



**CENTRO
COMPRESIVO
DE
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DAPuC

Data Analysis & Publication Core

University of Puerto Rico
Medical Sciences Campus

TRACKING THE EPIDEMIC: AN EVALUATION OF THE HIV CASE SURVEILLANCE AND NATIONAL HIV BEHAVIORAL AMONG MEN WHO HAVE SEX WITH MEN IN PUERTO RICO:

DATA FROM THE NATIONAL HIV BEHAVIORAL SURVEILLANCE SYSTEM (NHBS) 2008-2011

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DISCLOSURES

Vivian Colón-López

The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

No relationships to disclose.



**PUERTO RICO HIV SURVEILLANCE
SUMMARY CUMULATIVE DIAGNOSED
CASES UNTIL SEPTEMBER 30, 2015**

NUMBER OF HIV CASES BY AGE AT DIAGNOSIS

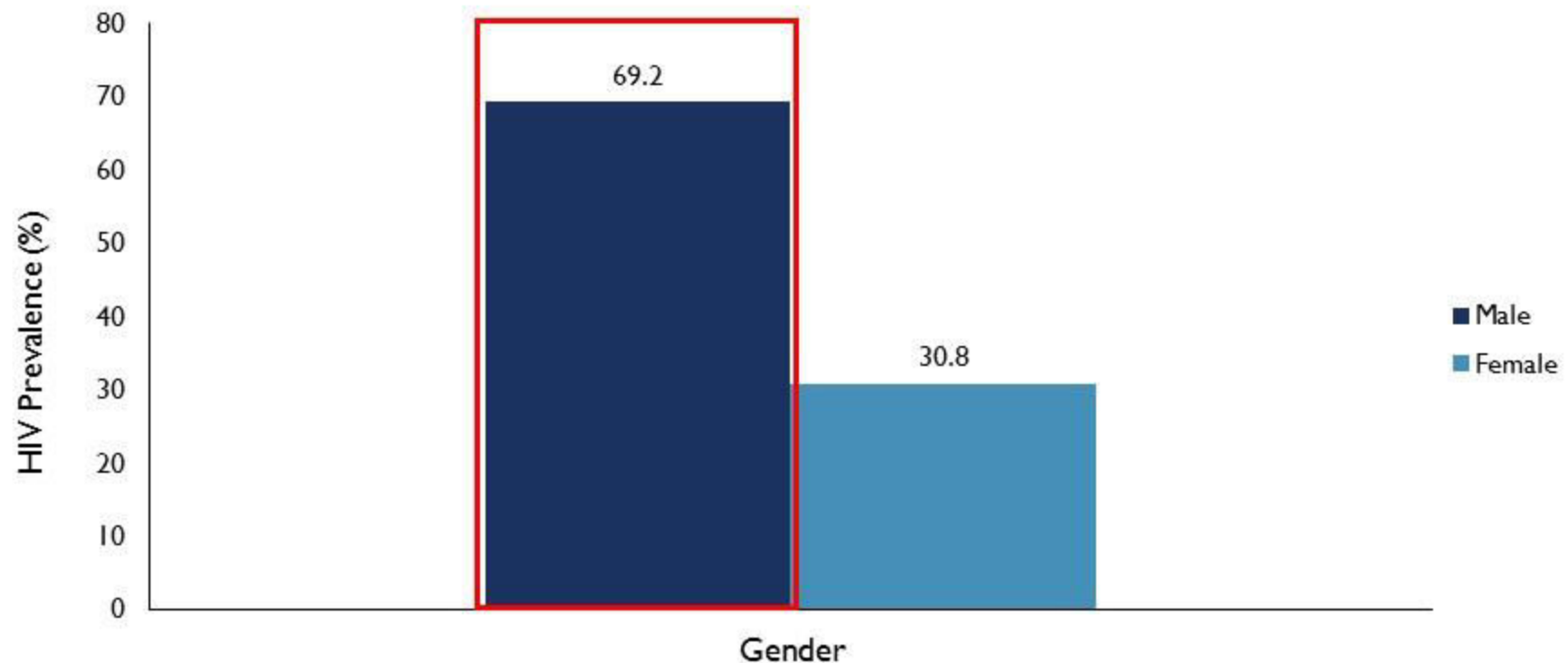
HIV SURVEILLANCE SYSTEM PR 1981-2015

Age group	Number	Percent (%)
<13	340	2
13 – 14	36	0
15 – 24	2882	14.0
25 – 34	6.920	34.0
35 – 44	5,805	29.0
45 – 54	2,924	15.0
55 – 64	924	5.0
≥ 65	283	1.00
Total	20,114	

48.0%

DISTRIBUTION OF HIV CASES BY SEX

HIV SURVEILLANCE SYSTEM PR 1981-2015



Source: Sistema de Vigilancia HIV/SIDA. Departamento de Salud de Puerto Rico. September 2015.

