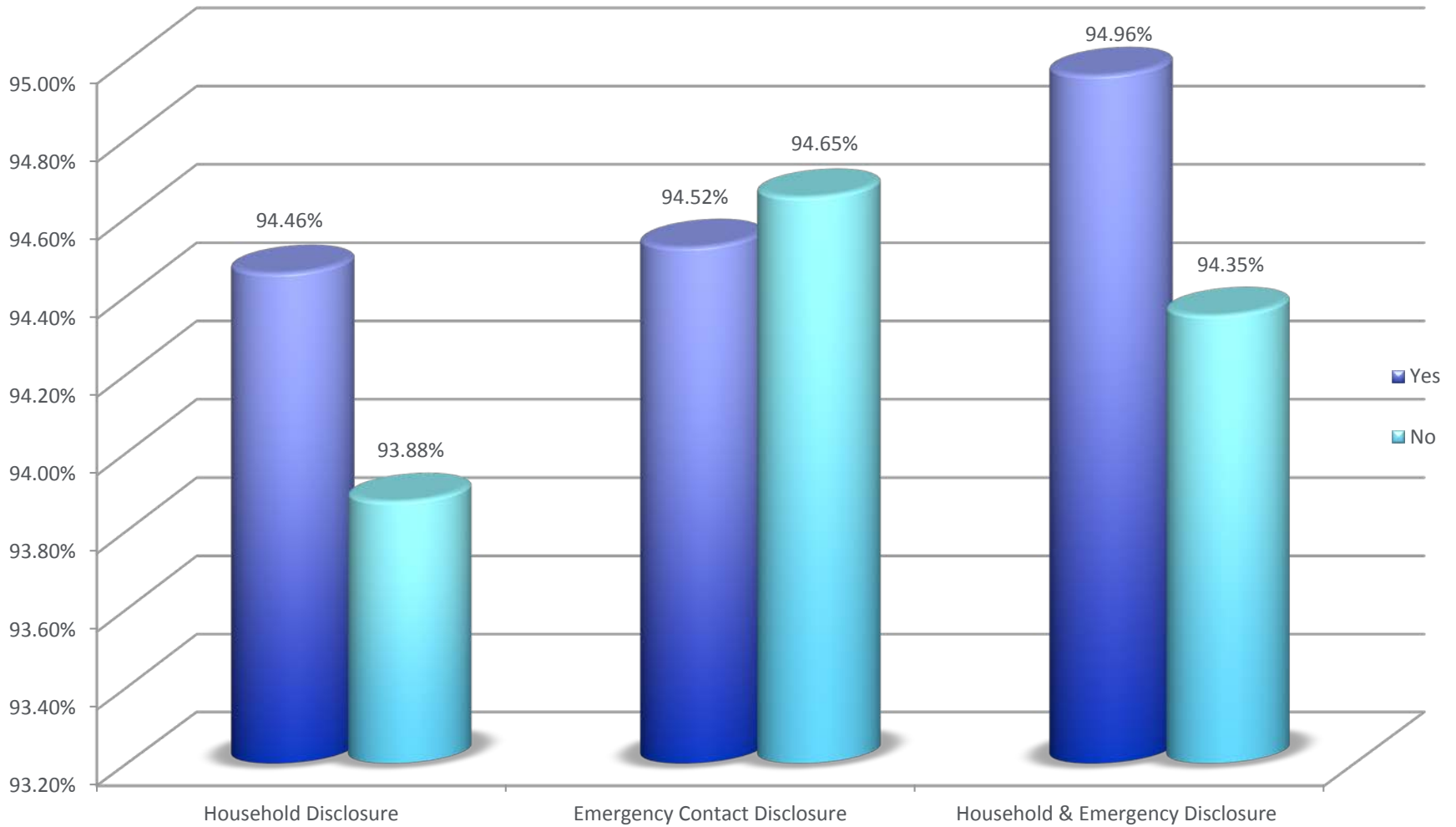


Disclosure

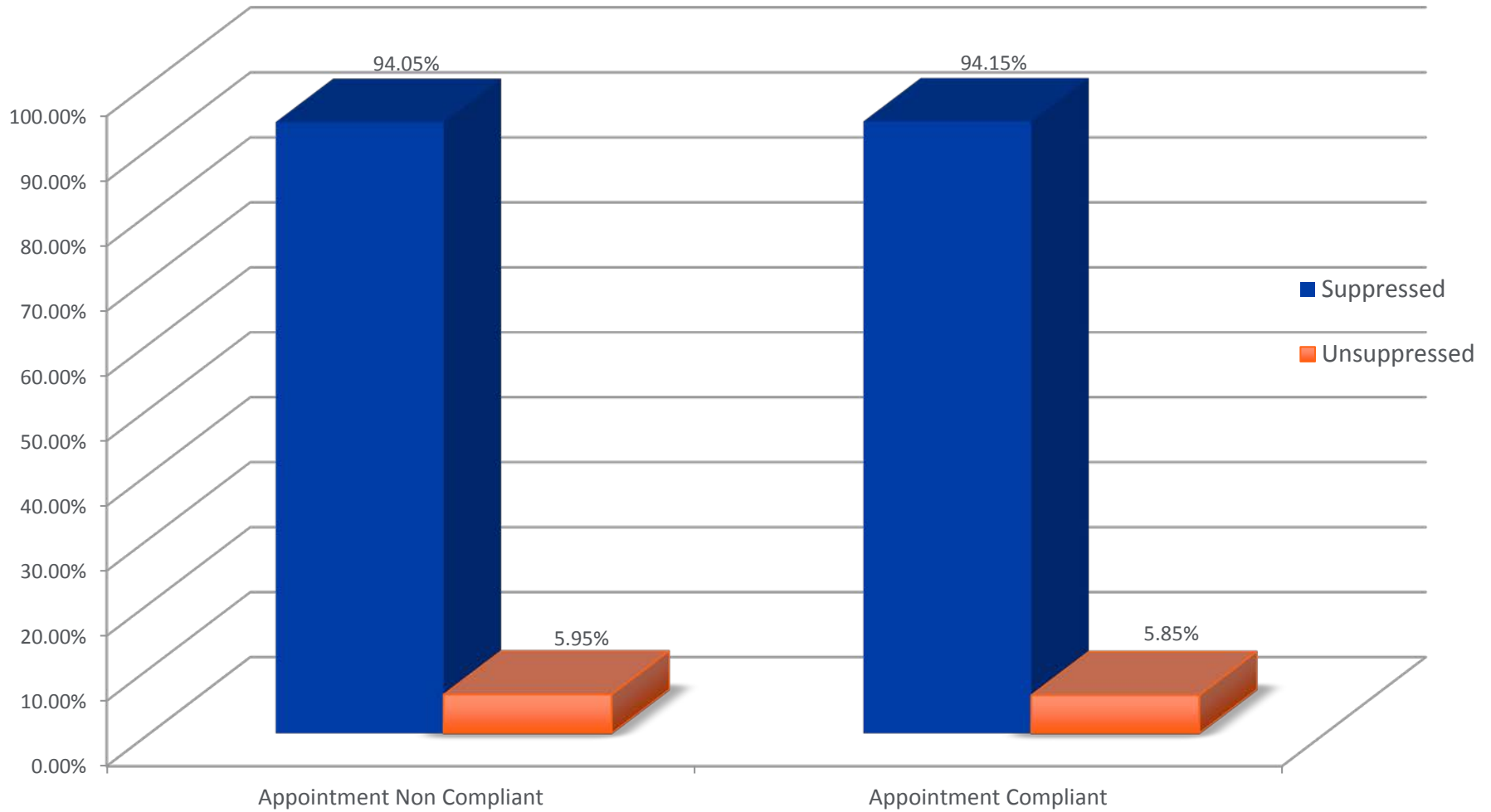
Yes No



Viral Load Suppression & Disclosure

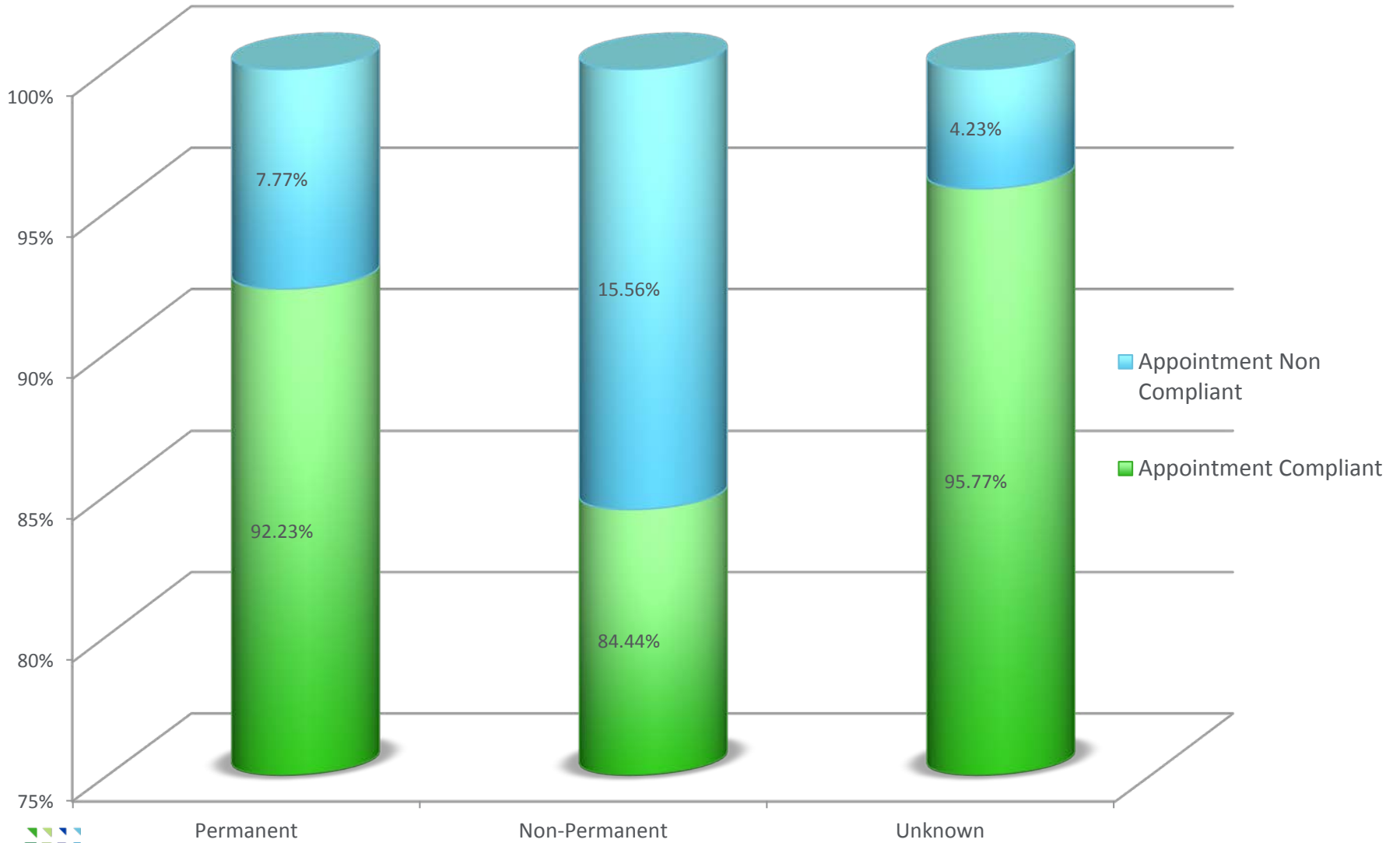


Appointment Compliance and Viral Load Suppression

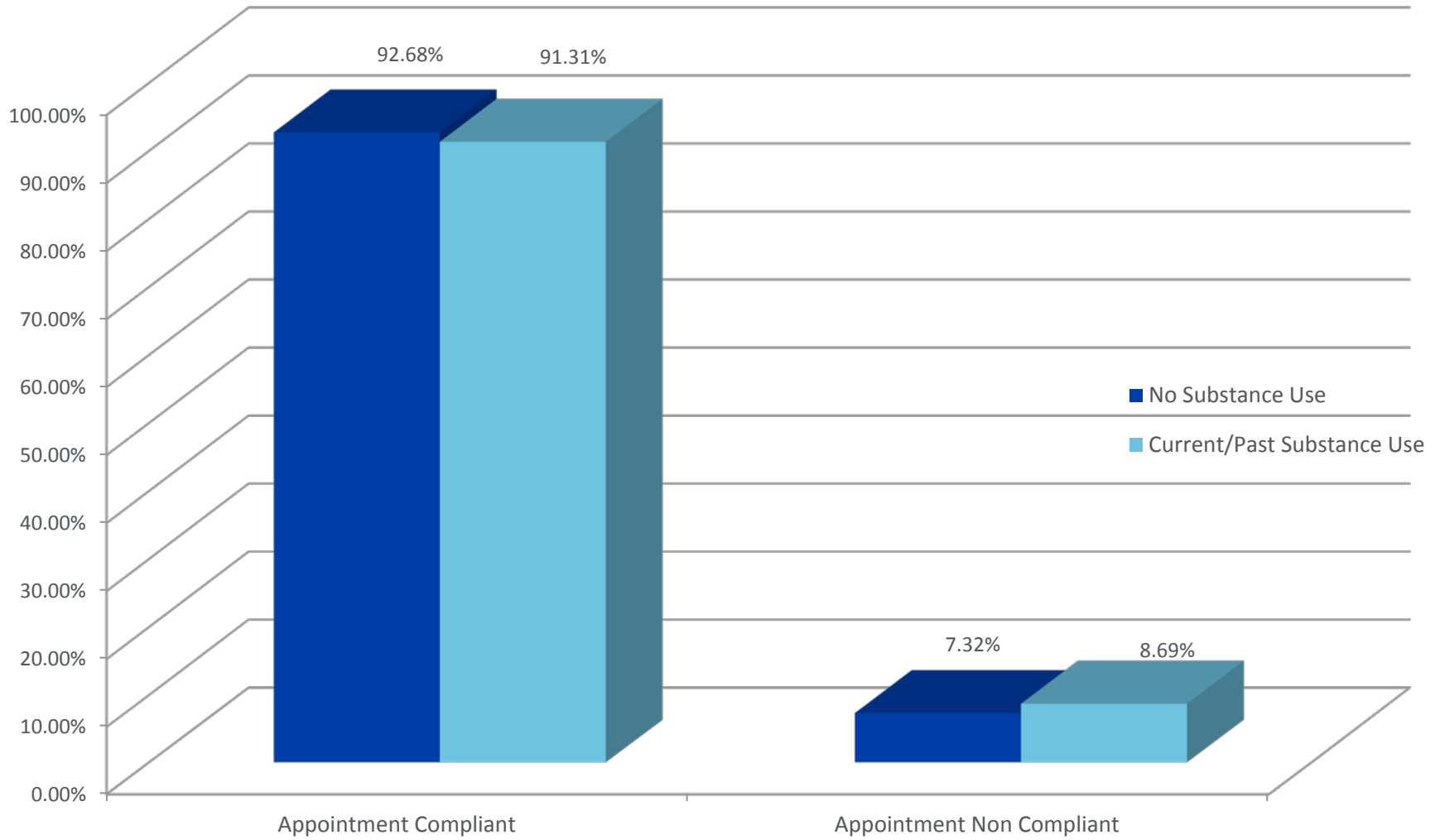


