

Tailoring HIVST to local communities can improve uptake: lessons from a virtual HIV self-testing intervention in India

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Background:

- Innovative strategies like HIV self-testing (HIVST) are needed to increase uptake of HIV testing among unreached groups

Description:

- Web-based HIVST platform launched in India in June 2021
- Virtual counsellors:
 - Contacted clients across 28 Indian states/territories on dating apps and social media platforms
 - Directed interested clients to free HIVST via home delivery or pick up at a community site
- Linkage to HIV confirmatory testing, ART, or PrEP provided, as needed
- Descriptive statistics used to characterize outcomes along cascade
- In-depth interviews conducted over the phone from Dec 2021-March 2022 with clients who ordered HIVST kits
 - Respondents purposively sampled by region, gender, age, kit retrieval method, and HIVST result
 - Transcripts were analyzed using inductive thematic analysis

Lessons:

- Between June 30, 2021-June 15, 2022, 4,394 clients ordered an HIVST kit.
- Gender breakdown stayed relative consistent across HIVST steps.
- From 41 interviews:
 - Clients appreciated HIVST because they could test privately, get results quickly, and avoid stigmatizing experiences at facilities
 - Clients appreciated quick delivery, confidential packaging, and kit instructions
 - Virtual counselor support and patience was instrumental in guiding and motivating clients to complete HIVST, and navigate next steps
 - Reported barriers included a lack of local languages on the website and kit instructions, and lack of messaging from trusted sources on the accuracy of HIVST

Conclusions:

- Web-based HIVST platform can reach populations who remain unreached with existing HIV testing approaches
- Virtual counsellors help support kit completion, result validation, confirmatory testing, and ART initiation
- HIVST programs should incorporate non-smartphone access, local languages, and counseling options (virtual or in-person) to improve uptake of HIVST
- Communication campaigns should focus on HIVST efficacy to build trust in HIVST

An HIVST web-based platform can reach higher-risk communities, capture HIVST results, and ensure confirmatory testing and ART linkage.

- Clients valued convenience, discrete kit packaging, and support from virtual counselors
- Need to improve client trust in kit accuracy, local languages, and non-smartphone usability

Figure 1: HIV self-testing cascade among virtual platform clients (June 30, 2021 - June 15, 2022)

