Ending the Epidemic: Getting to HIV Status Neutral

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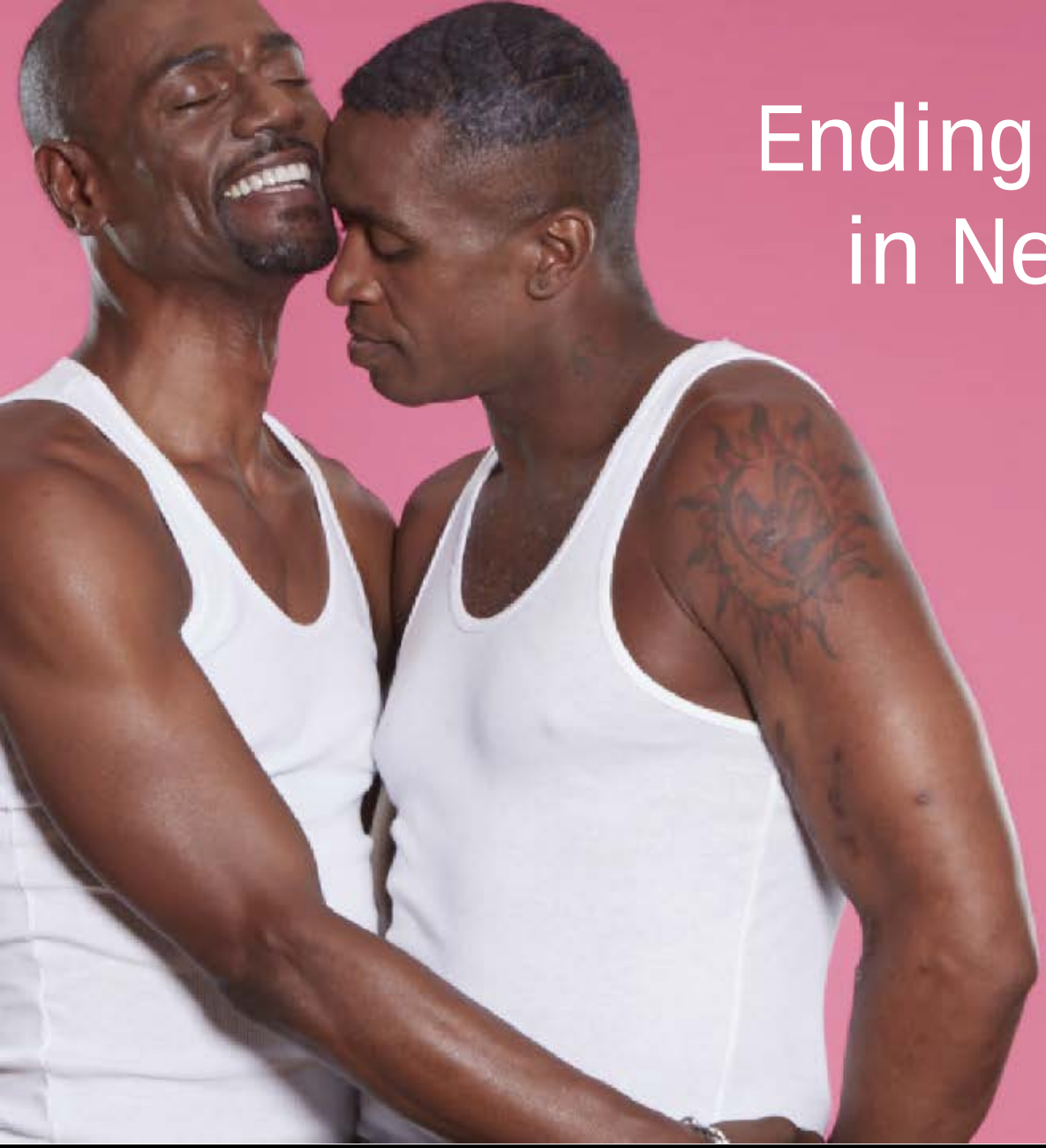
NYC Health

Outline

- Ending the Epidemic in NYC
- Treatment as Prevention & the Undetectables
- VLS and mortality prevention
- Describe new NYC Cycle
- Status neutral care coordination



Ending the Epidemic in New York City

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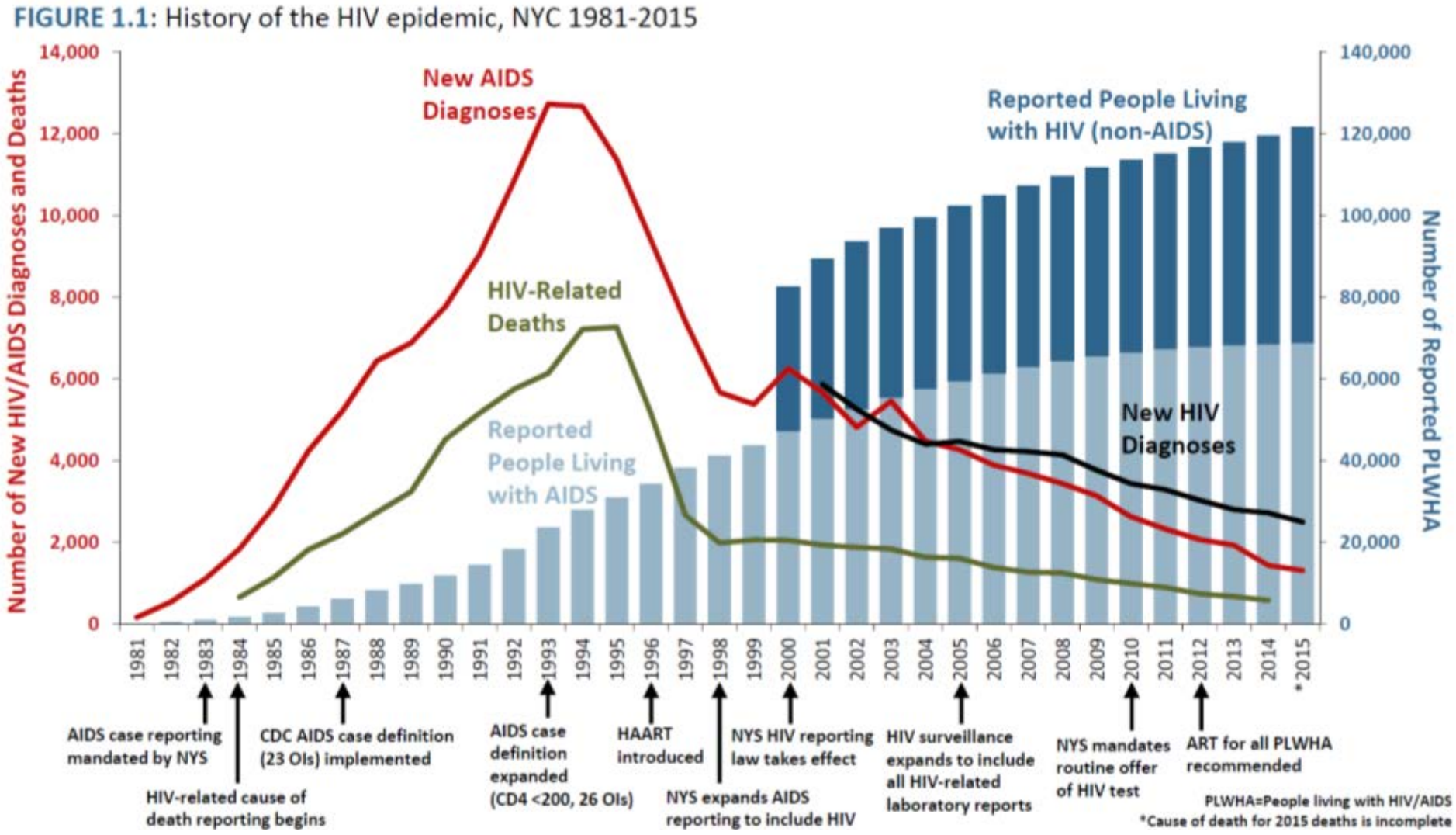
HISTORY OF THE EPIDEMIC



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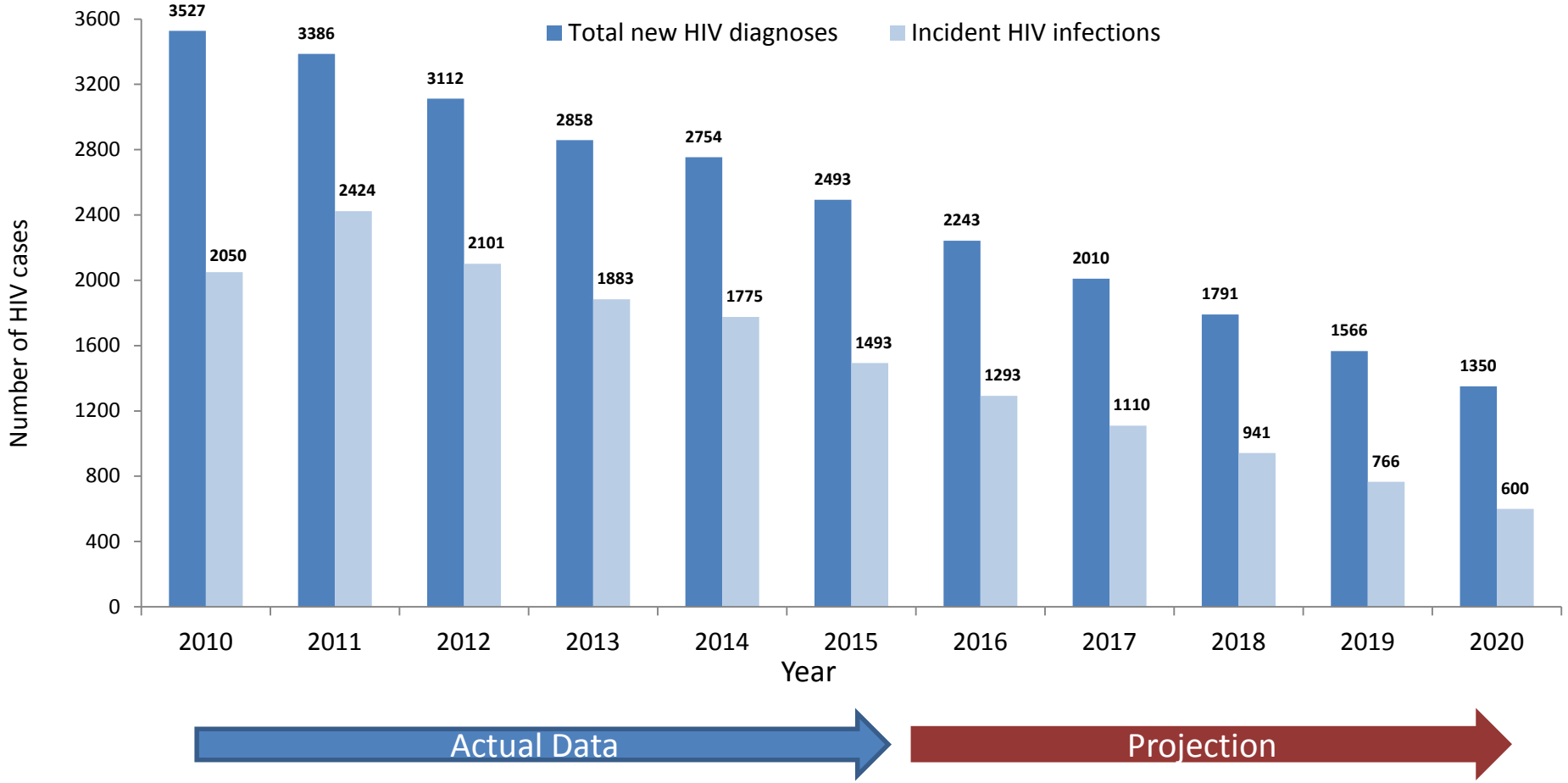
EtE: Strategy

1. Increase access to HIV prevention services
2. Promote innovative, optimal treatment for HIV
3. Enhance methods for tracing HIV transmission
4. Improve sexual health equity for all New Yorkers

External: support the HIV services of community-based clinics, organizations and coalitions across NYC

Internal: enhance and expand our STD clinics and HIV services

Achieving ETE GOALS: New HIV Diagnoses and Estimated Incident HIV Infections in NYC, 2010-2020



The number of new HIV diagnoses from 2010 to 2015 was reported to NYC DOHMH as of June 30, 2016. Incident HIV infection estimates from 2010 to 2015 were calculated using the CDC Stratified Extrapolation Approach (SEA). All data from 2016 to 2020 are estimates based on the slope of decline previously observed.