Proportion of Suppressed vs Unsuppressed patients who are Appointment Compliant or Non Compliant

Appointment Compliance & Housing



Appointment Compliance & Substance Use

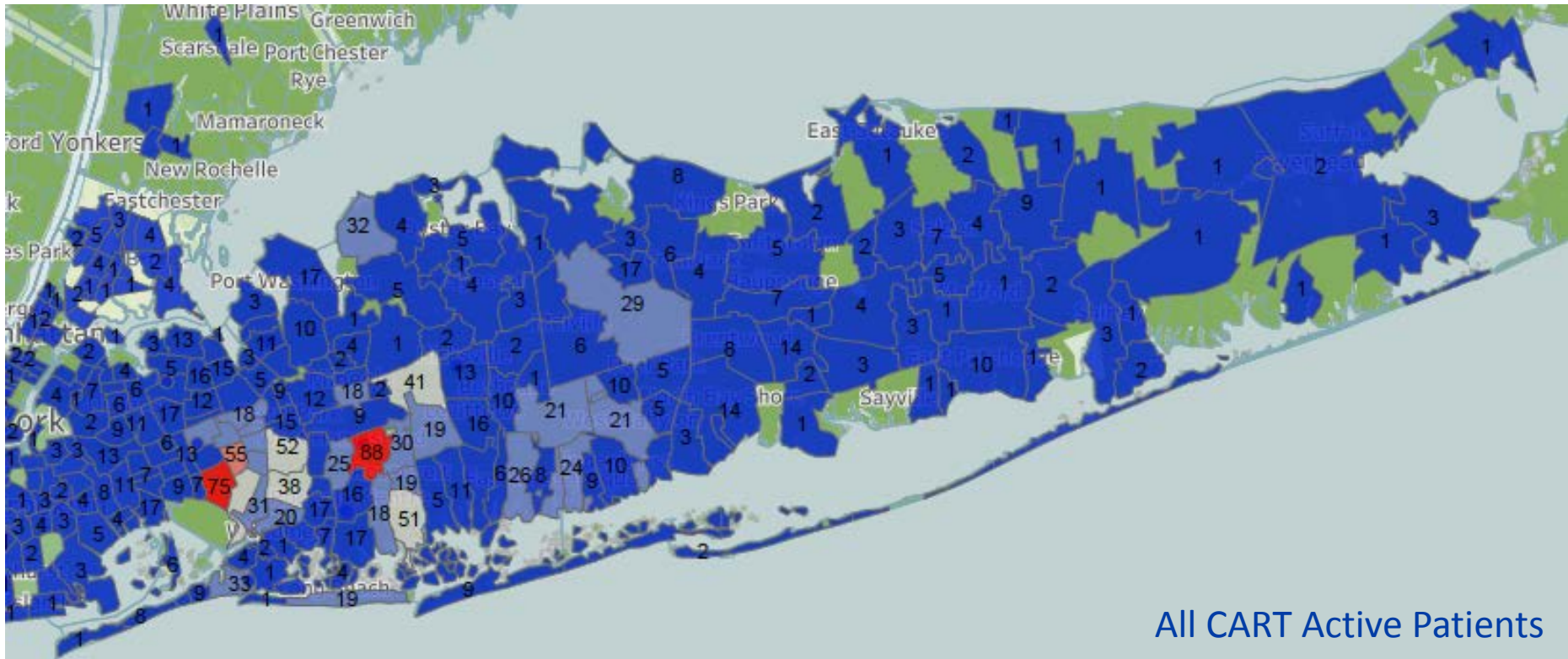


Proportion of patients with current/past/no history of substance use by appointment compliance/non-compliance

