# A COST-EFFECTIVENESS ANALYSIS OF THE WASHINGTON, D.C. DEPARTMENT OF HEALTH'S HIV/AIDS LINKAGE TO CARE PROGRAMS

John Wedeles, MPH<sup>1</sup>; Sungwoo Choi, MPP<sup>1</sup>; Damber Gurung, PhD<sup>2</sup>; Stacey Cooper, MSW<sup>2</sup>; Nestor Rocha<sup>2</sup>, MPH; Amanda Castel<sup>1</sup>, MD, MPH; Avi Dor, PhD<sup>1</sup>

<sup>&</sup>lt;sup>1</sup>George Washington University School of Public Health and Health Services

<sup>&</sup>lt;sup>2</sup> District of Columbia Department of Health HIV/AIDS, Hepatitis, STD, TB Administration

## Background





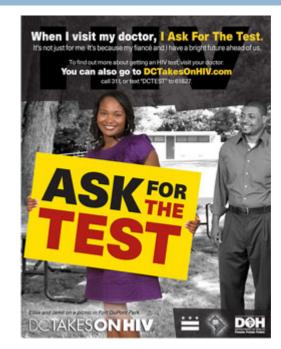
- In 2006, the DC DOH HIV/AIDS, Hepatitis, STD, TB Administration (HAHSTA) established a Public Health/Academic Partnership with the George Washington University School of Public Health and Health Services (GWU)
- In 2011, the DC Developmental Center for AIDS Research (DC D-CFAR) at GWU established the following three aims:
  - 1) Evaluate the DC DOH linkage to care portfolio;
  - 2) Evaluate clinical and non-clinical routine and targeted HIV testing implementation strategies; and
  - 3) Assess the feasibility and cost-effectiveness of non-occupational exposure prophylaxis (NPEP) and pre-exposure prophylaxis (PrEP).

## Background, cont'd.





- The District of Columbia Department of Health (DC DOH) has actively scaled-up routine testing and linkage to care programs since 2006
- Although these efforts have proven successful in identifying HIV-infected persons and linking them to care, a systematic analysis of the costeffectiveness of these programs has not been conducted to date





The female condom with pleasure points for her and him to tease, please and protect. Go on, give it a try.



### Methods





- Cost and utilization data were collected through:
  - Interviews with DC DOH staff
  - Program and evaluation monitoring system (PEMS) reports
  - Document review
- Analyses compared the cost effectiveness of three DC DOH funded programs:
- 1) a navigator program targeting the Latino population;
  - Medical case management program
  - Navigator accompanies patients to appointments, checks in every 3 months
- 2) a program specifically serving District residents living in Wards 7 and 8; and
  - Testing, counseling and linkage to care
  - Creates new medical homes for newly identified positives
- 3) a program focusing on high-risk adolescents and persons engaging in sex work.
  - Offers harm reduction, education, counseling, referral, advocacy and syringe access

## Methods, cont'd.





- A referral is defined as:
  - Referring a client to access services from another organization without following up to determine if those services were received
- Linkage to care is defined as:
  - Referring a client to access services from another organization
  - Making and confirming the appointment
  - Providing transportation if needed
  - Following up to ensure that the client received services within 30 days of the referral
- Linkages to care are reported directly by treatment providers
- Data is from the DC DOH Bureau for Care Housing and Support Services monthly

#### Results





Cost effectiveness of Navigator programs, April 2010-March 2011

Measure	Latino Navigator	Wards 7 and 8*	Adolescents and sex workers*
a. Number of referrals	249	45	6
b. Number of linkages to care	50	33	5
c. Total program cost	\$200,000	\$124,201	\$125,000
d. Cost per referral**	\$803	\$1,378	\$10,417
e. Cost per linkage to care***	\$4,000	\$1,879	\$12,500

\*Costs per referral and linkage are from October 2010 to March 2011

$$** = c/a$$

#### Discussion





Notes

 Latino Navigator program is clinic-based, which may explain the high number of referrals; other programs are CBO-based

#### Recommendations

- We recommend that these programs explore strategies to improve linkage to care among persons identified as HIV positive
- Next steps
  - Examine outcomes and quality of services after linkage
  - Break out costs into administrative and intervention costs
  - Future research may be needed that estimates long-term patient outcomes such as life expectancy, lifetime cost per patient and Quality-Adjusted Life Years (QALY's)

# Wrapping up

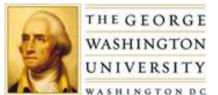




- □ Questions?
- □ Comments?

Thank you!

## Acknowledgements





This project was supported by supplemental funding for the ECHPP Initiative through the District of Columbia Developmental Center for AIDS Research, an NIH-funded Program (P30AI087714). The authors would like to thank the participating providers, the ECHPP study team, and colleagues at the DC Department of Health.

