

# Uptake of Treatment as Prevention for HIV and Continuum of Care Among HIV-positive Men Who Have Sex With Men in Nigeria

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# TRUST Study

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# Background

- The recent WHO guideline calls on the need to “re-energize and strengthen HIV programs so that all key populations benefit from the ongoing advances in HIV treatment and scale-up.”
- Nigeria is a mixed epidemic with HIV prevalence among MSM to be as high as 34.9%.
- There is a large evidence gaps on how to support existing HIV care service deliveries to make them accessible, safe, and friendly in order to optimize seek, test, treat, and retain for key population
- We report risk factors associated with engagement in Treatment as Prevention (TasP) and loss to follow-up (LTFU) among HIV-positive MSM recruited.



# Methods

- MSM recruited through respondent-driven sampling (RDS) and enrolled into a prospective cohort if eligible.
- Provide TasP for HIV-positives outside the National Guideline; approved by the National Agency for the Control of AIDS (NACA) .
- Standard of care follow-up schedules.
  - **HIV-positive:** weekly ART preparation (x2-3), every month if starting ART, every 3 months if stable on ART
  - **HIV-negative:** every 3 months for HIV testing
- Risk behavioral questionnaires administered every 3 months from time of enrollment.



# Community Clinics

## International Center for Advocacy and Rights to Health Trust Clinic, Abuja



Supported by IHVN



**INSTITUTE OF HUMAN VIROLOGY**

## Community Health Center Ireti Road, Lagos



Supported by MHRP



# Statistical Analyses

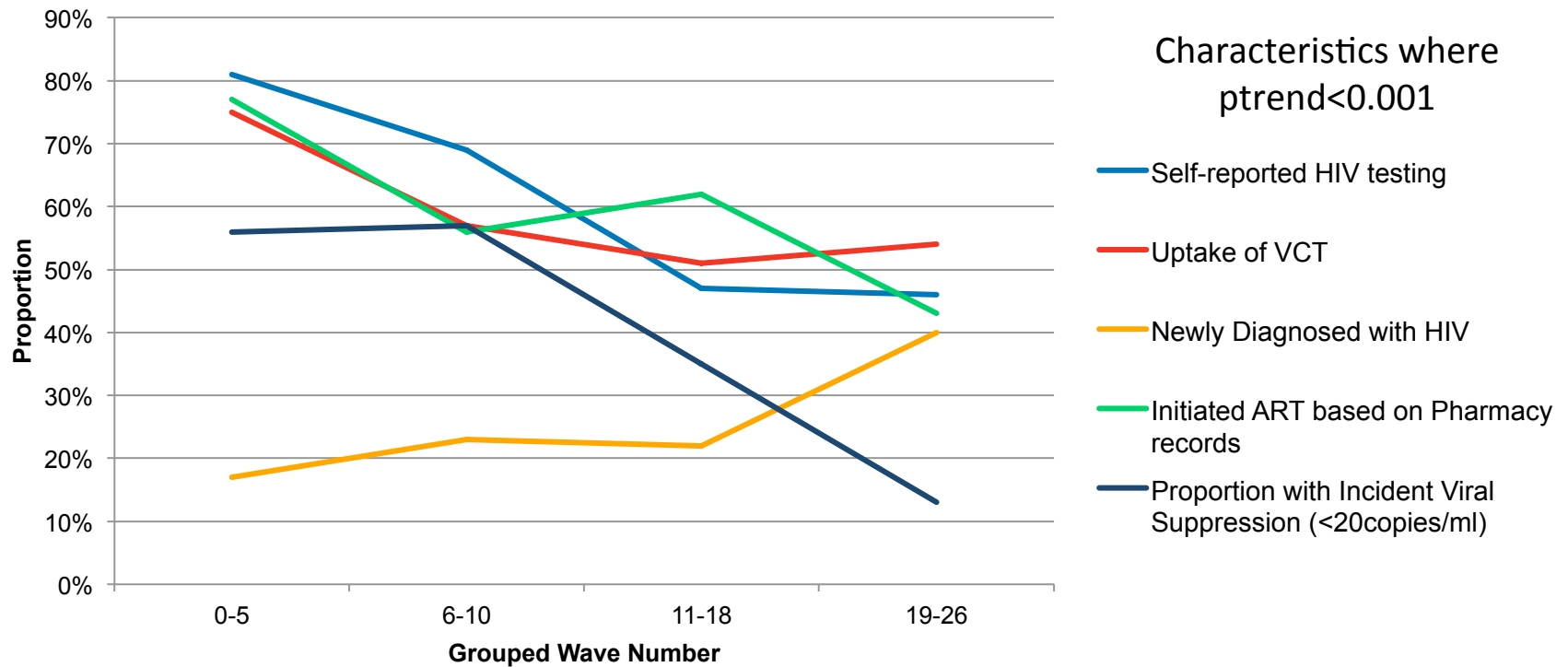
- Engagement in pre-TasP was defined as attending at least the first 2 or all sessions of pre-TasP preparation.
- Engagement in TasP was defined as initiation of ART.
- LTFU was defined as not having a visit within 3 months from the last visit.
- Factors associated with TasP engagement were determined by Chi-square and logistic regression at bivariate and multivariate level.
- Time to LTFU was characterized using Kaplan-Meier estimates and compared using log-rank test and Cox regression.