The Expanded HIV Prevention Toolkit

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Treatment as Prevention & The Undetectables

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HPTN 052: Results

- Starting ART early reduced HIV transmission by **93%**
- **Zero** index to partner linked transmissions when index participant was stably suppressed on ART

Partner Infections (ITT)

	April 2005-May 2011			May 2011-May 2015			Overall		
	PY f/u	All partner infections # (rate)	Linked partner infections# (rate)	PY f/u	All partner infections # (rate)	Linked partner infections # (rate)	PY f/u	All partner infections # (rate)	Linked partner infections # (rate)
Total	3482	46 (1.32)	37 (1.06)	5012	32 (0.64)	9 (0.18)	8494	78 (0.92)	46 (0.54)
Early arm	1751	4 (0.23)	1 (0.06)	2563	15 (0.59)	2 (0.08)	4314	19 (0.44)	3 (0.07)
Delayed arm	1731	42 (2.43)	36 (2.08)	2449	17 (0.69)	7 (0.29)	4180	59 (1.41)	43 (1.03)
Rate ratio		0.09	0.03		0.86	0.28		0.31	0.07
Risk reduction		**91%**	**97%**		**14%**	**72%**		**69%**	**93%**

Rate = # of events/ 100 PY
Risk reduction = 1 – rate ratio

Linked = index to partner transmission

Cohen. Antiretroviral Treatment Prevents HIV Transmission: Final Results from the HPTN 052 Randomized Controlled Trial . IAS 2015.

PARTNER Study

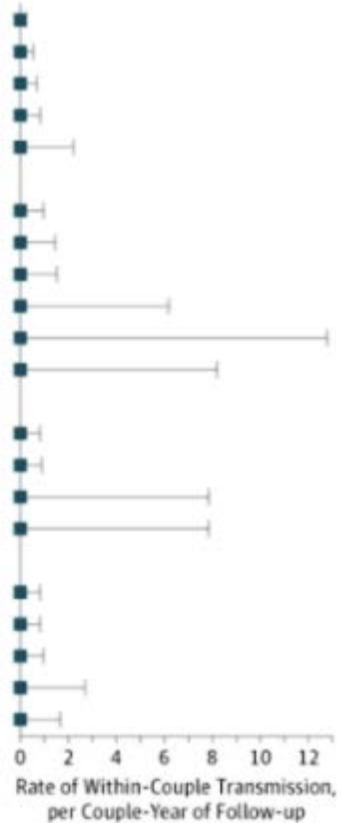
- Prospective, observational PARTNER study was conducted at 75 clinical sites in 14 European countries
- Enrolled 1166 HIV serodifferent couples (HIV-positive partner taking suppressive ART) who reported condomless sex (September 2010 to May 2014)
- Eligibility criteria for inclusion of couple-years of follow-up were condomless sex and HIV-1 RNA load less than 200 copies/mL.
- Used phylogenetic analysis if an HIV-negative partner became infected to determine phylogenetically linked transmissions.

Roger, A, et al. JAMA. 2016;316(2):171-181.

PARTNER Study:

No documented cases of within-couple HIV transmission during condomless sex when HIV positive partner is virally suppressed

	HIV-Negative Members of Eligible Couples Reporting Specific Sex Act, No./Total (%)	Couple-Years of Follow-up	Upper 95% Confidence Limit
All			
Any sex	863/866 (99.7)	1238	0.30
Vaginal sex	532/878 (60.6)	629	0.59
Anal sex	449/849 (52.9)	522	0.71
Insertive anal sex	363/862 (42.1)	417	0.88
Receptive anal sex with ejaculation	185/864 (21.4)	166	2.23
Heterosexual women			
Any sex	261/262 (99.6)	381	0.97
Vaginal sex with ejaculation	193/259 (74.5)	246	1.50
Vaginal sex without ejaculation	207/257 (80.5)	238	1.55
Anal sex	61/256 (23.8)	60	6.16
Receptive anal sex with ejaculation	37/255 (14.5)	29	12.71
Receptive anal sex without ejaculation	55/253 (21.7)	45	8.14
Heterosexual men			
Any sex	272/274 (99.3)	418	0.88
Vaginal sex	271/275 (98.5)	383	0.96
Anal sex	60/264 (22.7)	47	7.85
Insertive anal sex	60/264 (22.7)	47	7.85
Men who have sex with men			
Any sex	330/330 (100)	439	0.84
Anal sex	328/329 (99.7)	415	0.89
Insertive anal sex	303/329 (92.1)	370	1.00
Receptive anal sex with ejaculation	148/329 (45.0)	137	2.70
Receptive anal sex without ejaculation	217/324 (67.0)	220	1.68



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Why the STD Clinics Matter in EtE Strategy

HIV POSITIVE

10% of new HIV in NYC diagnosed there

20% of NYC Acute HIV diagnosed there

Safety net for some PLWHA not connected to care

Existing models of immediate ARV starts for newly diagnosed ideal for this setting

Data support treatment is prevention

STD clinics with proven track record for connection to care

HIV NEGATIVE

65% of patients surveyed at STD clinics would start PrEP at STD clinics

STD clinic data demonstrates that patients diagnosed with syphilis and rectal STIs are at very high risk for HIV

Potentially thousands of PrEP candidates seen annually in STD clinics

Multi-domain diversity of clients

Service delivery environment supports STD clinics as gateway to primary care and biomedical prevention

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Epidemiologic Considerations:
NYC HIV Incidence Studies

- 1 in 42 MSM attending NYC STD Clinics were diagnosed with HIV within a year[1]
- 1 in 20 MSM diagnosed with P&S Syphilis in NYC were diagnosed with HIV within a year[2]
- 1 in 15 MSM diagnosed w/ anorectal chlamydia/gonorrhea in NYC STD Clinics were diagnosed with HIV within a year[3]

[1] Pathela P, *AIDS Behav.* 2016 [Epub ahead of print]
[2] Pathela P, *Clin Infect Dis* 2015; 61(2)281-7.
[3] Pathela P, *Clin Infect Dis* 2013; 57(8) 1203-9.

HIV Treatment at DOHMH STD Clinics

HIV-infected patients

- 'JumpstART' immediate antiretroviral treatment for newly diagnosed patients along with other supportive services
- Use community-informed social work and navigation services to link HIV-infected patients to care
- Started in one clinic in November
  - 3 patients have been jumpstARTed!

Undetectable = Negligible Risk

Prevention Access Campaign's Consensus Statement:

People living with HIV on ART with an undetectable viral load in their blood have a negligible risk of sexual transmission of HIV. Depending on the drugs employed it may take as long as six months for the viral load to become undetectable. Continued and reliable HIV suppression requires selection of appropriate agents and excellent adherence to treatment. HIV viral suppression should be monitored to assure both personal health and public health benefits.

POZ

Demetre Daskalakis is the assistant commissioner of the Bureau of HIV/AIDS Prevention and Control, part of New York City's health departm
Courtesy of Prevention Access Campaign/Estella Yu

NEWSFEED • TREATMENT NEWS

First U.S. Public Health Official Endorses "Negligible Risk" When Undetectable

NACCHO

National Association of County & City Health Officials

The National Connection for Local Public Health

First U.S. Health Official Endorses "Negligible Risk" Position on HIV Transmission

positiveliving

FOR PEOPLE LIVING WITH AND AFFECTED BY HIV

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'Negligible risk' of HIV with ART

Daily Mail .com

'HIV drugs DO prevent spread': US health official signs groundbreaking consensus to declare infection risk is 'negligible' with regular medication

THE BODY®

The Complete HIV/AIDS Resource

PRESS RELEASE

Top NYC HIV Official: 'Negligible Risk' of Transmission With Undetectable Viral Load

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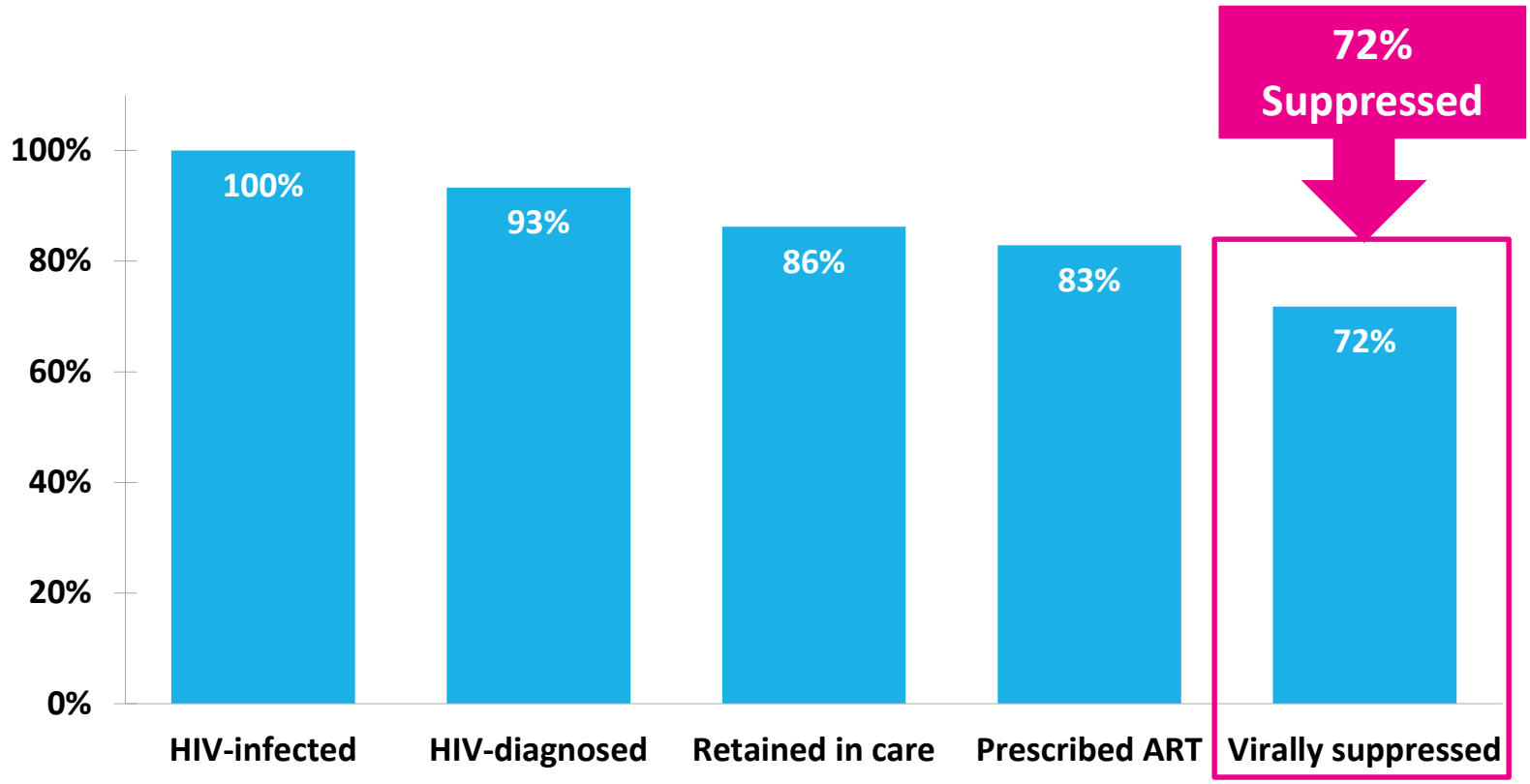
PROPORTION OF HIV-INFECTED PEOPLE IN NYC ENGAGED IN SELECTED STAGES OF THE HIV CARE CONTINUUM, 2014

