

Medical Monitoring Project (MMP)

Results from the MMP survey of people receiving HIV care
in 2011-2012 in NYC

HIV Epidemiology and Field Services Program,
Bureau of HIV/AIDS Prevention and Control,
New York City Department of Health and Mental Hygiene

Background

Medical Monitoring Project (MMP)

- The Centers for Disease Control and Prevention (CDC) estimates that 1.1 million persons aged 13 years and older are living with HIV infection, including 180,900 who are unaware of their infection. CDC, HIV Surveillance Supplemental Report 2013;18(No. 5).
- In NYC, at the end of 2013, 117,618 persons were diagnosed with HIV/AIDS (NYC DOHMH, 2013)
- MMP is a national study of persons living with HIV/AIDS receiving outpatient medical care for HIV conducted by CDC with local partners

Objectives

Medical Monitoring Project (MMP)

- Develop greater understanding of the health status and health-related needs of PLWHA, and their HIV transmission risk and prevention behaviors
- Conduct analysis on locally and nationally representative samples of HIV infected adults in care
- Inform the development and planning of policy and programs for PLWHA, e.g. Ryan White CARE Act planning councils and consortia

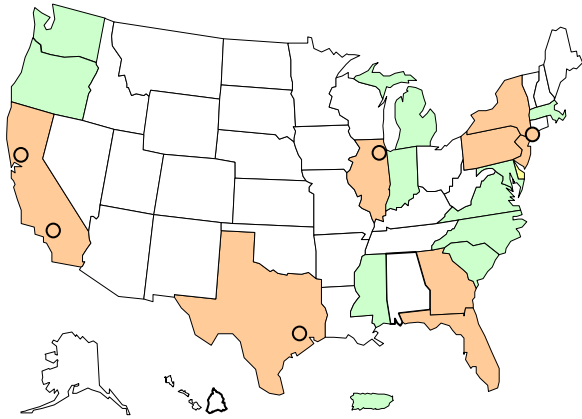
Methods

Medical Monitoring Project (MMP)

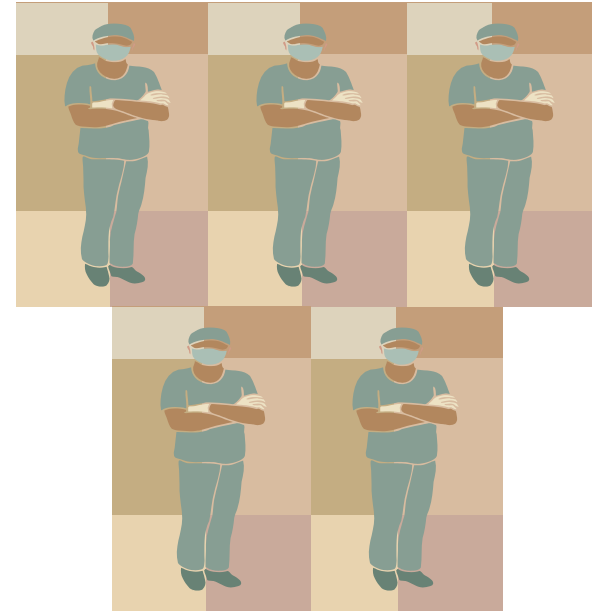
- Multi-year (2005-open) project of US adults in outpatient care for HIV
- Cross-sectional design
- Annual multi-stage probability sample

Methods

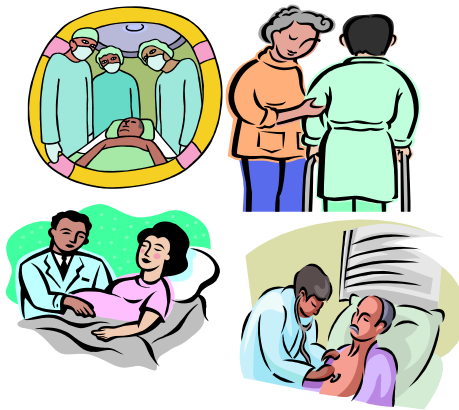
Medical Monitoring Project (MMP): 3-stage Sample Design



1st stage – local areas



2nd stage - providers



3rd stage - patients

Methods

Medical Monitoring Project (MMP): Sample Selection

- Stage 1 – Local Areas:
 - 23 areas selected (16 states, 1 US territory, and 6 cities)
 - Probability of selection is proportional to size (PPS) (# of reported living AIDS cases in 2002)
 - Includes >80% of US AIDS cases in 2002

Methods

Medical Monitoring Project (MMP): Sample Selection

- Stage 2 – Medical Providers (facilities or private providers):
 - Providers who deliver HIV medical care
 - Monitor CD4 count, viral load
 - Prescribe antiretroviral therapy (ART)
 - Probability of selection is proportional to size (facilities with higher patient loads are more likely to be selected)

Methods

Medical Monitoring Project (MMP): Sample Selection

- Stage 3 – Patients seen by a Selected Provider
 - Randomly sampled
 - Eligibility
 - HIV-infected
 - ≥ 18 years of age
 - received HIV medical care at facility between January 1st and April 30th in a given cycle year
 - Participation voluntary; \$40 incentive (MetroCard or cash or Visa Card)

Note: In 2012 MMP was designated a surveillance activity and did not require informed consent for medical record abstractions

Methods

Medical Monitoring Project (MMP)

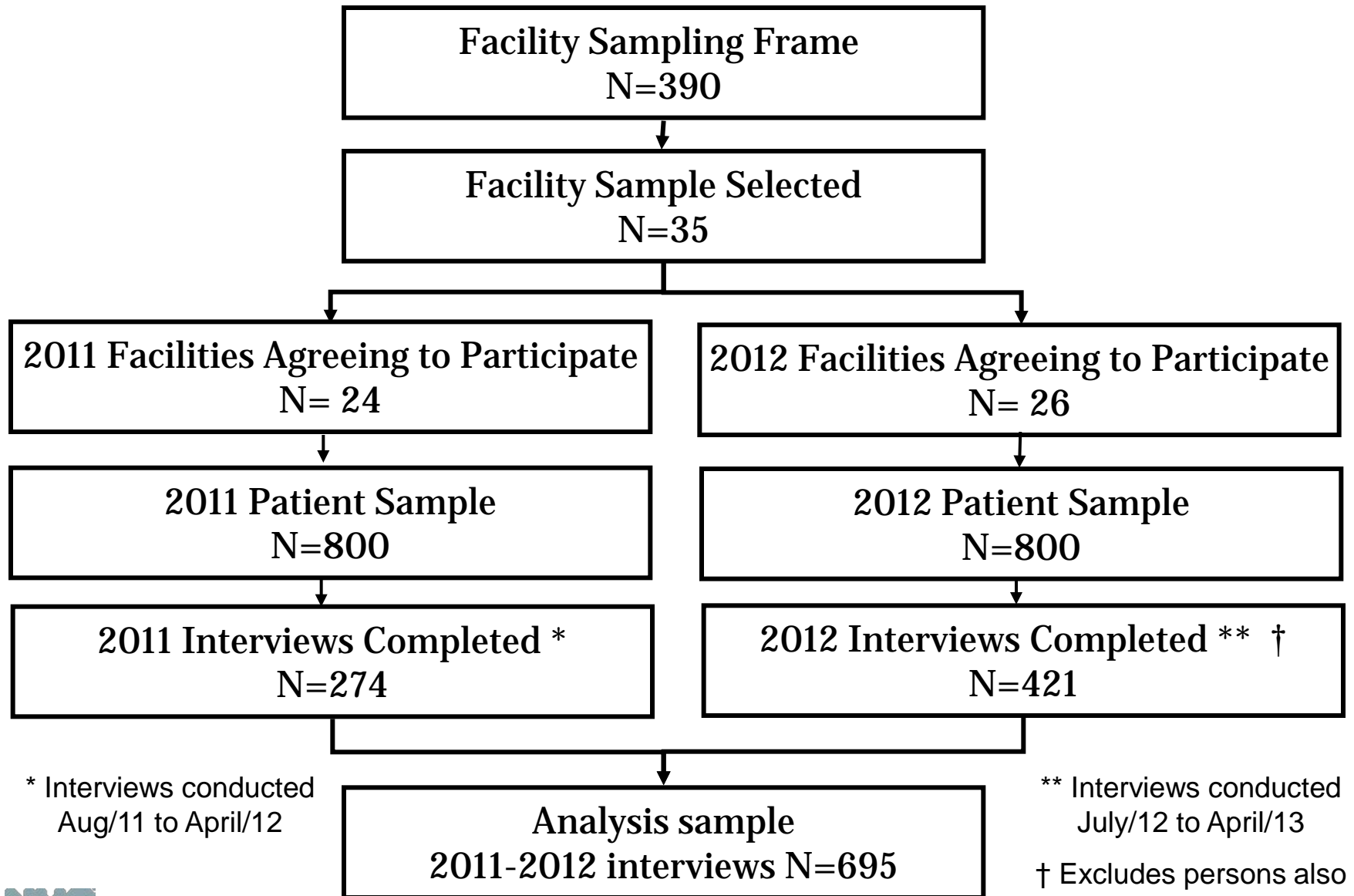
- Data collection using 2 sources:
 - Computer-based, structured face-to-face interview conducted in private or phone interview (few) by trained interviewer
 - Medical record abstractions
 - In 2011 only patients who consented to an interview had medical record abstractions (MRA) (2 interviews had no MRA)
 - In 2012 all patients were eligible for an MRA regardless of having been interviewed
- Interview data collected:
 - Clinical status including viral loads, CD-4 counts and other general health data
 - Treatment adherence
 - HIV-related service needs and utilization
 - Health behaviors (sexual, drug use, prevention)

Methods

Medical Monitoring Project (MMP)

- Analysis:
 - Descriptive statistics (frequency and percentage distributions)
 - Pearson Chi-Square test for associations between race/ethnicity and selected outcomes
 - Significance level set at $P < 0.05$

NYC 2011 and 2012 MMP Sample



* Interviews conducted
Aug/11 to April/12

** Interviews conducted
July/12 to April/13

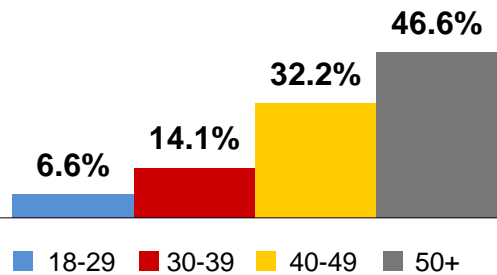
† Excludes persons also
interviewed in 2011

