

# Prevention Index Testing Model: Exploring Sexual Networks of HIV-negative Individuals at Substantial Risk of HIV Acquisition to Reach Undiagnosed PLHIV with Treatment and Expand PrEP Uptake in Zambia

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HIV prevention index testing (HPI) is a key strategy in identifying undiagnosed people living with HIV (PLHIV) and linking them to treatment, while also linking those at high HIV-risk to prevention services, including pre-exposure prophylaxis (PrEP).



A PrEP Provider meets with her young female clients to discuss HPI in Chingola. Credit: JSI

## INTRODUCTION

Expanding access to HIV combination prevention for individuals at substantial risk of HIV acquisition is needed to reduce new global HIV infections from 1.5 million in 2021 to less than 370,000 by 2025.

Not only should diagnosed people living with HIV (PLHIV) be initiated on antiretroviral therapy (ART) to prevent onwards transmission, but individuals who receive testing services and test negative should directly be linked to appropriate services, such as initiation of PrEP.

This study carried out by the USAID DISCOVER-Health project, which is implemented by JSI, assessed the feasibility of using HIV-negative individuals at substantial risk of HIV acquisition as **index clients** to explore their sexual networks for HIV case-finding and scale up PrEP uptake among HIV-negative, at-risk individuals at USAID DISCOVER-Health supported facilities in two Zambian provinces.

## METHODS

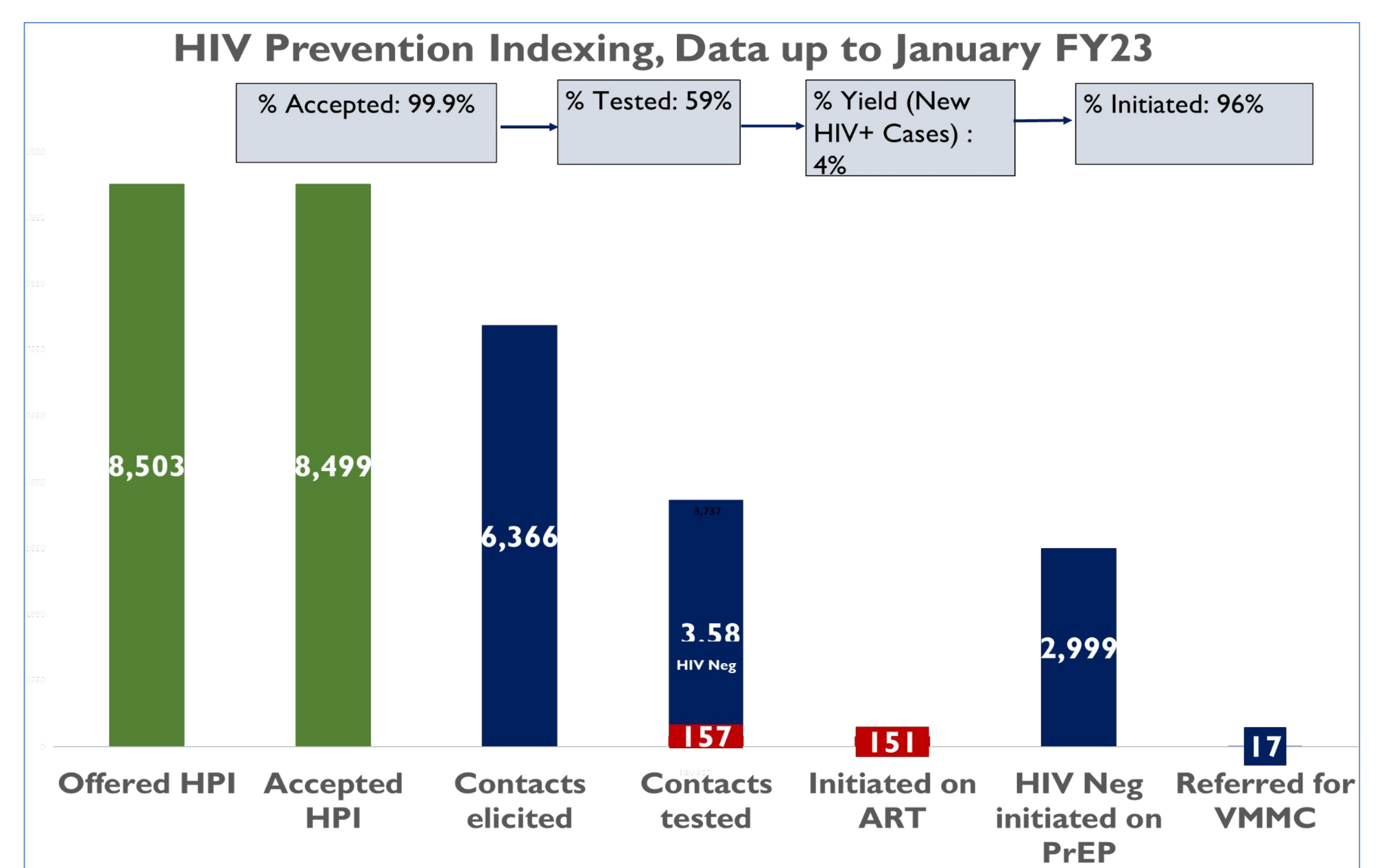
The intervention was piloted in 32 project-supported sites in 2021 and 2022. HIV-negative clients at substantial risk of HIV, including those on PrEP, were offered prevention index case testing (HPI) to explore their sexual networks.

All elicited individuals at substantial HIV acquisition risk were offered HIV testing. Individuals testing positive for HIV were immediately offered ART and those testing negative were offered combination prevention services, including PrEP.

Client-level data were recorded in registers from which key variables were derived for analysis using SPSS.

## RESULTS

- A total of 7,831 HIV-negative individuals, including 5,687 males aged 20-40 years and 2,144 females aged 18-35 years were offered reverse index testing within the study period. From these, 5,653 sexual network contacts were elicited. Females constituted the smallest proportion of elicited contacts at 1,357 (24%).
- **Females were two times more likely to accept HIV testing** than males and were twice as likely to test positive for HIV than males.
- 128 (3.7%) HIV-positive contacts were identified, comprising 75 (59%) males and 53 (41%) females, all of whom were linked to ART.
- Over 3,300 HIV-negative sexual contacts (93%) were linked to PrEP.
- **Females were more likely to initiate PrEP than males (89% vs. 83%).**



## CONCLUSION

Prevention index testing HPI is critical to help identifying HIV-negative individuals at substantial risk of HIV acquisition and linking them to prevention services. Spillover benefits include finding undiagnosed PLHIV and linking them to treatment, all helping Zambia move closer to epidemic control.