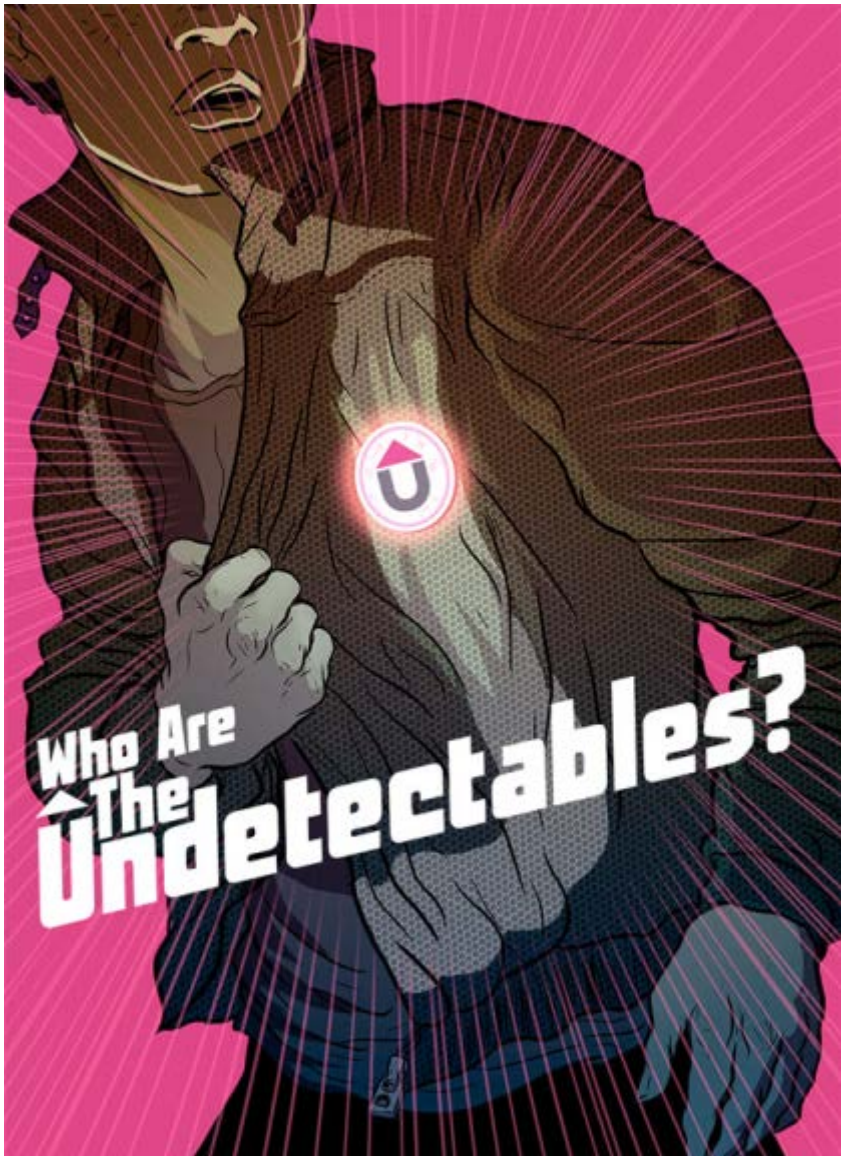


Of the approximately 87,000 people infected with HIV in NYC in 2014, 72% had a suppressed viral load.

Viral suppression is defined as viral load ≤200 copies/mL.
For definitions of the stages of the continuum of care, see Technical Notes.
As reported to the New York City Department of Health and Mental Hygiene by June 30, 2015.

The Undetectables

- Scale up of CBO/clinic based intervention
- Use of multiple domains of support (social, medical , and behavioral)
- Use of financial incentives for suppression



What does this mean?

- ✓ New York City Clinics are doing a very good job with *most* PLWHA VLS
- ✓ Lack of Viral Suppression
  - Associated with death despite evidence of connection and retention in care
  - Associated with increased transmission
- ✓ We need to find unsuppressed not in care
- ✓ We need to support those in care for VLS

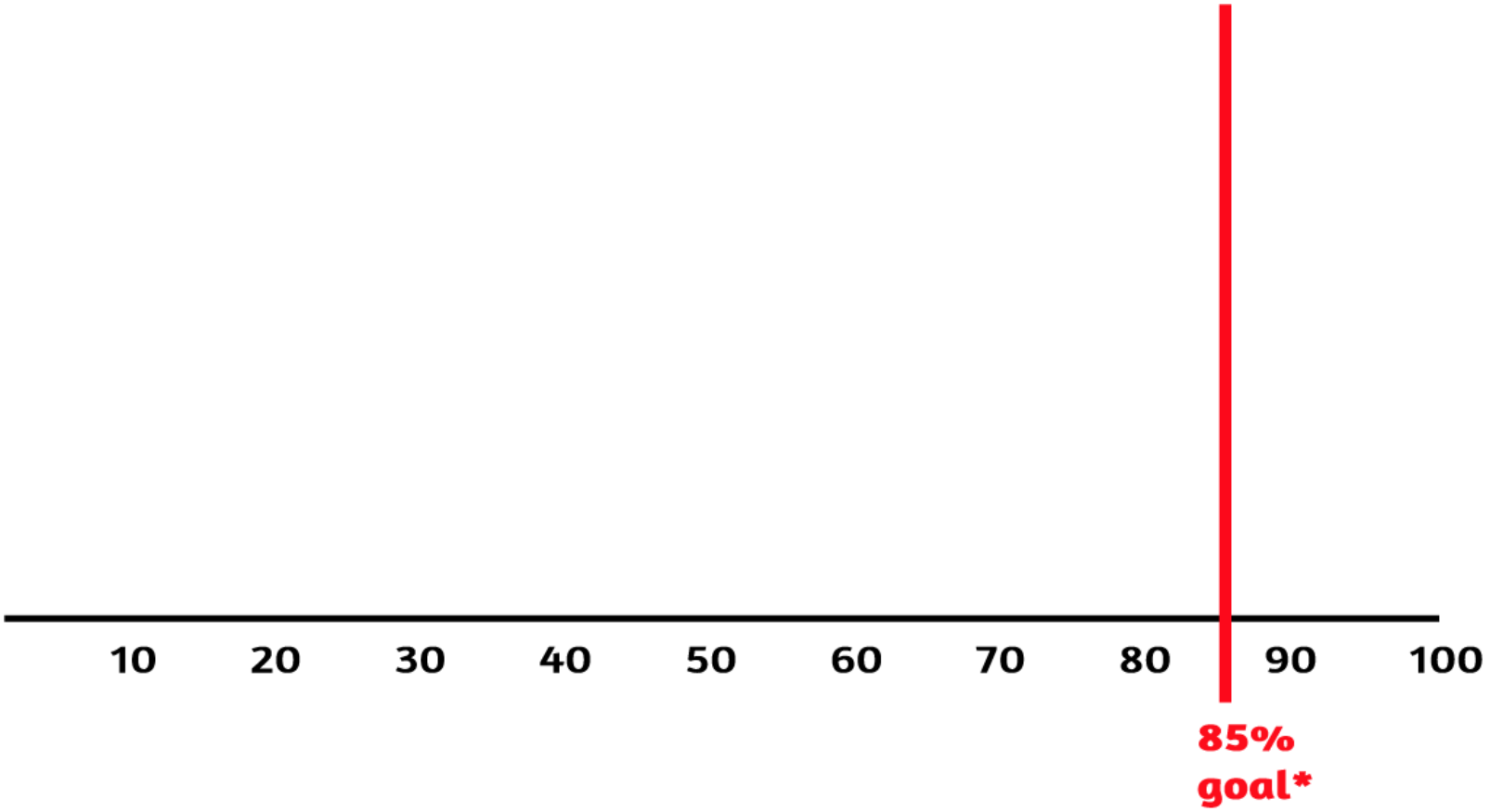
What's in the toolkit?

Stepped approach to ARV adherence

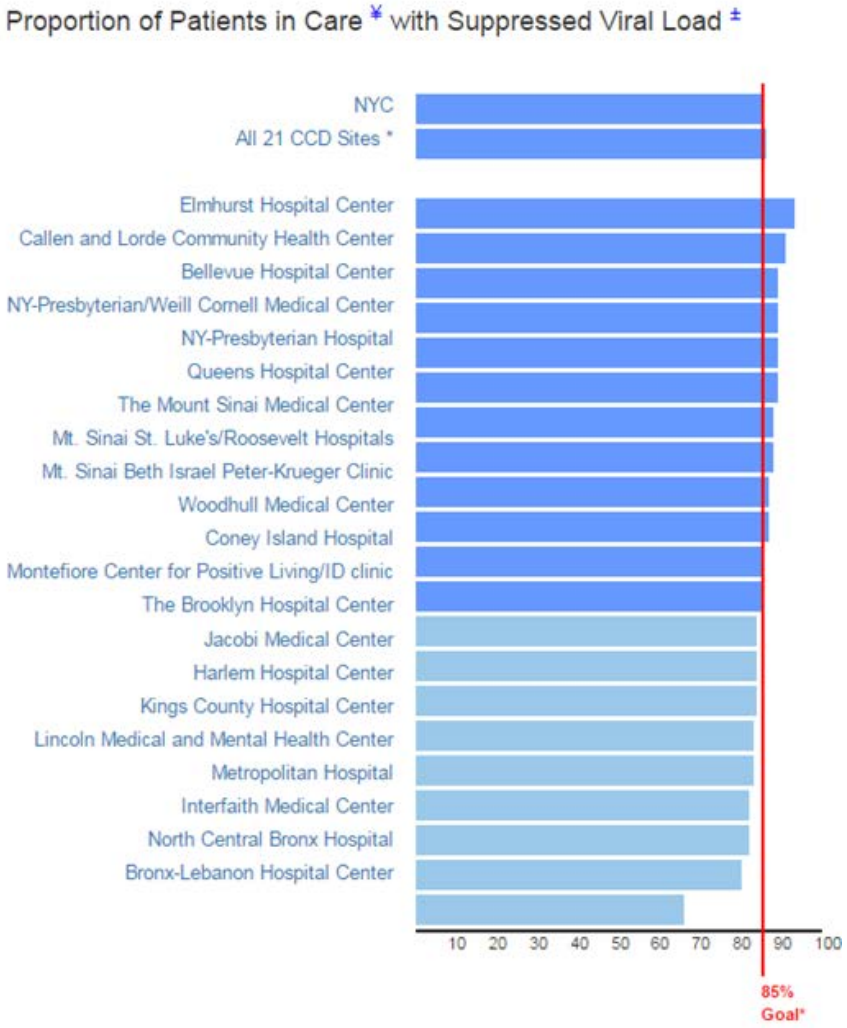
- ✓ Individual-level ARV adherence planning and support
  - case conferences among client, health providers & case manager
  - motivational interviewing & assistance to meet subsistence needs
  - Behavioral health assessment/referral
- ✓ $100 gift card incentive for quarterly lab result showing undetectable viral load (≤50 copies/ml), up to 4 per year
- ✓ Cognitive behavioral therapy (CBT) adherence support groups
- ✓ Adherence devices such as pill-boxing and text or other daily medication reminders
- ✓ Utilizing a text-message program to link clients with appointment adherence reminders (Sense Health)
- ✓ Directly observed ARV therapy (DOT)