MMP Participants' Social Demographics

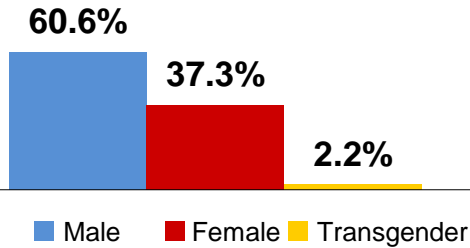
Participants' Social Demographics, (N=695)

MMP, NYC, 2011/2012

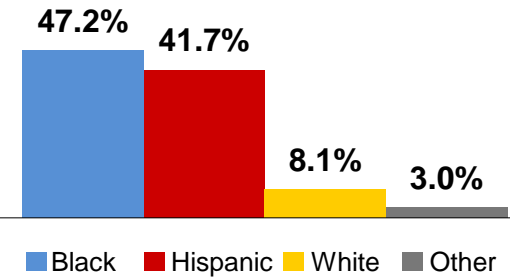
Age



Gender

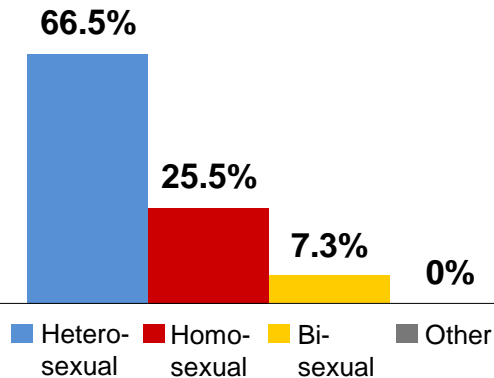


Race/Ethnicity

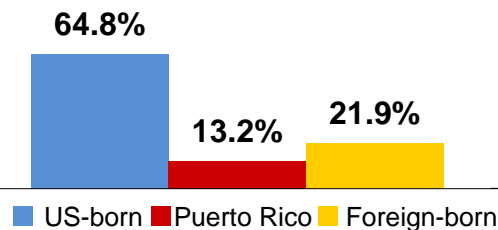


(Mean age = 47.9 years, SD = 11.1, range 49-84)

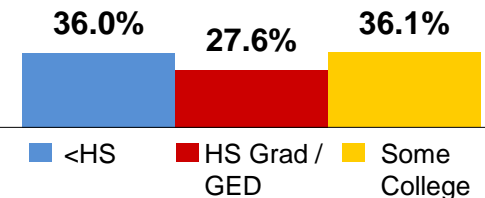
Sexual Orientation



Place of Birth



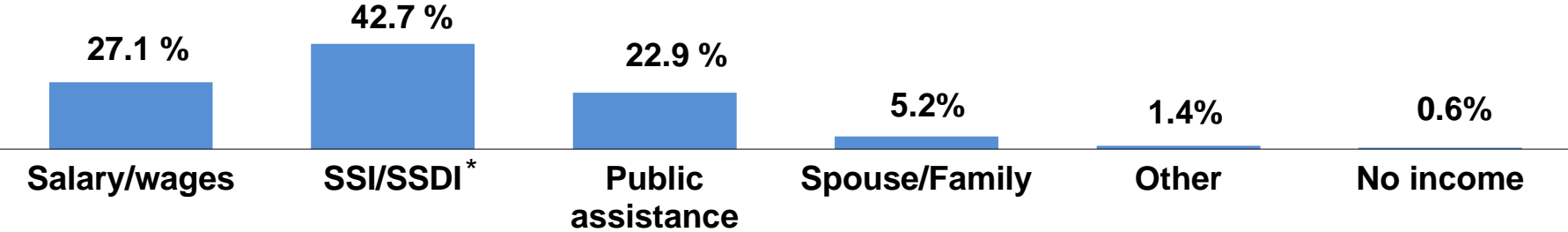
Education



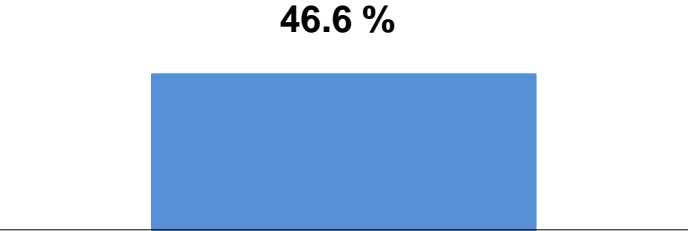
Participants' Social Demographics, (N=695)

MMP, NYC, 2011/2012 (cont'd)

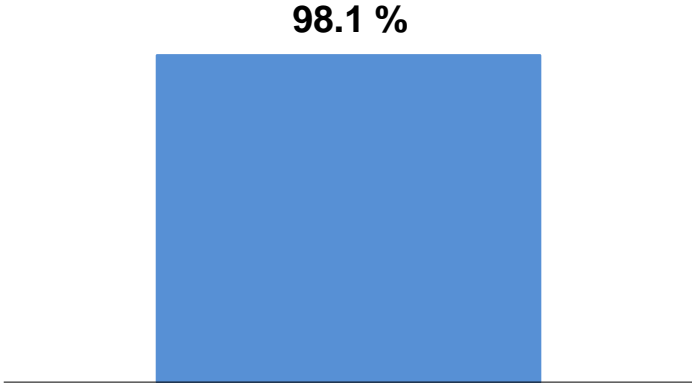
Main Source of Income Past 12 Months:



Received Any Public Assistance Past 12 Months:



Covered by Health Insurance Past 12 Months:



* Supplemental Security Income (SSI); Social Security Disability Income (SSDI)

Participants' Social Demographics, (N=695)

Past 12 Months

MMP, NYC, 2011/2012 (cont'd)

**Homelessness
Past 12 Months:**

(11.4%)



**Jail Time
Past 12 Months:**

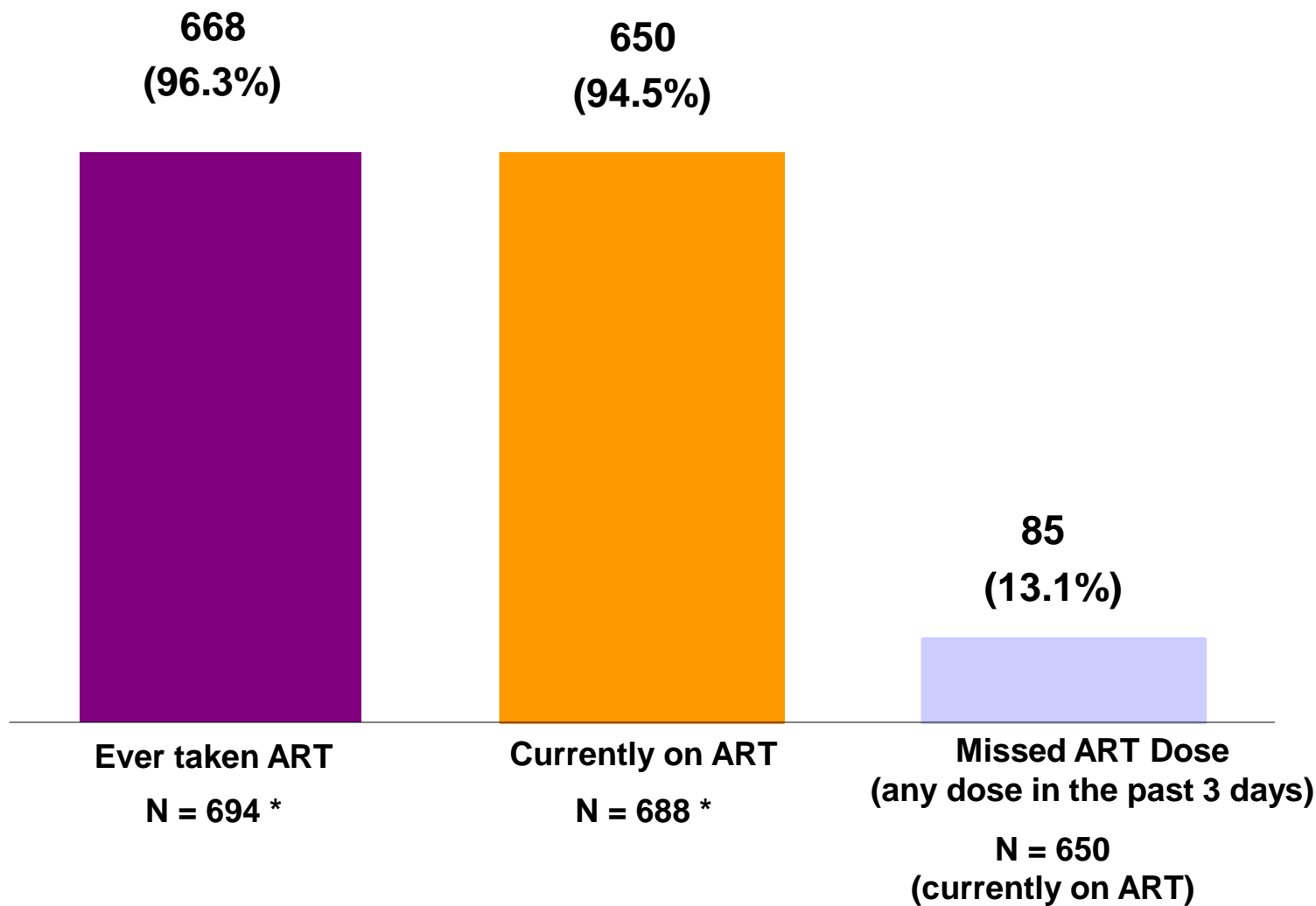
(7.2%)



