



**SUBSTANCE USE AND THE HIV
CARE CASCADE:
*FINDINGS FROM AN HIV COMMUNITY-BASED
TEST AND TREAT INITIATIVE***

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Substance Use & Engagement in Care

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Original Investigation

Differences in Human Immunodeficiency Virus Care and Treatment Among Subpopulations in the United States

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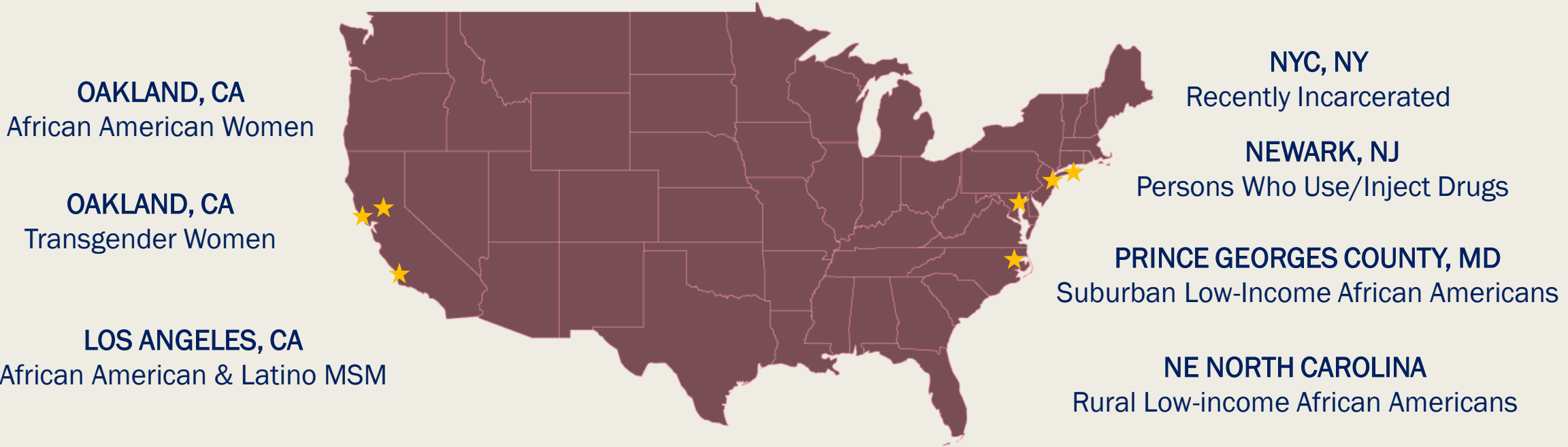
A Community-Based

- Launched 2013
- 7 CBO sites funded
- Evaluation is ongoing

HIV Test & Treat Initiative



A Community-Based HIV Test & Treat Initiative



Measures

■ Demographics

- Age
- Gender Identity
- LGB vs. heterosexual
- Time since diagnosis (1 = $\leq 12m$, 0 = $>12m$)

■ Cascade Outcomes [1= Yes, 0= No]

- In Care
- On ART
- Known Viral Suppression

■ Substance Use [1= Yes, 0= No]

- 12 month. Any Alcohol/Illicit Drug Use
- 30 day: Harmful Alcohol/Illicit Drug Use



Analysis Plan

■ Chi Square

Test for differences in cascade

- Substance Use
- Time Since Diagnosis

■ ML Multiple Logistic Regression

- Level 2 = Agency
- Covariates: Age, Gender Identity, Sexual orientation

■ Stratification/Moderation

- Time Since Diagnosis



Photo Credit: JWCH Bath House Testing Site

Results

■ Age

- Range: 18-78
- M = 43.5 (SD = 11.6)

■ Gender Identity

- Male 284 (57%)
- Female 167 (34%)
- Transgender 42 (9%)

