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## BACKGROUND

- Globally, populations at risk for HIV continue to evolve but standard HIV testing approaches have not changed to meet needs.
- Penetration of the internet and anonymity of online “hook-up” platforms have resulted in clients seeking partners in virtual vs. physical spaces.
- Traditional HIV testing approaches that rely on physical spaces to promote testing do not appear to reach these virtual populations.
- We implemented a virtual outreach program to provide education and offer HIV testing at convenient locations to virtual at-risk populations in India.

## METHODS

- Paid advertisements for the virtual platform were run on dating applications and social media platforms and via Google display network.
- A team of virtual outreach workers (vORWs) reached out to potential clients using Grindr, Planet Romeo and other dating applications as well as through social media platforms then switched to WhatsApp for more private communication.
- vORWs promoted safe sex practices and assisted in booking an HIV test on the platform for interested clients.
- Clients had to be 18 years of age or older and complete a risk assessment before booking a test at either a private or public sector facility of their choice.
- vORWs facilitated confirmatory testing and ART linkage for clients who screened positive for HIV
- Process measures across the testing continuum were captured.
- Correlates of a positive screening test were explored using logistic regression.

## RESULTS

- Oct 2019-Sep 2021, 9,355 HIV testing reservations were made across 22 Indian states
- 73% of clients who screened positive for HIV reported no prior testing history (**Figure 1**)
- Clients with no prior HIV testing history were less likely to initiate ART compared to those with previous testing experience (66% and 75% respectively)

# 73% of clients who screened positive through the virtual intervention had never been tested for HIV

Table 1 Demographic and risk characteristics N (%)	Clients with HIV test reservation (N=9,355)	Clients with HIV+ screening test among all registrations (N=491)
Median Age (IQR)	26 (23-30)	26 (24-30)
<b>Gender</b>		
Male	8,816 (94%)	475 (97%)
Female	317 (3%)	9 (2%)
Transgender	222 (2%)	7 (1%)
MSM	7,737 (83%)	415 (85%)
Screened positive for Syphilis	549* (10%)	331** (80%)
Sexual relations with men	8,089 (87%)	428 (87%)
Sexual relations with women	3,061 (33%)	149 (30%)
Sexual relations with transgender persons	2,009 (21%)	79 (16%)
<b>Reported risks in prior 6 months</b>		
Sex without a condom	7,938 (85%)	407 (83%)
Multiple sexual partners	4,077 (44%)	218 (44%)
Non-consensual sex	294 (3%)	32 (7%)
Substance use before sex	1,110 (12%)	55 (11%)
Engaging in sex work	271 (3%)	22 (4%)
Injection drug use	115 (1%)	21 (4%)
Needle sharing	262 (3%)	52 (11%)
TB or STI diagnosis	249 (3%)	19 (4%)
<b>Region</b>		
North	4,588 (49%)	290 (59%)
Central	618 (7%)	29 (6%)
East and Northeast	48 (1%)	1 (0%)
West	864 (9%)	12 (2%)
South	3,237 (35%)	159 (32%)

\*Out of the 5,669 clients who reserved an HIV screening test and Syphilis testing.  
 \*\*Out of the 412 clients who screened positive for HIV and completed Syphilis and HIV testing.

**Figure 1: HIV testing cascade among 9,355 clients reached by a virtual testing platform across 22 states in India (October 2019-September 2021).**

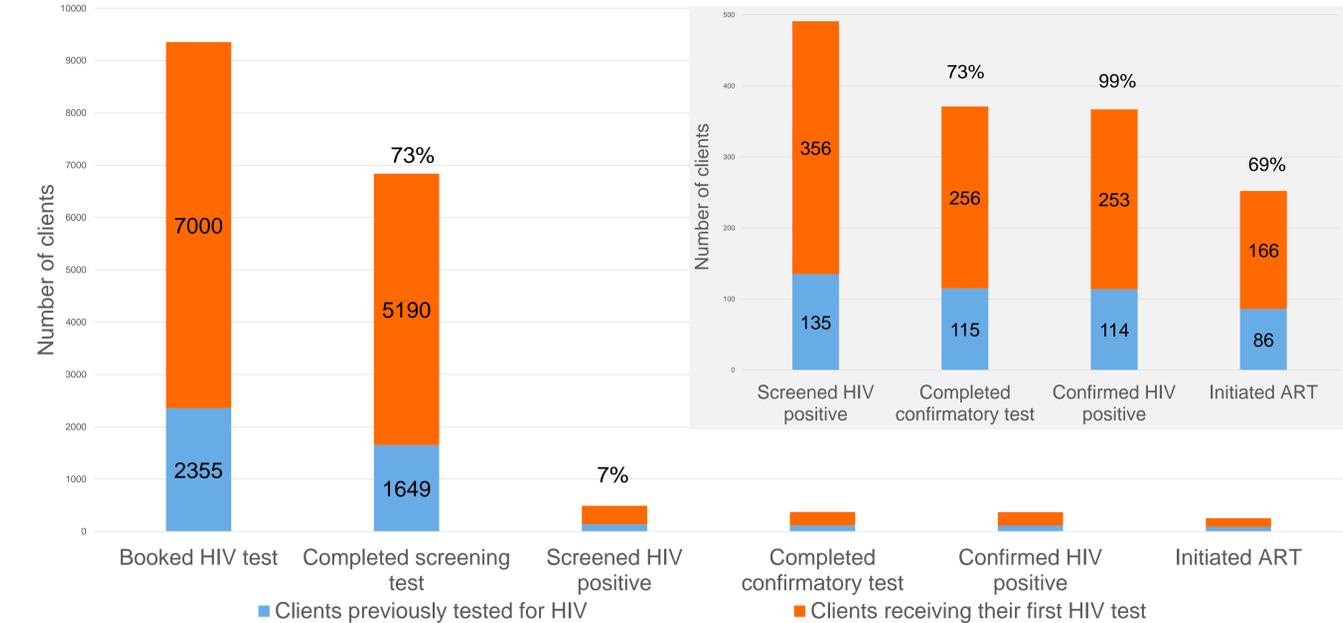


Table 2: Correlates of Positive HIV Screening Test (N=5,648)	aOR (95 CI)
<b>Age Group</b>	
18-22	Ref.
23-25	1.20 (0.87-1.65)
26-29	1.28 (0.94-1.76)
30+	0.95 (0.69-1.30)
<b>Gender</b>	
Male	3.02 (1.32-6.89)
Female	Ref.
Transgender	1.90 (0.62-5.83)
<b>Region</b>	
North	2.52 (1.36-4.69)
Central	(1.65 (0.68-3.99)
East and Northeast	**
West	Ref.
South	2.32 (1.24-4.37)
Sexual relations with transgender persons	1.62 (1.22-2.15)
Screened positive for Syphilis*	2.78 (2.13-3.64)
Needle sharing in prior 6 months	3.63 (2.57-5.12)

aOR: adjusted odds ratio, CI: confidence interval, ref: reference category  
 \*Total restricted to clients who were screened for Syphilis  
 \*\*Characteristic omitted from the model due to insufficient clients

- Factors significantly associated with screening positive were being male, reporting sex with men/women only (no transgender partners), recent needle sharing and positive syphilis test. (**Table 2**)

## CONCLUSIONS

- An online platform coupled with a vORW approach (virtual personal, private communication by trained counselors) is a viable way to reach populations at higher risk for and living with HIV.
- The majority of people reached had never previously been tested for HIV – this group also had a higher positivity rate than those previously tested.
- Online HIV testing platforms that meet people where they are will be critical for achieving the first 95.

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