MMP Participants' Clinical Characteristics

Antiretroviral Therapy (ART) and Adherence

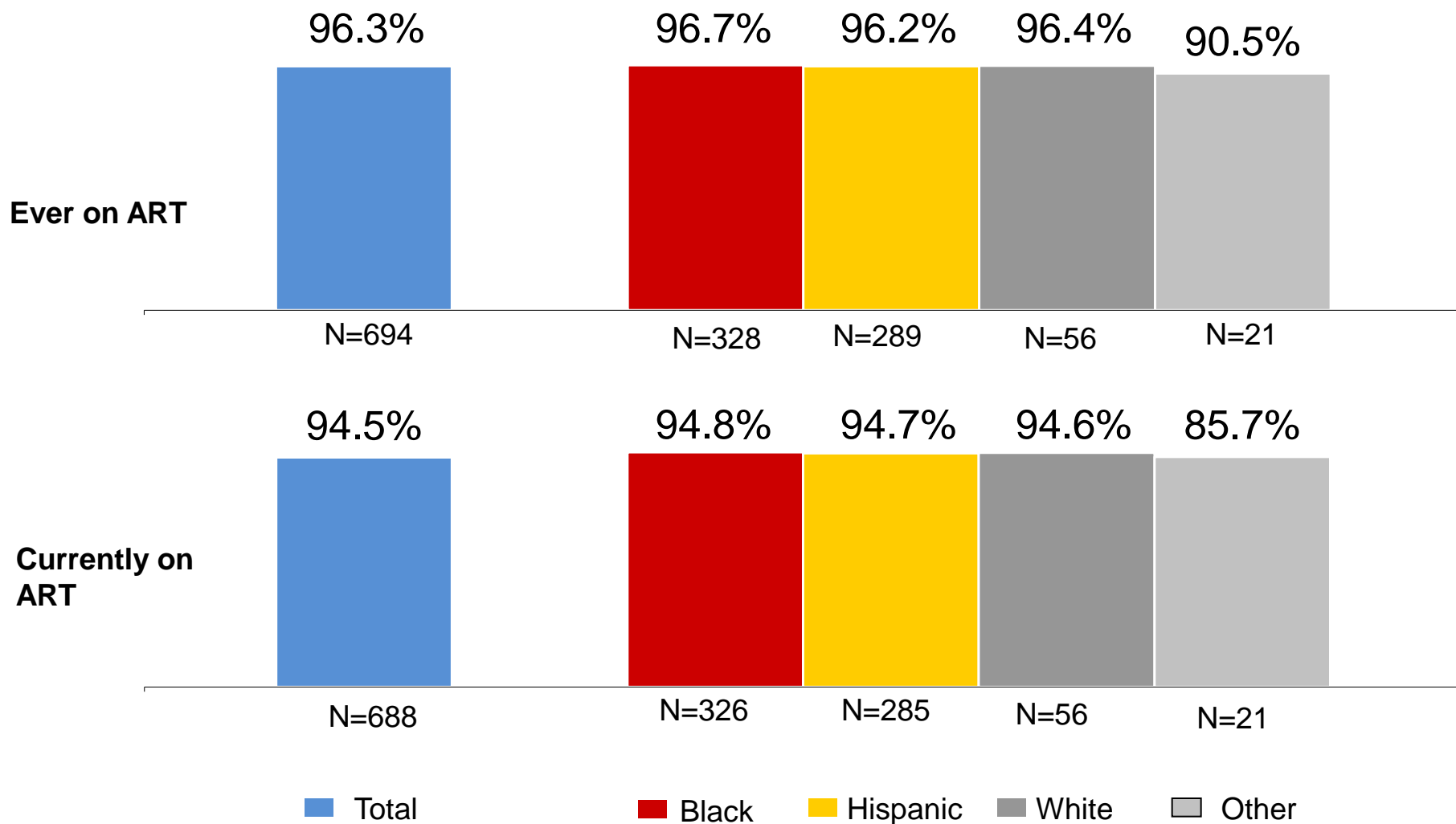
MMP, NYC, 2011/2012



* Note: N based on non-missing responses

HIV Treatment by Race/Ethnicity

MMP, NYC, 2011/2012



* Note: N based on non-missing responses

Non-Adherence by Race/Ethnicity Among Those Currently on ART

MMP, NYC, 2011/2012

Race/ Ethnicity	Dosing *			Timing **			Food *** †		
	Total N	Yes	%	Total N	Yes	%	Total N	Yes	%
Black	309	48	15.5 %	309	82	26.5 %	187	47	25.1 %
Hispanic	270	33	12.2%	270	67	24.8 %	166	44	26.5 %
White	53	3	5.7 %	53	8	15.1 %	27	4	14.8 %
Other	18	1	5.6 %	18	3	16.7 %	8	0	0 %
Total	650	85	13.1%	650	160	24.6 %	388†	95	24.5 %

* Missed any dose in the past three consecutive days; ** Did not adhere to specific medication schedule (timing);

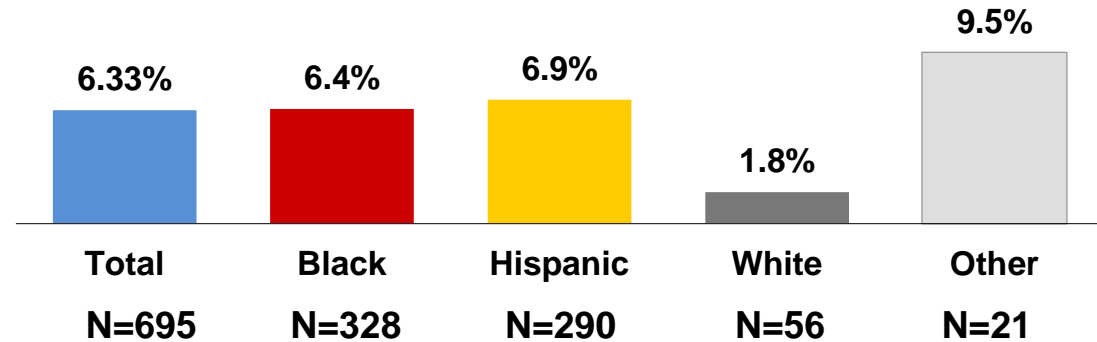
*** Did not adhere to specific food instructions; † Asked only of those with food restrictions

MMP Participants' Service Utilization

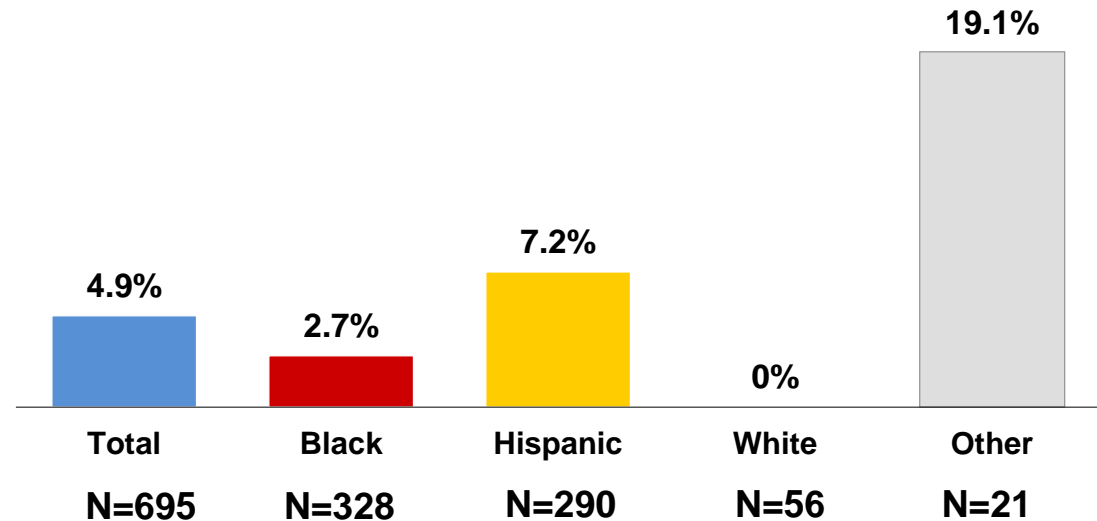
Healthcare Service Utilization by Race/Ethnicity, Past 12 Months

MMP, NYC, 2011/2012

ER Services,
HIV-related



Hospitalization,
HIV-related

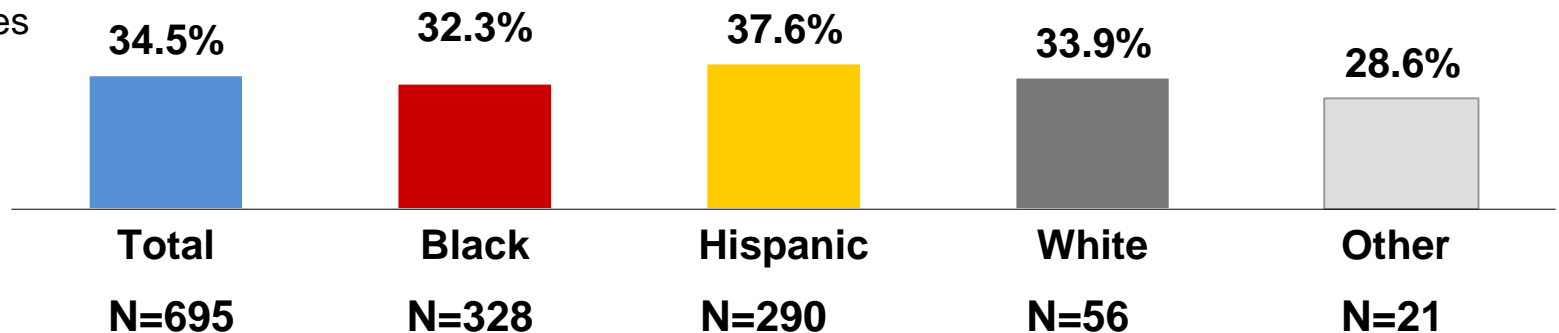


* p = .0003

Mental Health Services Provision by Race/Ethnicity, Past 12 months

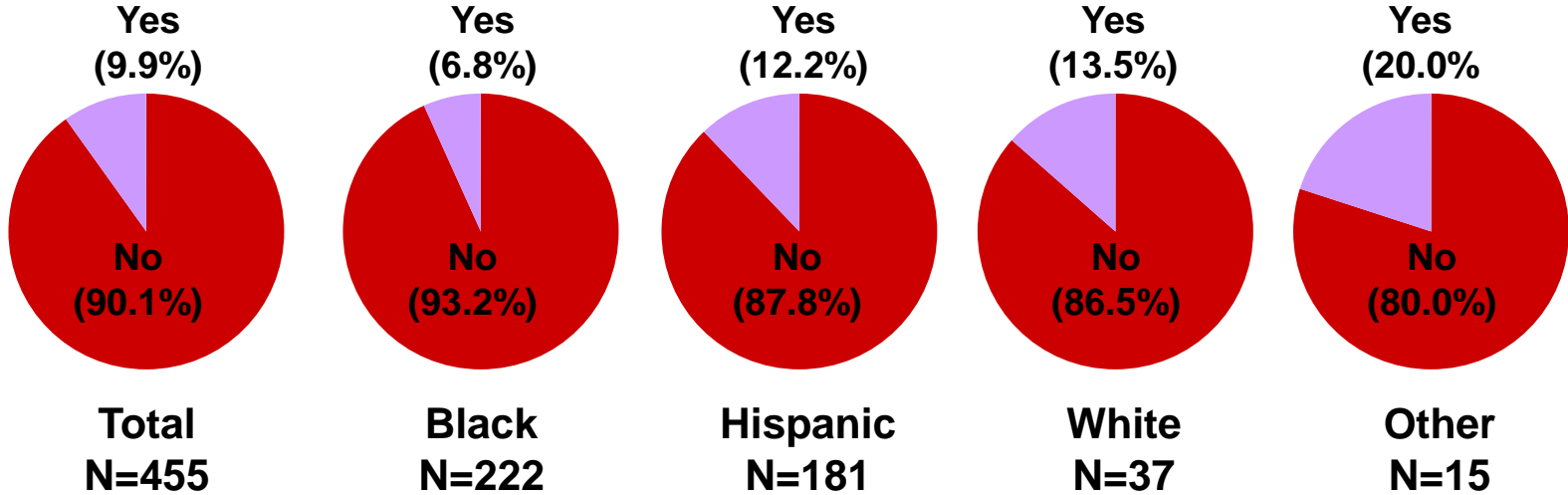
MMP, NYC, 2011/2012

People who received Mental Health Services



Unmet Need for Mental Health Services Among Those Not Receiving the Service by Race/Ethnicity, Past 12 Months

