

# Opting-Out: a Multivariate Analysis of Refusal of Free, Rapid HIV Testing in an Urban Emergency Department



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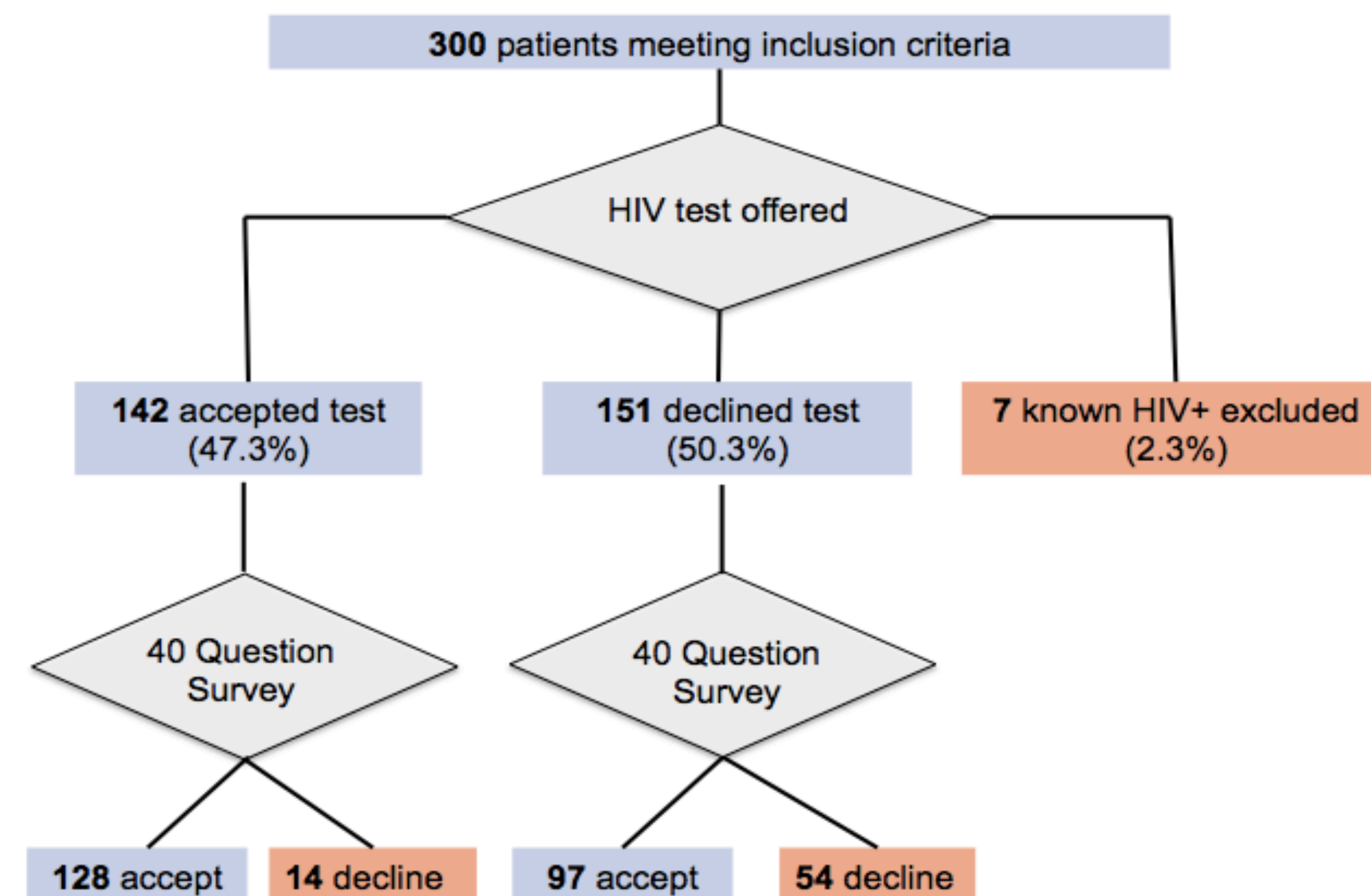
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## Introduction

The 2006 update to guidelines published by the Centers for Disease Control and Prevention regarding HIV screening recommended that opt-out HIV screening be offered in all healthcare settings, for all people aged 13-64<sup>1</sup>. This guideline is particularly important in the District of Columbia, where an estimated 2.7% of the population is living with HIV<sup>2</sup>. Viability of the CDC recommendation depends both on healthcare adherence to non-targeted testing, as well as patient acceptance of testing. This quantitative study explored reasons for opting out of HIV testing during a visit to the emergency department by comparing demographics, risk-factors, and attitudes between groups that accepted testing and those that opt-ed out. Secondly, the study aimed to assess existing access and use of HIV testing services in the DC area.