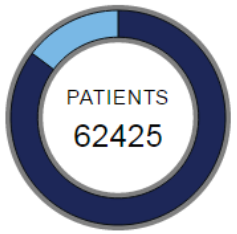
Results at 18 months: viral load suppression

- ✓ **Pre-enrollment: among 441 clients eligible for enrollment at project launch:**
  - 54% virally suppressed using ≤50 copies/mil as the measure
- ✓ **Current for all 610 clients enrolled at August 31, 2015:**
  - 83% virally suppressed using ≤50 copies/mil as the measure
- ✓ **Current for 554 clients enrolled ≥ 3 months at August 31, 2015:**
  - 85% virally suppressed using ≤50 copies/mil as the measure


10
20
30
40
50
60
70
80
90
100
85%
goal*

Public Release of VLS Data





Viral Load Suppression

2011 - 2014 Progress on Viral Load Suppression

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VLS and Mortality

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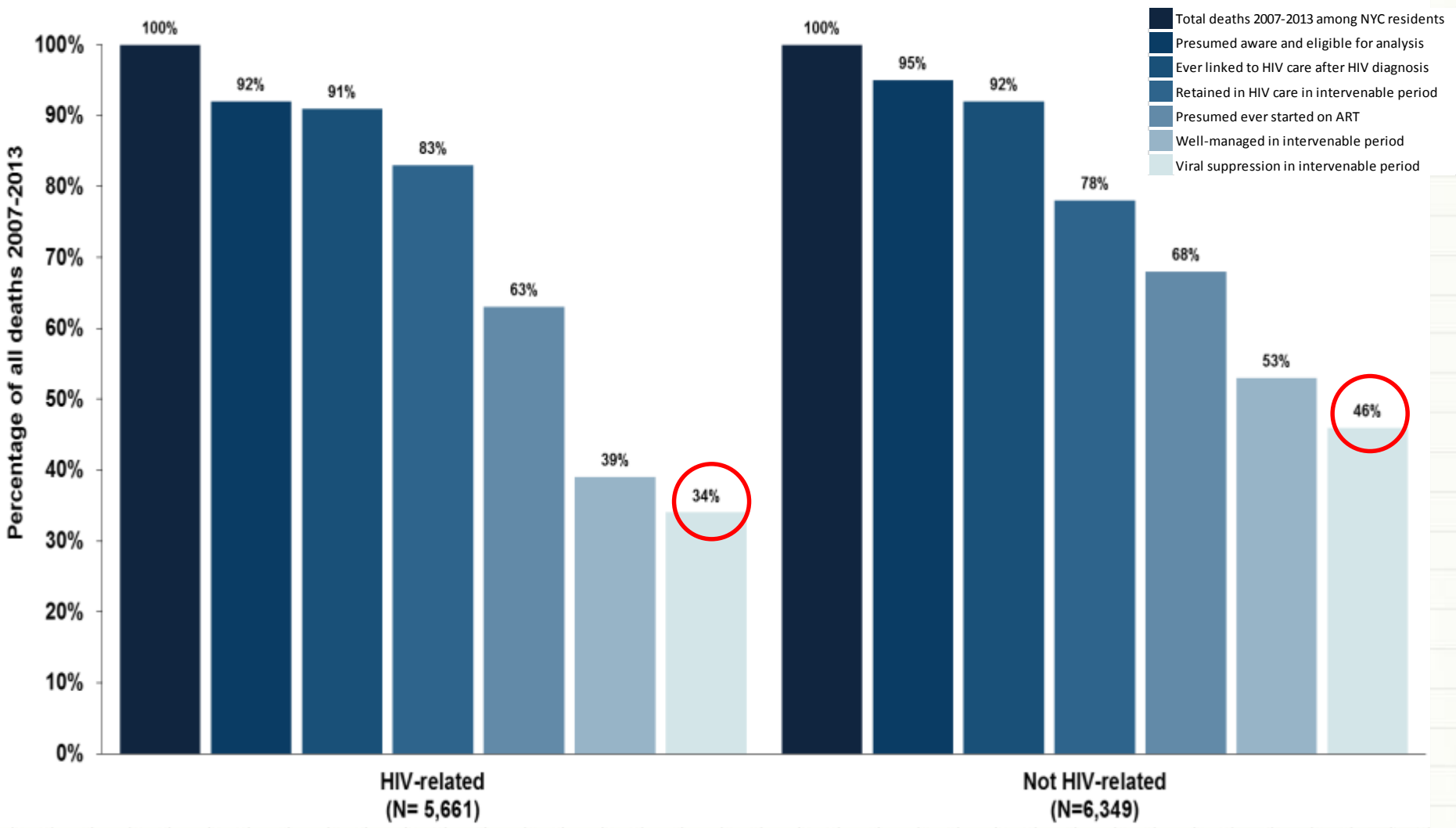
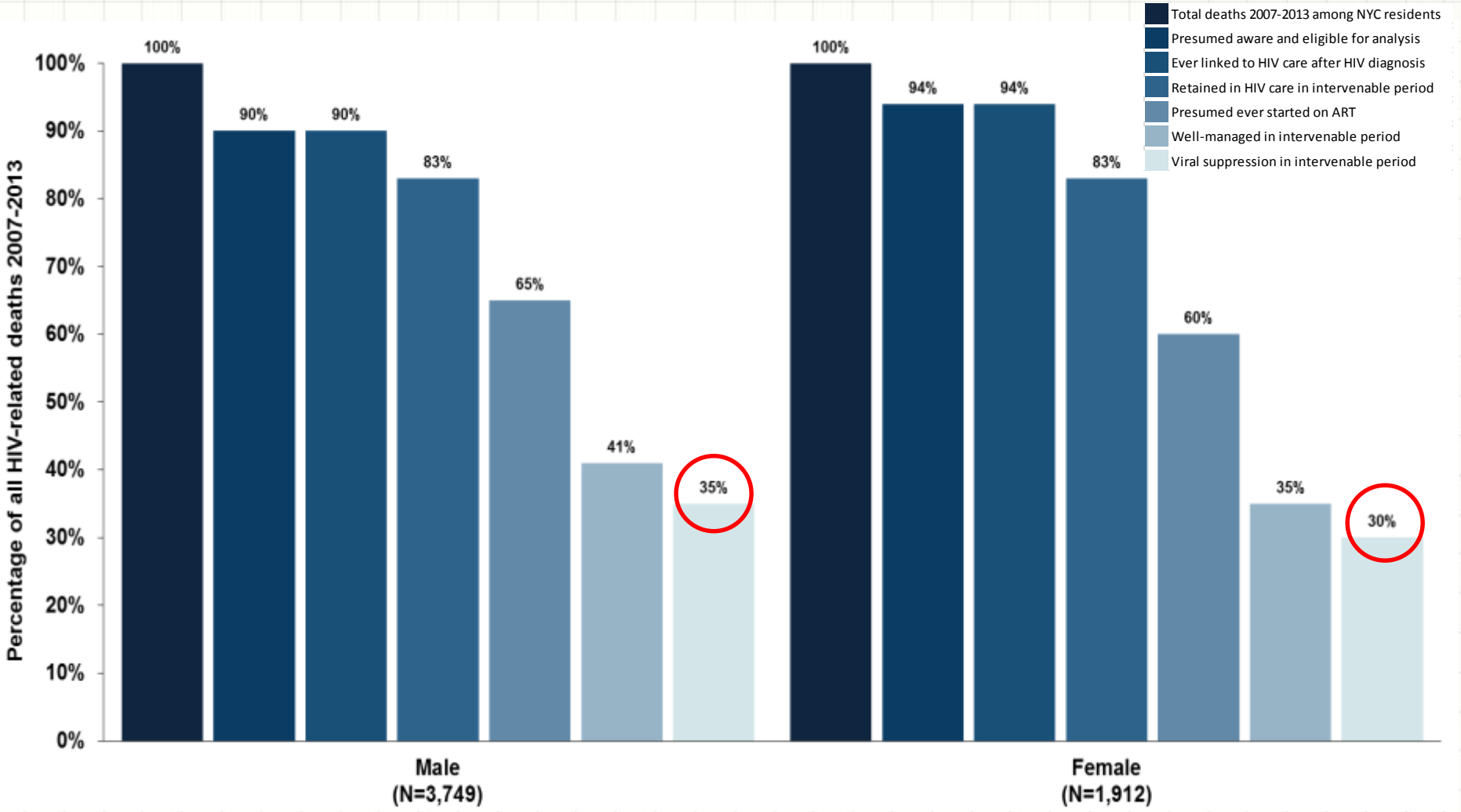
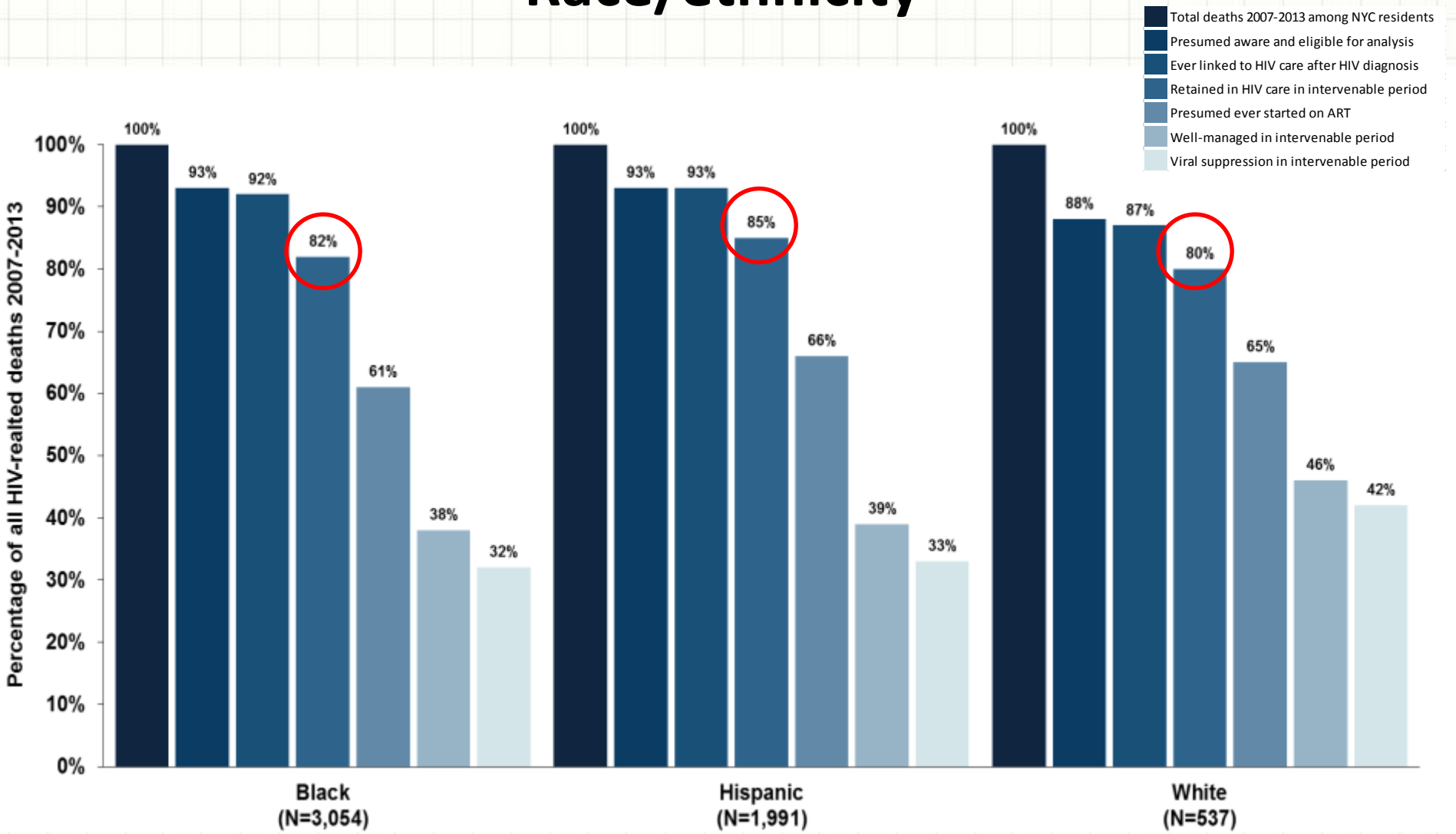
HMRCC, all deaths 2007-2013: Underlying cause of death