MMP, NYC, 2011/2012

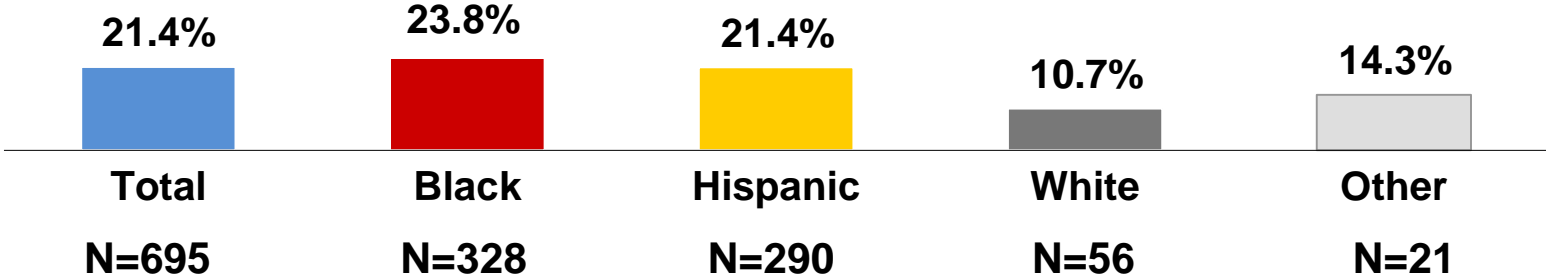


Yes = Unmet Need
No = Service Not Needed

Housing Services Provision by Race/Ethnicity, Past 12 Months

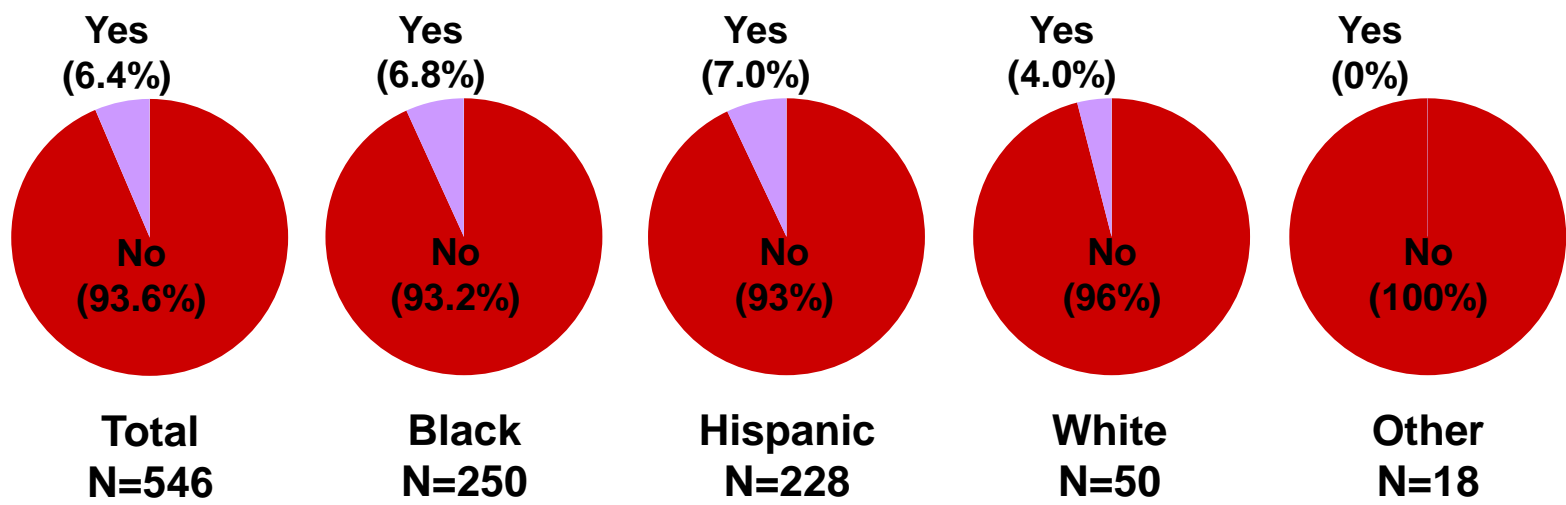
MMP, NYC, 2011/2012

People who received Housing Services



Unmet Need for Housing Services Among Those Not Receiving the Service by Race/Ethnicity, Past 12 Months