Heat Maps and Testing



Heat Maps & Mobile Testing

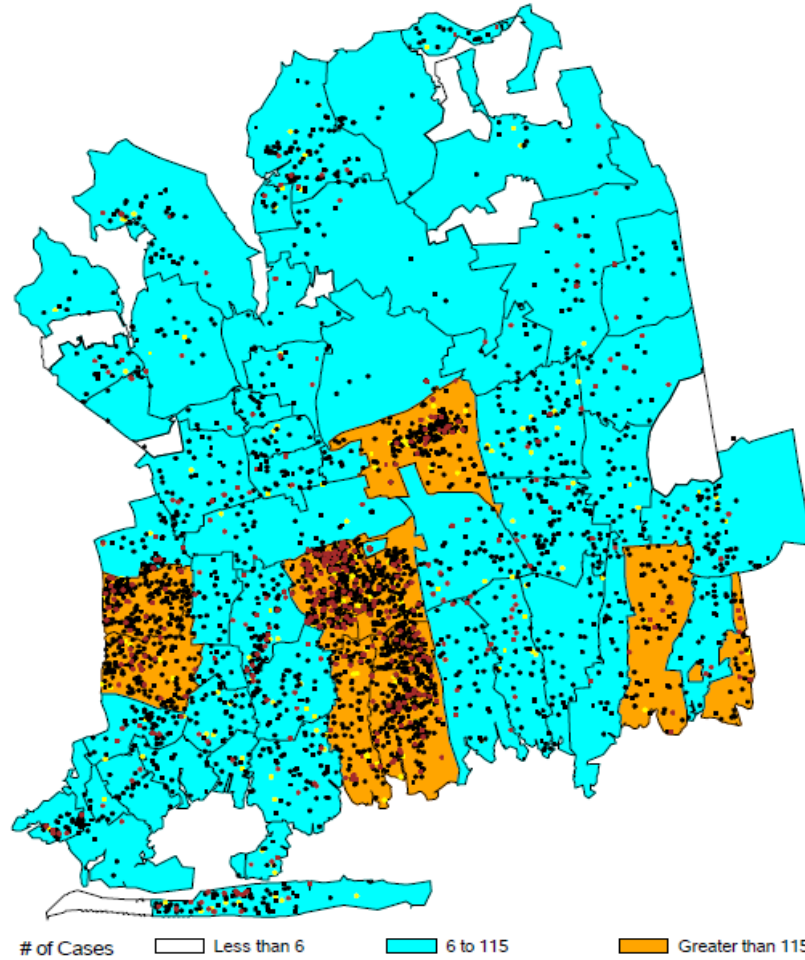


CART develops “Heat Maps” indicating by zip code the location of

1. All PLWHA in care at CART
2. All PLWHA in care at CART with an unsuppressed HIV viral load
3. All newly diagnosed persons referred for care at CART