DISTRIBUTION OF HIV/AIDS CASES BY TRANSMISSION CATEGORY HIV SURVEILLANCE SYSTEM PR 1981-2015

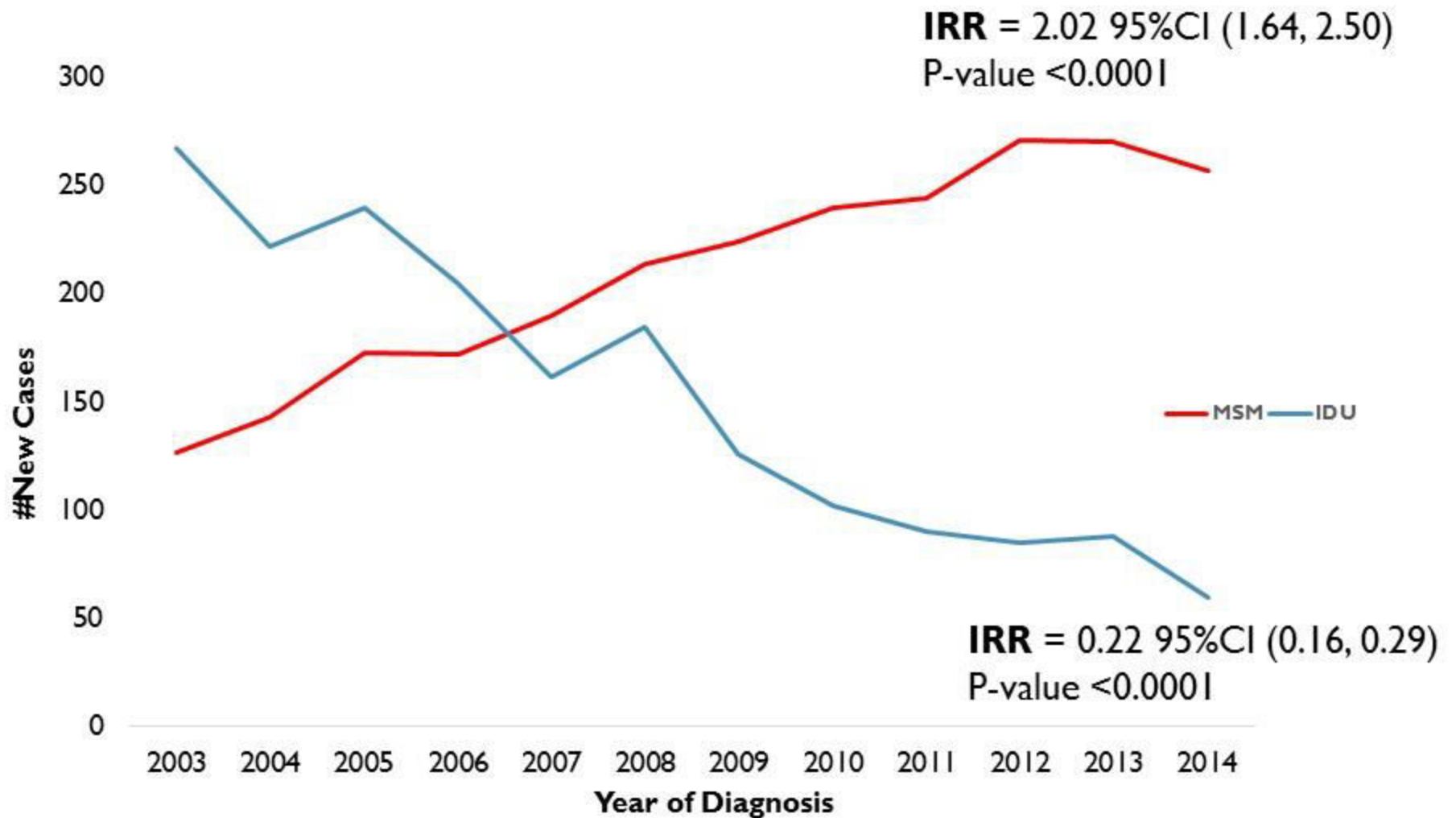


43.5% of the
HIV diagnosis