MMP, NYC, 2011/2012

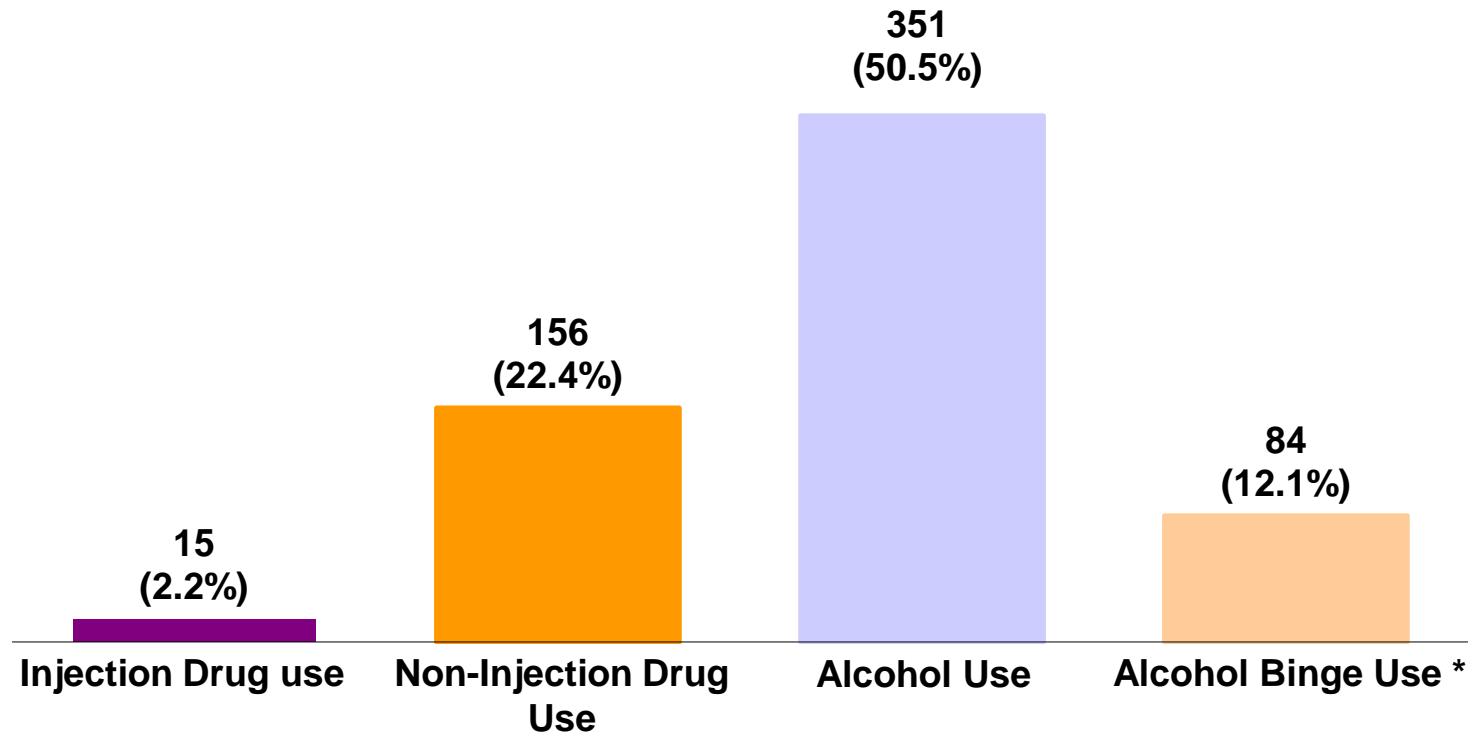


Yes = Unmet Need
No = Service Not Needed

MMP Participants' Drug Use Profile

Drug and Alcohol Use (N=695), Past 12 Months

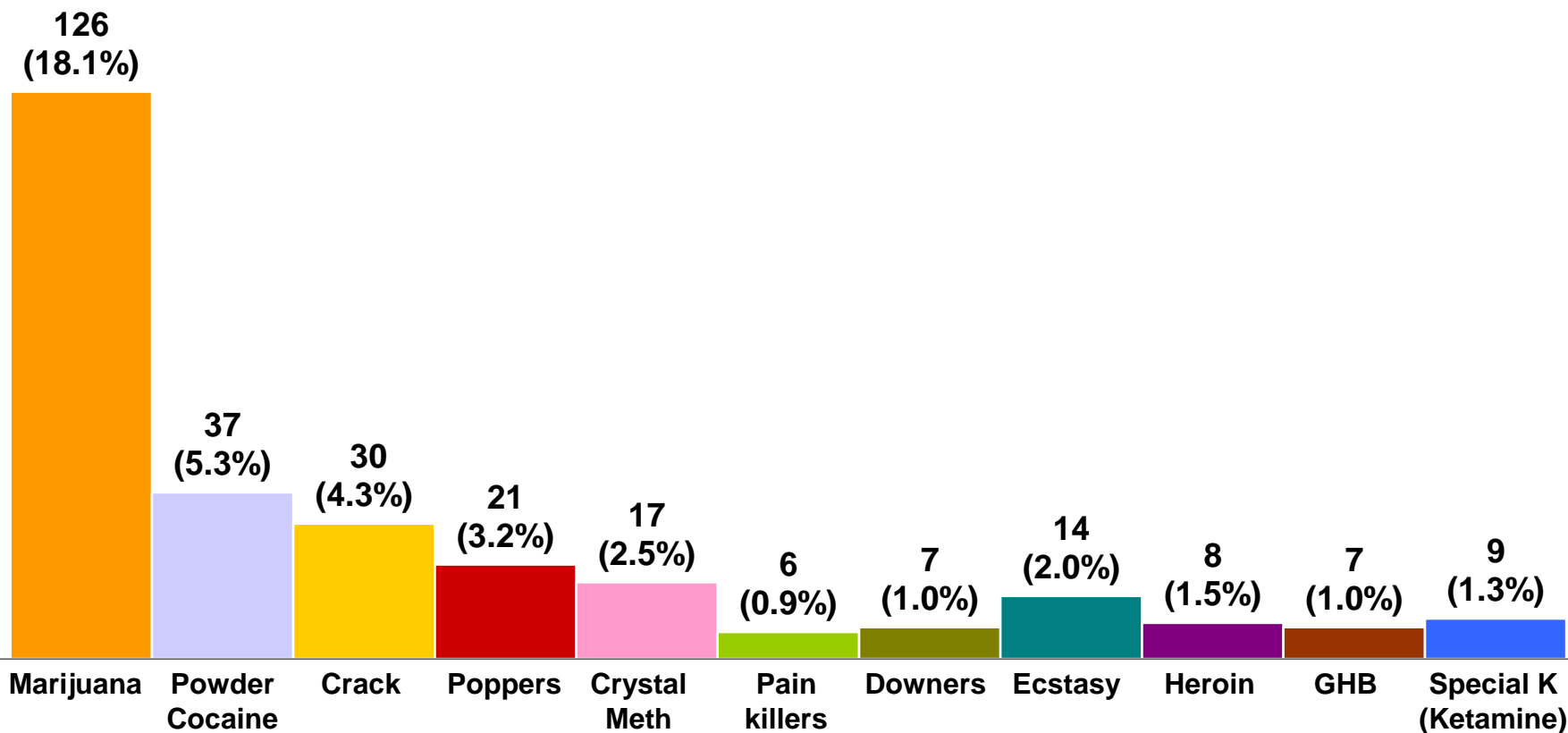
MMP, NYC, 2011/2012



* For men, binge drinking was defined as 5 or more drinks in one sitting in the past 30 days.
For women, binge drinking was defined as 4 or more drinks in one sitting in the past 30 days.

Non-Injection Drug Use* (N=695), Past 12 Months

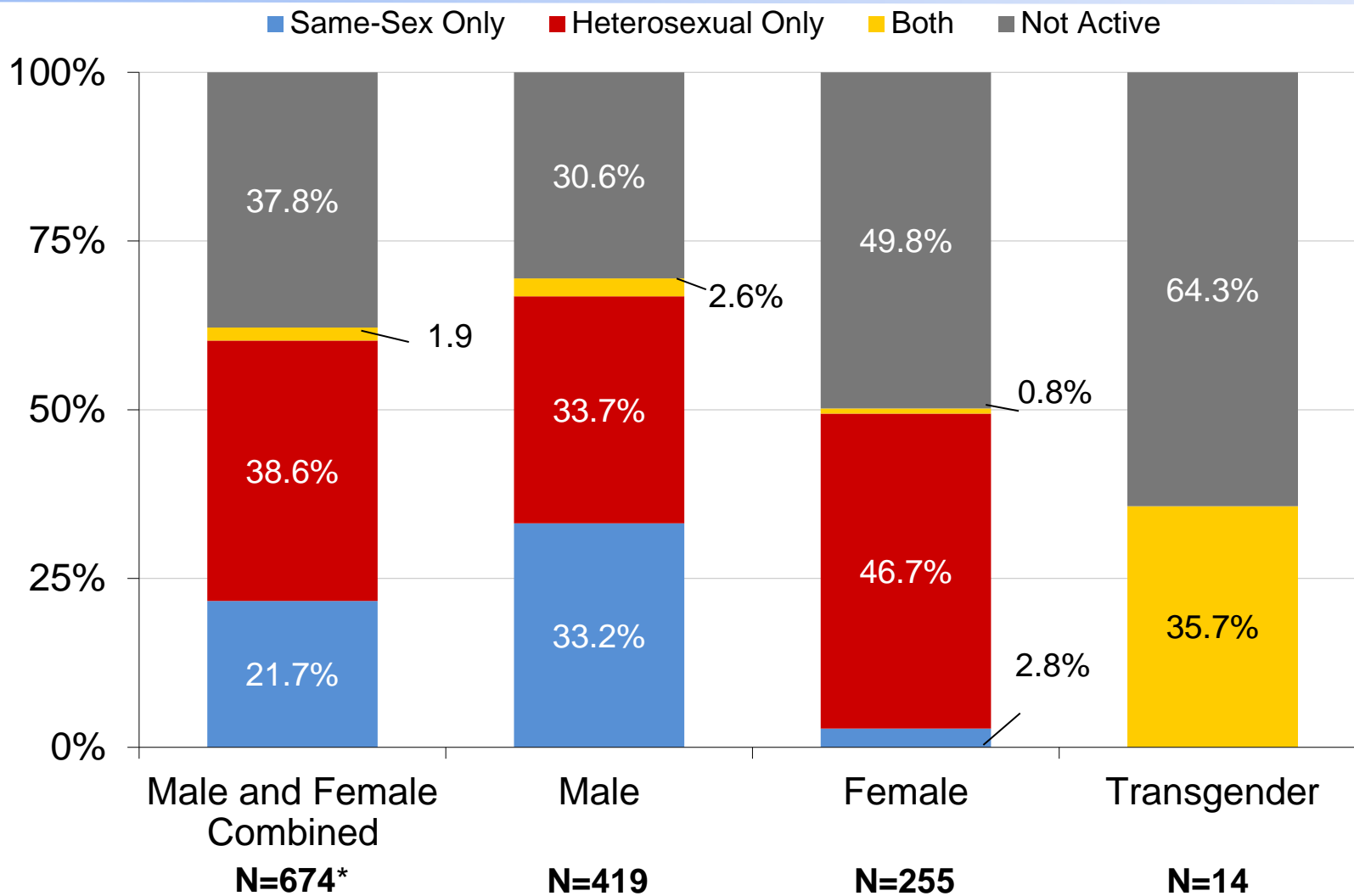
MMP, NYC, 2011/2012



Sexual Activity and Sexual Risk Behaviors

Sexually Active Participants by Gender Sex Partners', Past 12 Months

MMP, NYC, 2011/2012



* Note: N based on non-missing responses

Among the Sexually Active, Number of Sex Partners by Partnership Gender Type, Past 12 Months

MMP, NYC, 2011/2012

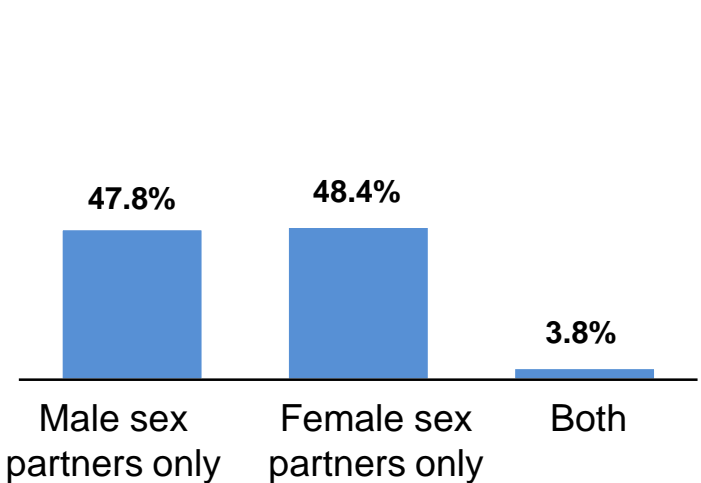
Partnership Type *	N	Median	Min, Max	IQR **
Male w/ Female	152	1	1, 10	(1, 2)
Male w/ Male	146	3	1, 60	(1, 6)
Female w/ Male	120	1	1, 20	(1, 1)

* Partnership types are not mutually exclusive ** Interquartile Range

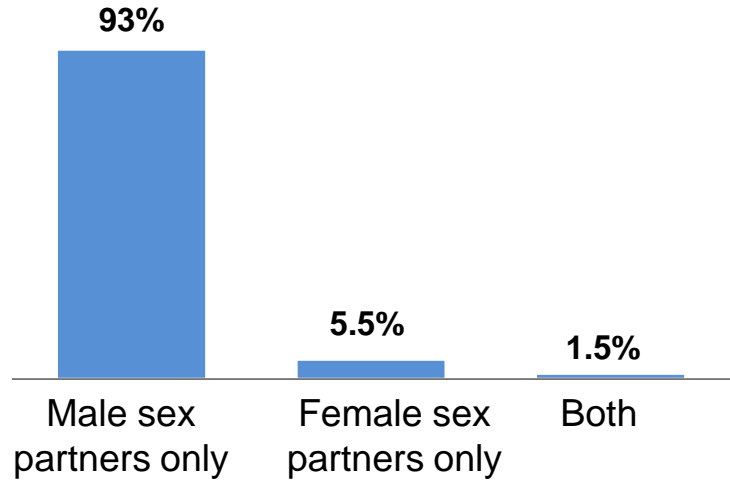
Partner Gender Among Participants Reporting Sexual Activity by Participant Gender, Past 12 Months

MMP, NYC, 2011/2012

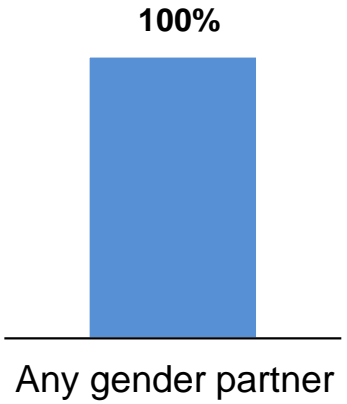
Male Participants (N = 291)



Female Participants (N = 128)