# RDS as a HIV Care and Prevention Tool

(Baral et al., JAIDS 2015 Supplement)

## Proportion of MSM Engaged in the HIV Care Cascade by Wave of Accrual in the Trust Study



# TasP cascade among newly diagnosed HIV-positives

(Akolo et al., CROI 2014, Charurat et al. JAIDS 2015 In Press)

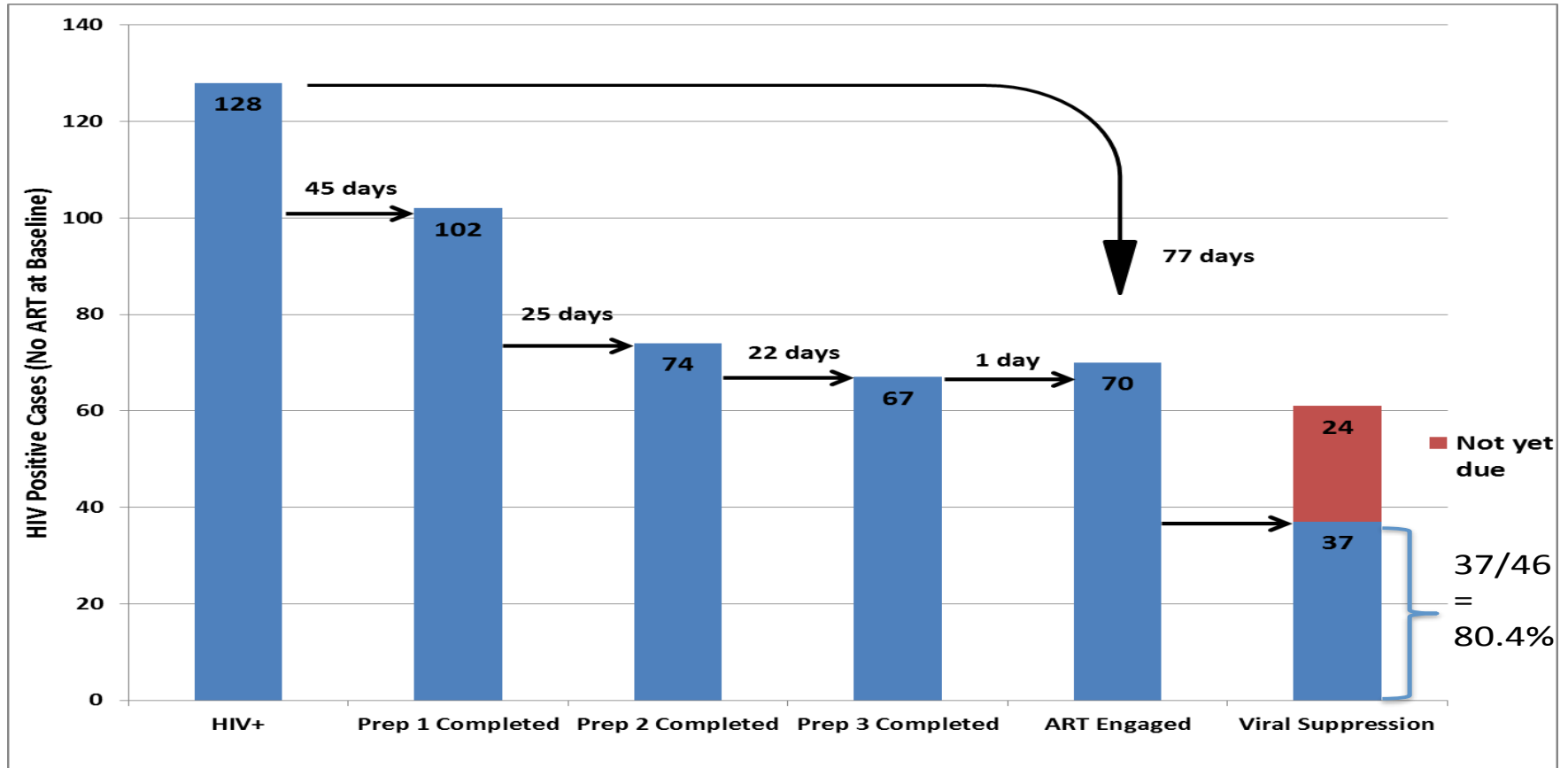




Table 1. Factors associated with engagement in TasP (n=128 ART-naive)

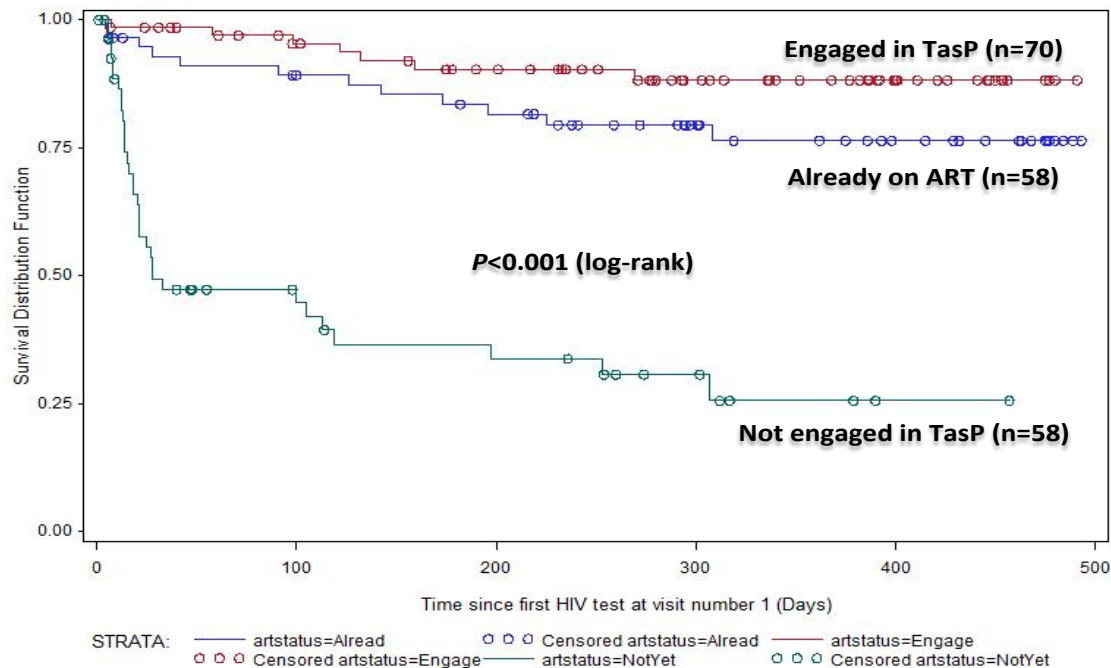
Covariates		% engaged	OR (95%CI)
Age	16-20	57.1	1.0
	21-25	42.6	0.56 (0.20 – 1.57)
	26-30	59.1	1.08 (0.38 – 3.10)
	31+	75.0	2.25 (0.54 – 9.34)
Religion	Christian	62.4	1.0
	Muslim and others	38.1	0.37 (0.17 – 0.80)
Disclose to family	No	49.5	1.0
	Yes	77.3	3.47 (1.19 – 10.1)
Disclose to HCW	No	48.3	1.0
	Yes	71.1	2.63 (1.16 – 5.93)
CD4 at screening	<200	63.0	1.0
	200-349	68.0	1.25 (0.47 – 3.34)
	350+	30.2	0.26 (0.09 – 0.71)

## Table 2. Factors associated with LTFU

Covariates		RH (95% CI)	aRH (95% CI)
Age	16-20	1.0	
	21-25	1.21 (0.51 – 2.87)	
	26-30	0.88 (0.37 – 2.11)	
	31+	0.85 (0.31 – 2.35)	
Religion	Christian	1.0	1.0
	Muslim and others	1.94 (1.10 – 3.42)	1.46 (0.81 – 2.63)
Disclose to family	No	1.0	
	Yes	0.98 (0.51 – 1.86)	
Disclose to HCW	No	1.0	1.0
	Yes	0.58 (0.33 – 1.04)	1.10 (0.57 – 2.14)
CD4 at screening	<200	1.0	1.0
	200-349	0.86 (0.40 – 1.86)	0.78 (0.36 – 1.72)
	350+	1.05 (0.50 – 2.19)	0.60 (0.28 – 1.31)