occurred
among IDUs

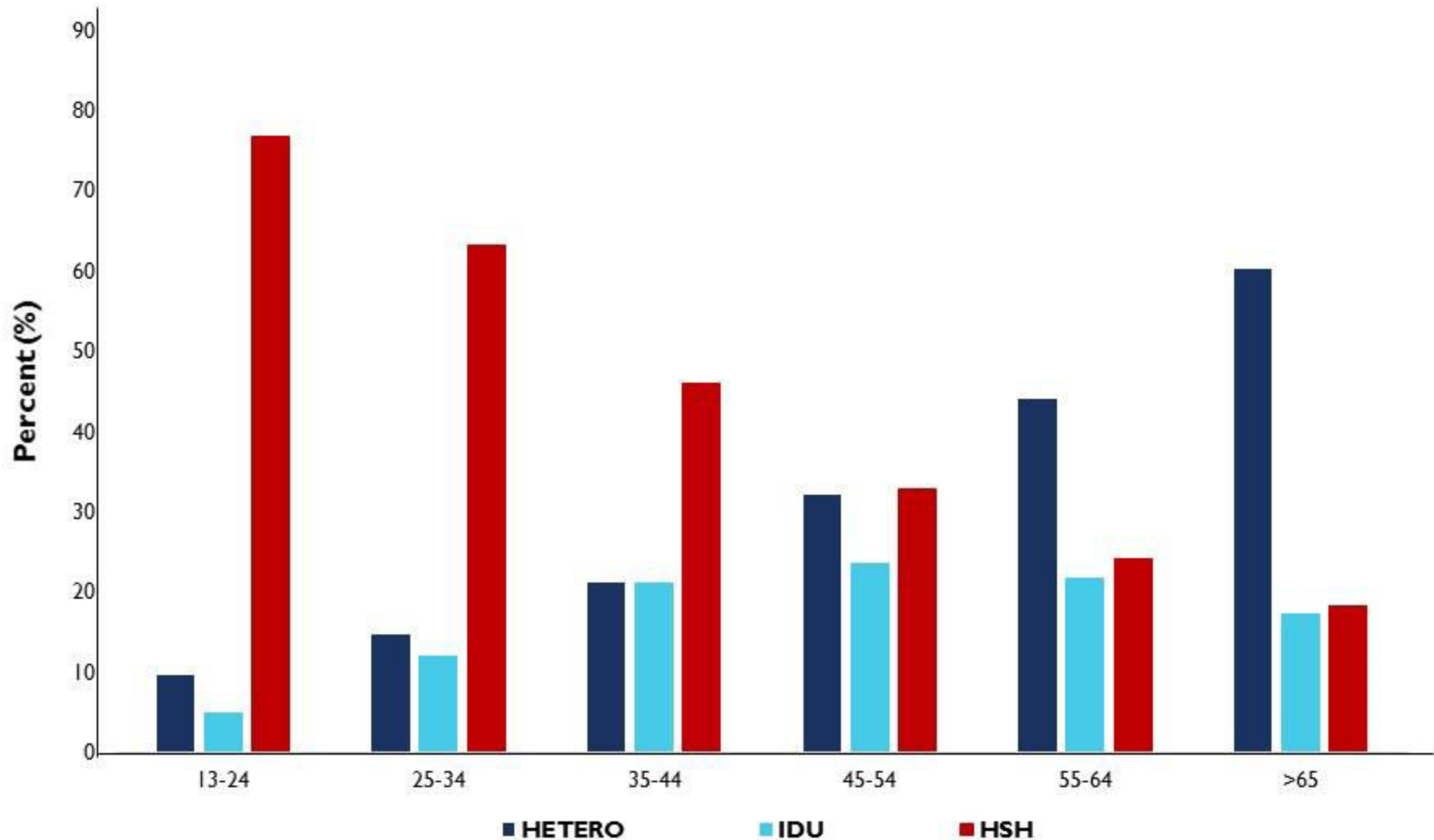
Source: Sistema de Vigilancia HIV/SIDA. Departamento de Salud de Puerto Rico. September 2015.

