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# Evaluating racial and ethnic disparities in access to primary care among gay and bisexual men in the US, a population at high-risk of HIV infection



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## Introduction

- Over 26,000 gay and bisexual men were newly infected with HIV in 2018; 69% of all diagnoses.<sup>1</sup> Significant racial and ethnic disparities exist and are increasing within this population with reductions in new diagnoses almost exclusively driven by non-Hispanic White (NHW) gay and bisexual men.<sup>2</sup>
- Primary care providers play an increasing role in the delivery of HIV preventive through integration of these services into routine primary care.<sup>3,4</sup> However, this may negatively impact access to these resources for individuals with less access to primary care.
- Concern for racial and ethnic groups who historically utilize primary care at lower levels than NHW individuals.<sup>5</sup> Impact may be far greater on racial and ethnic minorities who identify as gay and bisexual, given additional disparities in primary care access and utilization experienced by this population compared to heterosexual men.<sup>6</sup>
- To date, no body of work has quantitatively evaluated differences by race or ethnicity in access to primary care, specifically for self-identifying gay and bisexual men at a national level. Differences should raise concern about equitable distribution and uptake of HIV prevention resources

## Objective

- Assess the relationship between racial and ethnic minority status, specifically for Non-Hispanic Black (NHB) and Hispanic individuals, and measures of access to primary care among self-identifying gay and bisexual men.
- H1: NHB and Hispanic gay and bisexual men will report less access to primary care than NHW gay and bisexual men.

## Methods

- We used nationally representative person-level sociodemographic, health status, and health utilization data, data on organizational- and socially determinant barriers to care, from the National Health Interview Survey, 2013-2018.
- We used multivariable logistic regression to assess differences in primary care access for NHW versus NHB and Hispanic self-identifying gay and bisexual men.
- Outcomes were: 1) general physician visit in past 12 months, and 2) any usual place of care.
- In sensitivity analysis, we used an alternative definition for physician visits (any provider type) and usual place of care (primary care specific).

## Results, Descriptives and Unadjusted Outcomes

Table 1. Descriptive Statistics, Non-Hispanic White vs. Non-Hispanic Black & Hispanic Gay and Bisexual Men

| Proportion, F-Test      | Non-Hispanic White      | Non-Hispanic Black & Hispanic | p-value |
|-------------------------|-------------------------|-------------------------------|---------|
| <b>Age</b>              |                         |                               |         |
| 18-35                   | 42.85%<br>[0.397-0.461] | 49.86%<br>[0.449-0.549]       | 0.001   |
| 36-54                   | 35.57%<br>[0.326-0.387] | 38.82%<br>[0.342-0.437]       |         |
| 55-64                   | 21.58%<br>[0.191-0.243] | 11.31%<br>[0.084-0.150]       |         |
| <b>Education</b>        |                         |                               |         |
| High school edu or less | 19.30%<br>[0.168-0.221] | 33.30%<br>[0.285-0.384]       | 0.000   |
| Some college plus       | 80.70%<br>[0.780-0.832] | 66.70%<br>[0.616-0.715]       |         |
|                         |                         |                               |         |
| <b>Employment</b>       |                         |                               |         |
| employed                | 75.66%<br>[0.727-0.784] | 69.88%<br>[0.648-0.746]       | 0.041   |
| unemployed              | 24.34%<br>[0.217-0.273] | 30.12%<br>[0.255-0.352]       |         |
| <b>Income</b>           |                         |                               |         |
| <15 k                   | 12.06%<br>[0.101-0.143] | 15.85%<br>[0.124-0.201]       | 0.049   |
| 15-34999                | 17.44%<br>[0.150-0.202] | 22.32%<br>[0.177-0.277]       |         |
| 35-54999                | 14.44%<br>[0.122-0.171] | 16.37%<br>[0.125-0.212]       |         |
| 55-74999                | 14.96%<br>[0.126-0.176] | 13.15%<br>[0.096-0.178]       |         |
| 75-99999                | 10.95%<br>[0.090-0.133] | 10.51%<br>[0.075-0.146]       |         |
| 100000+                 | 30.14%<br>[0.267-0.389] | 21.80%<br>[0.170-0.276]       |         |
| <b>Region</b>           |                         |                               |         |
| Northeast               | 17.87%<br>[0.151-0.210] | 17.75%<br>[0.140-0.223]       | 0.003   |
| North and Midwest       | 23.14%<br>[0.202-0.264] | 15.90%<br>[0.124-0.202]       |         |
| South                   | 30.40%<br>[0.271-0.339] | 40.86%<br>[0.352-0.467]       |         |
| West                    | 28.59%<br>[0.251-0.324] | 25.49%<br>[0.209-0.307]       |         |
| <b>Health Status</b>    |                         |                               |         |
| Excellent               | 27.08%<br>[0.243-0.301] | 28.27%<br>[0.240-0.330]       | 0.345   |
| Very Good               | 35.98%<br>[0.329-0.392] | 31.67%<br>[0.270-0.367]       |         |
| Good                    | 23.89%<br>[0.212-0.268] | 24.06%<br>[0.202-0.284]       |         |
| Fair                    | 10.23%<br>[0.085-0.127] | 13.50%<br>[0.106-0.170]       |         |
| Poor                    | 2.82%<br>[0.019-0.042]  | 2.50%<br>[0.014-0.045]        |         |
|                         |                         |                               |         |