HMRCC, HIV-related deaths 2007-2013: Sex



HMRCC, HIV-related deaths 2007-2013: Race/ethnicity



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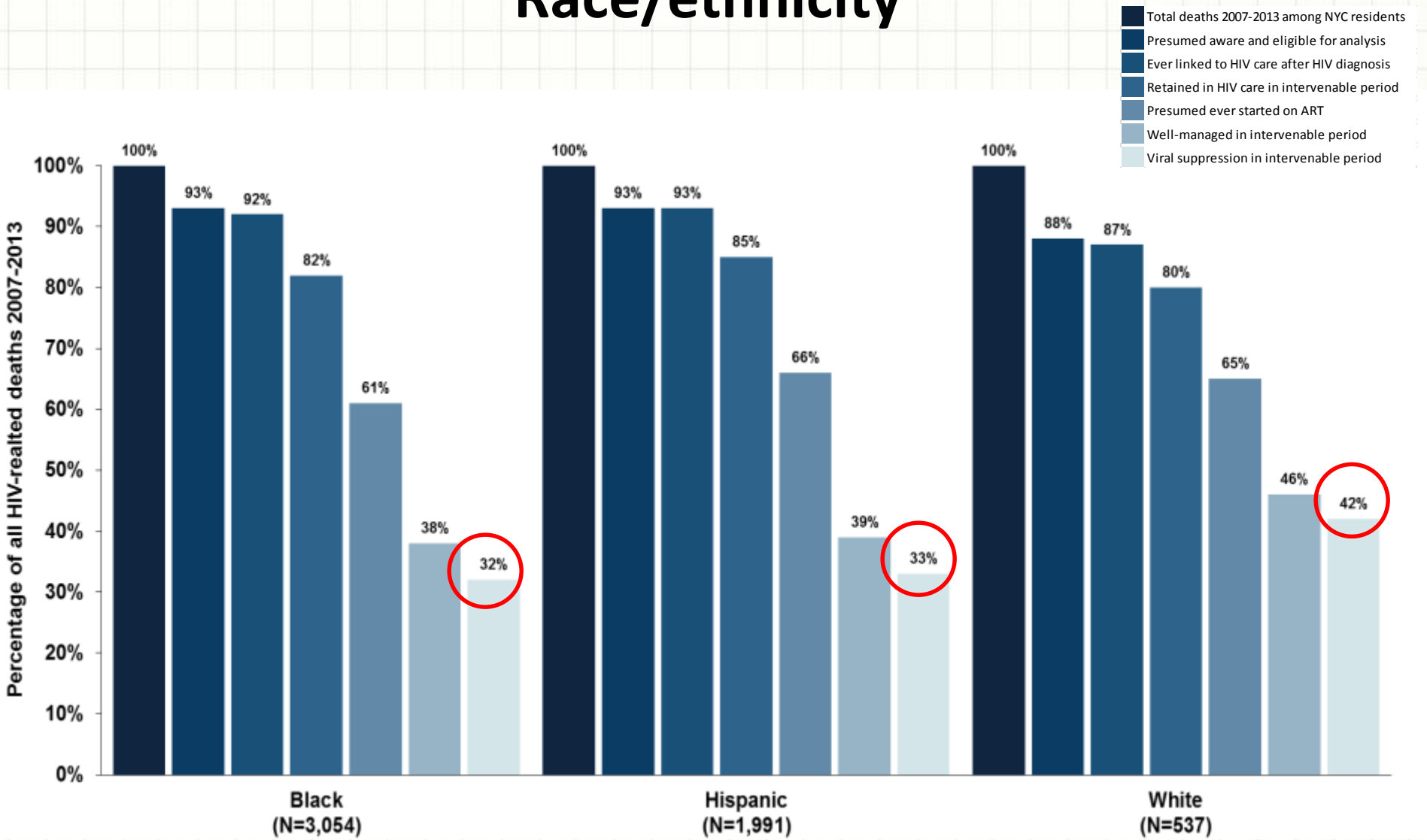
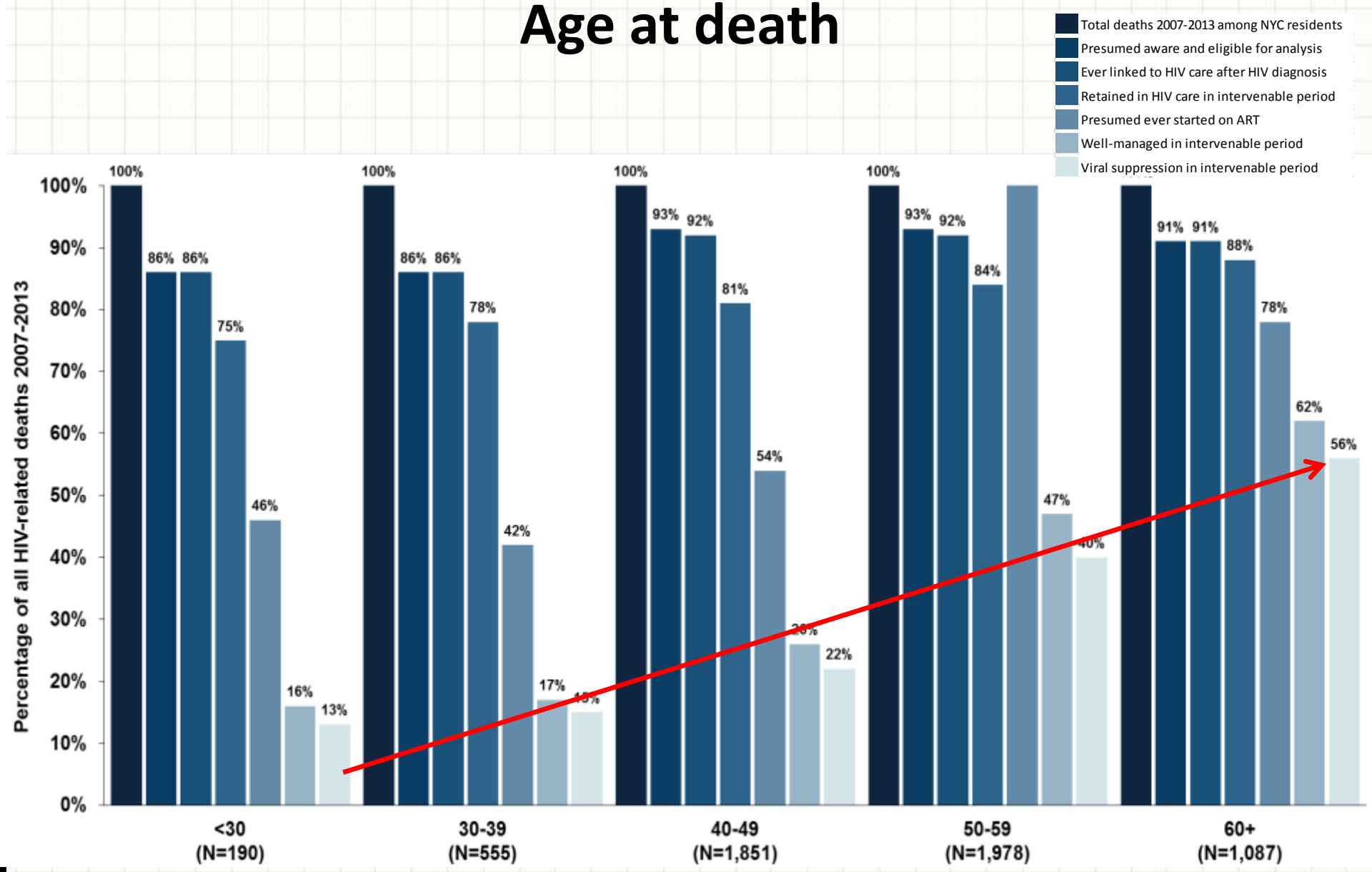
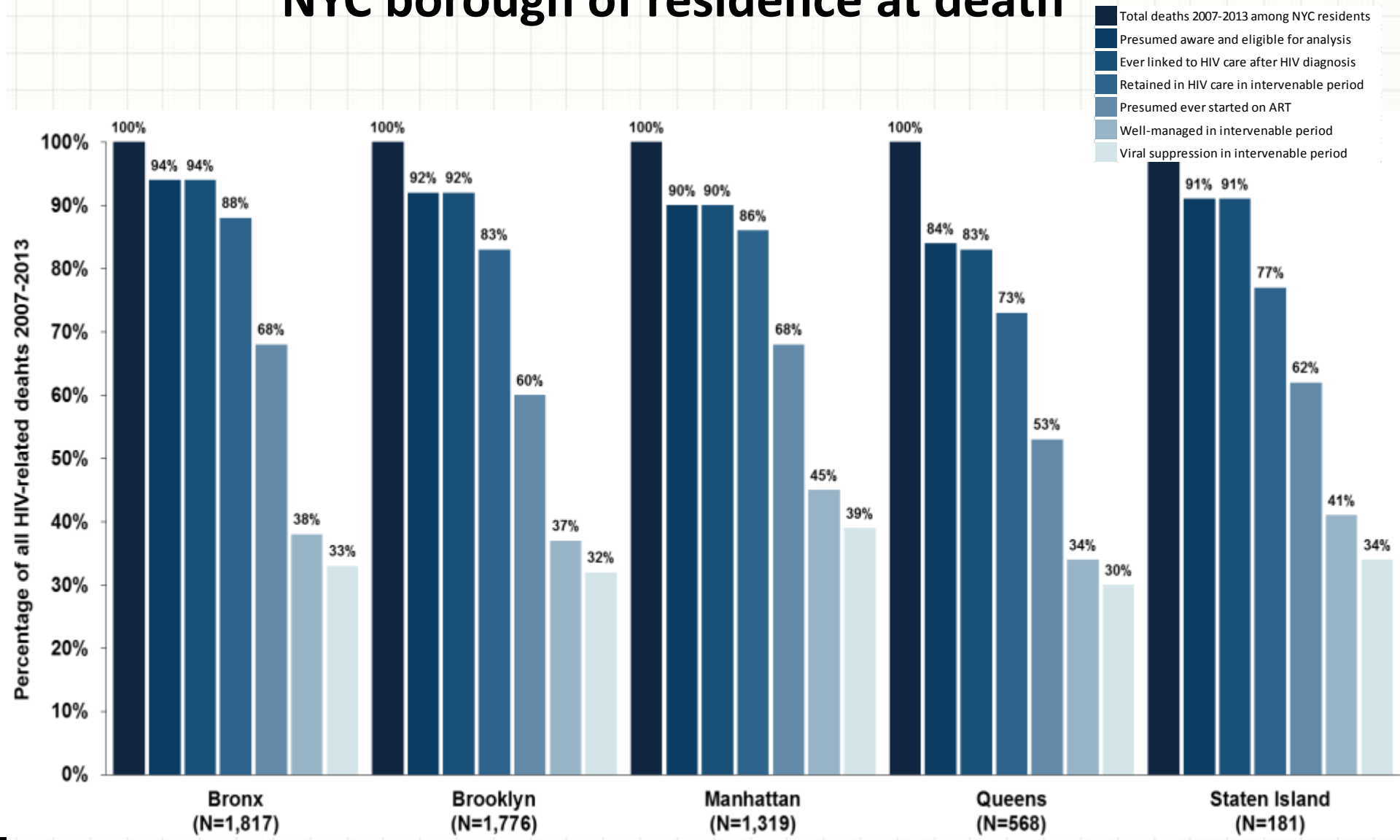