## Methods

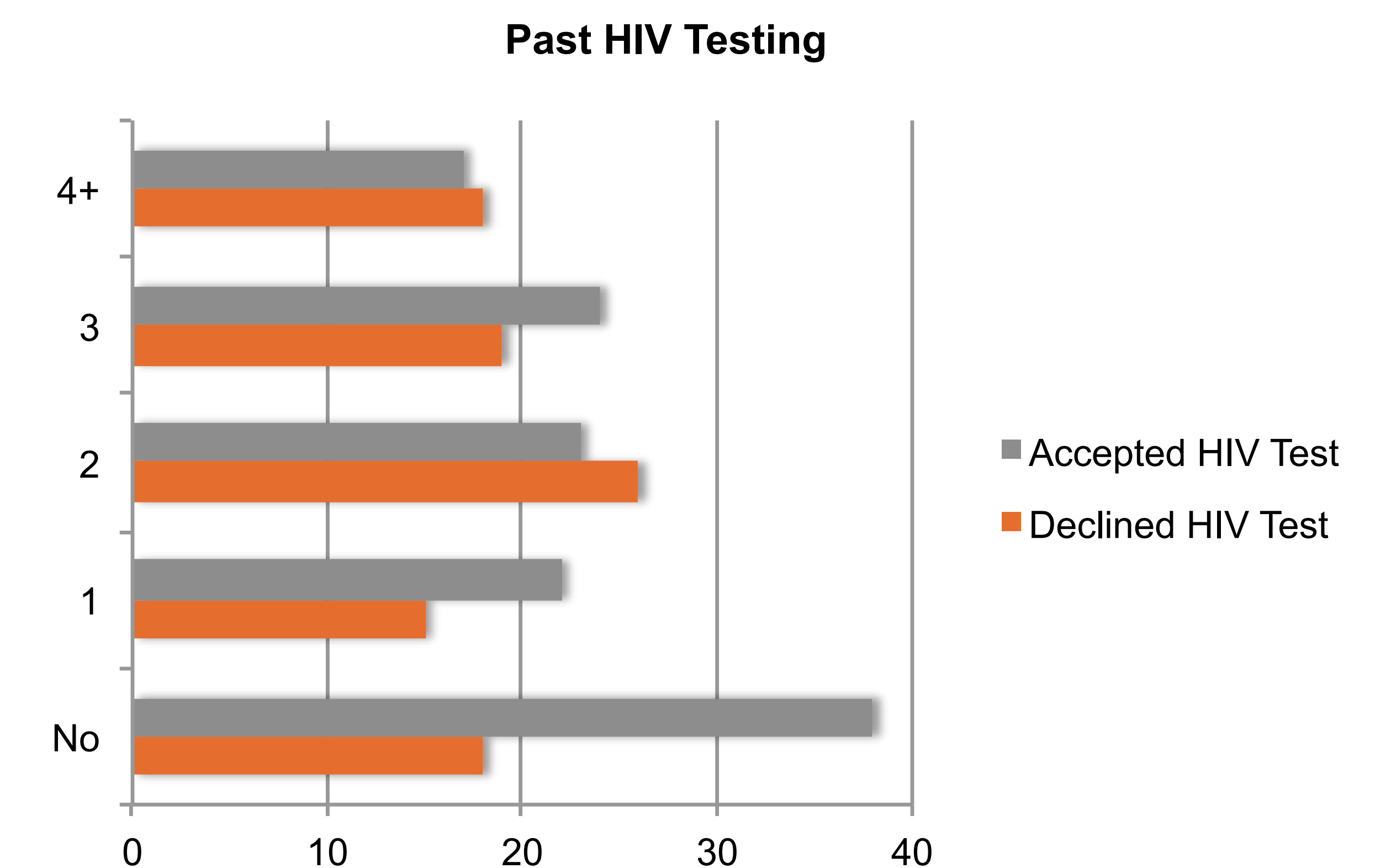
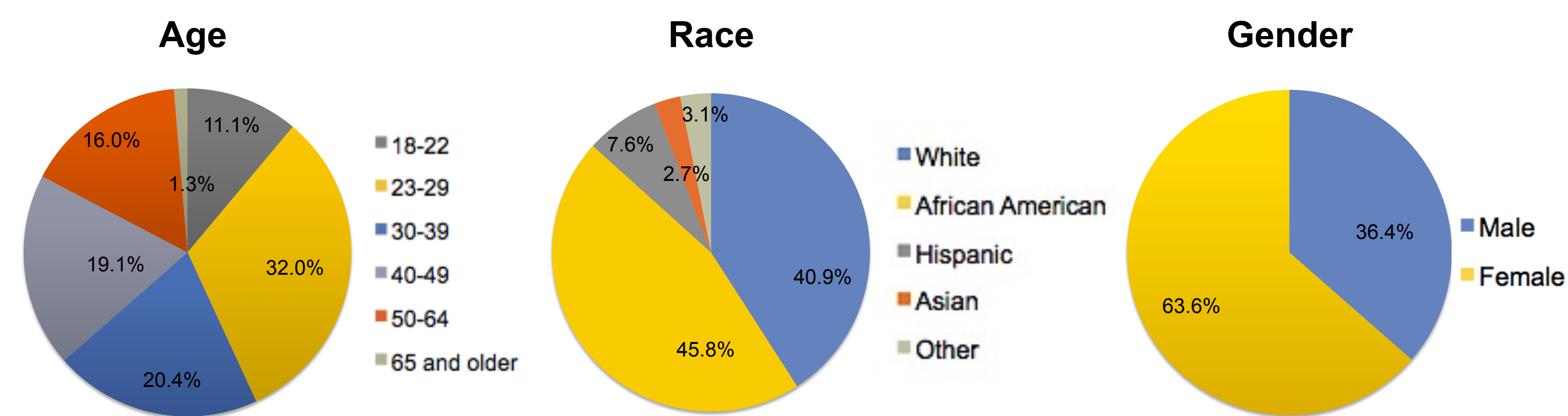
Statistical analyses on data collected from May-August 2013 from patients visiting the MedStar Georgetown University Hospital Emergency Department (ED) were utilized. A sample of 300 patients, 18 years of age or older were offered an HIV test, followed by a 40-item survey measuring demographics, risk factors, and attitudes towards testing. Bivariate analysis was conducted, using chi-squared, Fisher's exact, and Kruskal-Wallis tests, on those who accepted and refused HIV testing. Followed by a multivariate logistic regression, using a manual backwards-stepwise elimination procedure, to determine correlates associated with refusing HIV testing.