| Proportion, F-Test                         | Non-Hispanic White      | Non-Hispanic Black & Hispanic | p-value |
|--|-------------------------|-------------------------------|---------|
| <b>Chronic Disease Total</b>               |                         |                               |         |
| 0-1  | 72.29%<br>[0.690-0.754] | 81.75%<br>[0.774-0.854]       | 0.001   |
| 2+   | 27.71%<br>[0.246-0.310] | 18.25%<br>[0.1457-0.226]      |         |
|  |                         |                               |         |
| <b>Mental Health Distress</b>              |                         |                               |         |
| No to Mild Distress                        | 60.06%<br>[0.565-0.635] | 60.63%<br>[0.549-0.661]       | 0.451   |
| Moderate Distress                          | 12.77%<br>[0.106-0.153] | 15.16%<br>[0.115-0.198]       |         |
| Serious Distress                           | 27.17%<br>[0.242-0.304] | 24.21%<br>[0.194-0.297]       |         |
| <b>Health Insurance (any)</b>              |                         |                               |         |
| Insured                                    | 89.47%<br>[0.873-0.913] | 77.42%<br>[0.723-0.818]       | 0.000   |
| Uninsured                                  | 10.53%<br>[0.087-0.127] | 22.58%<br>[0.182-0.277]       |         |
| <b>Experienced &gt;1 Org. Barrier</b>      | 14.86%<br>[0.125-0.177] | 15.98%<br>[0.117-0.214]       | 0.691   |
| <b>Experienced &gt;1 Soc. Det. Barrier</b> | 23.07%<br>[0.204-0.260] | 42.56%<br>[0.368-0.485]       | 0       |

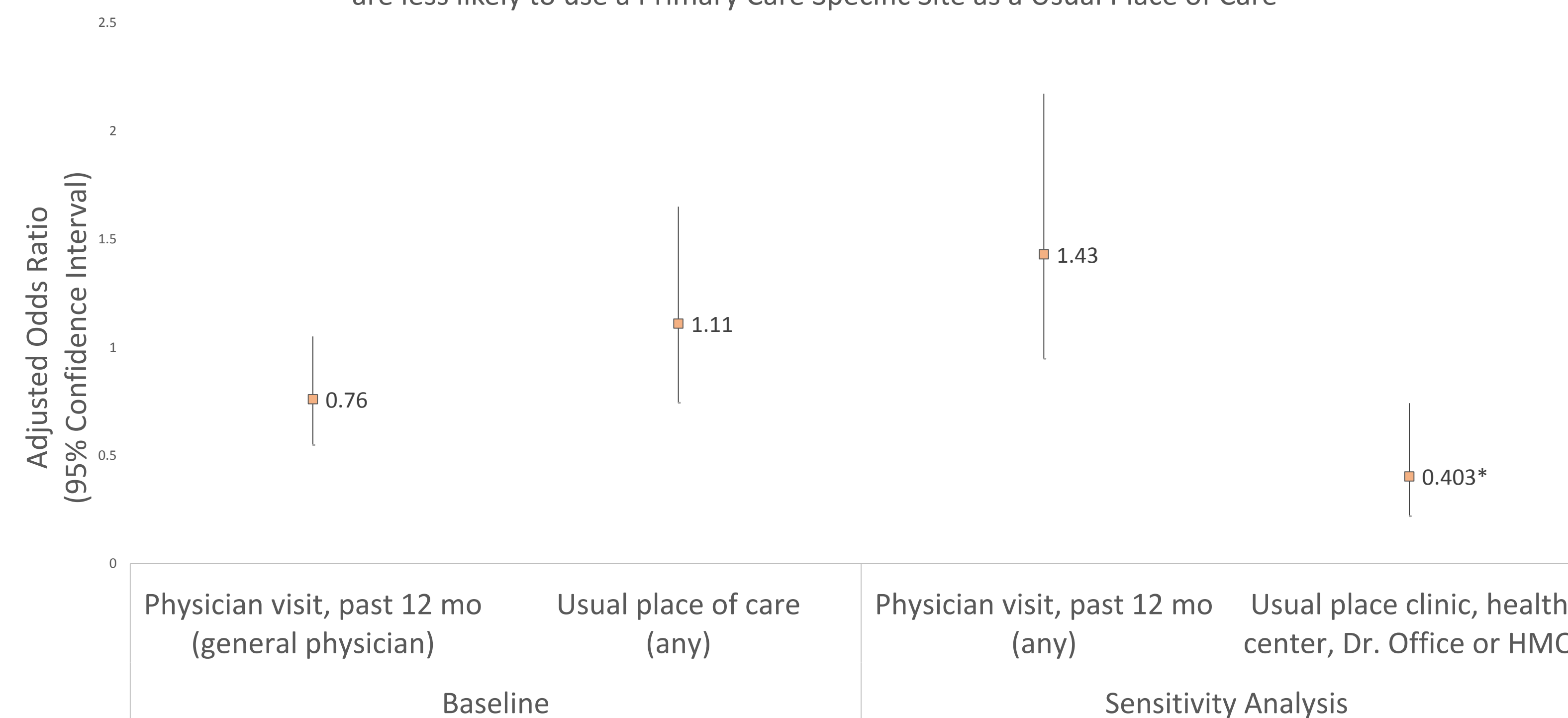
Table 2. Unadjusted Outcomes, Non-Hispanic White vs. Non-Hispanic Black & Hispanic Gay and Bisexual Men