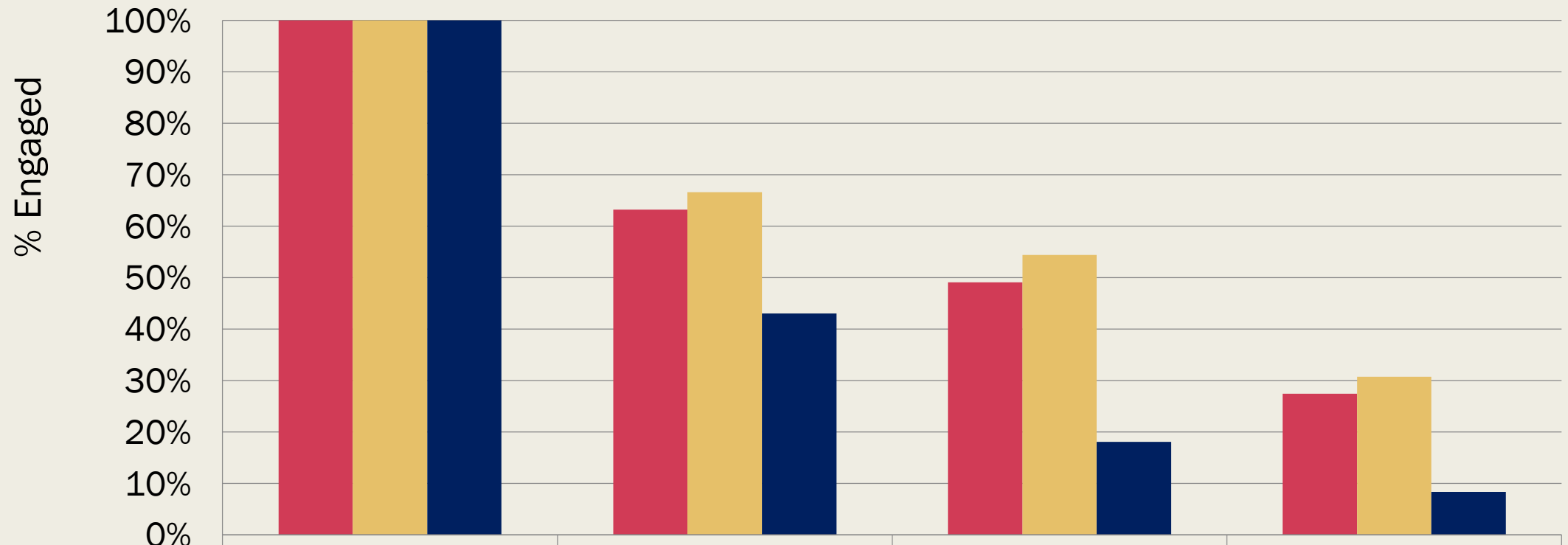
■ Sexual Orientation

- LGB 232 (48%)
- Heterosexual 250 (52%)

■ Time Since HIV Diagnosis

- ≤12 Months 72 (15%)
- > 12 Months 423 (85%)

HIV Care Cascade by Time Since Diagnoses



■ Total Sample	100%	63%	49%	27%
■ Dx > 12 months	100%	67%	54%	31%
■ Dx ≤ 12 months	100%	43%	18%	8%

Substance Use Across the Cascade

	Frequency (Yes = 1)	In Care	On ART	Known VL Suppression
Time Since Diagnosis (\leq 12 mo.)	15%	$\chi^2=14.754^{**}$	$\chi^2=15.493^{**}$	$\chi^2=32.472^{**}$
12 Mo. Any Alcohol Use	59%	$\chi^2=1.583$	$\chi^2=1.803$	$\chi^2=2.836$
12 Mo. Any Illicit Drug Use	54%	$\chi^2=0.616$	$\chi^2=1.869$	$\chi^2=0.094$
30 Day Binge Drinking	16%	$\chi^2=0.034$	$\chi^2=0.005$	$\chi^2=1.537$
30 Day Harmful Illicit Drug Use	19%	$\chi^2=1.537$	$\chi^2=0.535$	$\chi^2=0.719$

* p < .05 ** p < .01 *** p < .001

Substance Use Across the Cascade

Stratified by Time Since Diagnosis

≤ 12 Months (n = 72)