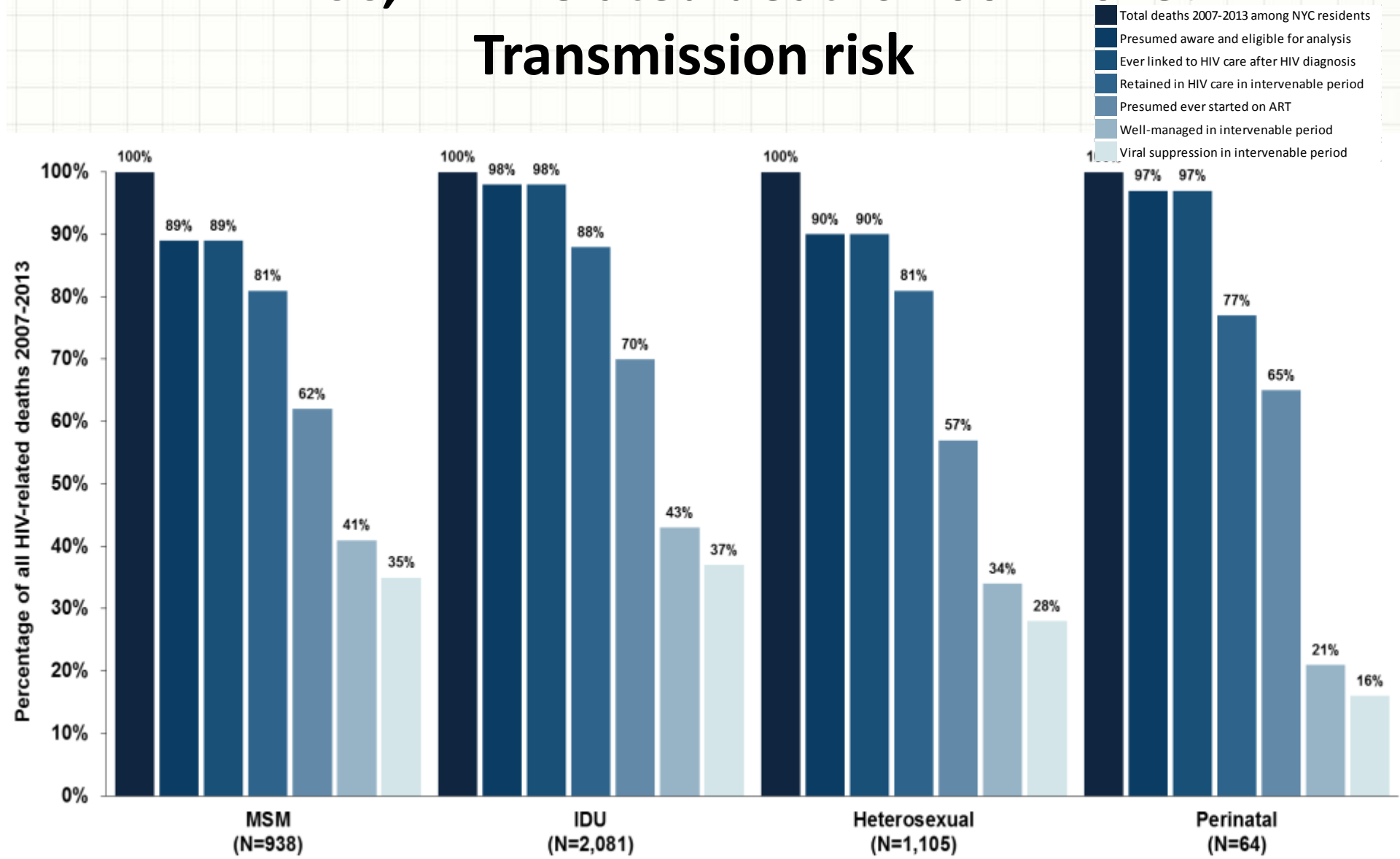
HMRCC, HIV-related deaths 2007-2013: Age at death



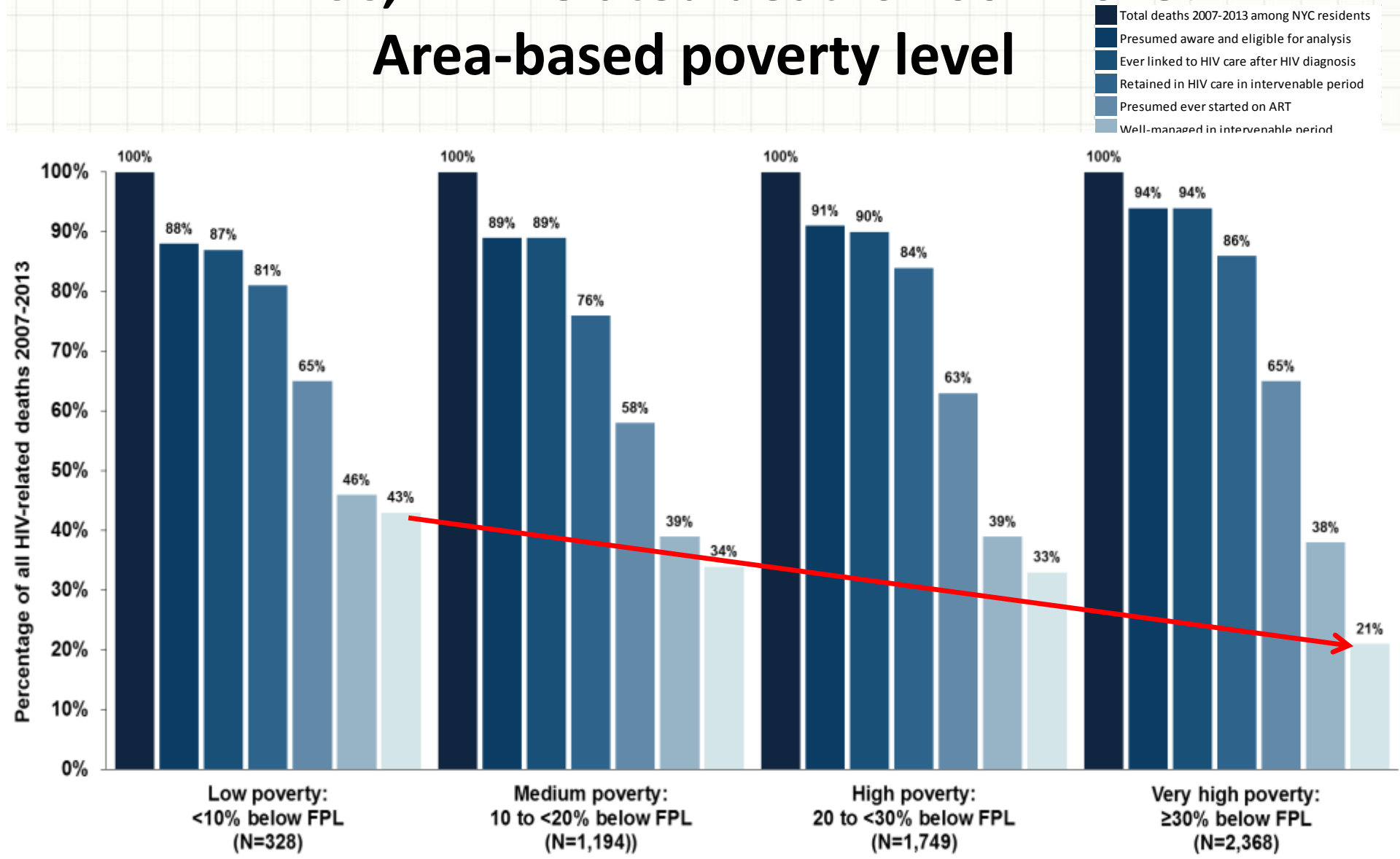
HMRCC, HIV-related deaths 2007-2013: NYC borough of residence at death