Heat Maps & Mobile Testing

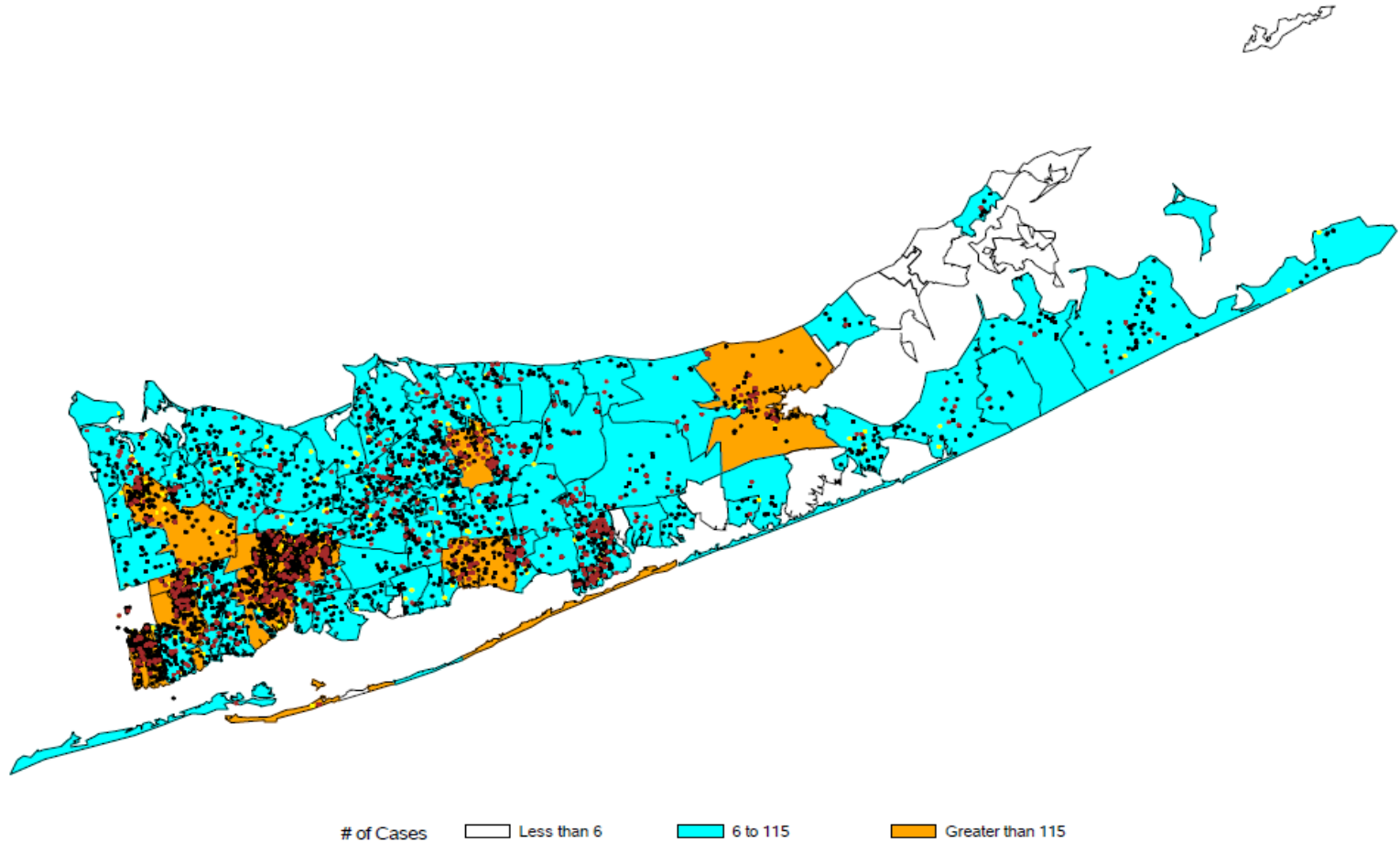
Reported cases of Chlamydia, Gonorrhea, and Syphilis in Nassau County in 2015