Photo: <http://www.theguardian.com/world/2013/jul/15/puerto-rick-health-crisis-heroin-drugs>

Trends in the Number of New Cases by Mode of Transmission, HIV Surveillance System, Puerto Rico 2003-2014



Prevalence of HIV Diagnosis by age group and mode of transmission, HIV Surveillance System, Puerto Rico 2010-2014



HIV/AIDS IN PUERTO RICO (PR): A COMPARISON WITH MAINLAND USA

- 7th highest AIDS estimated incidence rate in adults and adolescents ≥ 13 years in 2013. (14.2 per 100,000 habitants).
- Ranks 8th in the estimated incidence rate for new HIV diagnosis in adults and adolescents ≥ 13 years in 2013. (24.9 per 100,000 habitants).
- By 2013, PR ranked 10th in cumulative number of diagnosed AIDS cases.
- By 2012, PR ranked 5th in prevalence of HIV infection in adults and adolescents ≥ 13 years in 2013. (600.2 per 100,000 habitants)

PROJECT OVERVIEW

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- PR Department of Health grant since January 2012.
- Aim to:
 - Document behavioral indicators among MSM in PR.
 - Develop collaborative research and publications.
 - Build-up capacity and infrastructure and determine service needs.
 - Create community, academic and physician networks and partnerships.
 - Evaluation of current observational studies .