HMRCC, HIV-related deaths 2007-2013: Transmission risk



HMRCC, HIV-related deaths 2007-2013: Area-based poverty level



Getting to Status Neutral

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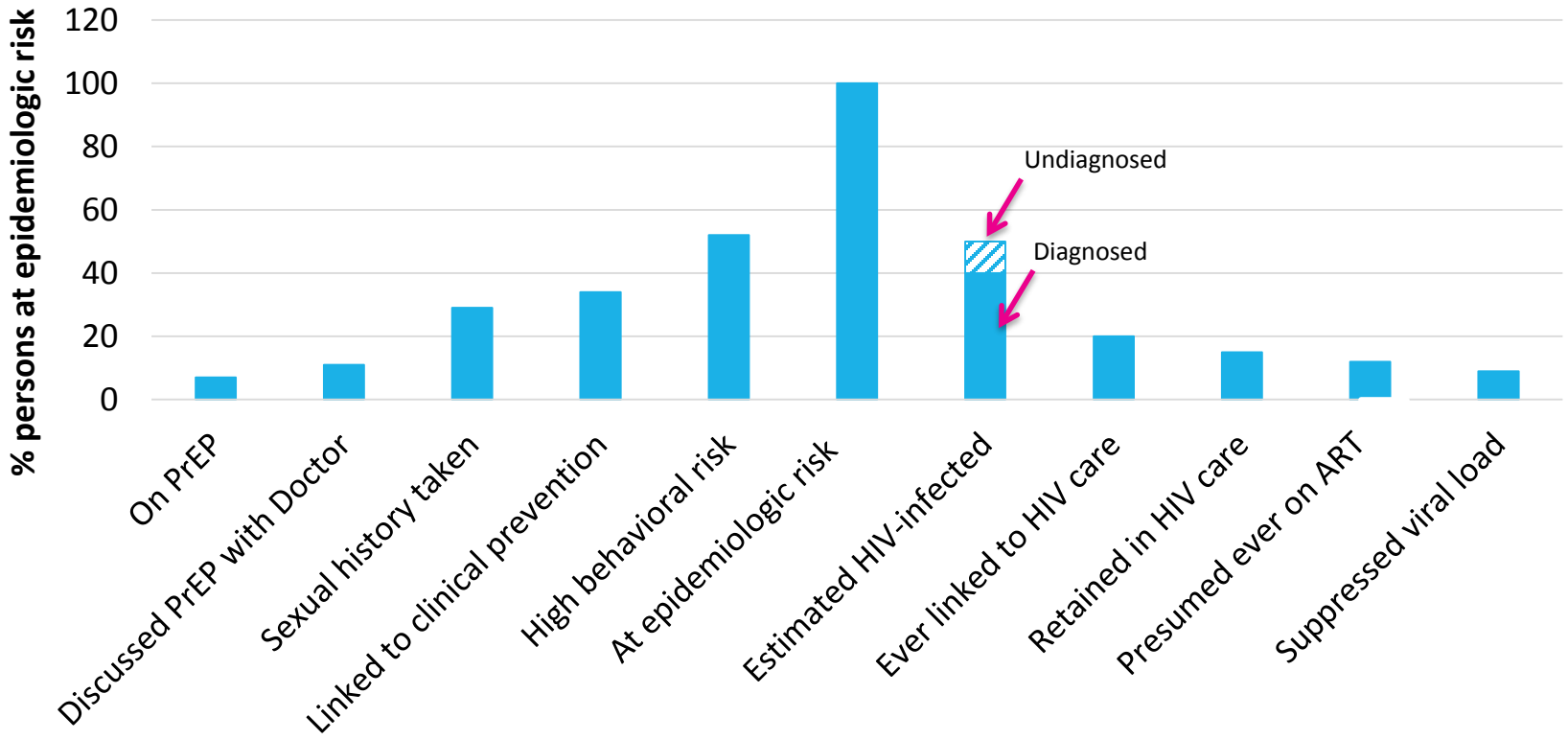
The HIV Neutral Continuum of Care
V 1.0



HIV CARE AND PREVENTION ARE THE SAME = GETTING TO HIV NEUTRAL

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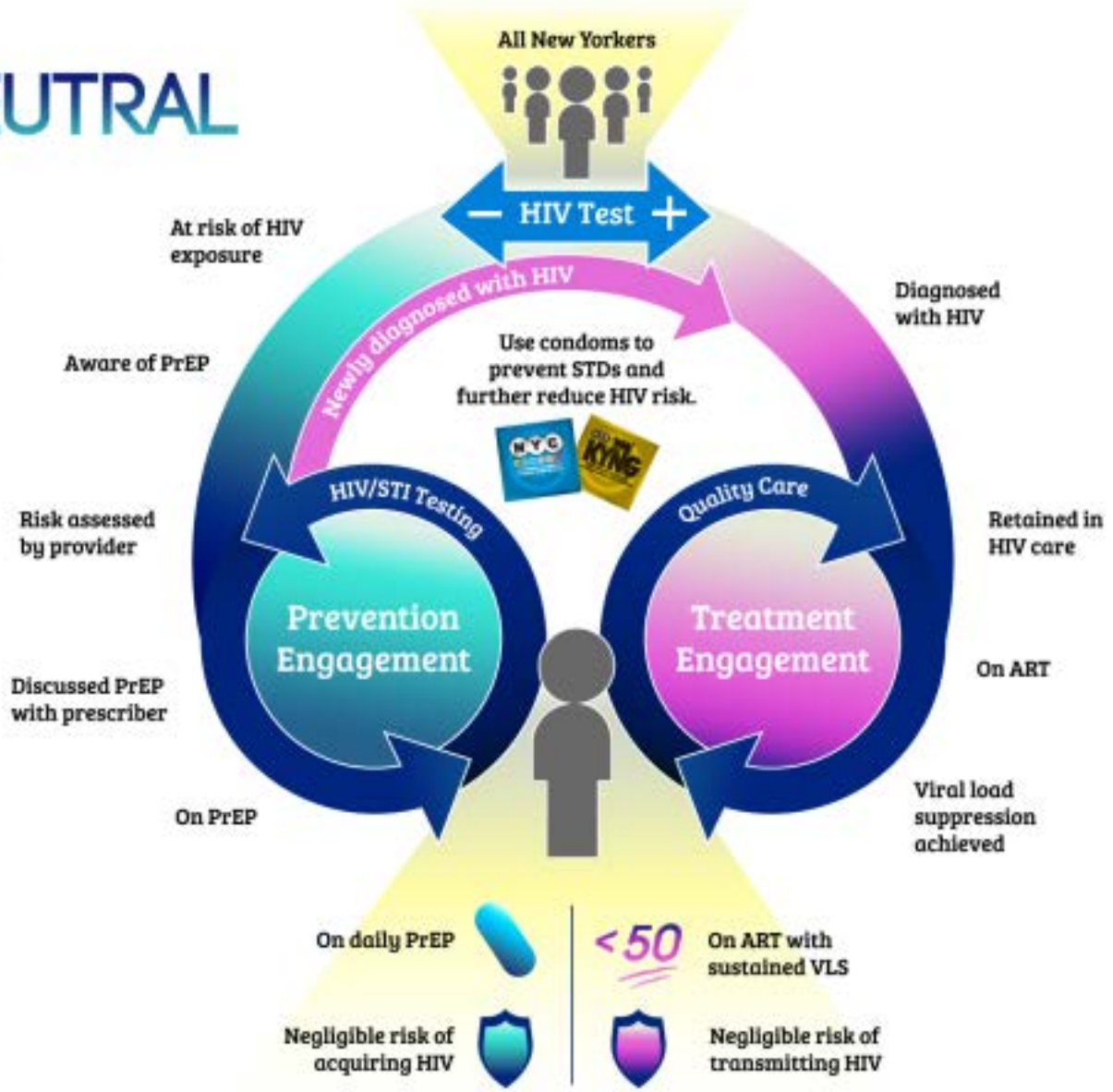
HIV Status Neutral
Prevention and Treatment Cycle

NEW YORK CITY'S

HIV STATUS NEUTRAL PREVENTION & TREATMENT CYCLE



People at risk of HIV exposure taking daily PrEP and people with HIV with sustained viral load suppression do not acquire or transmit HIV.

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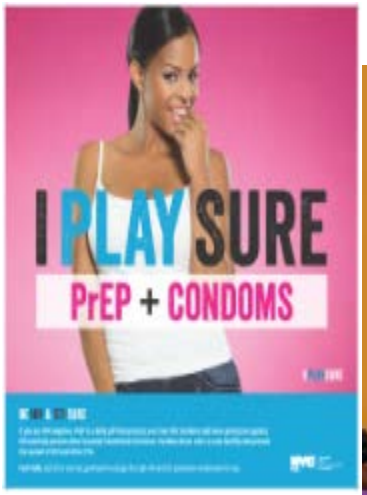
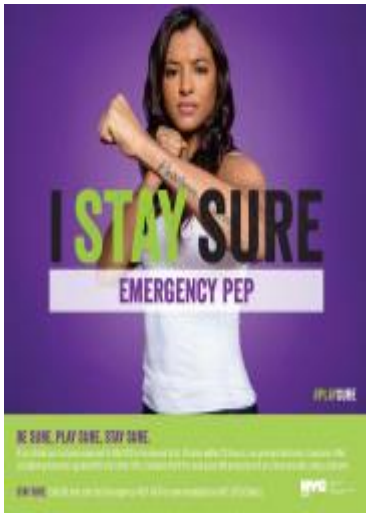
Combination Prevention HIV Neutral Social Marketing Campaign

- Launched #PlaySure, a combination prevention social marketing campaign, on World AIDS Day 2015
- Launched Stay Sure on World AIDS Day 2016
- EtE funds to support expansion of placement and social marketing





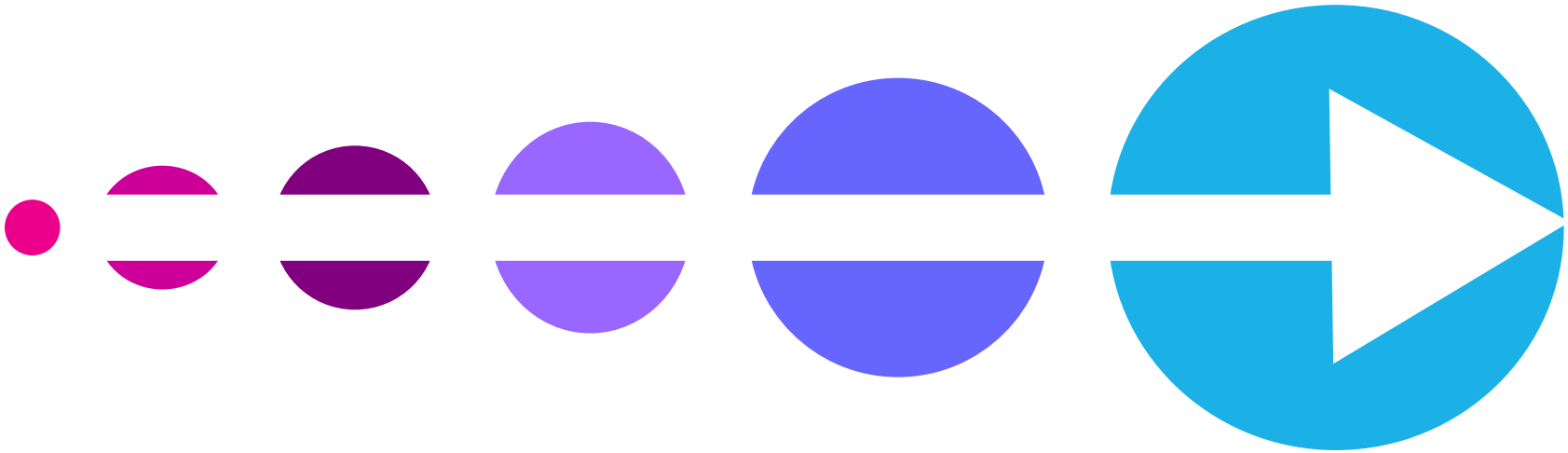
Status Neutral Care Coordination

Why do providers of RWPA-funded services need to know about PEP, PrEP & Sexual Health?