- Syphilis(all stages)
- Chlamydia
- Gonorrhea
- *Each dot represents one case

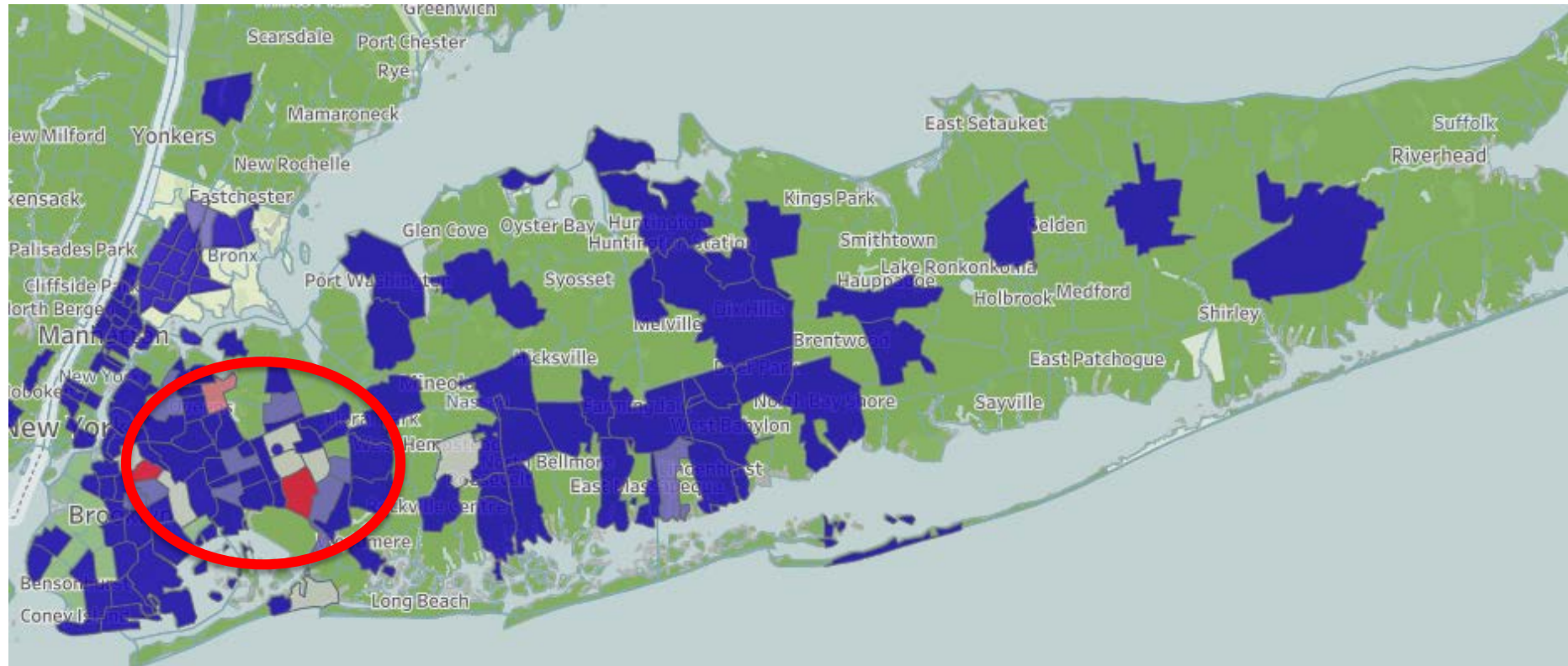
Heat Maps & Mobile Testing

Reported cases of Chlamydia, Gonorrhea, and Syphilis in Suffolk County in 2015



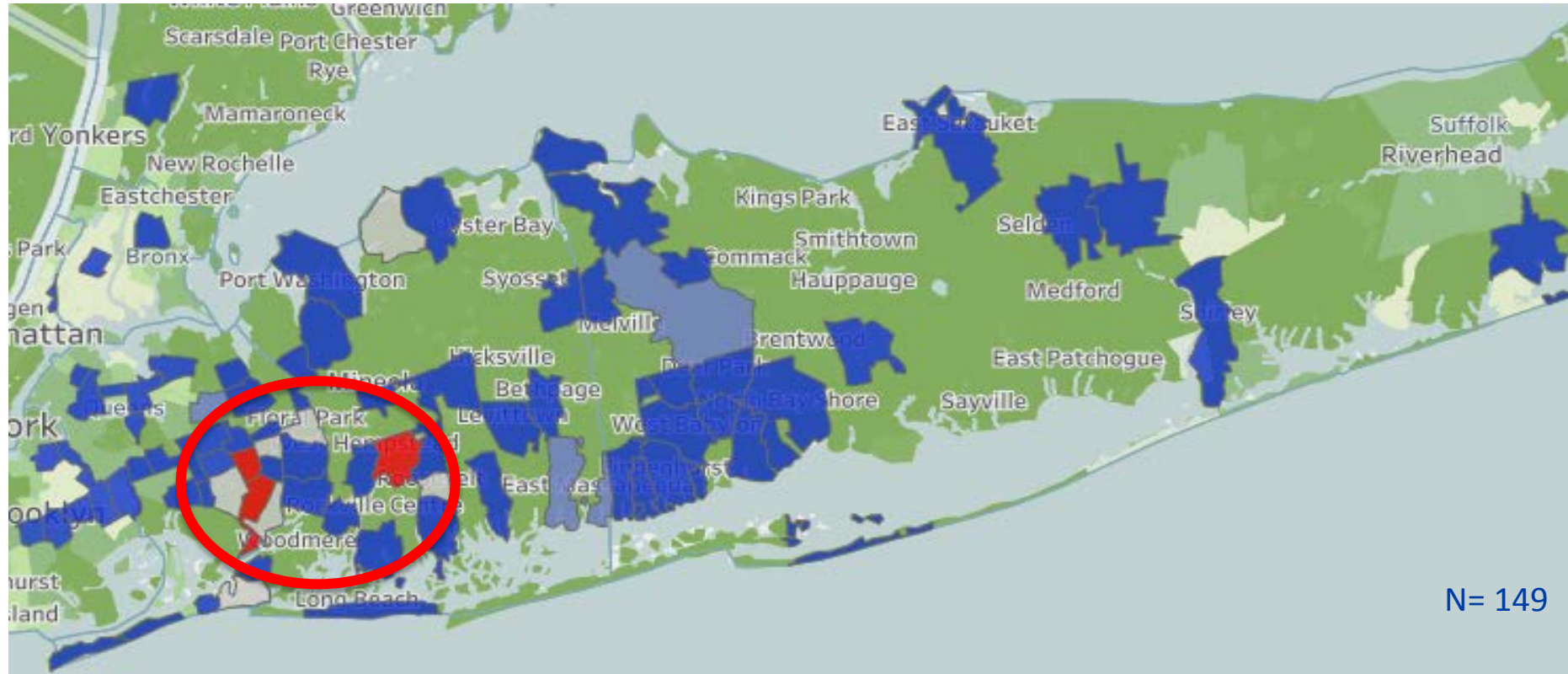
● Syphilis(all stages)
● Chlamydia
● Gonorrhea
*Each dot represents one case

Health System Unsuppressed Viral Load



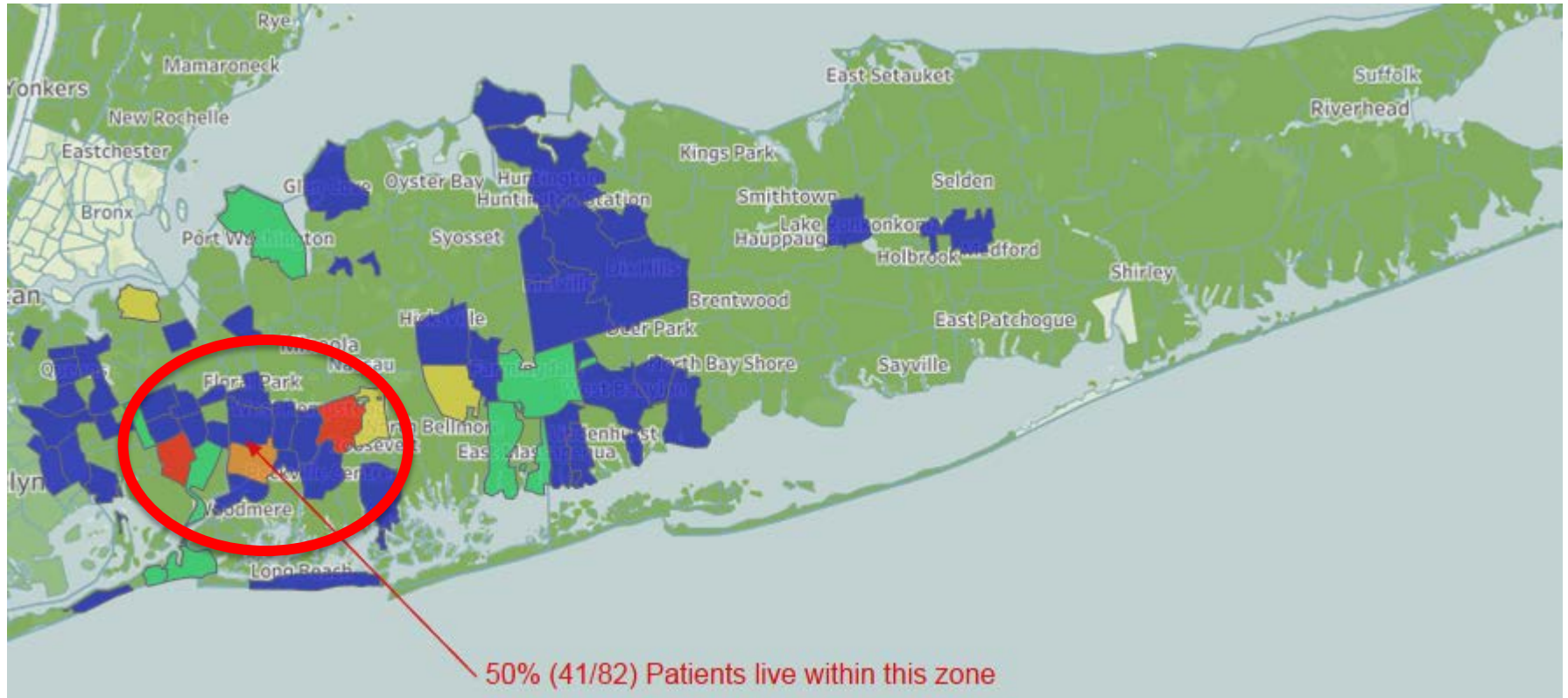
Areas highlighted are Hempstead, Far Rockaway, St. Albans, Jamaica, Corona and Brooklyn.