| Proportion, F-Test                                   | Non-Hispanic White      | Non-Hispanic Black & Hispanic | p-value |
|--|-------------------------|-------------------------------|---------|
| <b>Main Analysis</b>                                 |                         |                               |         |
| Has Usual Place of Care                              | 84.65%<br>[0.820-0.870] | 77.84%<br>[0.724-0.825]       | 0.010   |
| Last Saw General Dr <12 m                            | 72.67%<br>[0.693-0.758] | 60.59%<br>[0.559-0.656]       | 0.000   |
| <b>Sensitivity Analysis</b>                          |                         |                               |         |
| Usual Place Clinic, Health Center, Dr. Office or HMO | 96.00%<br>[0.944-0.972] | 88.82%<br>[0.838-0.924]       | 0.000   |
| Last Saw Any Dr <12 m                                | 84.23%<br>[0.814-0.867] | 82.56%<br>[0.782-0.862]       | 0.483   |

## Results

- The sample included a total of 1,867 gay and bisexual men (unweighted), aged 18-64 years, with 28% NHB or Hispanic. Compared to NHW men, a smaller fraction of NHB and Hispanic men had a general physician visit in the past 12 months and a usual place of care ( $p < 0.05$ ).
- After adjusting, NHB and Hispanic men were less likely have seen a general provider but our results were not significant ( $aOR = 0.76$ ,  $p = 0.100$ ) and there was no statistically significant difference in having a usual place of care ( $aOR = 1.11$ ,  $p = 0.616$ ) (Figure 1). Findings were sensitive to the specification of primary care site as usual place of care.

Figure 1. Compared to non-Hispanic White, non-Hispanic Black and Hispanic Gay and Bisexual Men are less likely to use a Primary Care Specific Site as a Usual Place of Care



## Results, Adjusted Outcomes

Table 3. Adjusted Outcomes NHW vs. NHB & Hispanic Gay & Bisexual Men

| Odds Ratio and Confidence Interval, T-test                   | NHB or Hispanic        | P-Value |
|--|------------------------|---------|
| Primary Analysis   |                        |         |
| Has a Usual Place of Care                                    | 1.11<br>[0.743-1.65]   | 0.616   |
| Saw Gen Dr. <12 months                                       | 0.76<br>[0.548-1.05]   | 0.100   |
| Sensitivity Analysis   |                        |         |
| Usual Place of Care Clinic, Health Center, Dr. Office or HMO | 0.403<br>[0.219-0.742] | 0.004   |
| Interval since last doctor visit <12 months                  | 1.43<br>[0.947-2.172]  | 0.088   |

## Discussion

- Outcome measures illustrate a distinct disparity in use of a primary care specific site of care as a usual place for NHB and Hispanic individuals compared to NHW. NHB and Hispanic individuals may also experience disparities in seeing a primary care physician, while there were no disparities in more general measures of access to any care.
- Both findings need to be considered to improve access to HIV prevention among this population – two of the highest risk groups for HIV infection.
- HIV prevention should still be discussed and available where those at high-risk are likely to encounter it; emergency departments, urgent care centers and other outpatient settings. Acute care settings could be used to provide referrals and linkages to primary care services as a way to foster engagement and entry into the primary care system.
- Additional research needed to determine other enabling (or disabling) factors that may be influencing access to primary care in this population, specifically if to become primary location of HIV prevention resources.

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