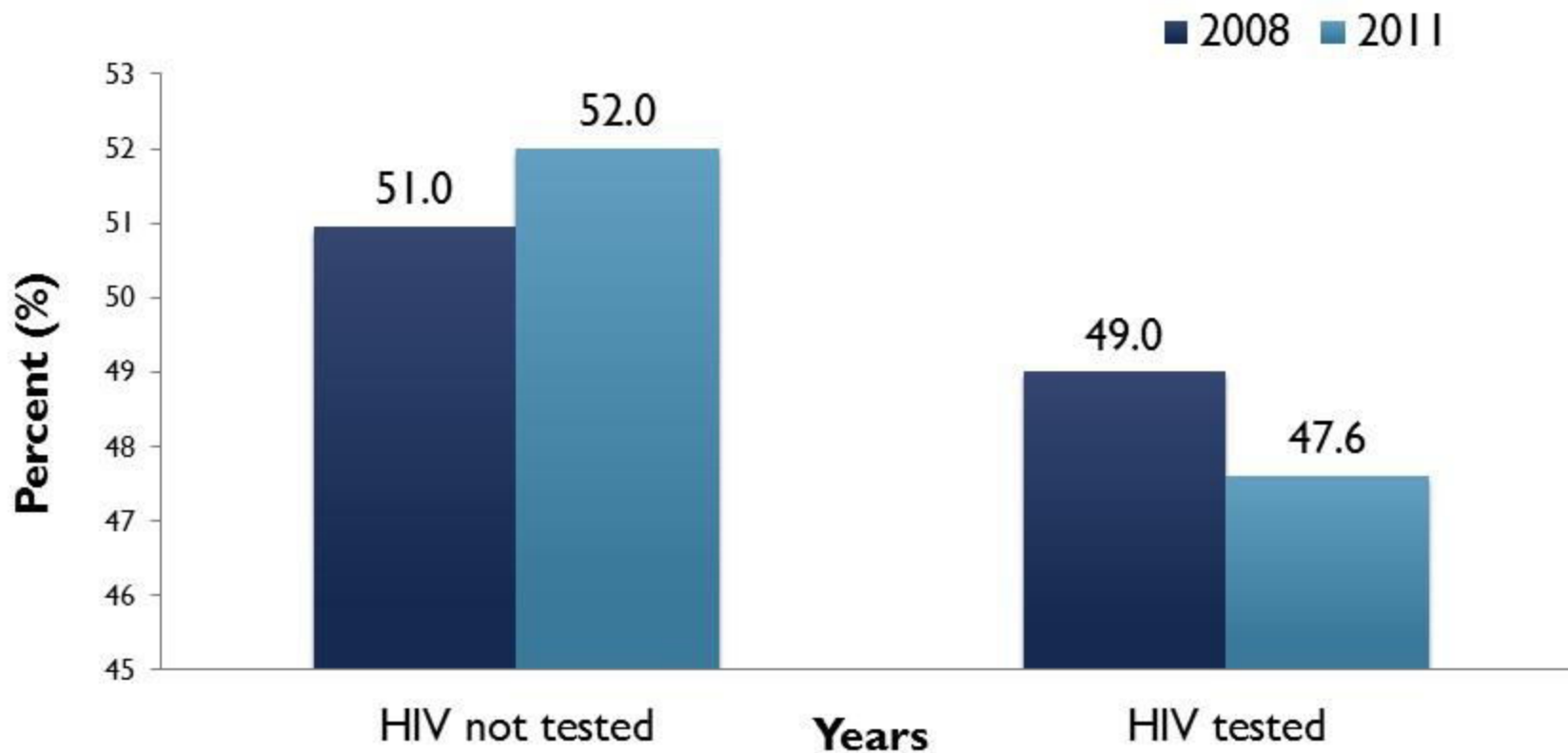


RESEARCH

1. HIV testing and unawareness of infection
2. Coming Out to Health Care Providers
3. Evaluation of the National HIV Behavioral Surveillance (NHBS)