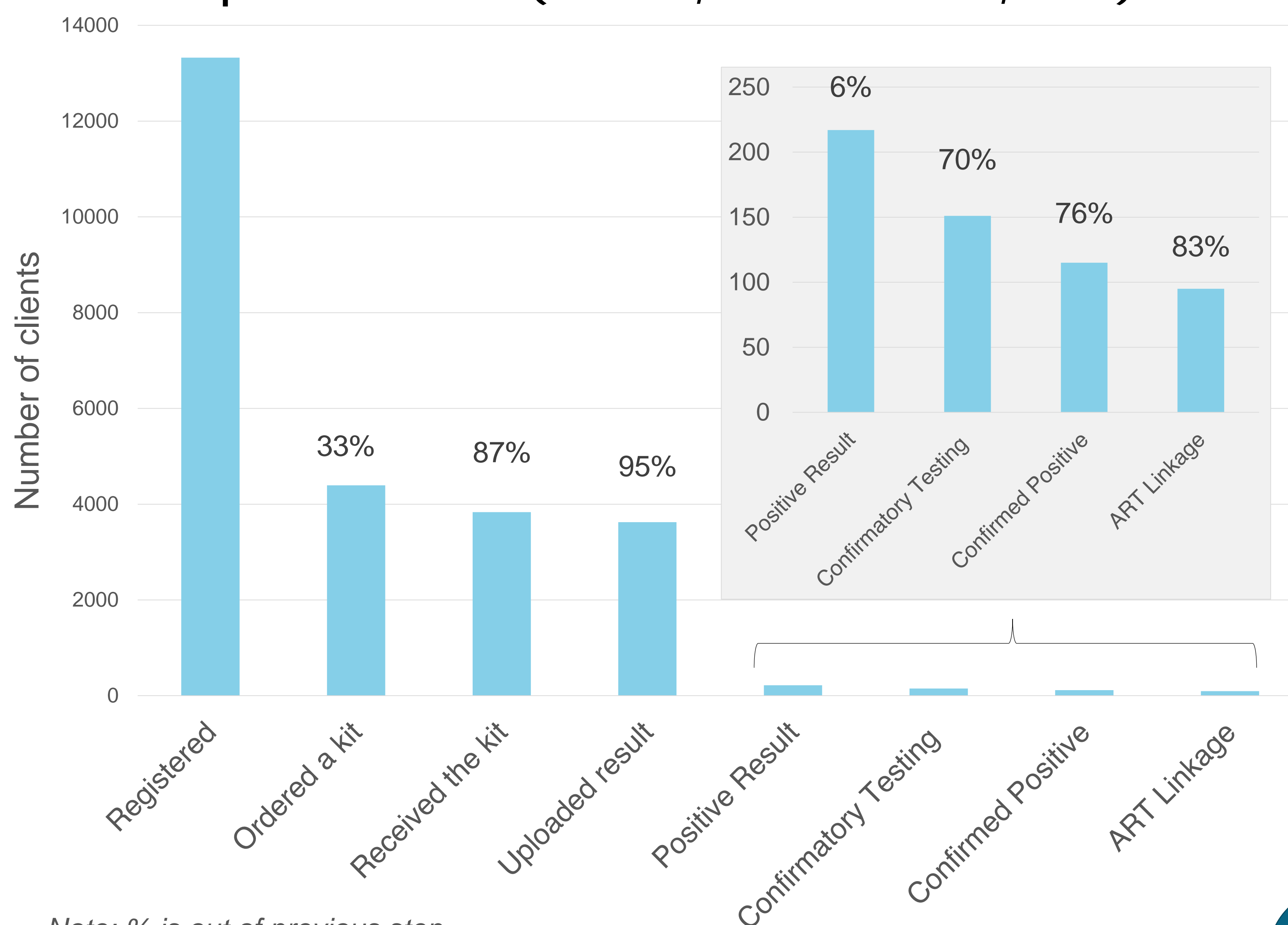
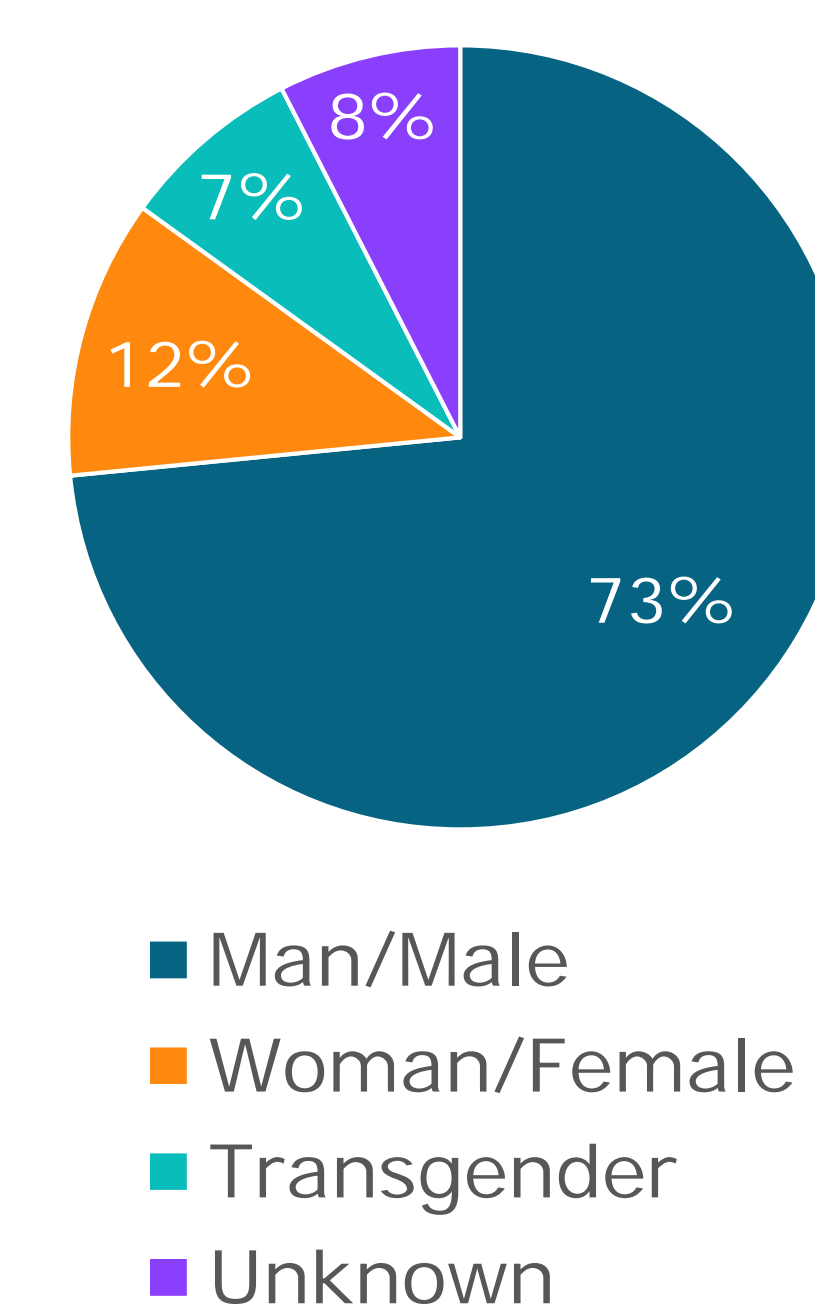