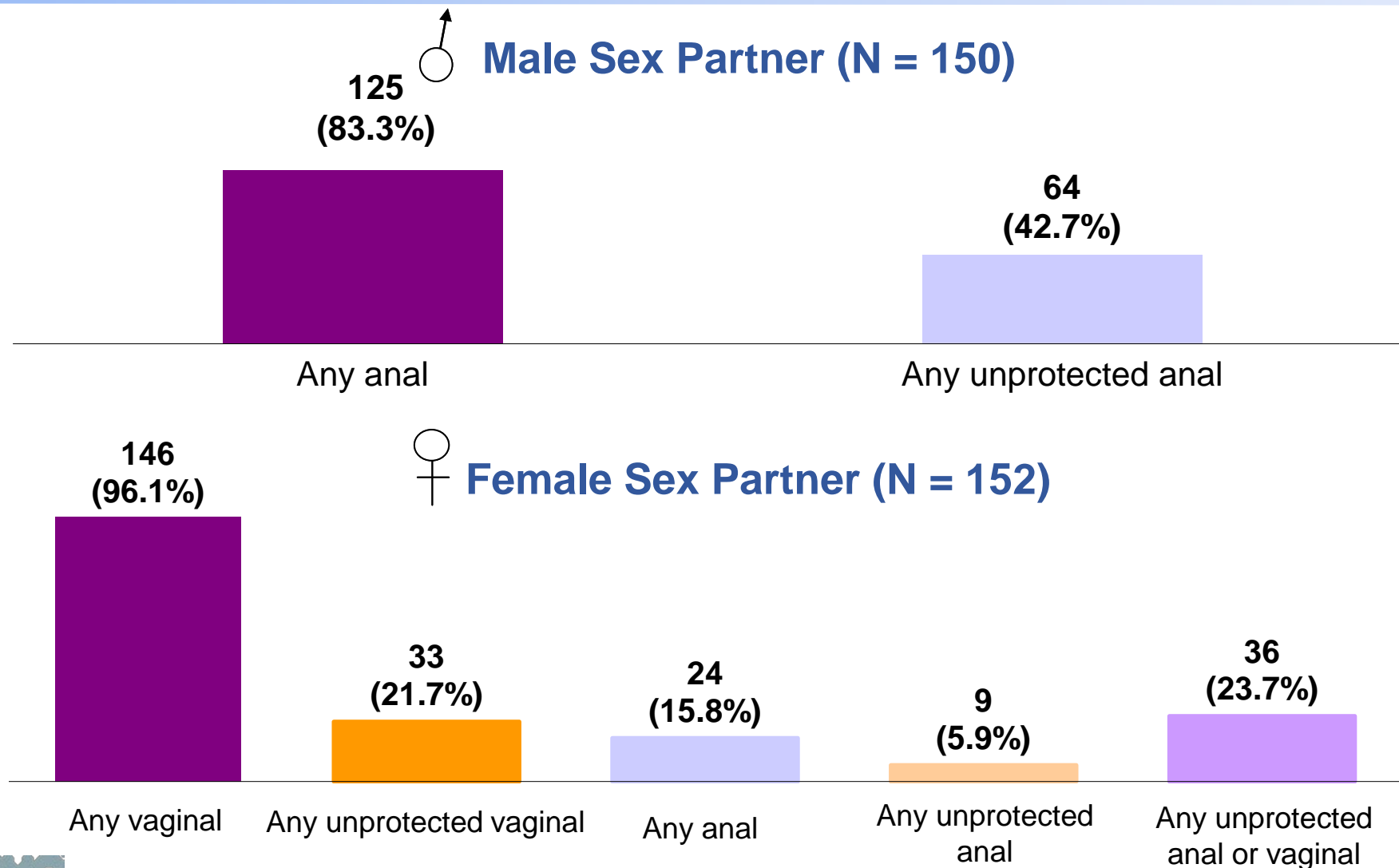


Transgender Participants (N = 5)



Sexual Behaviors by Partnership Gender Among Sexually Active Male Participants, Past 12 Months*

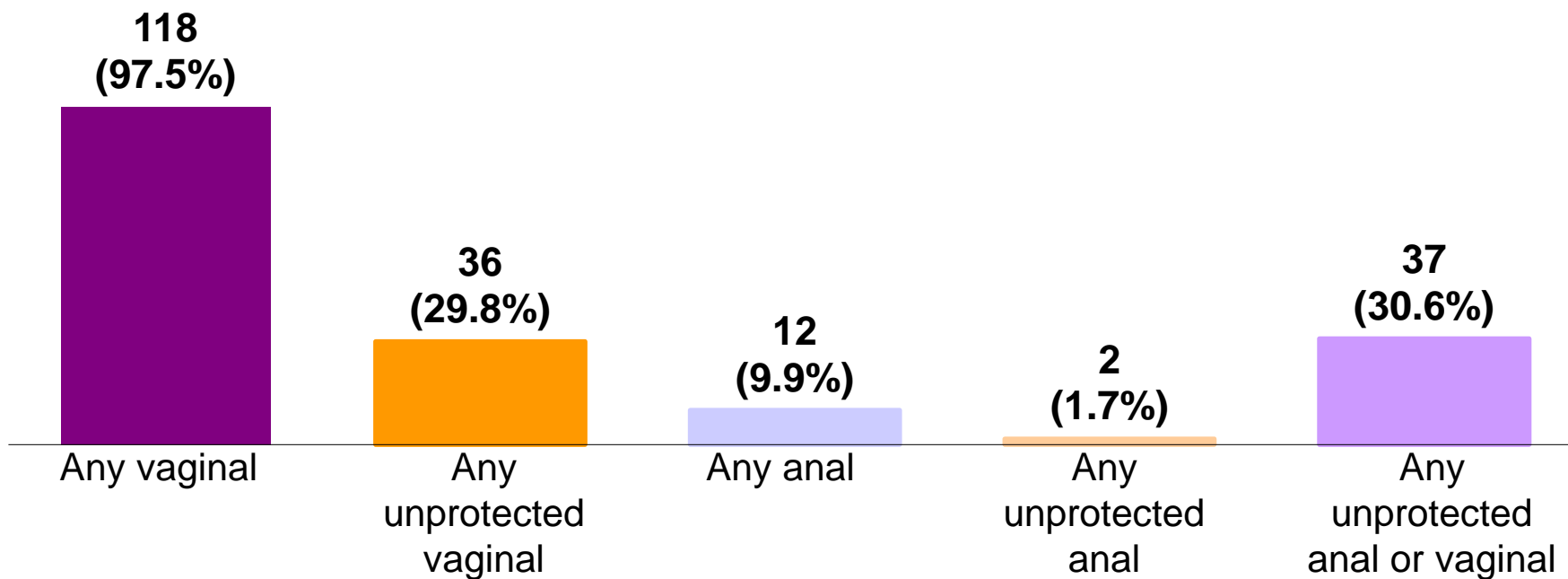
MMP, NYC, 2011/2012



Sexual Behaviors by Partnership Gender among Sexually Active Female Participants with Male Partners, Past 12 Months

MMP, NYC, 2011/2012

♂ **Male Sex Partner (N = 121)**

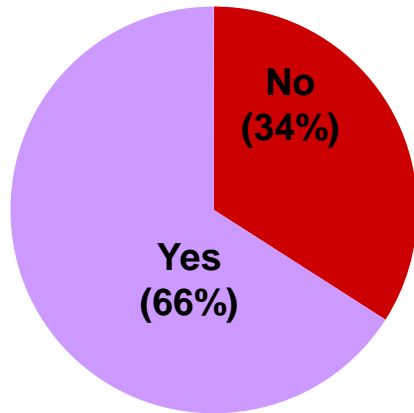


Exposure to Individual Counseling or Group Prevention

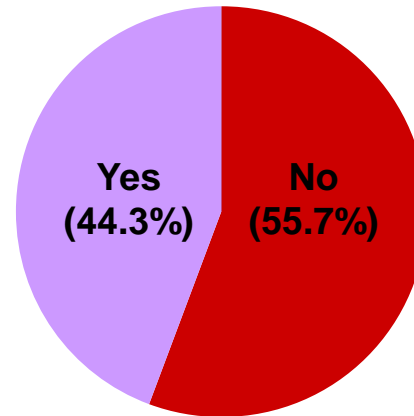
Exposure to Prevention (N=695), Past 12 Months

MMP, NYC, 2011/2012

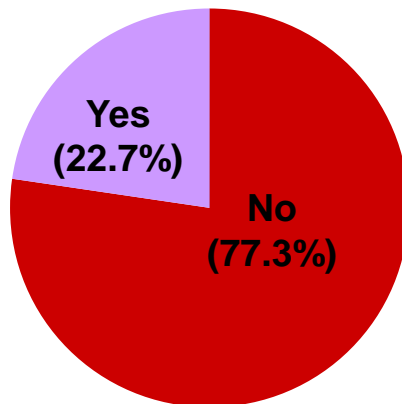
Received any free condoms



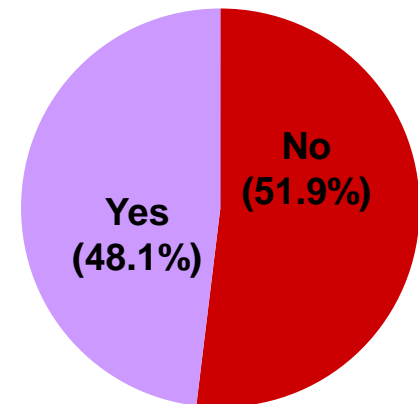
Talked with a counselor (one-on-one) about HIV prevention



Participated in group sessions to talk about HIV prevention



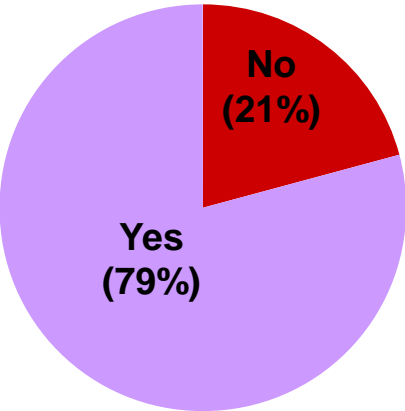
Participated in group sessions or talked with a counselor about HIV prevention



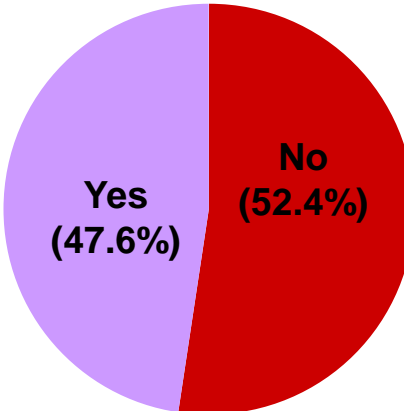
Exposure to Prevention Among Sexually Active Participants (N=418), Past 12 Months