	Frequency (Yes = 1)	In Care	On ART	Known VL Suppression
12 Mo. Any Alcohol Use	68%	$\chi^2=0.314$	$\chi^2=1.473$	$\chi^2=0.982$
12 Mo. Any Illicit Drug Use	56%	$\chi^2=4.090$ *	$\chi^2=0.019$	$\chi^2=0.082$
30 Day Binge Drinking	18%	$\chi^2=2.583$	$\chi^2=1.152$	$\chi^2=1.442$
30 Day Harmful Illicit Drug Use	21%	$\chi^2=4.108$ *	$\chi^2=0.286$	$\chi^2=0.069$

* p < .05 ** p < .01 *** p < .001

Substance Use Across the Cascade *Stratified by Time Since Diagnosis*

> 12 Months (n = 423)

	Frequency (Yes = 1)	In Care	On ART	Known VL Suppression
12 Mo. Any Alcohol Use	57%	$\chi^2=0.696$	$\chi^2=0.381$	$\chi^2=1.466$
12 Mo. Any Illicit Drug Use	53%	$\chi^2=0.005$	$\chi^2=1.815$	$\chi^2=1.860$
30 Day Binge Drinking	16%	$\chi^2=0.219$	$\chi^2=0.074$	$\chi^2=0.001$
30 Day Harmful Illicit Drug Use	18%	$\chi^2=0.127$	$\chi^2=0.223$	$\chi^2=0.529$

* p < .05 ** p < .01 *** p < .001

Substance Use (* Time Since Diagnosis) Cascade ML Multiple Logistic Regression

In Care

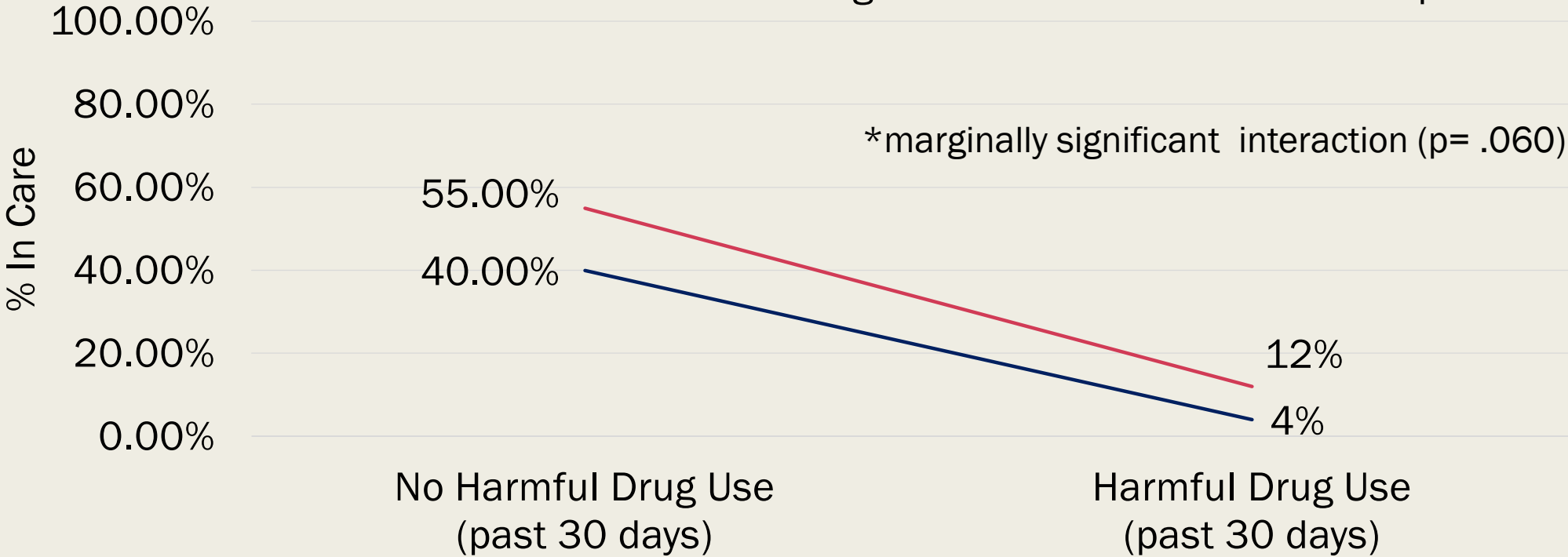
	AOR	95% CI	P-value
Time Since Diagnosis	1.135	0.347 - 3.713	p = .834
12 Mo. Any Illicit Drug Use	0.065	0.413 - 0.887	p = .010
30 Day Harmful Illicit Drug Use	0.061	0.327 - 1.104	p = .101
12 Mo. Any Illicit Drug Use (* Time Since Diagnosis)	1.665	0.813 - 3.410	P = .163
30 Day Harmful Illicit Drug Use (* Time Since Diagnosis)	2.507	0.961 - 6.539	p = .060