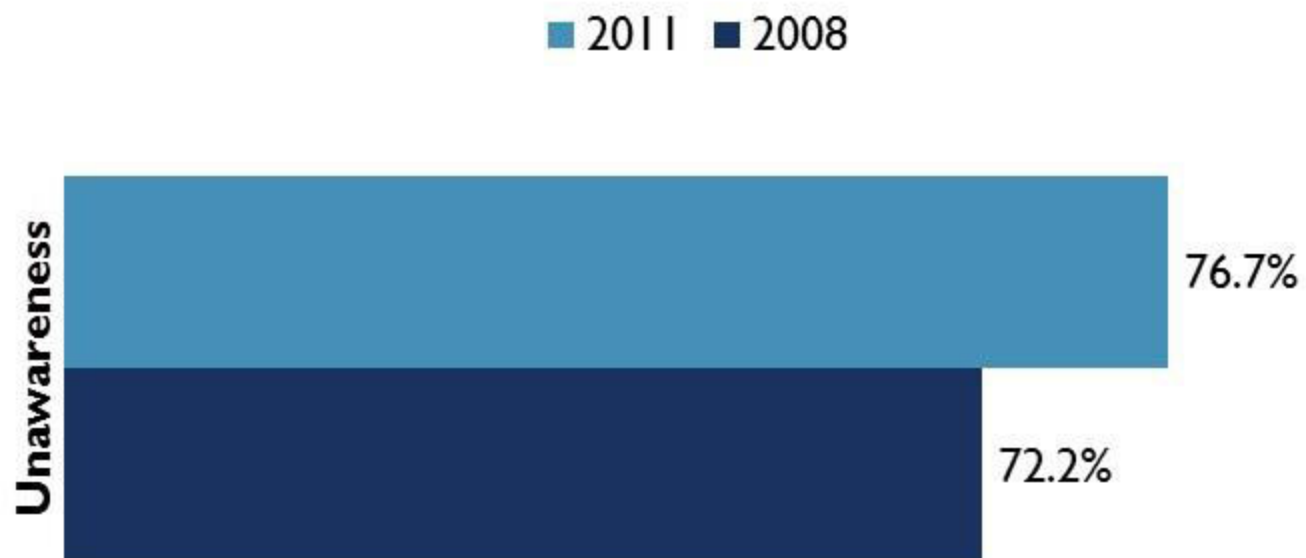


HIV TESTING (PAST 12 MONTHS) AMONG PR MSM, 2008-2011



$p = 0.7132$

HIV UNAWARENESS



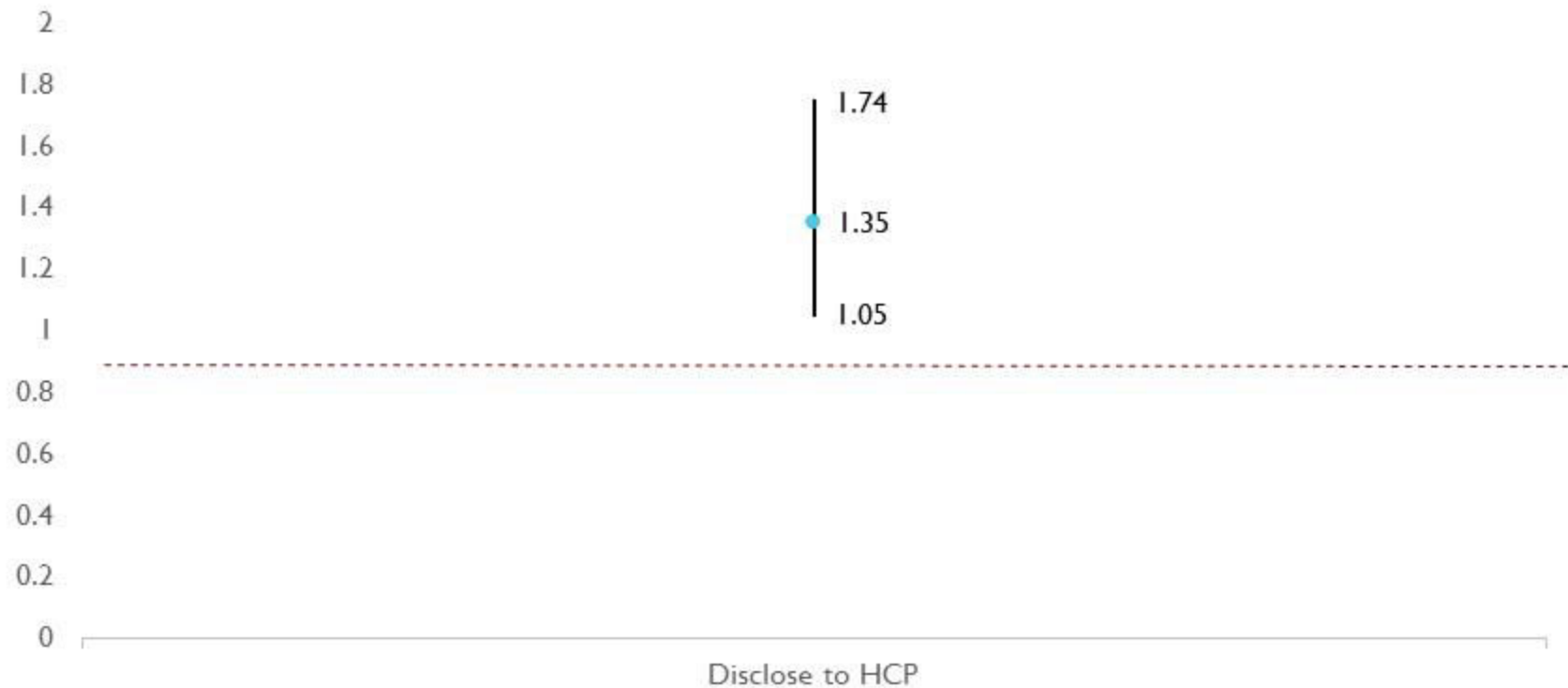
p= 0.681

AGE ADJUSTED POR FOR HIV UNAWARENESS, MSM NHBS 2008-2011

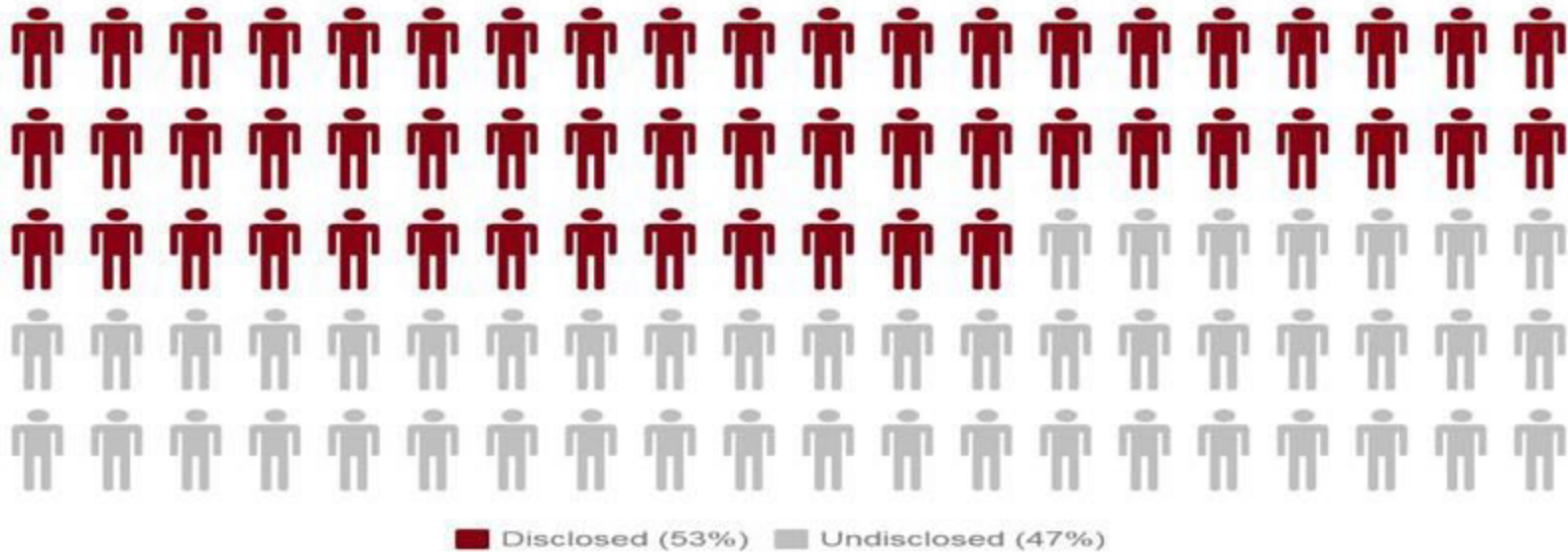
	POR	P-Wald
Number of male sexual partners	1.01	0.0063
Female sexual partner	0.85	0.0905

DISCLOSE TO HEALTH CARE PROVIDER

Those who reported their sexual preferences to their health care provider (HCP) were 35% more likely to be unaware.