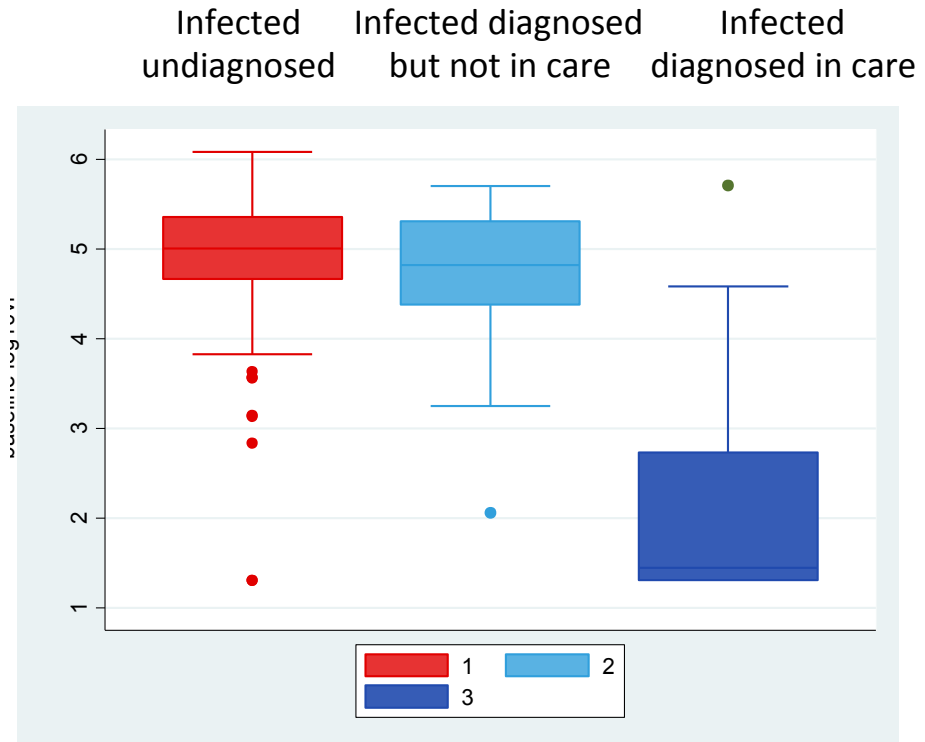
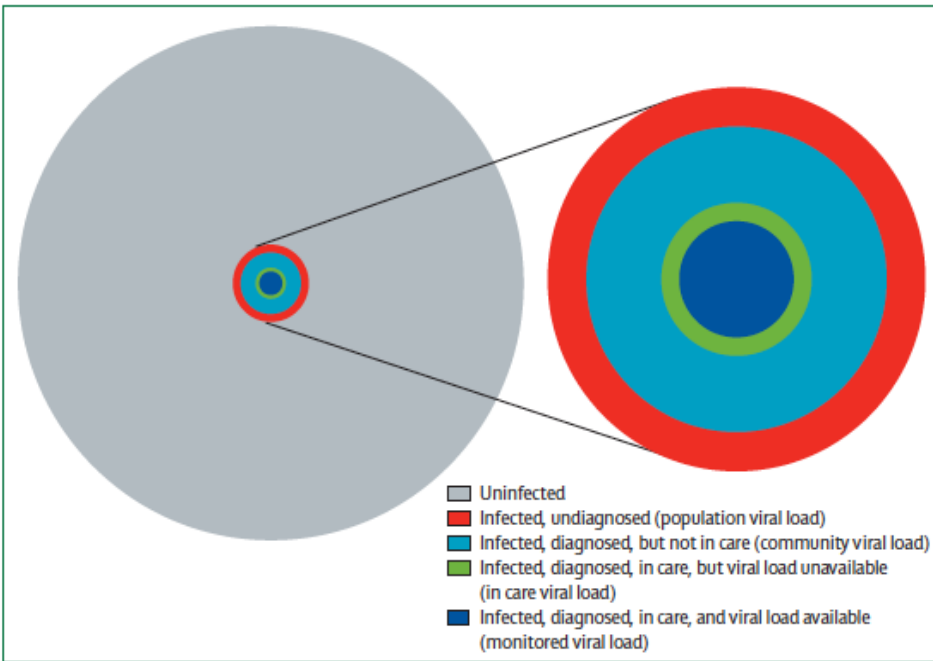
# Table 2. Factors associated with LTFU (continued)