CART Unsuppressed Viral Load

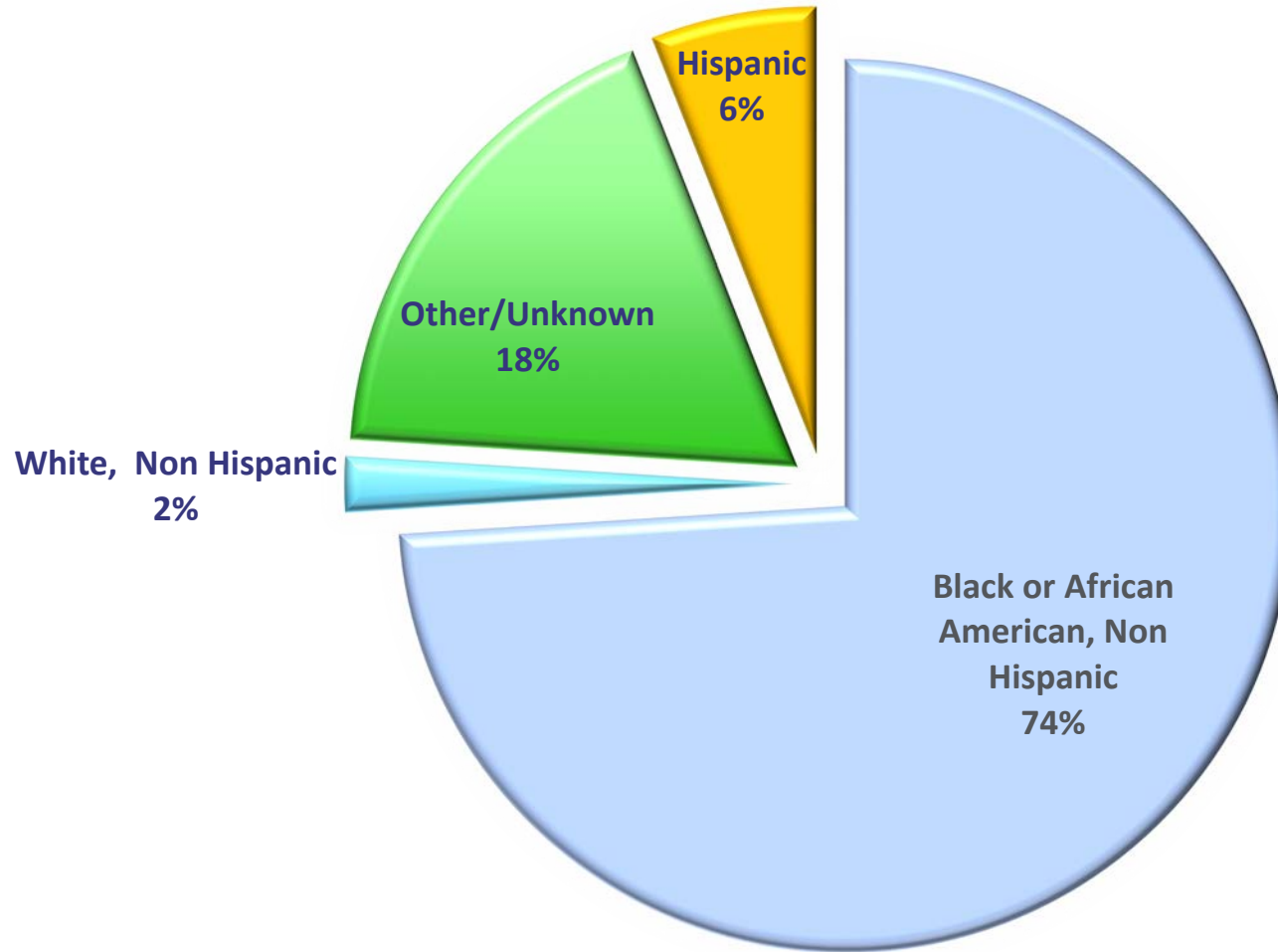


Areas highlighted are Hempstead, St. Albans, Springfield Gardens, Rosedale and surrounding areas.