DISCLOSURE OF MSM SEXUAL PREFERENCE TO HEALTH CARE PROVIDER

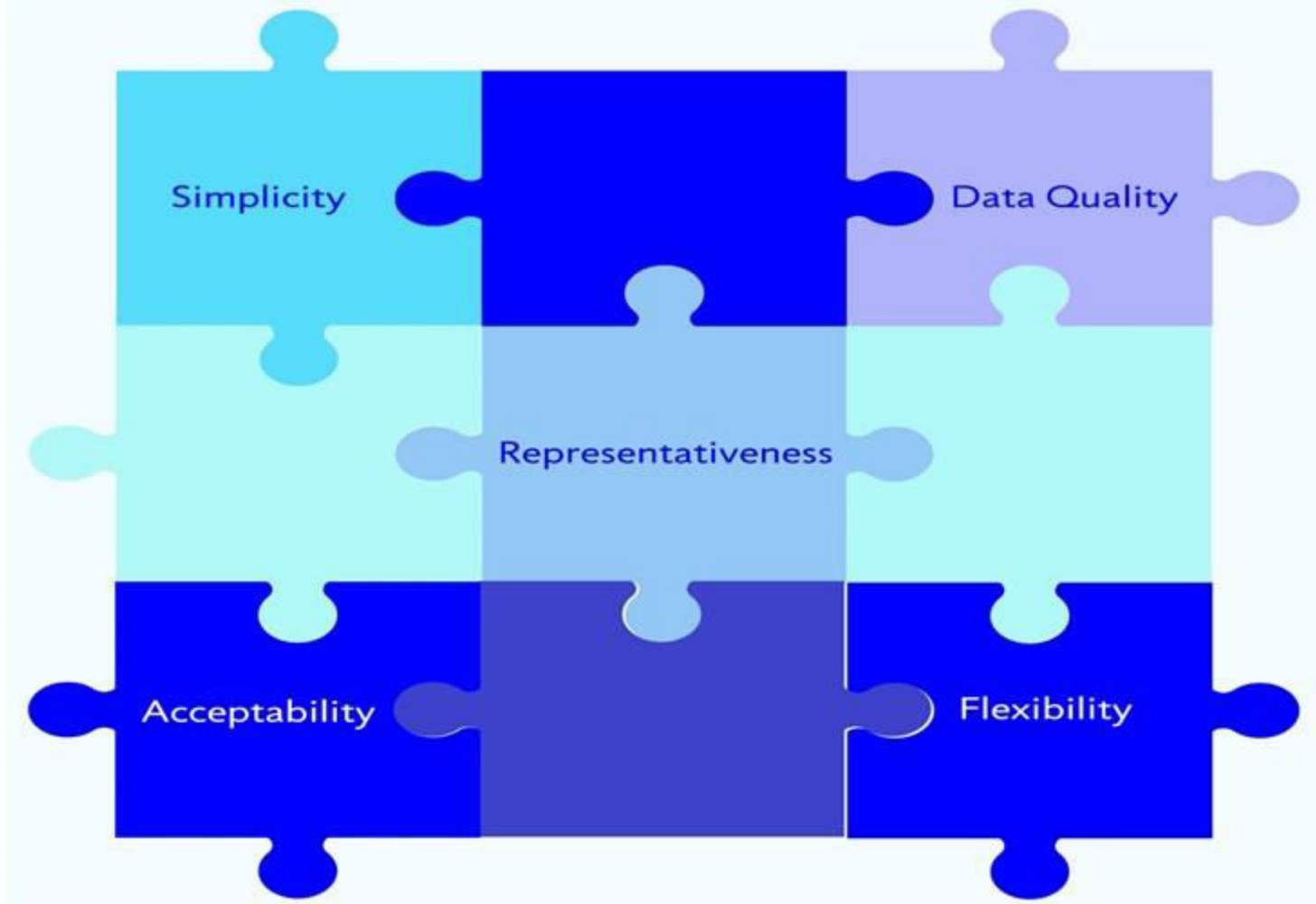


Multivariable analysis for disclosing same-sex orientation

Characteristics	Adjusted OR (95%CI)	p for Wald
Age	1.03 (1.00-1.05)	0.0203
Awareness of partner serostatus	1.65 (1.04-2.64)	0.0341
Not visited Health Care Provider in the last 12 months.	0.66 (0.38-1.14)	0.1369
Not tested for HIV in last 12 months	0.49 (0.30-0.80)	0.0046

Adjusted by age, awareness of partner serostatus and visited HCP provider in last 12 months variables.

EVALUATION OF THE NHBS





The ability to adapt to changes, such as the emergence of new trends or the modification of old ones within the study subject, is a characteristic a competent surveillance system should have.

▪ **Findings:**

- System is capable of measuring:
 - Sociodemographic indicators
 - Alcohol and drug use
 - Sexual behaviors (number of partner and condom use)
 - STD testing, diagnosis and treatment.

- Fails in capturing information of other high-risk behaviors pertinent to this community
 - Mental health (e.g. depression and suicidal intents)
 - HIV and MSM related stigma
 - Use of the internet and mobile applications for sexual encounters
 - Tobacco use

CONCLUSIONS

- Increasing number of HIV cases among MSM might be explained due to the high proportion of unaware HIV positive MSM in Puerto Rico.
- NHBS data can be used to monitor progress towards national strategies and local efforts in order to maximize the impact of prevention programs and the creation of public policy.

FUTURE DIRECTIONS



FUTURE

HIV CARE CONTINUUM:

THE SERIES OF STEPS A PERSON WITH HIV TAKES FROM INITIAL DIAGNOSIS THROUGH THEIR SUCCESSFUL TREATMENT WITH HIV MEDICATION



Final Thought: The Sequelae of Chronicity among PLWHA

- Persons living with HIV/AIDS (PLWHA) in Puerto Rico (PR) have an increased burden of anal cancer
 - Men: SIR = 86.8; 95% CI, 51.5–137.2
 - Women: SIR = 52.8; 95% CI, 10.9–154.3
- In PR, the 3-year relative survival for anal cancer is 53% (Colón-Lopez, 2014).
- PLWHA are responsible for increasing anal cancer incidence trends in PR, particularly in men
- (APC=3.2% from 1985-2005) (Ortiz, 2014).