## Discussion

Patients that demonstrated robust engagement in their own health through interaction with a primary care physician every year, possessing private insurance, or past participation in HIV testing were more likely to refuse testing. Opt-out testing in the emergency department captures those who are otherwise disconnected with their healthcare. Patients in demographics that are more heavily affected by the HIV burden as well as those engaging in unsafe behaviors were significantly more likely to take advantage of the free HIV test. As patients were more likely to refuse testing when others were present in the room, testing protocols in the emergency department should be modified to reflect this preference.

## Results

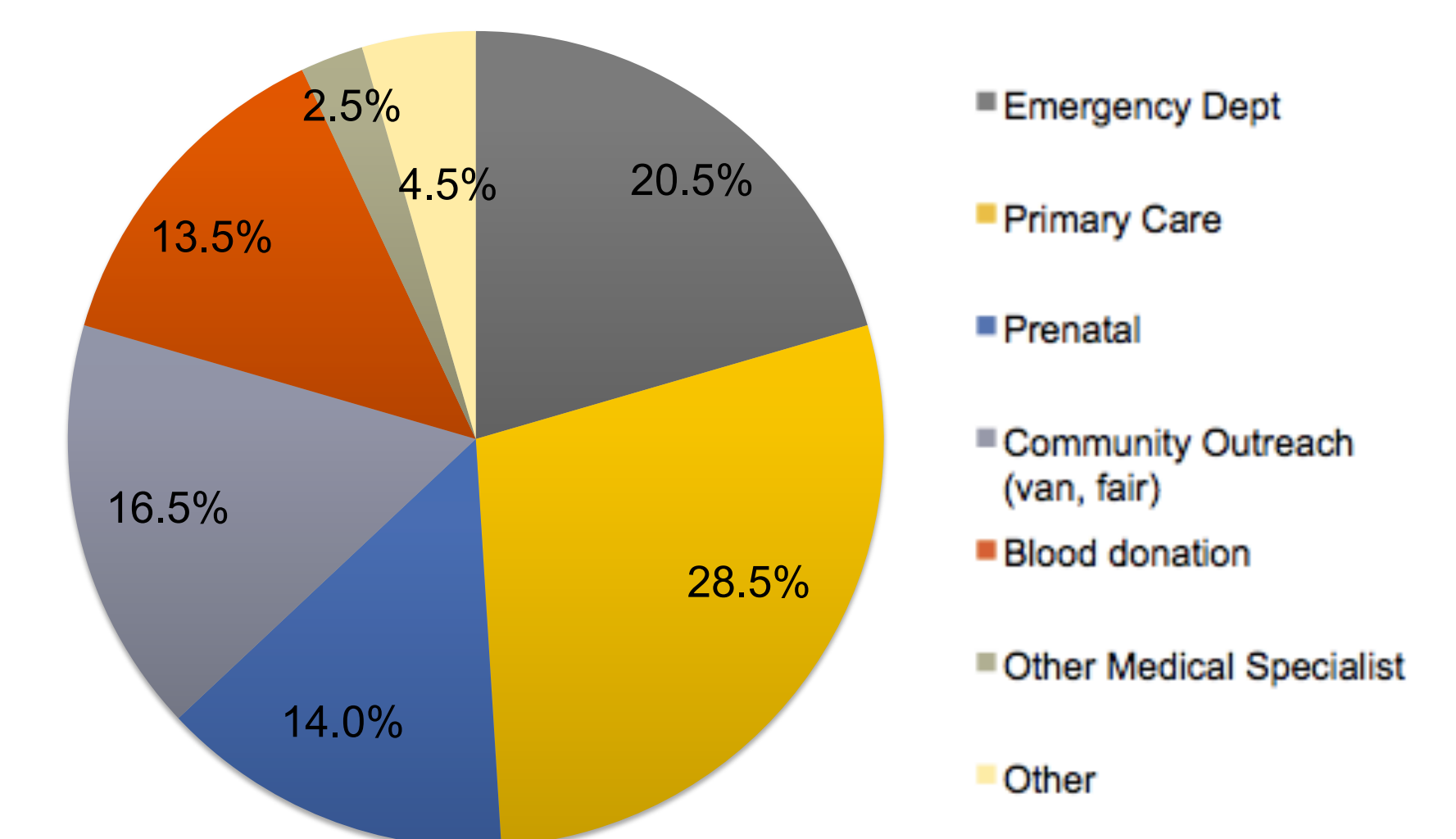


Correlates Associated with Refusing a Voluntary HIV test

	Adjusted Prevalence Odds-Ratio	p-value
<b>Race</b>		
White	1.00	
African American	0.20 (0.06 – 0.65)	0.0080
Hispanic	2.58 (0.41 – 16.19)	0.3110
Asian	1.59 (0.19 – 13.06)	0.6660
Other	0.41 (0.04 – 4.81)	0.4812
<b>Medical Insurance</b>		
None	1.00	
Public funded (Medicare/Medicaid)	0.08 (0.003 – 2.08)	0.1290
Private	0.13 (0.03 – 0.54)	0.0052
Other	0.61 (0.01 – 28.30)	0.7984
<b>Place of Birth</b>		
Non-U.S.	1.00	
U.S.	18.72 (2.85 – 122.79)	0.0023
<b>Was Someone in the Room with you?</b>		
No	1.00	
Yes	2.61 (2.46 – 15.71)	0.0223
<b>Have you seen a PCP in the last year?</b>		
No	1.00	
Yes	6.22 (2.46 – 15.71)	0.0001
<b>Have you previously been tested for HIV?</b>		