Figure 2: Gender of clients who ordered HIVST kit



Note: % is out of previous step

Table 1: Interview Participant Characteristics

	Total (n=41)	%
Gender		
Man	29	70%
Woman	8	20%
Trans woman	4	10%
Age		
18-19	2	5%
20-29	22	53%
30-39	11	27%
40-49	6	15%
Geographic region in India		
North	13	32%
East	2	5%
South	3	7%
West	12	29%
Central	10	24%
Unknown	1	3%
Registration Type		
Pick-up Point (PUP)	7	17%
Self	18	44%
Virtual Counsellor	16	39%
HIVST result		
Negative	31	76%
Positive	7	17%
Unknown	3	7%

Table 2: Qualitative Findings

Theme	Findings
Benefits of HIVST vs. in-person HIV testing	<ul style="list-style-type: none"> Convenient: no travel time, fast results, can do anywhere No fear of being seen by others No judgement/invasive questions from provider No needles or blood
Experience receiving and completing kit	<ul style="list-style-type: none"> Virtual counselor helped clients order kit online clients appreciated flexible, quick delivery and discrete packaging Test was easy to do using print & video instructions Skeptical about accuracy of results/low trust in HIVST
Value of virtual counselor	<ul style="list-style-type: none"> Provided instructions to complete HIVST accurately Helped interpret results and navigate next steps Easy to contact and talk to Instilled comfort and confidence
Feedback to improve platform	<ul style="list-style-type: none"> Shorter forms More local languages Channels to order kit and upload result for people who don't have a smartphone More promotion of HIVST on social media platforms

"If I go to a clinic for testing, people who are working there or people nearby the clinic might see me entering the clinic, I might feel uncomfortable and guilty. But [with self-testing] nobody knows what is in this package. It is very much in privacy."

Man, age 45

"I was thinking then, why are we using saliva to do the test as the HIV virus is not present in saliva? How will we check if HIV is there or not from saliva?"

Woman, age 30

"Talking to the counsellor helps in gaining trust with the service and it definitely gives us the confidence of using and doing the test...I would say talking to the counsellor was really helpful. It helps in building the trust in this website too."

Man, age 19