CART Newly Diagnosed



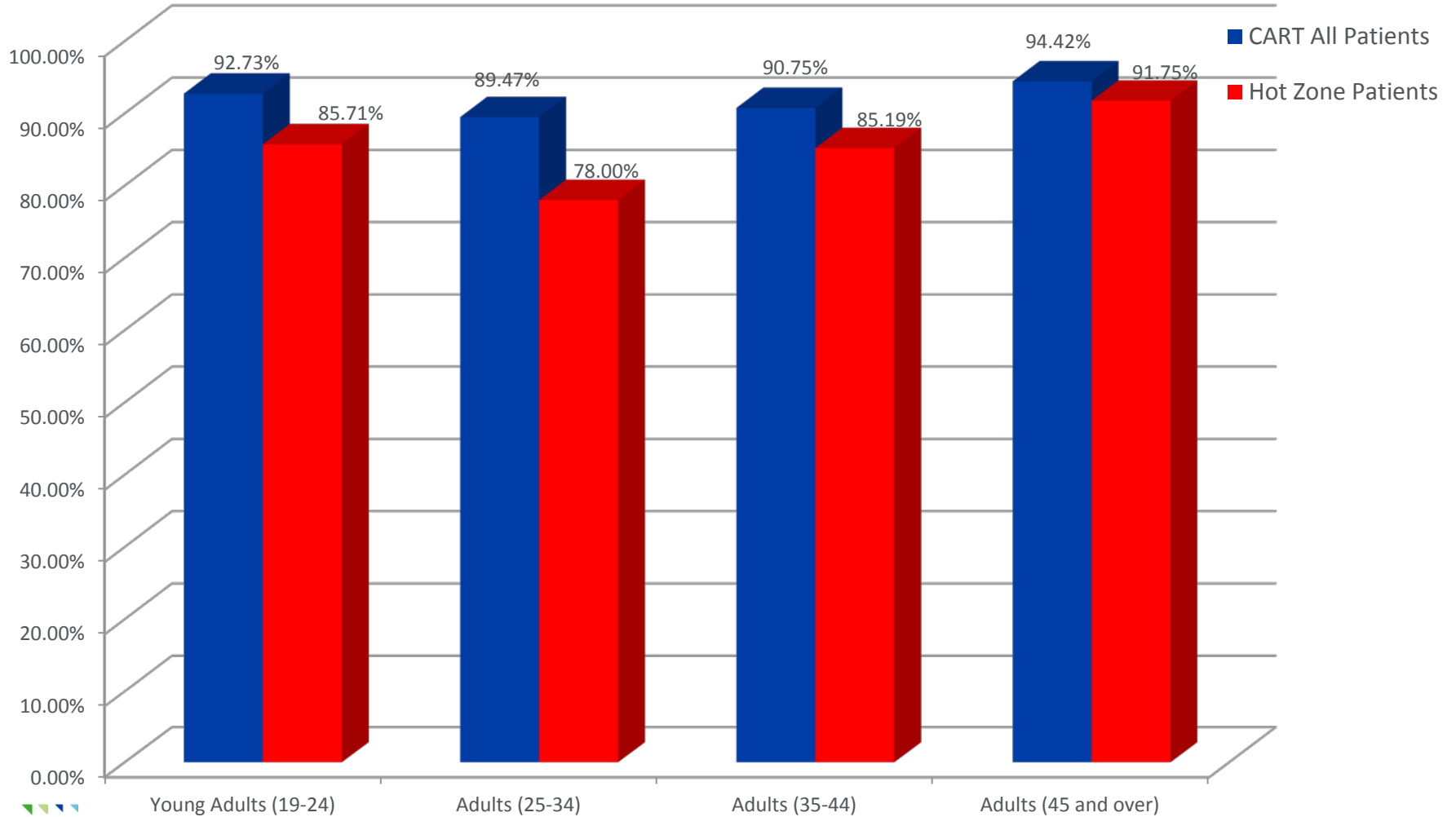
Unsuppressed Patients & “Hot Zones”