Covariates		RH (95% CI)	aRH (95% CI)
ART status during	Did not engage TasP	1.0	
Follow-up	Engaged in TasP	0.08 (0.04 – 0.19)	0.08 (0.03 – 0.19)
	Already on ART	0.18 (0.09 – 0.35)	0.17 (0.08 – 0.35)



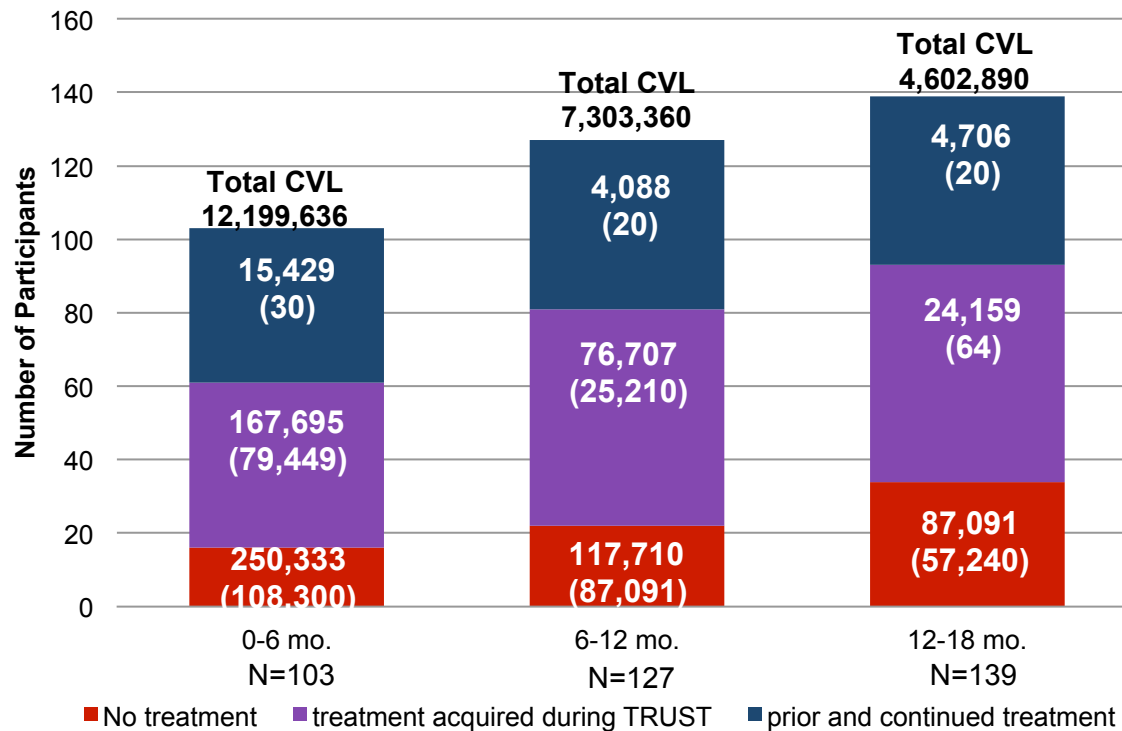
# Network Viral Load as a Measure of TasP

Cohen et al. Lancet Infect Disease 2013



# Network Viral Load as a Measure of TasP

Mean (median) Cohort Viral Load (CVL) of HIV-positive during phases of *TRUST*, stratified by treatment status



## Caveats/Limitations

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- Viral load suppression in plasma  $\neq$  100% viral load suppression in semen.
- Sexual monogamy and awareness of partner's status contributed to success of HPTN052 with TasP; high rates of concurrency among MSM may limit application of TasP.
- Further analyses need to be undertaken to evaluate the impact of TasP on HIV incidence.

# Discussion

- RDS is an effective care and prevention tool to reach hard-to-reach population.
- Engagement in TasP with low LTFU in HIV care services can be achieved in a setting where individual-level stigma and discrimination toward MSM is prevalent.
- Disclosure of sexual orientation to health care providers was associated with being on ART at baseline and subsequent engagement in TasP but was not strongly associated with LTFU.
- Early this year, GoN enacted with Same Sex Marriage Prohibition Act which resulted in increased discrimination and fear of seeking health care. Further evaluations on the long-term consequence of this law will be conducted.

# Questions and Thank You

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