MMP, NYC, 2011/2012

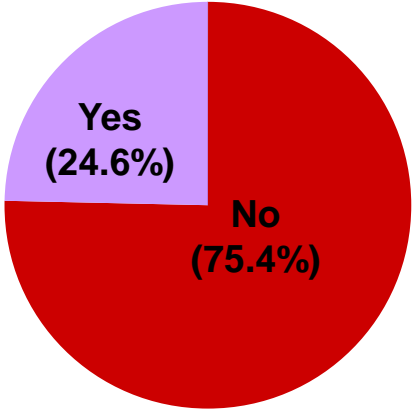
Received any free condoms



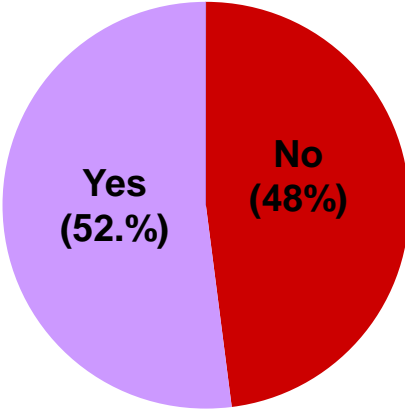
Talked with a counselor (one-on-one) about HIV prevention



Participated in group sessions to talk about HIV prevention

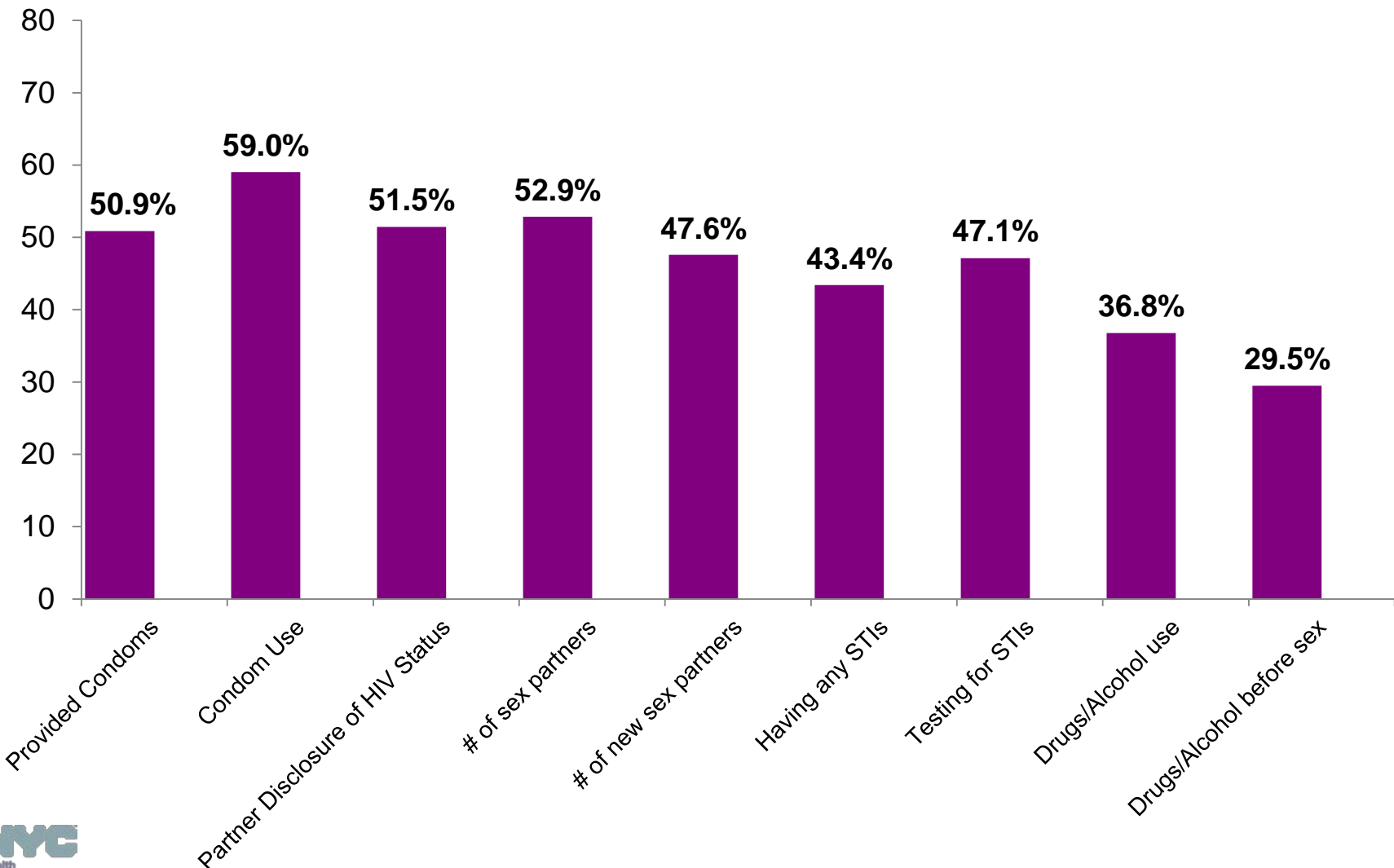


Participated in group sessions or talked with a counselor about HIV prevention



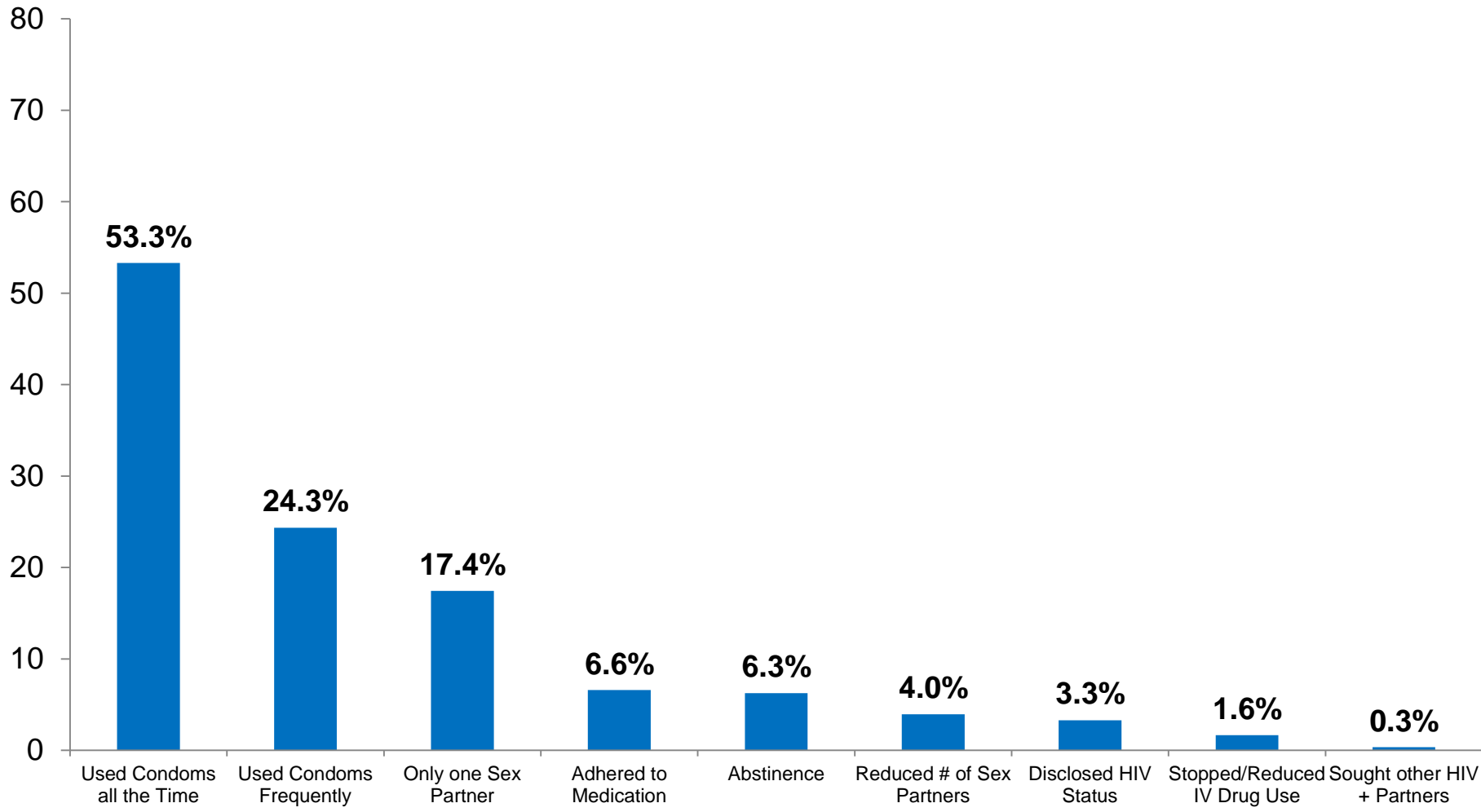
Provision of Condoms and Questions Asked by Physicians or Other Medical Providers about Prevention, Past 12 months

MMP, NYC, 2011/2012



Type of Action Taken by Sexually Active Respondents Who Took Actions to Reduce the Transmission of HIV (N=304), Past 12 Months

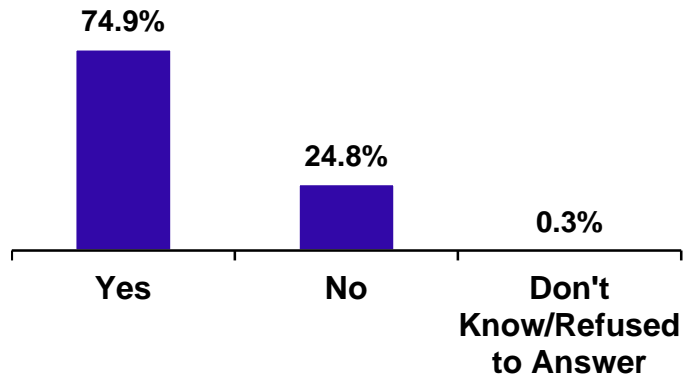
MMP, NYC, 2011/2012



Awareness and use of NYC Condom, Ever

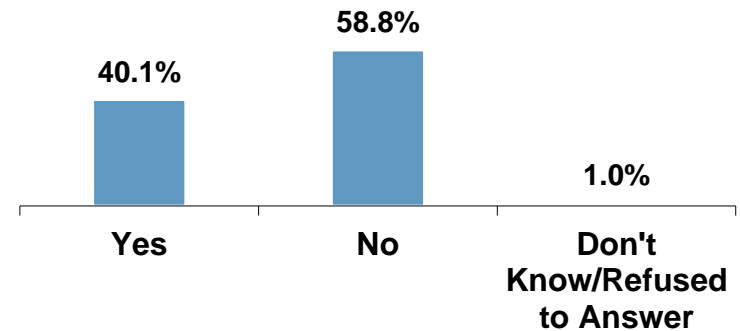
MMP NYC, 2011/2012

Have you ever heard of or seen the NYC Condom?