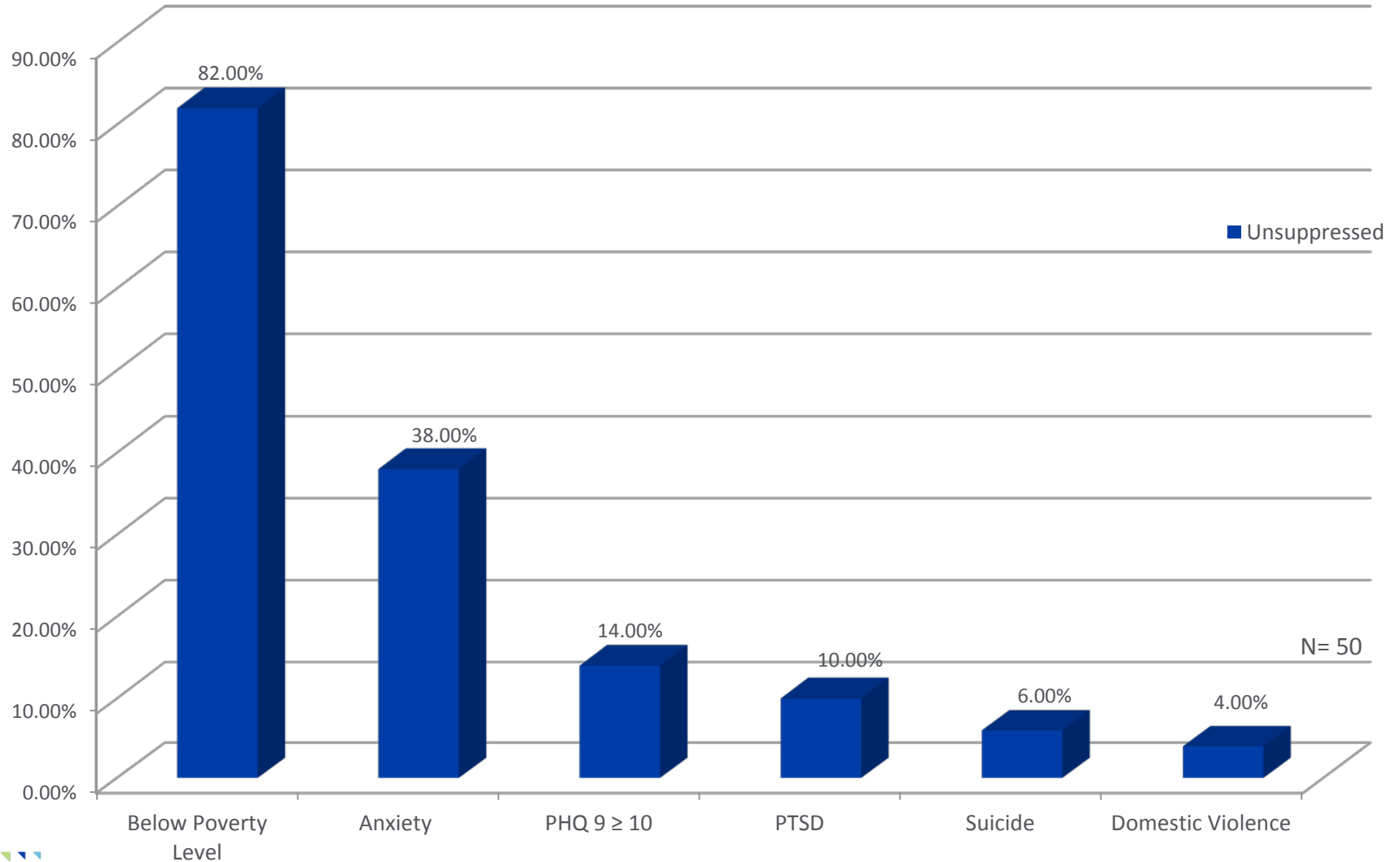
N= 50

Viral Load Suppression – CART and “Hot Zone” By Age

CART Clinic-Wide Viral Load Suppression Rate: 93%

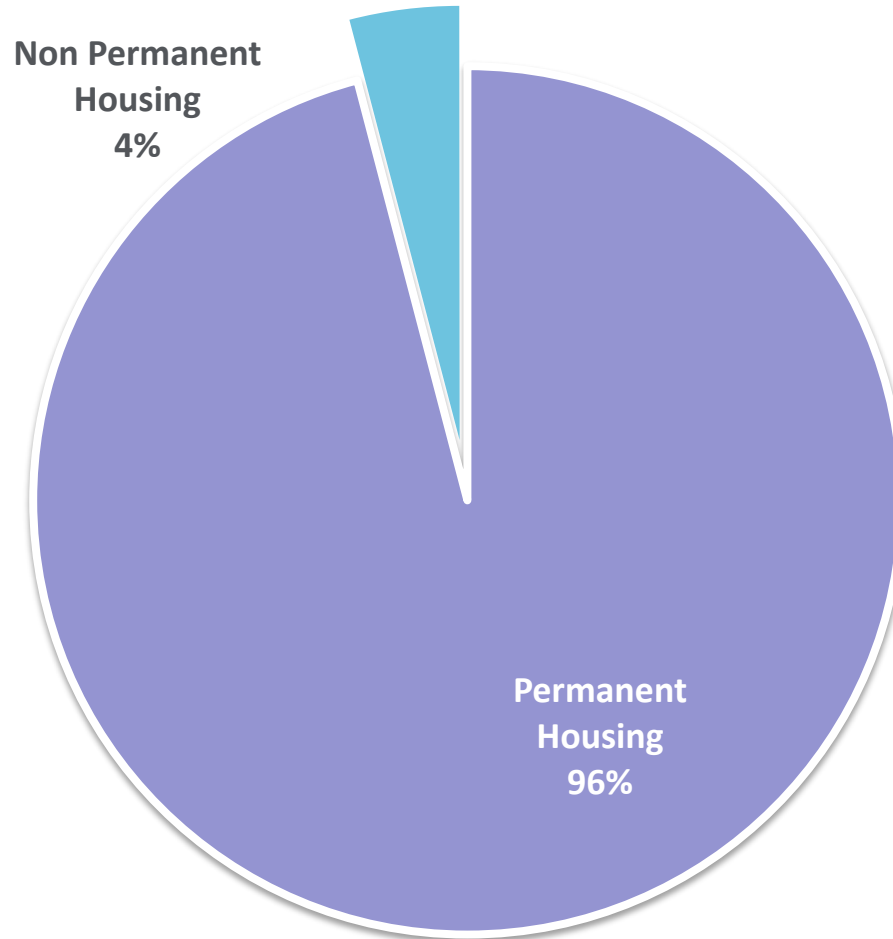


Unsuppressed Patients & “Hot Zones”



Proportion of Patients who live in “Hot Zones” that have Current or Past history of each subgroup

Unsuppressed Patients in “Hot Zones” & Housing

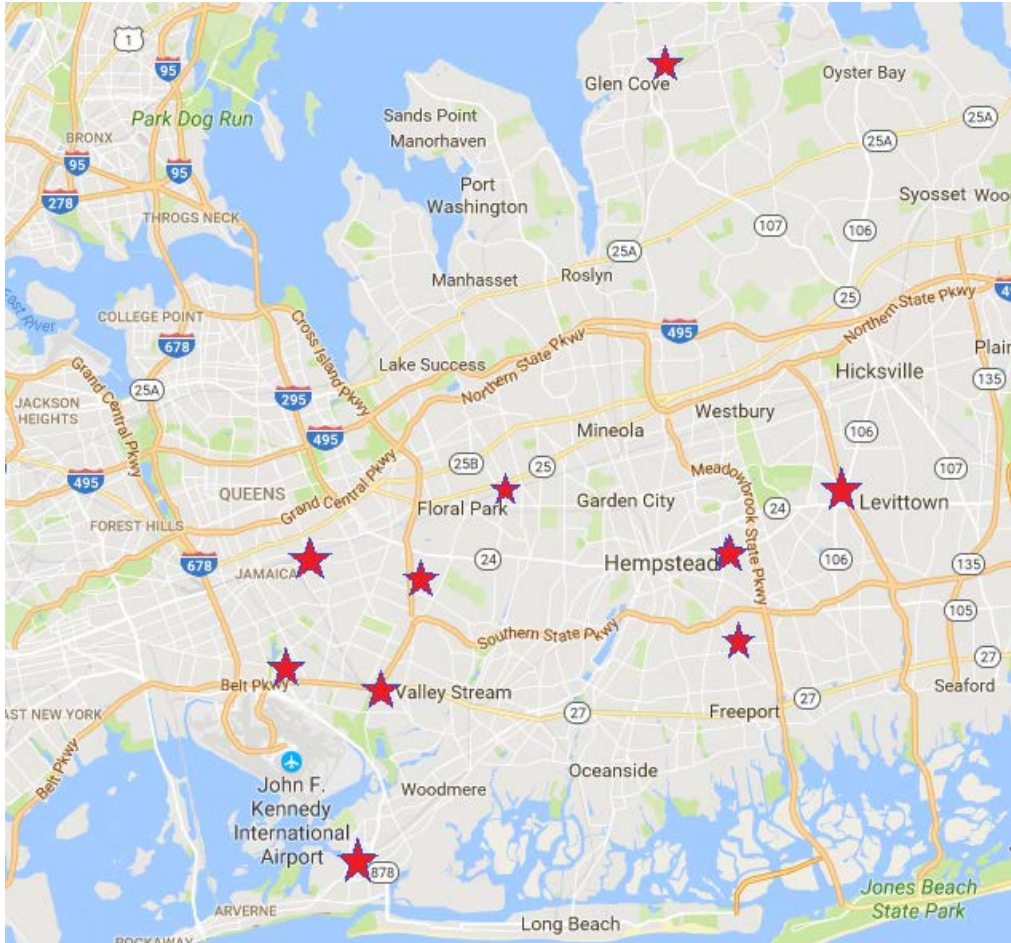


Proportion of Unsuppressed Patients who live in 10 “hot zone” zip codes with Permanent/Non-Permanent Housing.

Predictive Modeling – Retention in HIV Primary Care

1. Generate a list of screenable characteristics such as age, residence, housing status, PHQ-9, PTSD score that are associated with poor viral suppression and/or appointment adherence
2. Calculate a “weight” for each characteristic as it relates to the outcome
3. Generate a “risk” score for each patient in real time during initial assessment
4. Proactively identify patients with high adherence risk potential and initiate engagement/linkage support before they leave the office

Initiatives to Target Outcomes



- ✓ Expand retention efforts.
- ✓ Conduct outreach and testing in high incidence locations.
- ✓ Recruit POL in affected areas as an education and referral source
- ✓ Scale up behavioral, biomedical, and organizational HIV intervention strategies to significantly impact the HIV epidemic and reduce health disparities identified with:
 - Young HIV-infected Adults
 - Patients with history of PTSD/Domestic Violence/Suicide-Homicide
 - Patients below the poverty level and those with unstable housing
 - Reduce stigma, increase disclosure and acceptance of diagnosis

Further Next Steps

- Hospitalization rates
- Determine validity of REDCap data: develop QI project using ACASI survey for subset of patients versus data from REDCap comp
- Link REDCap Comp to Health Information Exchange: query data for BMI, smoking, and other variables of interest.
- Health Literacy Screen

Thank You