- **RWPA Providers are our partners in Ending the Epidemic**
- **Building on the RWPA system of care to embrace Status Neutral Approach to prevent new infections and achieve health equity**

ONE STOP NYC

STD Clinics as HIV Neutral Gateway to Care



State of the Art HIV Interventions and Navigation in STD Clinic

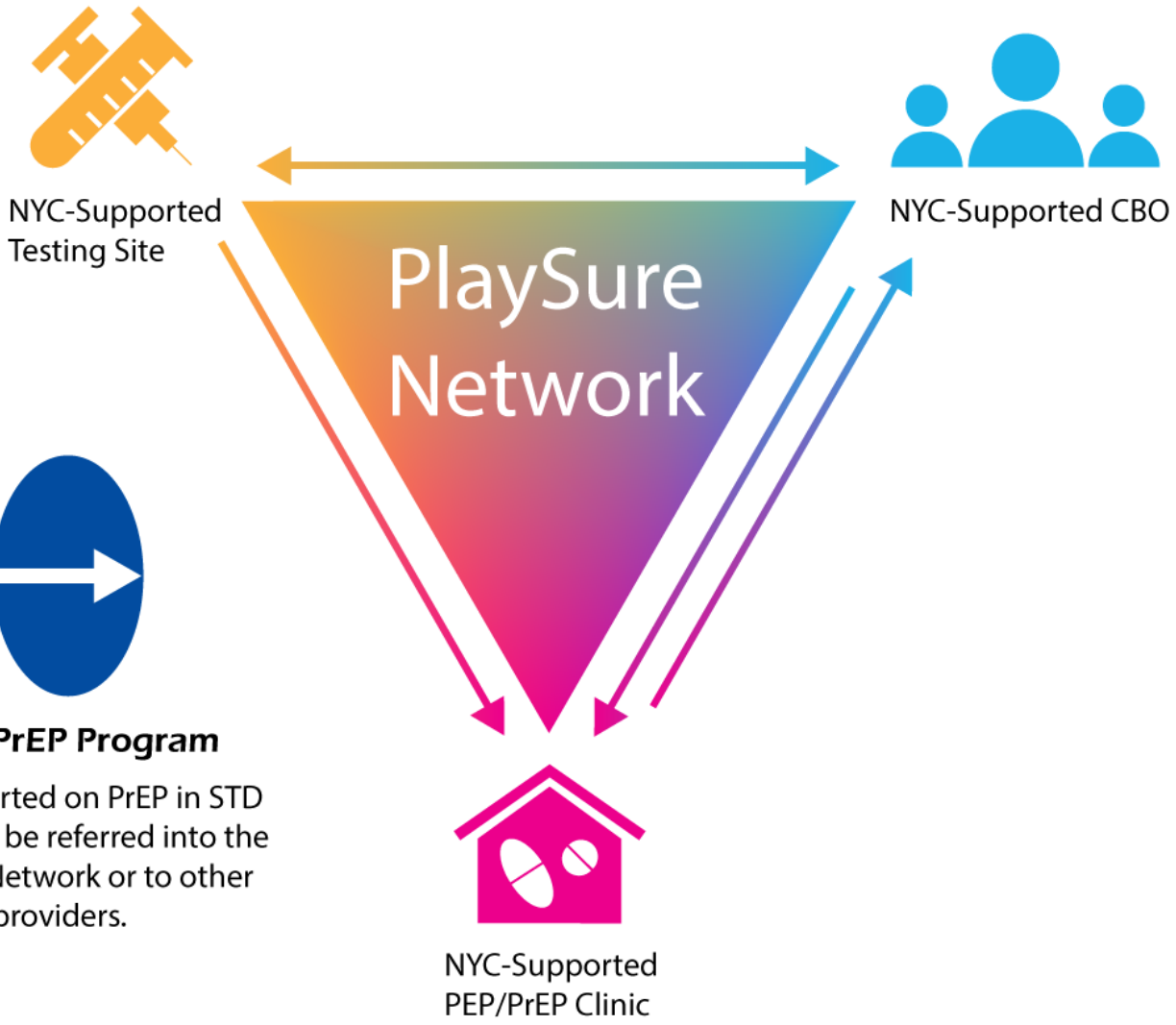
BIOMEDICAL EVALUATION AND INTERVENTION:

INSTANT STARTS OF ARV TREATMENT AND PREVENTION

SOCIAL WORK ASSESSMENT FOR SOCIAL DETERMINANTS OF RISK OR DISEASE PROGRESSION + INSURANCE CONNECTION

NAVIGATION TO LONGITUDINAL CARE FOR BOTH HIV NEGATIVE AND POSITIVE CLIENTS

NYC #PlaySure Network



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HIV Prevention at DOHMH STD Clinics

HIV status-unknown patients

- Screen using the most rapid and sensitive methods available (4th generation rapid testing, testing for acute infection)

HIV-uninfected patients at risk

- Offer full 28-day course of PEP
- Start PrEP and navigate to PrEP provider for continuation of therapy
- Connect to primary care provider

Access to PEP & PrEP Across NYC

- Open PEP Centers of Excellence throughout NYC
- Launch a 24-hour PEP call center
- Provide status-neutral care coordination
- Open PrEP pilot for adolescents
- Establish citywide PrEP network
- Scale up provider detailing program
- Measure PrEP Use in NYC

Targeted Outreach and Support

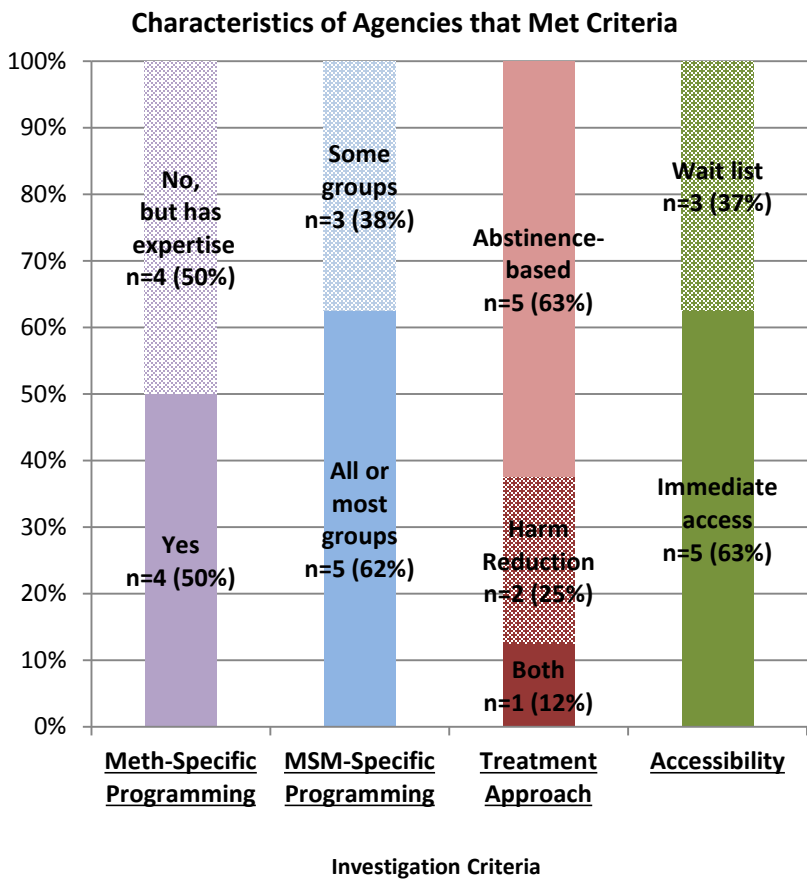
- Provider trainings on sexual and gender-related health issues
- LGBTQ Healthcare Bill of Rights
- LGBTQ Health Equity Coalition
- Trans-led and trans-focused organizations
- Programs for IV drug and crystal meth users

Resource Investigation

Aim: Preliminary assessment of resources for Crystal Meth Treatment and Support in NYC

- Only 8 of 22 agencies met criteria, majority in Manhattan
  - AIDS Service Center NYC
  - Crystal Clear Project*
  - Crystal Meth Anonymous*
  - Gay Men's Health Crisis
  - LGBT Center*
  - LES Harm Reduction Center
  - PRIDE Institute
  - Realization Center

  * Largest # of targeted local services
- Limited range of treatment approaches
- Community interest in crystal meth treatment
- Resource guide needed

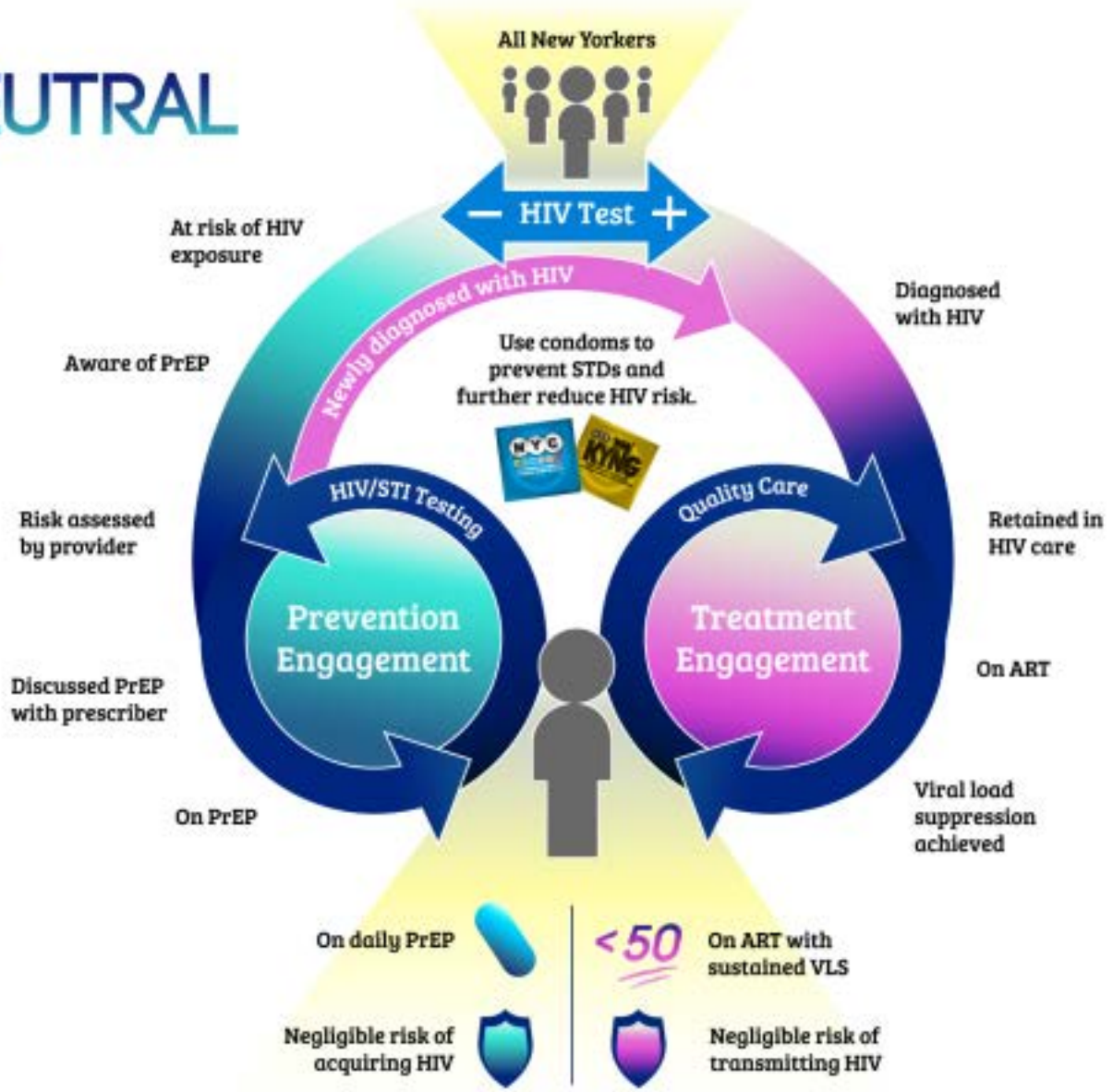


EtE RFP: Harm Reduction Services for Crystal Methamphetamine Users

- Increase RW crystal meth harm reduction services
- Innovative program to address crystal meth use in NYC and expand harm reduction support
  - Service focus on MSM and Transgender women at risk of HIV
  - HIV Positive meth users receive RW services and clinical services in this EtE RFP
- The program will be a collaborative consisting of a CBO and a clinic-based agency
  - **CBO:** provide outreach, drop in space, counseling, group-level support, education and linkage to services, & benefits navigation
  - **Clinic:** pharmacotherapy, counseling, vaccinations, STI treatment, & PEP starter packs

NEW YORK CITY'S

HIV STATUS NEUTRAL PREVENTION & TREATMENT CYCLE



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NYC Health

Thank you!

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