N=690*

Have you or your sexual partner ever used the NYC Condom?

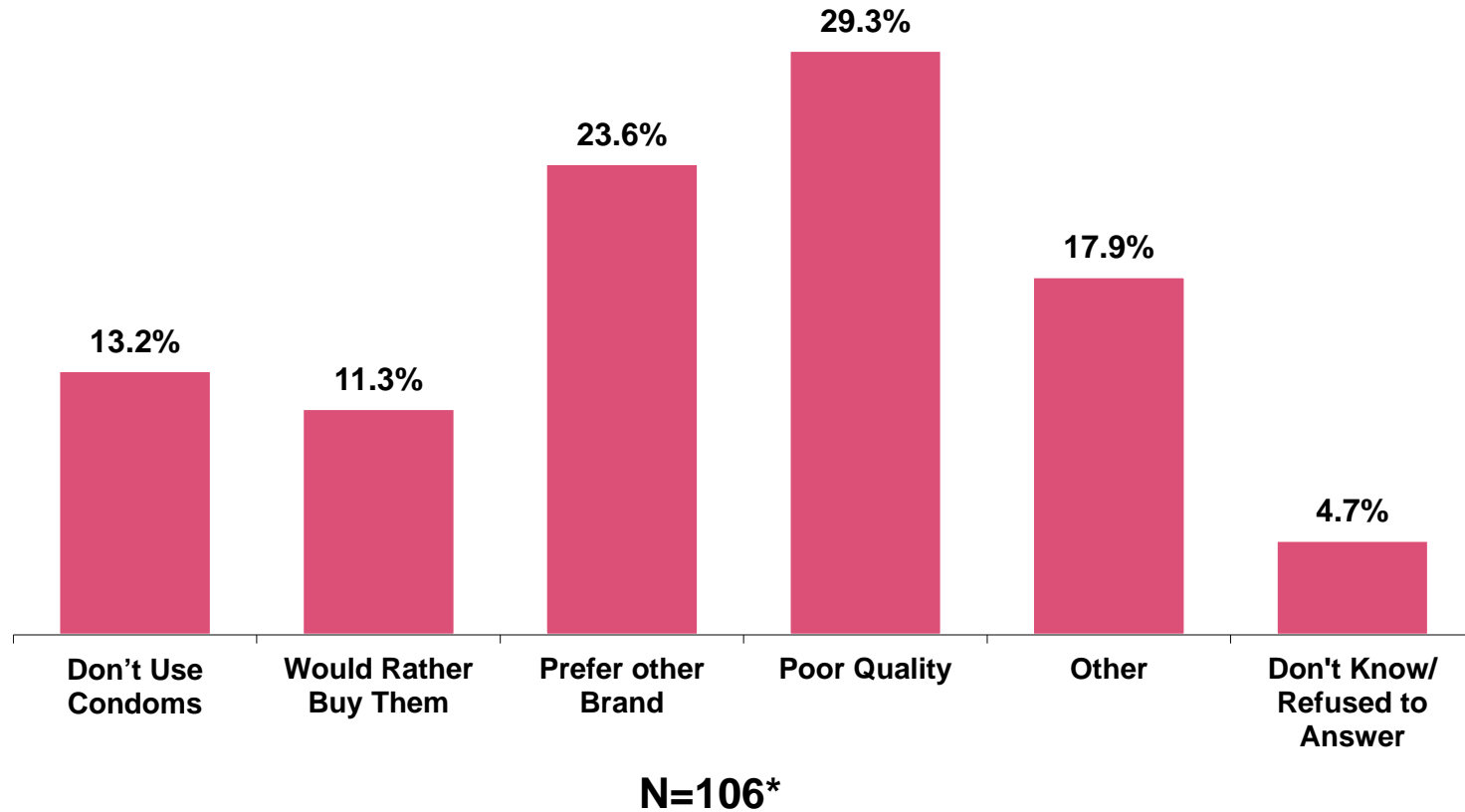


N=690*

* Note: N based on non-missing responses

Reasons for Not using the NYC Condom, Past 12 Months

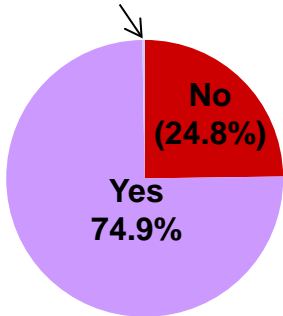
MMP NYC, 2011/2012



Exposure to and Use of NYC Condom, Last 6 months

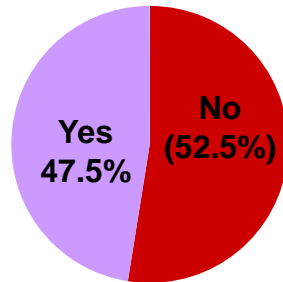
MMP, NYC, 2011/2012

Don't Know/
Refused to Answer
(0.2%)



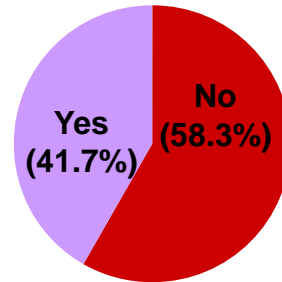
Have you ever seen
or heard of an NYC Condom
(Among Everyone)

N = 690*



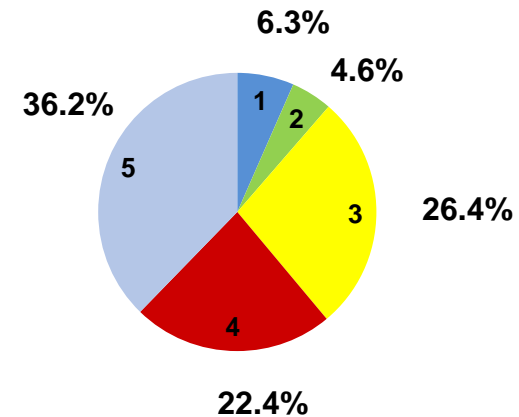
Have you taken or been
given an NYC Condom
(Among the Sexually Active)

N = 417*



Have you or your sexual partner
used the NYC condom
(Among the Sexually Active)

N = 417*



On a scale of 1 to 5 †
how would you rate the NYC Condom
(Among the Sexually Active
who have used the NYC Condom)

N = 174

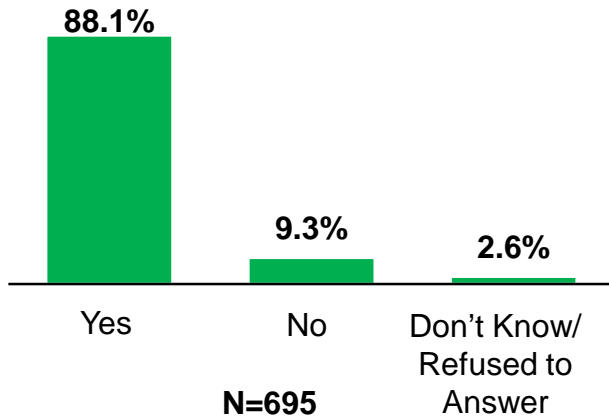
†1 = very poor; 5 = very high quality

* Note: N based on non-missing responses

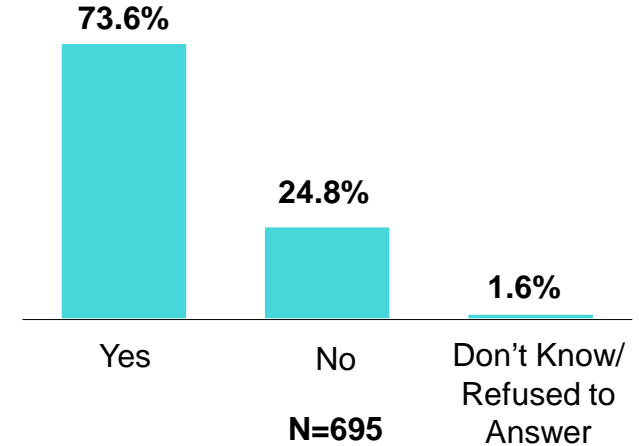
Patients' Knowledge of HIV Drug Resistance, Past 12 Months

MMP, NYC, 2011/2012

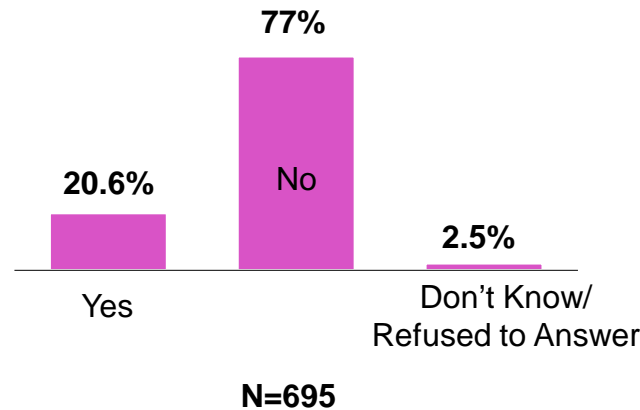
Do you think that taking your medication regularly affects how well it works?



Do you know about resistance to HIV antiretroviral medicines?



Have you ever been told by a provider that you are resistant to any HIV antiretroviral medicines?



Analysis and Data Limitations

- Data are based on self-report
- Stigmatized behaviors (e.g., sex and drug risk behaviors) may be underreported
- Cross-sectional design, therefore cannot determine causal relationships
- Caution is required in making generalizations to all NYC HIV-infected patients receiving care for HIV:
 - Some sampled facilities did not participate
 - Low response rate in patient sample
 - Unweighted data are drawn from a complex survey design — sample prevalences may differ from weighted population prevalence estimates

References

Centers for Disease Control (CDC), *HIV Surveillance Supplemental Report 2013;18(No. 5)*.

HIV Epidemiology and Field Services Program. *HIV Surveillance Annual Report, 2013*. New York City Department of Health and Mental Hygiene: New York, NY. December 2014.

The MMP Research Team

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