Model controlled for: Age, Gender Identity, Sexual Orientation, all co-variates are non-significant

Time Since Diagnosis * Harmful Drug Use

Interaction Effect

	Slope	β	p-value
■ Diagnosed \leq 12 Mo.		0.094	p= .722
■ Diagnosed $>$ 12 Mo.		1.351	p= .053



Discussion

- Illicit drug use (AOR=0.065 CI=0.413-0.887) as a barrier to engaging in HIV care, demonstrated differences based on severity of use, and time since HIV diagnosis.
- Findings are limited by self-report and cross-sectional data, but strengthened by a diverse pooled sample.
- CBOs are reaching vulnerable PLWHA, but drug use may still be a barrier to initial engagement in care.
- Integrating linkage to drug treatment programs by CBOs is one approach that may strengthen efforts to engage PLWHA in care.



Photo Credit: PHI

Thank you.

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- K01 DA039767 (PI: L. Smith)

EVALUATION TEAM

- UCSD Div. Global Public Health, Center for Gender Equity and Health
- Dr. Anita Raj (Evaluation PI)

CBO CLIENTS & STAFF

- WORLD, OAKLAND, CA
- PHI, OAKLAND, CA
- JWCH, LOS ANGELES, CA
- FORTUNE SOCIETY, NY, NY
- NJCRI, NEWARK, NJ
- iPHI, PRINCE GEORGE'S CO., MD
- ASK4CARE, NE NORTH CAROLINA

The image features two large, thick black L-shaped brackets. One is positioned in the top-left corner, and the other is in the bottom-right corner, framing the central text.

QUESTIONS

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Table 1: Site Characteristics

Site	Population	Intervention
JWCH Los Angeles, CA	MSM	Enhanced HIV C&T and ARTAS-based HIV linkage to care targeting MSM in bathhouse settings and downtown Skid Row.
PHI Oakland, CA	Transgender	Multi-session Motivational Enhancement Intervention (MEI), plus quality of life workshops, and support groups.
WORLD Oakland, CA	African American Women	CHW-delivered linkage to care/patient navigator style approach linking community outreach via CHWs to health systems.
Fortune Society Long Island, NY	Re-Entry from Prison	Linkage to HIV and health care services with food security and nutrition education upon release from prison.
NJCRI Newark, NJ	Drug Users (esp. IDU)	Individualized counseling and comprehensive case management over a 3-6 month period to engage drug users at high risk for acquisition and transmission of HIV.
IPHI Prince Georges County, MD	Low-Income African American and Black Immigrants	CHW-delivered ARTAS inclusive of client navigation to increase HIV testing and HIV care linkage and retention/
Duke University North Carolina	Rural African American	Peer-driven HIV testing and retention in care program that includes eight peer-led modules to help build patients' HIV knowledge and communication skills to help them prioritize and engage in HIV care.

ICC: MEASURE OF DEPENDENCE

Average cluster size : 70.714

SUB USE	CASCADE	COVARS
ALC12M 0.029	INCARE 0.118	AGE 0.081
DRUG12M 0.173	ONART 0.108	GENDER 0.737
ALC30D 0.028	VLSUPP 0.077	LGB 0.191
DRUG30D 0.269		TDX12M 0.083