No	1.00	
Yes	8.90 (2.66 – 29.77)	0.0004
<b>Based on my perceived risk of acquiring HIV, I should be tested for HIV</b>		
Strongly agree	1.00	
Agree	3.96 (0.82 – 19.20)	0.0878
Undecided	0.99 (0.20 – 4.97)	0.9865
Disagree	3.16 (0.64 – 15.58)	0.1583
Strongly disagree	6.18 (0.64 – 15.58)	0.0237
<b>Have you ever had anal sex?</b>		
No	1.00	
Yes	0.21 (0.07 – 0.62)	0.0049

All the variables listed in the table, in addition to gender, age, income, past sexual partners, provider perception on testing and injection drug use behavior, were also included in the final model.

Location of Past HIV Testing



## Conclusions

- Opt-out testing remains a valuable tool in the Emergency Department to reach otherwise medically disengaged patients.
- Patient perception of risk strongly drives acceptance of HIV testing.
- As patients were more likely to refuse testing when others were present in the room, testing protocols in the emergency department should be modified to reflect this preference.

## References

1. Branson, Bernard. *Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Setting*. September 26, 2006. <<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5514a1.htm>>.
2. 2012 Annual Epidemiology and Surveillance Report. Washington, DC Department of Health HIV/AIDS, Hepatitis, STD, and TB Administration. <<http://doh.dc.gov/sites/default/files/dc/sites/doh/publication/attachments/2012AESRFINAL.pdf>>

Based on my risk for contracting HIV, I think I should be tested.

